REQUEST FOR PROPOSAL

To: ALL BIDDERS

CTBTO Ref. No.: 2020-0093/RAHMAN
(PLEASE QUOTE ON ALL COMMUNICATIONS)

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

Date: 29 Jul 20

Subject: CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions

Deadline for Submission: 03 Sep 20
Vienna Local Time: 17:00

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

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

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

Yours Sincerely,

Courtney Linley
Chief, Procurement Section
ACKNOWLEDGEMENT FORM

**Solicitation No:** 2020-0093  
**Title:** CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions  
**Closing Date:** 03 Sep 20  
**Vienna Local Time:** 17:00

**Procurement Staff:** Fazal Rahman  
**CTBTO Req. No.:** 0010016398

Please complete 'A' or 'B' or 'C' and Return

**WITHIN FIVE (5) DAYS**

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

by email to  
procurement@ctbto.org

**A: We shall submit our proposal**

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

**B: We may submit and will advise**

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

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

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

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>_______________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Name:</td>
<td>_______________________________</td>
</tr>
<tr>
<td>Email/Tel:</td>
<td>_______________________________</td>
</tr>
</tbody>
</table>
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 CTBTO Key Infrastructure Maintenance, Support and Development of Enhanced Solutions (hereinafter referred to as the “Services” and/or the “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 Services are 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 its attachments:
   Attachment A - Mandatory Table of Contents and Format
   Attachment B – Sample Format for Pricing
   Attachment C – Evaluation Matrix
(c) List of CTBT Member States
(d) Statement of Confirmation
(e) Vendor Profile Form
(f) The Commission’s Model Contract and its Annexes A – D;
   o The Commission’s Model License Agreement (Annex A, Option 1 and Option 2)
   o The Commission’s End User Disclaimer (Annex B)
   o The Commission’s General Conditions of Contract (Annex C)
   o Terms of Reference (Annex D)

Note: In the event of award, the Proposal will be incorporated as Annex E 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 10 business days prior to the Closing Date. No requests for clarifications will be entertained after this time. Questions will only be accepted via e-mail and should be sent to:

E-mail: procurement@ctbto.org
Subject: Request for Clarifications re RFP No. 2020-0093/RAHMAN

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

Except in case of responding to 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 Equipment (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 Contract based on the attached Model Contract for each of C1 and C2 as defined in the Commission’s Terms of Reference (Annex D to the Contract), or for both C1 and C2, if applicable. The terms and conditions of payment for services are described in Clause 11 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 number of person-days/work-hours proposed for the project as part of the “turn-key solution” (on-site as well as off-site) and their respective estimated allocation to different work-phases shall be specified clearly in the proposal. In any case it shall be the sole responsibility of the Contractor to fulfil and complete the scope of work as specified in these Terms of Reference regardless of the actual number of person-days dedicated to a specific task.

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

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

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

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

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

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

**Sub-Contractors**

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

**Model Contract**

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

**Delivery Schedule**

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

**PART II: FINANCIAL PROPOSAL**

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

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

(i) 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.

(ii) The Financial Bid shall be submitted in the format set out in Attachment B “Sample Format for Pricing” attached hereto. Bidders must provide all the information requested in this matrix but may provide additional related content as attachments.

(iii) The quoted fees/rates shall be fixed for the duration of the Contract. The quoted fees/rates and travel expenses (if and as applicable) must include all overheads and ancillary expenses, unless otherwise stated in the Terms of Reference or Attachment B “Sample Format for Pricing”. All individual items shall be stated in EURO or US Dollars and adequate justification and calculation must be included in the cost. The sum of all individual costs shall be computed to constitute the total Contract Price.

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

(1) For Austrian companies

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

(2) For European Union (EU) Companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at
the conclusion or implementation of the Contract in respect of the goods/services shall be
quoted separately or be 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

(3) For Non-EU Companies

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

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

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 70% for the Technical Proposal and 30% 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

Detailed list of evaluation criteria is provided in Attachment C.

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

14. Negotiations of the Proposal

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

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.

<table>
<thead>
<tr>
<th>Use of former Preparatory Commission for the CTBTO (“Commission”) employees in the preparation of Proposals:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Bidder must <strong>not</strong>, 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:</td>
</tr>
<tr>
<td>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;</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>
BIDDER’S STATEMENT
PLEASE STATE BELOW & SUBMIT WITH PROPOSAL

<table>
<thead>
<tr>
<th>Delivery Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shipping weight (kg) and Volume (m³) – if applicable:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Warranty period applicable (it shall be for a <strong>minimum of 24 months</strong>, starting from the acceptance of the goods/services by the Commission) – please tick below:</th>
</tr>
</thead>
<tbody>
<tr>
<td>For a two year period ☐ For a period of .................................................</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Availability of local service in Vienna, Austria (if any):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State country of origin or assembly of all items quoted:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quantity discount and early payment discount (if any):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Included in this quotation: Yes ☐ No ☐</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Confirmation that the bidder has reviewed the Commission’s Model License Agreement, the Commission’s End User Disclaimer the Commission’s General Conditions of Contract, the Commission Draft Model Contract, and agreed to all terms and conditions.**

<table>
<thead>
<tr>
<th>Yes ☐ No ☐</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Yes ☐ No ☐ Not applicable ☐</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Signature &amp; date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
PROCEDURE FOR SUBMISSION OF ELECTRONIC BIDS IN 2 SEALED FILES

Given the current logistics restrictions at the Vienna International Centre as a result of the COVID-19 situation, the Commission invites you to submit your sealed bids in response to Request for Proposal No. 2020-0093/RAHMAN: CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions.

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).

```
Figure 3 SHA1
```

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.
**ATTACHMENT A**

*Instructions for Preparation and Submission of Proposal*

PKI - CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions

*Technical Proposal - Mandatory Table of Contents and Format*

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum content</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Executive Summary</strong></td>
<td>• Provide an overview of proposal</td>
</tr>
<tr>
<td><strong>2. Experience, Resources and Project Management</strong></td>
<td></td>
</tr>
</tbody>
</table>
| 2.1 Corporate Profile and Values | • Background of company, ownership, size, location, bases of operations profile  
• If a consortium, provide a clear explanation of the business relationship between the members and governance for execution of this project. Also discuss and show the relationship of any sub-contractors. |
| 2.2 Corporate Experience | • Experience in managing and executing work 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 (for each category of services, C1 and C2) 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 for every category of services (C1 and C2).  
• Include QA certifications and applicable references. |
| **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 detailed knowledge and understanding of project as described in the Terms of Reference (ToR) document 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. |
3.3 Software Development  | Please address in as much detail as reasonable:
| - How you intend to address the tasks described in C1 – Software Support Services category sections in the Terms of Reference.

3.4 Hardware Management  | Please address in as much detail as reasonable:
| - How you intend to address the tasks described in C2 – Hardware Management Services (HSM Infrastructure) category section in the Terms of Reference.

4. Skills and Experience of key staff

| Provide resumes of the proposed key personnel describing in detail all qualifications and experience required by each of the two categories of service (C1 and C2) defined in the Terms of Reference. |
| Provide a matrix that details how each of the proposed key personnel satisfies the requirements. |

5. Attachments (as set out in the Instructions for the Preparation of Proposals)

| Statement of Confirmation |
| Vendor Profile Form |
| Statement regarding Model Contract |
CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions

Format for Pricing under Section 5.1 “C1: Software Support Services” of Annex D:

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Initial Period (Firm)</th>
<th>Price**</th>
<th>First Extension (Optional)</th>
<th>Price** (Lump Sum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1.1. ongoing monitoring and basic support services on a 24x7 basis</td>
<td>LOT</td>
<td>62 months (5years + 2 months)</td>
<td></td>
<td></td>
<td>1 years</td>
</tr>
<tr>
<td>(Lump Sum)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1.2. procurement of licenses for UniCERT software*** (Lump Sum)</td>
<td>LOT</td>
<td>62 months (5years + 2 months)</td>
<td></td>
<td></td>
<td>1 years</td>
</tr>
<tr>
<td>C1.3. Fee for additional on-demand support services- Daily rate</td>
<td>Day</td>
<td>62 months (5years + 2 months)</td>
<td></td>
<td></td>
<td>1 years</td>
</tr>
<tr>
<td>C1.3.1 Travel costs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International return travel*</td>
<td>Trip/person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowances*** (if applicable)</td>
<td>person/day</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*) Please change/add categories as appropriate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**) Please specify currency (USD or Euro only).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>***) Daily subsistence allowance (DSA) or PER DIEM per person per on-site working day including accommodation and local transport (if applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>****) Invoiced separately based on the actual cost of the item subject to the Commission’s approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#) Airfares should be based on the least costly (Economy Class ticket), most direct route.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AND/OR

Format for Pricing under Section 5.2 “C2: Hardware Maintenance Services for the PTS HSM infrastructure” of Annex D:

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Initial Period (Firm)</th>
<th>Price**</th>
<th>First Extension (Optional)</th>
<th>Price** (Lump Sum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2.1. procurement of the licenses for HSM partitions**** (Lump Sum)</td>
<td>LOT</td>
<td>62 months (5years + 2 months)</td>
<td></td>
<td></td>
<td>1 years</td>
</tr>
<tr>
<td>C2.2. support and maintenance contract**** (Lump Sum)</td>
<td>LOT</td>
<td>62 months (5years + 2 months)</td>
<td></td>
<td></td>
<td>1 years</td>
</tr>
<tr>
<td>C2.2.1 Travel costs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International return travel*</td>
<td>Trip/person</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowances*** (if applicable)</td>
<td>person/day</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*) Please change/add categories as appropriate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**) Please specify currency (USD or Euro only).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>***) Daily subsistence allowance (DSA) or PER DIEM per person per on-site working day including accommodation and local transport (if applicable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>****) Invoiced separately based on the actual cost of the item subject to the Commission’s approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#) Airfares should be based on the least costly (Economy Class ticket), most direct route.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# ATTACHMENT C

## CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions

### Table 1 "Evaluation Matrix"

<table>
<thead>
<tr>
<th>TOR Reference (Qualifying Criteria)</th>
<th>Type (HW, SW, SVC)</th>
<th>Description of Qualifications</th>
<th>Max Points</th>
<th>Weight</th>
<th>Max. Score (Weight x Points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CATEGORY C2 - PERSONNEL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.1</td>
<td>HW</td>
<td>Knowledge and at least 3 years (in the past 5 years) work experience in deploying and/or supporting Gemalto Safenet Luna SA 5 v5.4.7.1 HSM in PKI environments including installation, configuration, operation and troubleshooting of HSM</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>C2.2</td>
<td>HW</td>
<td>Knowledge and at least 3 years (in the past 5 years) work experience in deploying Gemalto Safenet Luna SA 5 v5.4.7.1 HSM in Verizon-based UniCERT v4.x and/or v5.x PKI environments</td>
<td>10</td>
<td>1.5</td>
<td>15</td>
</tr>
<tr>
<td>C2.3</td>
<td>HW</td>
<td>Knowledge and at least 3 years (in the past 5 years) work experience in deploying, operating and supporting HSM monitoring systems (system health-check, integration with big data analysis platforms such as Splunk)</td>
<td>10</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td><strong>SubTotal</strong></td>
<td></td>
<td></td>
<td><strong>30</strong></td>
<td></td>
<td><strong>35</strong></td>
</tr>
<tr>
<td><strong>CATEGORY C2 - CONTRACTOR</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C2.4</td>
<td>HW</td>
<td>Long-standing market presence (at least 10 years) in System Integration and support services for Crypto Hardware industry.</td>
<td>10</td>
<td>1.5</td>
<td>15</td>
</tr>
<tr>
<td>C2.5</td>
<td>SVC/HW</td>
<td>The support and maintenance contracts must be at level &quot;Plus&quot; or greater, as defined in: <a href="https://supportportal.thalesgroup.com/csm/?id=kb_article_view&amp;sys_kb_id=3757d9921b3108d0f2888739cd4bcb31&amp;sysparm_article=KB0020654">https://supportportal.thalesgroup.com/csm/?id=kb_article_view&amp;sys_kb_id=3757d9921b3108d0f2888739cd4bcb31&amp;sysparm_article=KB0020654</a></td>
<td>10</td>
<td>1.5</td>
<td>15</td>
</tr>
<tr>
<td><strong>SubTotal</strong></td>
<td></td>
<td></td>
<td><strong>20</strong></td>
<td></td>
<td><strong>30</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
<td><strong>50</strong></td>
<td></td>
<td><strong>65</strong></td>
</tr>
</tbody>
</table>

Points will be awarded for each of the evaluation criteria of Table 1 “Evaluation Matrix” in accordance with Table 2 “Scoring Breakdown” below. Should bidders be assigned less than 3 points for any of the evaluation criteria, they will be deemed not technically compliant; consequently, they will be disqualified and their proposals not further evaluated. Bidders that fully satisfy the criteria to the minimum acceptable level will be assigned between 3 and 6 points. Bidders whose proposals demonstrate that they satisfy the criteria beyond the minimum level will be assigned additional points up to 10, as per Table 2 below:
Table 2 "Scoring Breakdown"

<table>
<thead>
<tr>
<th>Points</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Response incomplete, inadequate and/or non-responsive to the criterion. Bidder does not clearly understand the criterion.</td>
</tr>
<tr>
<td>1-2</td>
<td>Does not meet the minimum technical, functional, or performance related criterion.</td>
</tr>
<tr>
<td>3-4</td>
<td>Meets the criterion in most areas, but is lacking details and responsiveness in some areas of the criterion.</td>
</tr>
<tr>
<td>5-6</td>
<td>Meets the criterion in all areas.</td>
</tr>
<tr>
<td>7-8</td>
<td>Meets the criterion to minimum acceptable levels in all areas, and exceeds it in some areas.</td>
</tr>
<tr>
<td>9-10</td>
<td>Response exceeds the criterion in all areas and adds additional technical, functional and performance related value</td>
</tr>
</tbody>
</table>

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

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

Legenda
- X = points 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 commercial evaluation components is 70% and 30% respectively.
<table>
<thead>
<tr>
<th>CTBTO Member States</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Dominican Republic</td>
<td>Liberia</td>
<td>Rwanda</td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>Republic</td>
<td>Libya</td>
<td>Saint Kitts and Nevis</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td></td>
<td>State of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andorra</td>
<td></td>
<td>Liechtenstein</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td></td>
<td>Lithuania</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antigua and Barbuda</td>
<td></td>
<td>Luxembourg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td></td>
<td>Eritrea</td>
<td>Madagascar</td>
<td></td>
</tr>
<tr>
<td>Armenia</td>
<td></td>
<td>Estonia</td>
<td>Malawi</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
<td>Eswatini</td>
<td>Malaysia</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td></td>
<td>Ethiopia</td>
<td>Maldives</td>
<td></td>
</tr>
<tr>
<td>Azerbaijan</td>
<td></td>
<td>Fiji</td>
<td>Mali</td>
<td></td>
</tr>
<tr>
<td>Bahamas</td>
<td></td>
<td>Finland</td>
<td>Malta</td>
<td></td>
</tr>
<tr>
<td>Bahrain</td>
<td></td>
<td>France</td>
<td>Marshall Islands</td>
<td></td>
</tr>
<tr>
<td>Bangladesh</td>
<td></td>
<td>Gabon</td>
<td>Mauritania</td>
<td>Singapore</td>
</tr>
<tr>
<td>Barbados</td>
<td></td>
<td>Gambia</td>
<td>Mexico</td>
<td></td>
</tr>
<tr>
<td>Belarus</td>
<td></td>
<td>Georgia</td>
<td>Micronesia, Federated States of</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td></td>
<td>Germany</td>
<td>Monaco</td>
<td></td>
</tr>
<tr>
<td>Belize</td>
<td></td>
<td>Ghana</td>
<td>Mongolia</td>
<td></td>
</tr>
<tr>
<td>Benin</td>
<td></td>
<td>Greece</td>
<td>Montenegro</td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td>(Plurinational State of)</td>
<td>Grenada</td>
<td>Republic of Morocco</td>
<td></td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td></td>
<td>Guinea</td>
<td>Mozambique</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Botswana</td>
<td></td>
<td>Guinea-Bissau</td>
<td>Myanmar</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
<td>Haiti</td>
<td>Namibia</td>
<td></td>
</tr>
<tr>
<td>Brunei</td>
<td></td>
<td>Holy See</td>
<td>Nauru</td>
<td></td>
</tr>
<tr>
<td>Darussalam</td>
<td></td>
<td>Honduras</td>
<td>Nepal</td>
<td>Timor-Leste</td>
</tr>
<tr>
<td>Bulgaria</td>
<td></td>
<td>Hungary</td>
<td>Netherlands</td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td></td>
<td>Iceland</td>
<td>New Zealand</td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td></td>
<td>Indonesia</td>
<td>Nicaragua</td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td></td>
<td>Iran, Islamic</td>
<td>Niger</td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td></td>
<td>Republic of</td>
<td>Nigeria</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td>Iraq</td>
<td>North Macedonia</td>
<td>Uganda</td>
</tr>
<tr>
<td>Cape Verde</td>
<td></td>
<td>Ireland</td>
<td>Republic of Norway</td>
<td></td>
</tr>
<tr>
<td>Central African Republic</td>
<td></td>
<td>Israel</td>
<td>United Arab Emirates</td>
<td></td>
</tr>
<tr>
<td>Chad</td>
<td></td>
<td>Italy</td>
<td>United Kingdom</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td>Jamaica</td>
<td>United Republic of Tanzania</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td></td>
<td>Japan</td>
<td>United States of America</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
<td>Jordan</td>
<td>America</td>
<td></td>
</tr>
<tr>
<td>Comoros</td>
<td></td>
<td>Kazakhstan</td>
<td>Paraguay</td>
<td>Uruguay</td>
</tr>
<tr>
<td>Congo</td>
<td></td>
<td>Kenya</td>
<td>Peru</td>
<td></td>
</tr>
<tr>
<td>Cook Islands</td>
<td></td>
<td>Kiribati</td>
<td>Philippines</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td></td>
<td>Kuwait</td>
<td>Poland</td>
<td></td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td></td>
<td>Kyrgyzstan</td>
<td>Portugal</td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td></td>
<td></td>
<td>Venezuela</td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td></td>
<td></td>
<td>Vietnam</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td></td>
<td></td>
<td>Qatar</td>
<td></td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td></td>
<td></td>
<td>Yemen</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td></td>
<td>Latvia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Djibouti</td>
<td></td>
<td>Lebanon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian Federation</td>
<td></td>
<td>Lesotho</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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](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.
**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)**  

Organization:  

Value in US$ Equivalent:  

Year:  

Organization:  

Value in US$ Equivalent:  

Year:  

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:

<table>
<thead>
<tr>
<th>Product/Service/Work #</th>
<th>Product/Service/Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. This section shall be **signed and stamped** by an official legally authorized to enter into contracts on behalf of your organization:

<table>
<thead>
<tr>
<th>Name:</th>
<th>Title:</th>
<th>Signature:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Bank Details**

Bank Name:

Bank Address:

Exact Account Holder Name:

**Beneficiary Details**

Beneficiary Name:

(Exactly as stated on bank statements)

IBAN:

(if applicable)

Account number:

SWIFT/BIC:

ABA/Sort Code:

**Additional Details** (if applicable)

Correspondent bank:

Correspondent account number:

Correspondent SWIFT/BIC:

Tax Identification Number:

FOR CTBTO USE ONLY

<table>
<thead>
<tr>
<th>Evaluated By:</th>
<th>Initials</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Updated By:</th>
<th>Initials</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks:

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

** Please provide supplementary documentation on these items.
MODEL CONTRACT

(SAP No. …. )
(Shopping Cart No. ….)

between

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

and

(THE CONTRACTOR)

for

CTBTO PUBLIC KEY INFRASTRUCTURE
MAINTENANCE, SUPPORT AND DEVELOPMENT OF ENHANCED
SOLUTIONS

This Contract comprises this cover page, 15 (fifteen) pages of text (including a table of contents and a signatories page), and 5 (five) Annexes (A to E)

July 2020
# TABLE OF CONTENTS

1 DEFINITIONS .................................................................................................................................................. 2

2 AIM OF THE CONTRACT ............................................................................................................................... 3

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

4 STANDARD OF WORK ................................................................................................................................... 5

5 RESPONSIBILITIES OF THE CONTRACTOR .................................................................................................... 6

6 ORGANISATION OF CONTRACT IMPLEMENTATION FOR WORK ORDERS .............................................. 6

7 WARRANTY .................................................................................................................................................... 7

8 PERMITS, NOTICES, LAWS AND ORDINANCES ............................................................................................ 7

9 PROTECTION OF PERSONS AND PROPERTY .............................................................................................. 8

10 RESPONSIBILITIES OF THE COMMISSION ................................................................................................. 9

11 CONTRACT PRICE ....................................................................................................................................... 9

12 PAYMENT .................................................................................................................................................... 11

13 TEMPORARY SUSPENSION OF WORK .......................................................................................................... 12

14 DELAYS AND EXTENSION OF TIME ........................................................................................................... 13

15 CONTRACTOR’S CLAIMS AND REMEDIES ............................................................................................... 13

16 ENTIRE AGREEMENT .................................................................................................................................. 13

17 DISCREPANCIES .......................................................................................................................................... 14

18 SEVERABILITY ............................................................................................................................................. 14

19 NO WAIVER ................................................................................................................................................. 14

20 CONTRACT AMENDMENT ............................................................................................................................ 14

21 TRANSMISSION OF NOTICES AND OTHER DOCUMENTS ......................................................................... 15

22 EFFECTIVENESS ....................................................................................................................................... 16

SIGNATORIES PAGE ....................................................................................................................................... 15
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 Model License Agreement.

“Annex B” means the Commission’s End User Disclaimer.

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

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

“Annex E” means the Contractor’s Proposal.

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

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

“Goods” means equipment, software licenses, hardware replacement and spare parts to be supplied and delivered by the Contractor under the Contract.
“Party(ies)” means the Commission and/or the Contractor, as the context requires.

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

“Services” means all ongoing hardware and software maintenance and support and monitoring services and on-demand services to be provided by the Contractor, including its affiliates and/or subcontractors, in order to fulfil all its obligations under the Contract, and the remediying of any defects therein.

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

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

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

2 AIM OF THE CONTRACT

The aim of this Contract is to perform the Work in relation to CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions for the Commission.

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

(a) The Contract shall enter into force upon the date of the last signature by the authorized Representatives of the Parties (hereinafter referred to as the “Effective Date”) and shall be valid until the Parties fulfill all their obligations hereunder.

(b) Regarding the ongoing monitoring and basic support services within the meaning of Section 5.1 “C1: Software Support Services” of Annex D,
(i) The Contractor shall commence on 1 November 2020, and shall complete no later than 31 December 2025, the Work pertaining to:

(aa) ongoing monitoring and basic support Services on a 24x7 basis;

(bb) procurement of licenses for UniCERT software, which shall be invoiced separately.

(ii) After the initial period ending on 31 December 2025, the Services shall extend automatically for one (1) further one (1) year period until 31 December 2026, unless the Commission notifies the Contractor one (1) month in advance of the expiry date of the relevant period of its intention not to extend the ongoing monitoring and basic support services.

(iii) The Commission shall have the right to call-off additional on-demand support Services, for up to 750 person-days, in the form of WO(s) within a period of sixty-two (62) months (five years plus two months) from 1 November 2020 (hereinafter referred to as the “Call-off Period”). The commencement and completion date for the performance of the optional Work (hereinafter referred to as “Commencement Date” and “Completion Date”, respectively) will be set out in the respective WO. This sub-clause (iii) shall also apply to any extension exercised under sub-clause (iv) below.

(iv) After the expiry of the Call-off Period or the maximum number of man-days set out in subparagraph (iii) above, whichever occurs first, the Commission shall have the option to extend the Call-off Period one (1) time for twelve (12) months and up to 150 person-days, subject to the availability of funds, under the same terms and conditions as those of this Contract. The Commission will inform the Contractor about its intention to extend the relevant Call-off Period at least one (1) month prior to the expiry of the respective Call-off Period. The optional extensions will be implemented through a written notification to the Contractor by the Commission.

AND/OR [THESE TWO SECTIONS MAY BE COMBINED IN ONE]

(c) Regarding Hardware Maintenance Services within the meaning of Section 5.2 “C2: Hardware Maintenance Services” of Annex D,

(i) The Contractor shall commence on 1 November 2020, and shall complete no later than 31 December 2025, the Work pertaining to:
(aa) the licenses for HSM partitions;

(bb) support and maintenance contracts for all HSM devices.

(ii) After the initial period ending on 31 December 2025, the Services shall extend automatically for one (1) further one (1) year period until 31 December 2026, unless the Commission notifies the Contractor one (1) month in advance of the expiry date of the relevant period of its intention not to extend the ongoing monitoring and basic support services.

(iii) The Commission shall have the right to call-off support Services in case of service/hardware outages and/or operational incidents, for up to 300 person-days, in the form of WO(s) within a period of sixty-two (62) months (five years plus two months) from 1 November 2020 (hereinafter referred to as the “Call-off Period”). The commencement and completion date for the performance of the optional Work (hereinafter referred to as “Commencement Date” and “Completion Date”, respectively) will be set out in the respective WO. This sub-clause (iii) shall also apply to any extension exercised under sub-clause (iv) below.

(iv) After the expiry of the Call-off Period or the maximum number of man-days set out in subparagraph (iii) above, whichever occurs first, the Commission shall have the option to extend the Call-off Period one (1) time for twelve (12) months and up to 60 person-days, subject to the availability of funds, under the same terms and conditions as those of this Contract. The Commission will inform the Contractor about its intention to extend the relevant Call-off Period at least one (1) month prior to the expiry of the respective Call-off Period. The optional extensions will be implemented through a written notification to the Contractor by the Commission.

4 STANDARD OF WORK

The Contractor shall perform the Work in a workmanlike manner in conformity with standard professional practices, using qualified personnel and in strict accordance with the Contract. The Contractor shall furnish the highest skill and judgement and cooperate with the Commission, including all the Commission's consultants and agents, in best furthering the interests of the Commission and the aim of this Contract. The Contractor shall provide efficient business administration and supervision, and it shall perform the Work in the best way and in the most expeditious and economical manner consistent with the requirements of the Contract.
5 RESPONSIBILITIES OF THE CONTRACTOR

(a) The Contractor shall perform the Work as described in Annexes D and E.

(b) [OPTION 1 – WHEN THE CONTRACTOR IS THE MANUFACTURER AND THE OWNER OF THE SOFTWARE]:

The Contractor, as the manufacturer and the owner of the software procured under this Contract, shall grant the Commission a non-exclusive, non-transferable and irrevocable license to the software and related documentation in accordance with Annex A. Annex B shall apply to any end-user license agreements with respect to the software that the Commission may be required to sign.

[OPTION 2 – WHEN THE CONTRACTOR IS NOT THE OWNER OF THE SOFTWARE AND PROCURES IT FROM THE MANUFACTURER, WHO RETAINS INTELLECTUAL PROPERTY RIGHTS TO THE SOFTWARE]:

In relation to the software procured under this Contract, the Contractor shall obtain the relevant software licenses from the manufacturer of the software. The Contractor shall make sure that these software licenses contain a right to sub-license the software to the Commission. The terms and conditions of the software licenses granted by the Contractor to the Commission shall be regulated by Annex A. Annex B shall apply to any end-user license agreements with respect to the software that the Commission may be required to sign.

(c) The Contractor shall provide qualified English-speaking personnel as necessary to perform the Services under this Contract. The key persons shall be available for possible tasks related to the Services throughout the duration of the Contract period. Any replacement of the key personnel shall be made in accordance with Clause 7 of Annex C.

6 ORGANISATION OF CONTRACT IMPLEMENTATION FOR WORK ORDERS

(a) During the term of the Contract, the Commission has the right, but not the obligation, to initiate performance of Work through the issuance of individual WO in accordance with Section 5.1 and/or 5.2 of Annex D based on the firm fixed unit prices set out in Annex E. The Contractor shall not perform any such Work if not requested by the Commission through a WO. However, the Contractor may propose WO for Commission’s evaluation.
(b) The WO issued by the Commission shall be the basis for acceptance, invoicing and payment of any optional Services performed by the Contractor under a WO in accordance with Annex D.

(c) The performance of the relevant WO shall be made in full in accordance with the respective WO. Partial Services performance of a WO will not be accepted without prior written agreement by the Commission.

(d) The relevant 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. The Contractor will have 5 working days as of the date of receipt of the WO to notify the Commission in writing that it rejects the amendment; otherwise it will be understood that the revision submitted by the Commission has been accepted.

7 WARRANTY

(a) The provisions of Clause 28 of Annex C 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.

8 PERMITS, NOTICES, LAWS AND ORDINANCES

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

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

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

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

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

(i) all employees on the Commission’s premises and all other persons who may be affected thereby;

(ii) all the Work, equipment, its spare parts, materials and supplies to be incorporated therein, whether in storage on or off the Commission’s premises, which are under the care, custody or control of the Contractor or any of its subcontractors; and

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

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

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

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

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

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

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

10 RESPONSIBILITIES OF THE COMMISSION

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

11 CONTRACT PRICE

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

(i) For Section 5.1 “C1: Software Support Services” of Annex D:

   i. Within the meaning of Clause 3(b)(i)(aa) above, for ongoing monitoring and basic support services on a 24x7 basis for the initial 62-month period and, subject to Clause 3(b)(ii) above, for the subsequent 12-month period of the Contract, the firm fixed prices pursuant to Annex E;

   ii. Subject to Clause 3(b)(i)(bb) above, for procurement of licenses for UniCERT software during the initial 62-month period and, subject to Clause 3(b)(ii) above, during the subsequent 12-month period of the Contract, the prices that shall be invoiced separately based on the actual cost of the licenses, subject to the Commission’s approval;

   iii. Subject to Clause 3(b)(iii), for the initial 62-month Call-off Period for the additional on-demand support services under Section 5.1 of Annex D and, subject to Clause 3(b)(iv) above, for the subsequent 12-month Call-off Periods, the firm fixed unit rates specified in Annex E;
(ii) For Section 5.2 “C2: Hardware Maintenance Services for the PTS HSM infrastructure” of Annex D:

i. Within the meaning of Clause 3(c)(i)(aa) above, for procurement of the licenses for HSM partitions during the initial 62-month period and, subject to Clause 3(c)(ii) above, for the subsequent 12-month periods of the Contract, the prices that shall be invoiced separately based on the actual cost of the licenses, subject to the Commission’s approval;

ii. Within the meaning of Clause 3(c)(i)(bb) above, for support and maintenance contracts for all HSM devices during the initial 62-month period and, subject to Clause 3(c)(ii) above, for the subsequent 12-month periods of the Contract, the firm fixed prices pursuant to Annex E;

iii. Subject to Clause 3(c)(iii), for the initial 62-month Call-off Period for the additional on-demand support services under Section 5.2 of Annex D and, subject to Clause 3(c)(iv) above, for the subsequent 12-month Call-off Periods, the firm fixed unit rates specified in Annex E;

hereinafter jointly referred to as the “Contract Price”.

(b) In the event that the Commission decides to extend the Call-off Period early, as foreseen in Clause 3(b)(iv) and/or Clause 3(c)(iv) above, the Contactor will be reimbursed for the person-days called off in this period as follows:

(i) until the expiry of the initial Call-off Period, the daily rate set out in Annex E for this period;

(ii) after the expiry of the initial Call-off Period, the daily rate set out in Annex E for the respective extension period.

(c) The daily rates set out in Annex E shall be held fixed for the entire duration of the Contract.

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

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

---

Model Contract - CTBTO Public Key Infrastructure Maintenance, Support and Development of Enhanced Solutions
– July 2020
10
The Contractor shall be reimbursed by the Commission for such taxes on the basis of actual amounts paid and duly documented by the Contractor as per Clause 12 (e).

OR

No Taxes are applicable under this Contract.

12 PAYMENT

(a) The Contract Price shall be paid as follows:

(i) The price for the Services mentioned in Clause 11(a)(i), subparagraph i. above, in arrears upon acceptance by the Commission of the Services, or in advance, where applicable, at the beginning of the respective period against an invoice drawn up in accordance with this Clause 12;

(ii) The price for the licenses mentioned in Clause 11(a)(i), subparagraph ii. above, in arrears upon acceptance by the Commission of the licenses against an invoice drawn up in accordance with this Clause 12;

(iii) The price for the Services mentioned in Clause 11(a)(i), subparagraph iii. above, in arrears upon the acceptance by the Commission of the deliverable(s) under each WO against an invoice drawn up in accordance with this Clause 12 and any other documentation that might be required under the applicable WO.

AND/OR

(i) The price for the Services mentioned in Clause 11(a)(ii), subparagraph i. above, in arrears upon acceptance by the Commission of the licenses against an invoice drawn up in accordance with this Clause 12;

(ii) The price for the Services mentioned in Clause 11(a)(ii), subparagraph ii. above, in arrears upon acceptance by the Commission of the Services, or in advance, where applicable, at the beginning of the respective period, against an invoice drawn up in accordance with this Clause 12;

(iii) The price for the Services mentioned in Clause 11(a)(ii), subparagraph iii. above, in arrears upon the acceptance by the Commission of the deliverable(s) under each WO
against an invoice drawn up in accordance with this Clause 12 and any other
documentation that might be required under the applicable WO.

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

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

d) The Contractor shall submit an invoice, either by mail/courier or as an attachment to an email, directly to the relevant Party specified in the Notices Clause. 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.

[IF NO TAXES ARE APPLICABLE UNDER THIS CONTRACT, PARAGRAPH (E) BELOW SHALL BE OMITTED]

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

13 TEMPORARY SUSPENSION OF WORK

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

14 DELAYS AND EXTENSION OF TIME

(a) If the Contractor is delayed at any time in the progress of the Work by any act or omission of the Commission or by any of its employees, or by any other contractor employed by the Commission, or by changes in the Work ordered by the Commission, or by any causes beyond the Contractor’s reasonable control, or by any other cause which the Commission determines may justify the delay, then the time for completion of the Work shall be extended by an amendment to this Contract in accordance with Clause 20 below for such reasonable time as the Commission may determine.

(b) Any request for extension of the time for reasons referred to in Clause 14(a) above shall be submitted to the Commission not later than 20 (twenty) days after the commencement of the delay, otherwise said request shall be deemed to be waived. Such request shall state grounds for the delay and shall provide an estimate of the probable effect of such delay on the progress of the Work.

15 CONTRACTOR’S CLAIMS AND REMEDIES

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

16 ENTIRE AGREEMENT

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

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

(i) this document;

(ii) the Commission’s Model License Agreement (Annex A);

(iii) the Commission’s End User Disclaimer (Annex B);

(iv) the Commission’s General Conditions of Contract (Annex C);

(v) the Contractor’s Proposal (Annex E);

(vi) the relevant WO, if applicable.

18 SEVERABILITY

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

19 NO WAIVER

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

20 CONTRACT AMENDMENT

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

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

(a) The Commission:

For Contractual Issues:

Chief, Procurement Section
Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)
Vienna International Centre
Wagramerstrasse 5, P.O. Box 1200
1400 Vienna, Austria
Tel: + (43 1) 26030 6350
Fax: + (43 1) 26030 5948
E-mail: procurement@ctbto.org

For invoices and related enquiries:

Accounts Payable
CTBTO Financial Services Section
Vienna International Centre
Wagramerstrasse 5, P.O. Box 1200
1400 Vienna, Austria
Tel: + (43 1) 26030 6292
E-mail payments@ctbto.org

(b) The Contractor:

For Contractual Issues:

Name:
Address:
Tel:
Email:

For invoices and related enquiries:

Name:
Address:
Tel:
Email:
22 EFFECTIVENESS

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

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

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

(iii) if by fax, when received in legible form;

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

(b) A communication given under Clause 22(a) above that is received or becomes retrievable on a non-working day or after business hours at the seat of the Commission will only be deemed to be given on the next working day of the Commission.
IN WITNESS hereof, the duly authorized Representatives of the Parties have executed this Contract:

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

________________________________________________________________________

[Name, Position/Title]

Date: ________________  
Place: ________________

For and on behalf of **CONTRACTOR**:

________________________________________________________________________

[Name, Position/Title]

Date: ________________  
Place: ________________
ANNEX A

[Option 1 – to be used when the Contractor is the owner of the software]

LICENSE AGREEMENT

1. PREAMBLE

1.1. This License Agreement is part of the Contract entered between the Commission and the Contractor (hereinafter collectively referred to as the “Parties”).

1.2. The Contractor possesses intellectual property rights to the software (hereinafter referred to as the “Software”) and relevant documentation (hereinafter referred to as the “Documentaion”).

1.3. The Contractor is willing to grant and the Commission desires to acquire a non-exclusive, non-transferable, irrevocable License as provided below.

1.4. The Parties hereto have agreed as follows.

2. DEFINITIONS

As used herein, the following terms shall have the following definitions:

2.1. “License Agreement” means the present document.

2.2. “License” means the license to the Software and Documentation granted under this License Agreement.

2.3. “Documentation” means the Contractor’s copyrighted materials that document functions of the Software.

2.4. “Effective Date” means the date of the last signature by the representatives of the Parties of the Contract, on which the Contract shall enter into force.

2.5. “Eligible Users” means the Commission’s employees and/or direct contractors.

2.6. “Software” means the software listed in the Contract.

Capitalized terms shall have the same meaning as defined in the Contract and the General Conditions of Contract, unless expressly otherwise defined herein.

3. GRANT OF RIGHTS AND LICENSES

3.1. The Contractor hereby grants the Commission a non-exclusive, non-transferable, irrevocable License to use the Software and Documentation, under the terms and conditions set forth herein.

3.2. The Commission is authorized to use the Software and Documentation only for activities related to the fulfilment of mandate and purposes of the CTBT including the performance of services of the Commission’s own commercial and/or government customers. The Commission is not authorized to sublicense, distribute, sell, or grant access to the Software, or integrate it into products or computer software programs of third parties unless required for the performance of activities related to its mandate.

3.3. Access to, and use of, the Software is restricted to Eligible Users.

3.4. The Commission agrees to protect the Software and the Documentation from use by, or disclosure or distribution to, persons who are not Eligible Users.

3.5. The Commission is authorized to make copies of the Documentation provided by the Contractor only for internal distribution. Copies of the Software may be made by the Commission only for back-up and archival purposes.

3.6. The Commission agrees not to remove or destroy any proprietary markings, restrictive legends, or intellectual property notices on or in the Software and Documentation.
3.7. All title, ownership rights and intellectual property rights in and to the Software and the Documentation shall remain with the Contractor. The Commission acquires no title, right or interest in the Software or the Documentation, other than the License(s) specifically granted herein by the Contractor and the title to the media upon which the Software is delivered.

4. **SUPPLY OF SOFTWARE AND DOCUMENTATION**

4.1. The Contractor shall supply to the Commission a properly functioning and fully tested Software system, as well as its new versions, releases and/or upgrades.

4.2 The Contractor shall provide the Commission with the Documentation, as well as catalogues and other descriptive literature with respect to the Software and its new versions, releases and/or upgrades.

5. **WARRANTY**

5.1. The Contractor warrants that the licensing and use of the Software by the Commission in accordance with the terms of this License Agreement shall not infringe any copyright, patent or registered design rights of any third party.

6. **INDEMNITY**

6.1. If any claims of copyright infringement are asserted against the Commission by virtue of the infringement by the Contractor of a third party intellectual property rights through the grant of this Software License, the Contractor agrees, upon written notification of such claim by the Commission, to indemnify, hold and save harmless the Commission from and against all such suits, claims, demands and liability, including costs and expenses incurred by the Commission. The Commission shall give the Contractor due notice in writing of any such claim and, without prejudice to the Commission’s privileges and immunities under international law, the Commission shall give the Contractor the opportunity to defend the Commission against any such claim at its discretion.

6.2. If, as a result of any claim, suit or proceeding so defended, any of the Software is held to constitute an infringement or its use by the Commission is enjoined, the Contractor shall, at its option and expense, either (i) procure for the Commission the right to continue using said Software; (ii) replace it with substantially equivalent non-infringing Software; or (iii) modify it so that it becomes non-infringing.

6.3. If the violation of Software rights is the result of the use of the Software in combination with other products not delivered by the Contractor, then the Contractor shall not be held liable.

7. **INSOLVENCY AND BANKRUPTCY**

7.1. Should the Contractor become insolvent or be adjudged bankrupt, the Commission, after having paid the Contract Price, will retain the License to use the Software, whether or not the Commission elects to terminate the Contract under Clause 21 of the General Conditions of Contract.
1. **PREAMBLE**

1.1. This License Agreement is part of the Contract entered between the Commission and the Contractor (hereinafter collectively referred to as the “Parties”).

1.2. The Contractor certifies that it has a right to grant a license (hereinafter referred to as the “License”) to the software (hereinafter referred to as the “Software”) and relevant documentation (hereinafter referred to as the “Documentation”) under this License Agreement, while the manufacturer of the Software retains all intellectual property rights to the Software and Documentation.

1.3. The Contractor is willing to grant and the Commission desires to acquire a non-exclusive, non-transferable, irrevocable License as provided below.

1.4. The Parties hereto have agreed as follows.

2. **DEFINITIONS**

   As used herein, the following terms shall have the following definitions:

2.1. “License Agreement” means the present document.

2.2. “License” means the license to the Software and Documentation granted under this License Agreement.

2.3. “Documentation” means the manufacturer’s copyrighted materials that document functions of the Software.

2.4. “Effective Date” means the date of the last signature by the representatives of the Parties of the Contract, on which the Contract shall enter into force.

2.5. “Eligible Users” means the Commission’s employees and/or direct contractors.

2.6. “Software” means the software listed in the Contract.

Capitalized terms shall have the same meaning as defined in the Contract and the General Conditions of Contract, unless expressly otherwise defined herein.

3. **GRANT OF RIGHTS AND LICENSES**

3.1. The Contractor hereby grants the Commission a non-exclusive, non-transferable, irrevocable License to use the Software and Documentation, under the terms and conditions set forth herein.

3.2. The Commission is authorized to use the Software and Documentation only for activities related to the fulfillment of the mandate and purposes of the CTBT including the performance of services of the Commission’s own commercial and/or government customers. The Commission is not authorized to sublicense, distribute, sell, or grant access to the Software, or integrate it into products or computer software programs of third parties unless required for the performance of activities related to its mandate.

3.3. Access to, and use of, the Software is restricted to Eligible Users.

3.4. The Commission agrees to protect the Software and the Documentation from use by, or disclosure or distribution to, persons who are not Eligible Users.

3.5. The Commission is authorized to make copies of the Documentation provided by the Contractor only for internal distribution. Copies of the Software may be made by the Commission only for back-up and archival purposes.
3.6. The Commission agrees not to remove or destroy any proprietary markings, restrictive legends, or intellectual property notices on or in the Software and Documentation.

3.7. All title, ownership rights and intellectual property rights in and to the Software and the Documentation shall remain with the manufacturer. The Commission acquires no title, right or interest in the Software or the Documentation, other than the License(s) specifically granted herein by the Contractor and the title to the media upon which the Software is delivered.

4. SUPPLY OF SOFTWARE AND DOCUMENTATION

4.1. The Contractor shall supply to the Commission a properly functioning and fully tested Software system, as well as its new versions, releases and/or upgrades.

4.2. The Contractor shall provide the Commission with the Documentation, as well as catalogues and other descriptive literature with respect to the Software and its new versions, releases and/or upgrades.

5. WARRANTY

5.1. The Contractor warrants that the licensing and use of the Software by the Commission in accordance with the terms of this License Agreement shall not infringe any copyright, patent or registered design rights of any third party.

6. INDEMNITY

6.1. If any claims of copyright infringement are asserted against the Commission by virtue of the infringement by the Contractor of a third party intellectual property rights through the grant of this Software License, the Contractor agrees, upon written notification of such claim by the Commission, to indemnify, hold and save harmless the Commission from and against all such suits, claims, demands and liability, including costs and expenses incurred by the Commission. The Commission shall give the Contractor due notice in writing of any such claim and, without prejudice to the Commission’s privileges and immunities under international law, the Commission shall give the Contractor the opportunity to defend the Commission against any such claim at its discretion.

6.2. If, as a result of any claim, suit or proceeding so defended, any of the Software is held to constitute an infringement or its use by the Commission is enjoined, the Contractor shall, at its option and expense, either (i) procure for the Commission the right to continue using said Software; (ii) replace it with substantially equivalent non-infringing Software; or (iii) modify it so that it becomes non-infringing.

6.3. If the violation of Software rights is the result of the use of the Software in combination with other products not delivered by the Contractor, then the Contractor shall not be held liable.

7. INSOLVENCY AND BANKRUPTCY

7.1. Should the Contractor become insolvent or be adjudged bankrupt, the Commission, after having paid the Contract Price, will retain the License to use the Software, whether or not the Commission elects to terminate the Contract under Clause 21 of the General Conditions of Contract.
The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (the “Commission”) is an international organization which enjoys privileges and immunities under international law for the exercise of its functions.

Nothing in or relating to any end user agreement accepted by the Commission for purposes of obtaining goods/services from the supplier¹ is to be deemed as waiver of any of the privileges and immunities of the Commission, or of the privileges and immunities enjoyed by the Commission’s officials and experts.

To ensure the definitive settlement of any disputes that may arise in the context of an end user agreement, disputes that cannot be amicably resolved between the Commission and the supplier shall be referred by either party for settlement in accordance with the arbitration rules established by UNCITRAL as at present in force. The number of arbitrators shall be one. The place of arbitration shall be Vienna, Austria, and the arbitration shall be conducted in the English language. The supplier’s attention is drawn to the fact that as a publicly funded international organization, the Commission cannot and does not accept indemnification obligations, and the Commission’s liability for any breach of an end user agreement must be limited to the price that has been paid by the Commission for the goods/services.

The supplier’s attention is also drawn to the Commission’s requirement that all information or data that is made available to, or that is accessible by, the supplier by means of the Commission’s use of its goods/services remains the Commission’s property and is to be treated as confidential by the supplier.

The terms and requirements set forth in this End User Disclaimer shall prevail over any terms and conditions of the end user agreement and over any amendments to the end user agreement that may be subsequently accepted by the Commission.

¹ For purposes of this End User Disclaimer, the term “supplier” shall mean the Commission’s counterpart in an end user agreement, which is generally understood to be the owner/licensor of the goods/services whose use is subject to the terms and conditions of the end user agreement.
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-paragraphs (a) through (c) above will be inserted in all subcontracts made in performance of the Contract, except sub-contracts exclusively for furnishing Goods.

10. **ENCUMBRANCES/LIENS**

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

11. **OBSERVANCE OF THE LAW**

(a) The Contractor shall comply with all laws, ordinances, rules and regulations, including but not limited to health, environmental and labour laws bearing upon the performance of its obligations under the terms of the Contract.

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

12. **CONFIDENTIALITY**

(a) All technical, financial or other documentation and data the Contractor compiled for or received from the Commission under the Contract shall be treated as confidential and shall be delivered only to the Commission’s authorized officials on completion of the Services or as requested by the Commission.

(b) Either Party acknowledges that all knowledge and information concerning the other Party that may be acquired in connection with the performance of its obligations under the Contract, including but not limited to, any information relating to its operations and procedures, are confidential and proprietary information of the other Party and it shall receive such confidential and proprietary information of the other Party in confidence and shall not disclose or permit disclosure of any such knowledge or information to any person and/or entity without the prior written consent of the other Party.

(c) The Contractor shall not, at any time, use such confidential information to its own advantage.

(d) The restrictions on confidentiality shall not apply to the information which:
   (i) presently is in the public domain;
   (ii) hereafter becomes part of the public domain without the other Party’s fault;
   (iii) was in the possession of the other Party at the time of the disclosure, as shown by written evidence;
   (iv) is disclosed to the other Party at any time hereafter by a third Party.
   (v) is required to be disclosed to governing bodies, or to governmental authorities to the extent required by law or to obtain needed authorization to perform the Contract or pursuant to reporting requirements imposed by those governing bodies or the government of the State of the Contractor.

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

13. **LANGUAGES, WEIGHTS AND MEASURES**

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

14. **PUBLICITY**

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

(b) These obligations do not lapse upon satisfactory completion of the Services, delivery of the Goods or termination of the Contract.
15. OFFICIAL NOT TO BENEFIT/CONTINGENT FEES

(a) The Contractor warrants that:

(i) No person or selling agency has been employed or retained by it to solicit or secure the Contract upon an agreement or understanding for a commission, percentage, brokerage, contingent fee or retainer, except regular employees or bona fide and officially established commercial or selling agencies maintained by the Contractor for the purpose of securing business;

(ii) No official or servant or retired employee of the Commission who is not a regular employee of the Contractor, has been or shall be admitted by the Contractor to any direct or indirect benefit arising from the Contract or the award thereof.

(b) In case of breach by the Contractor of the warranties referred to in previous clauses, the Commission shall have the right to deduct from the Contract Price, or otherwise recover from the Contractor, the full amount of any such commission, percentage, brokerage, contingent fee or retainer so paid.

16. INTELLECTUAL PROPERTY AND OTHER PROPRIETARY RIGHTS

(a) Except to the extent the Contractor has granted a license to the Commission, the 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 awards arising from such claims. This obligation of the Contractor shall continue to be in full force and effect up to the expiration of such intellectual property rights.

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

17. DEFAULT BY THE CONTRACTOR

(a) In case the Contractor fails to fulfill 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
Terms of Reference PKI

CTBTO Public Key Infrastructure
Maintenance, Support and Development of Enhanced Solutions
TABLE OF CONTENTS

1. Introduction .......................................................................................................................... 3
2. PTS PKI High-Level Architecture Overview ........................................................................ 3
3. Base of Operations ................................................................................................................. 4
4. Scope of Work ........................................................................................................................ 4
5. Invoicing/ Price Model .......................................................................................................... 4
6. Call-off Work Order Mechanism (applicable to C1 only) .................................................... 5
   6.1. Planning .......................................................................................................................... 5
   6.2. PTS WO Signoff ............................................................................................................ 5
7. Resources provided by the Commission ............................................................................... 6
8. Duration ................................................................................................................................ 6
   8.1. Initial Fixed Period ......................................................................................................... 6
   8.2. Optional extensions ....................................................................................................... 6
9. Penalties ................................................................................................................................ 6
10. C1 – Software Support Services .......................................................................................... 8
   10.1. General Services Requirements .................................................................................. 8
   10.2. Minimum required expertise: ..................................................................................... 9
   10.3. Qualifying Criteria for C1 Category ............................................................................ 9
11. C2 – Hardware Maintenance Services (HSM Infrastructure) .............................................. 11
   11.1. General Services Requirements ............................................................................... 11
   11.2. Minimum required expertise: ................................................................................... 11
   11.3. Qualifying Criteria for C2 Category .......................................................................... 11
Annex A PTS PKI Architecture Elements ............................................................................. 12
1. Introduction

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organisation (hereafter referred to as “the Commission”), 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 weapon test explosion or any other nuclear explosion. The verification system includes the International Monitoring System (IMS), a global network of monitoring stations (radionuclide technologies: particulate and noble gas; waveform technologies: seismic, hydro-acoustic and infrasound), a Global Communications Infrastructure (GCI), an International Data Centre (IDC) and the capability to carry out On-Site Inspections (OSI).

Under CTBT requirements, The Provisional Technical Secretariat (PTS) of the Commission has deployed over 320 stations worldwide. Each station sends the collected IMS Data, in real-time, to Vienna, for processing.

Consequently, the integrity (physical and digital) and authenticity of the IMS Data shall be ensured. In order to comply with IMS Data security requirement, PTS has engineered and deployed its own Public Key Infrastructure (PKI) based on Verizon's UniCERT v5.4.1 technical solution. Under CTBT provisions, PKI Services shall meet high-availability (99.98%) status.

PTS intends to establish up to two contracts for the provision of maintenance, support and development of enhanced solutions for CTBTO KPI Infrastructure (“the Services”), in accordance with the terms outlined in these Terms of Reference.

2. PTS PKI High-Level Architecture Overview

PTS’ PKI is currently operating on a highly customized platform and consists of three (3) environments:

   a. **PKI Dev/Test**: includes PKI infrastructure involved in testing of various authentication mechanisms applicable to IMS Data digital signing mechanisms; PKI Test is also used for PKI Operators Training purposes;
   
   b. **PKI production**: includes PKI infrastructure involved in operating the IMS Data Authentication and Verification Mechanisms; and
   
   c. **PKI-N-BOX** Business Continuity and Disaster Recovery System; this system is a miniaturized, mobile version of the PKI production environment; the system was in-house developed and deployed.

All environments employ high-availability server clusters running on a high-security zoning network including but not limited to:

   a. Verizon UniCERT 5.4.1
   
   b. VMWare
   
   c. Microsoft Server Windows 2012 R2
   
   d. Linux RHEL 6.10
PKI Architecture Elements are outlined in detail in Annex A of this document.

3. Base of Operations

Currently, PTS PKI is hosted at the United Nations Vienna International Centre in Vienna, Austria.

4. Scope of Work

The scope of work defined under this ToR includes two Categories of Services (C1 and C2).

The categories are:

- **C1: Software Support Services** including:
  - Software Support Services for PKI UniCERT Software Infrastructure (all PKI environments); and
  - Maintenance and Enhancement of the PKI Web-based Portals.

- **C2: Hardware Maintenance Services for the PTS HSM infrastructure**

The Contractor may submit their offer for one (C1 or C2) or both (C1 and C2) categories. If the Contractor submits an offer for both categories, each category shall be quoted individually.

5. Invoicing/ Price Model

Invoicing model shall be based on the following:

5.1. **C1: Software Support Services**
- The Contractor shall provide ongoing monitoring and basic support services on a 24x7 basis. Invoicing for services will be done on a quarterly basis.
- The Contractor shall procure the licenses for UniCERT software and invoice them separately.
- In addition to the firm services outlined above, the Contractor may be asked to provide additional on-demand support services that will be invoiced on a Call-Off / Work order basis, at a fixed daily rate. Those on-demand services may include service outages, operational incidents, training of PKI operators and specialized support to various PTS business units, as well as on-demand development work (i.e. PKI Portal enhancement, Command & Control Portal, PKI Monitoring Portal, etc.).
5.2. C2: Hardware Maintenance Services
- The Contractor shall procure all necessary licenses for the HSMs listed in Annex A, including corresponding partitions.
- The contractor shall procure maintenance and support contracts from the manufacturer for all HSM devices listed in Annex A.
- The support and maintenance contracts must correspond to level “Plus” or higher, as defined in: https://supportportal.thalesgroup.com/csm/?id=kb_article_view&sys_kb_id=3757d9921b3108d0f2888739cd4bcb31&sysparm_article=KB0020654.
- The Contractor shall provide hardware maintenance and support services including all hardware repair and original replacement parts necessary to restore the equipment to good working condition. All firmware upgrades must also be included. All repairs need to be completed within 48 hours during workdays (weekends excluded).

6. Call-off Work Order Mechanism (applicable to C1 only)

PTS will request the Contractor to perform the contracted services upon the issuance of a Work Order (WO) by the Commission. The WO will include the detailed scope of work, invoicing and payment methods, project metrics, etc. The WO mechanism employs a two-phase process:

6.1. Planning

PTS issues a written request outlining the scope of work (SoW), timeline and expected outcome. The Contractor shall submit, within one (1) week from receiving the written request, a proposed Work Plan (WP) including:

- Acknowledgment of the SoW requirements;
- Proposed service tasks for deliverables;
- Proposed timeline within PTS specified parameters (Start – End dates);
- Staff (names and required qualifications) assigned to tasks;
- Necessary number of man-days per task;
- Place of work (on-site / off-site);
- The list of any hardware replacement with relevant costs;
- Special requirements for PTS (i.e. necessary PTS support resources such as physical access on-site, remote access, servers access, etc).

6.2. PTS WO Signoff

After review of the proposed WP, PTS will issue the WO. The Commission will forward the WO to the Contractor with adequate advance notice (within one week from the date of WP submission). The PTS WO represents the contractual basis for work initiation and subsequent invoicing.
7. Resources provided by the Commission

For designated Contractor personnel, and to the extent necessary for the Contractor to fulfil the requirements of these TOR, the Commission will provide:

a) Non-exclusive access to infrastructure, including office space and standard office supplies, hardware and software;

b) Reasonable access to PTS office infrastructure e-mail, telephone, remote access services;

c) Restricted physical access to selected areas of the PTS Data Centre; access will be granted only upon request and approval by the relevant internal bodies;

d) Relevant documentation necessary for performance of the contract;

e) Qualified staff will be made available to assist the Contractor in carrying out the Work;

f) PKI supporting infrastructure not falling under Contractor responsibilities (server hardware, cloud services, hosting racks, environmental control systems, physical security systems, specific gear and equipment);

g) PTS will provide the necessary virtual servers, Windows, Linux and Oracle (licenses included) enterprise database servers as needed.

8. Duration

8.1. Initial Fixed Period

The Contractor shall provide the services from 01 November 2020 to 31 December 2025. Performance of the Work may commence immediately after Contract Signoff and continue for up to 62 months, to the extent requested by PTS.

The contracted volume of work will be limited to 750 man-days for Category C1 during the fixed contract period. PTS reserves the right, at its sole discretion, to call-off less or no man-days at all.

8.2. Optional extensions

The contracted duration may be extended by PTS for an additional period of one (1) year, until 31 December 2026 under the same conditions as the initial contract period and with up to additional 150 man-days for category C1. The PTS would notify the Contractor in writing at least one (1) month in advance of its intention to extend the contract.

9. Penalties

If the Contractor fails to deliver services as described in the general services requirements sections for both C1 and C2, or in individual work orders, PTS may (without prejudice to its other remedies under the Contract) apply penalties of 0.5% (half of a percent) of the total value of the Work Order/Contract for any additional day of delay up to a maximum amount of 10% of the total WO's/contract's value. The penalty amounts will be deducted from the relevant invoices for the quarterly periods or for the relevant Work Order.
If the maximum amount of 10% of the total contract value is reached, PTS retains the right to re-negotiate the terms of the contract or unilaterally terminate the contract.
10.  C1 – Software Support Services

10.1. General Services Requirements

The Contractor shall support PTS with expertise, staff and equipment in order to attain the following objectives:

a) PKI Services shall be operational 24x7 at a 99.98% availability rate. In order to achieve this strict service requirement, the Contractor shall prove necessary expertise, availability and operational capability to support the UniCERT based software infrastructure.

b) In case of an incident or outage, the Contractor shall respond within 2 hours. If the problem requires on-site presence in Vienna, the Contractor shall ensure presence on-site within 48 hours. The resolution time will be mutually agreed based on the nature and severity of an incident or outage, and will be binding for the Contractor.

c) The Contractor shall procure the required software modules and licenses required for normal operations of the PKI systems.

d) The Contractor shall maintain and provide updated technical documentation for the existing systems and services in scope.

e) The Contractor shall assist PTS in case of incidents in order to ensure quick service recovery while maintaining the security posture of the PKI systems.

f) The Contractor shall be responsible for on-going monitoring services off all PKI services and systems (as listed in Annex A) including system health, security events, environmental controls, interfaces and dependencies. The contractor shall develop a monitoring and dashboard to provide availability information on each component of the PKI (see Annex A). The Contractor shall provide and deploy all the software systems required to monitor and display the availability information. The costs of the software components and of the services required to build and deploy the monitoring solution shall be included in the proposal.

g) The Contractor shall provide personnel 24x7 at a remote location to receive and process alerts generated by the monitoring solution. The Contractor’s personnel will be fully responsible for recovering from incidents in the PKI systems or promptly escalate the incident to the designated PTS PoC if the incident is outside of the scope of these ToR.

h) PTS will provide IPSEC VPN connectivity to the provider for the operation of the monitoring system and to allow authorized personnel to support the PKI systems.

i) The Contractor shall Interface and coordinate activities with manufacturers (support and engineering groups) as necessary in order to obtain specialized expertise and/or technical documentation that is not publicly available.
j) The Contractor shall procure all necessary support and maintenance contracts from the manufacturers of the PKI software components, except for the components already covered by PTS contracts: VMWare, Windows, Red Hat Linux, Oracle Server.

k) The Contractor shall generate and keep up-to-date PKI Business Continuity (BCP) and Disaster Recovery Governance (DRP) plans, Standard Operating Procedures (SOPs) and protocols integrated with the overall PTS BCP/DRP protocols.

l) The Contractor shall provide technical support to PTS PKI Training for PKI Operators including PKI Test/DEV environment setup, creation and management of PKI training materials such as presentations, protocols and Standard Operating Procedures (SOP).

m) The Contractor shall ensure ongoing operational status of the PKI Web portals and interfaces. Where necessary, new developments or enhancements of the existing portals will be undertaken by the Contractor.

n) The Contractor shall assign its Staff to PTS; Contractor Staff shall meet the required expertise levels in line with the tasks’ complexity.

10.2. Minimum required expertise:

a) University Degree in Computer Sciences or equivalent. Additional professional certifications such as CISSP, SANS GIAC, MCSE, PMP, PRINCE2, ITIL constitute an advantage;

b) Fluency in English, advanced technical writing and presentation skills;

c) Proven and verifiable hands-on expertise (as per qualifying criteria outlined below).

10.3. Qualifying Criteria for C1 Category

The Contractor’s personnel assigned to this Contract shall have:

C1.1 Knowledge and at least 5 years (in the past 10 years) experience in design, deployment and support of PKI UniCERT v5.4 and above (see Annex A: Items #1 - #5 and #9 - #33).

C1.2 Knowledge and at least 5 years (in the past 10 years) experience including all relevant algorithms implemented in the Commission’s PKI and X.500/LDAP directories (eg SHA1, SHA2, SHA3, DSA, ECDSA).

C1.3 Knowledge of standards such as Public Key Cryptography Standards including open source implementations of PKI and related applications (specifically OpenSSL, OpenSSH and OpenLDAP), Secure Shell (SSH) terminal emulation and file transfer functionality, file transfer (FTP) and relevant scripts.

C1.4 Knowledge and at least 5 years (in the past 10 years) experience on various core platform components, including Operating System and database
expertise (e.g. Windows XP, 7, 8, 10, Server 2008, VMWare, and other Virtualization platforms, Linux RHEL server platforms, LDAP, SQL and Oracle Databases).

C1.5 Knowledge and at least 5 years (in the past 10 years) experience in PKI UniCERT service monitoring systems (system health-check, integration with big data analysis platforms such as Splunk).

C1.6 Knowledge and at least 5 years (in the past 10 years) experience in Incident Response activities including but not limited Service Operations centre (SOC), Hotlines, toll-free support numbers or similar Always-ON contact capabilities in order to respond to incidents within one (1) hour from the PTS initiated call.

C1.7 Knowledge and at least 5 years (in the past 10 years) experience in Incident Response methodologies, troubleshooting and Disaster Recovery protocols.

C1.8 Knowledge and at least 5 years (in the past 10 years) experience in developing and implementing WEB Services (SOAP/REST).

C1.9 Knowledge and at least 5 years (in the past 10 years) experience in Enterprise Java Software Development stack preferably with the Spring Framework.

C1.10 Knowledge and at least 3 years (in the past 5 years) experience in CryptoAPI including BouncyCastle.

C1.11 Knowledge of and at least 5 years (in the past 10 years) experience in Oracle and Postgress SQL RDBMS.

C1.12 Knowledge and at least 3 years (in the past 5 years) experience in object-oriented development and common design patterns and methodologies.

C1.13 Knowledge and at least 3 years (in the past 5 years) experience in software development using Agile methodology (preferably SCRUM or Kanban).

C1.14 Knowledge and at least 3 years (in the past 5 years) experience in DevOps principles and desired experience building CI/CD pipelines.

C1.15 Knowledge and at least 3 years (in the past 5 years) experience in code development on various platforms including Java, Mobile (Apple, Android), HTML5.0 and other modern technologies, scripting and code testing.

The Contractor shall comply with the following requirements:

C1.16 Long-standing market presence (at least 10 years) in Software Development and/or System Integration (SI) and support services for PKI industry.

C1.17 Present appropriate base of operations in order to be present on-site in Vienna within 48 hrs if required and/or ensure delivery service of spare parts and replacement units within the mutually agreed time.

C1.18 Delivery of at least three (3) complex PKI projects in heterogeneous, geographically distributed environments including but not limited to large corporations, banks, national governments or international organizations.
11. C2 – Hardware Maintenance Services (HSM Infrastructure)

11.1. General Services Requirements

The Contractor shall support PTS with expertise, staff and equipment in order to ensure that PKI Services shall be operational 24x7 at a 99.98% availability rate. The Contractor staff shall comply with PTS required levels of expertise.

11.2. Minimum required expertise:

a) Manufacturer certified/ formally trained and/or authorized system integrator for Gemalto SafeNet Luna HSM and Verizon UniCERT v5.4 platforms;
b) Fluency in English, including advanced technical writing and presentation skills; and
c) Proven and verifiable hands-on expertise (as per qualifying criteria outlined below).

11.3. Qualifying Criteria for C2 Category

The Contractor’s personnel assigned to this Contract shall have:

C2.1 Knowledge and at least 3 years (in the past 5 years) work experience in deploying and/or supporting Gemalto Safenet Luna SA 5 v5.4.7.1 HSM in PKI environments including installation, configuration, operation and troubleshooting of the afore-mentioned HSM (see Annex A: items 6, 7 and 8).

C2.2 Knowledge and at least 3 years (in the past 5 years) work experience in deploying Gemalto Safenet Luna SA 5 v5.4.7.1 HSM in Verizon-based UniCERT v4.x and/or v5.x PKI environments.

C2.3 Knowledge and at least 3 years (in the past 5 years) work experience in deploying, operating and supporting HSM monitoring systems (system health-check, integration with big data analysis platforms such as Splunk).

The Contractor shall comply with the following requirements:

C2.4 Long-standing market presence (at least 10 years) in System Integration and support services for Crypto Hardware industry.

C2.5 The support and maintenance contracts must be at level “Plus” or greater, as defined in: https://supportportal.thalesgroup.com/csm/?id=kb_article_view&sys_kb_id=3757d9921b3108d0f2888739cd4bcb31&sysparm_article=KB0020654.
<table>
<thead>
<tr>
<th>Item</th>
<th>Server</th>
<th>Server Role</th>
<th>Environment</th>
<th>Physical Server</th>
<th>Services Running</th>
<th>OS</th>
<th>Application Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OPS Primary CA</td>
<td>Primary CA</td>
<td>Production</td>
<td>HP DL360 cluster</td>
<td>UniCERT CA UniCERT CSS UniCERT RA UniCERT RAX UniCERT Publisher</td>
<td>RedHat 6 (6.10)</td>
<td>UniCERT v5.4.1</td>
</tr>
<tr>
<td>2</td>
<td>OPS Secondary CA</td>
<td>Secondary CA</td>
<td>Production</td>
<td>HP DL360 cluster</td>
<td>UniCERT CA UniCERT CSS UniCERT RA UniCERT RAX UniCERT Publisher</td>
<td>RedHat 6 (6.10)</td>
<td>UniCERT v5.4.1</td>
</tr>
<tr>
<td>3</td>
<td>Test CA</td>
<td>Test CA</td>
<td>Test</td>
<td>HP DL360 cluster</td>
<td>UniCERT CA UniCERT CSS UniCERT RA UniCERT RAX UniCERT Publisher</td>
<td>RedHat 6 (6.10)</td>
<td>UniCERT v5.4.1</td>
</tr>
<tr>
<td>4</td>
<td>Nagios Server</td>
<td>Nagios Monitoring</td>
<td>Production/Test</td>
<td>HP DL360 cluster</td>
<td></td>
<td>RedHat 6 (6.10)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Backup Server</td>
<td>Windows Backup</td>
<td>Production/Test</td>
<td>HP DL360 cluster</td>
<td></td>
<td>Windows Server 2012 R2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>HSM1</td>
<td>Primary HSM</td>
<td>Production</td>
<td>Gemalto Luna SA 1700 (5x partitions)</td>
<td></td>
<td></td>
<td>SA 5.4.7-1</td>
</tr>
<tr>
<td>7</td>
<td>HSM2</td>
<td>Secondary HSM</td>
<td>Production</td>
<td>Gemalto Luna SA 1700 (5x partitions)</td>
<td></td>
<td></td>
<td>SA 5.4.7-1</td>
</tr>
<tr>
<td>8</td>
<td>PIB HSM</td>
<td>PKI in a Box HSM</td>
<td>PKI-in-a-box</td>
<td>Gemalto Luna SA 1700 (5x partitions)</td>
<td></td>
<td></td>
<td>SA 5.4.7-1</td>
</tr>
<tr>
<td>9</td>
<td>PIB Laptop</td>
<td>PKI in a Box Laptop</td>
<td>PKI-in-a-box</td>
<td>Toshiba core i7, 32GB, 512 GB HDD Laptop</td>
<td>VMWare VMs</td>
<td>Windows Server 2012 R2</td>
<td>Vmware Workstation</td>
</tr>
<tr>
<td>Item</td>
<td>Server</td>
<td>Server Role</td>
<td>Environment</td>
<td>Physical Server</td>
<td>Services Running</td>
<td>OS</td>
<td>Application Version</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-------------</td>
<td>-------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>----</td>
<td>---------------------</td>
</tr>
<tr>
<td>10</td>
<td>CMC1</td>
<td>CMC1 - Rack Environmental Monitoring Unit</td>
<td>Production/Test</td>
<td>PKI Rack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>CMC2</td>
<td>CMC2 - Rack Environmental Monitoring Unit</td>
<td>Production/Test</td>
<td>PKI Rack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>OPS CAO</td>
<td>Windows Workstation</td>
<td>Production</td>
<td>HP DL360 OPS cluster</td>
<td>UniCERT CAO UniCERT RAEV</td>
<td>Windows Server 2012 R2</td>
<td>UniCERT v5.4.1</td>
</tr>
<tr>
<td>14</td>
<td>Window Jumphost</td>
<td>Windows Jumphost</td>
<td>Production/Test</td>
<td>HP DL360 OPS cluster</td>
<td>RDP</td>
<td>Windows Server 2012 R2</td>
<td>RDPv3</td>
</tr>
<tr>
<td>15</td>
<td>Linux Jumphost</td>
<td>Linux Jumphost</td>
<td>Production/Test</td>
<td>HP DL360 OPS cluster</td>
<td>SSH</td>
<td>RedHat 6 (6.10)</td>
<td>OpenSSH</td>
</tr>
<tr>
<td>16</td>
<td>Test PKI Web Server</td>
<td>TEST PKI Web Server (UniCERT Components) &amp; TEST LDAP Slave for ULSU (Internal LAN)</td>
<td>Test</td>
<td>DataCentre</td>
<td>Tomcat Probe UniCERT UPI UniCERT WebHandler UniCERT WebRAO OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Tomcat v6.0.24 Open LDAP v2.4.40 OpenSSL v1.0.1e UniCERT Web v5.4.1</td>
</tr>
<tr>
<td>17</td>
<td>Test PKI Portal</td>
<td>TEST PKI PORTAL &amp; TEST LDAP Slave for ULSU (DMZ5)</td>
<td>Test</td>
<td>DataCentre</td>
<td>Tomcat Probe CACRL PKI Portal OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Tomcat v6.0.24 Open LDAP v2.4.40 OpenSSL v1.0.1e</td>
</tr>
<tr>
<td>Item</td>
<td>Server</td>
<td>Server Role</td>
<td>Environment</td>
<td>Physical Server</td>
<td>Services Running</td>
<td>OS</td>
<td>Application Version</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-------------</td>
<td>-------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>--------</td>
<td>---------------------</td>
</tr>
<tr>
<td>18</td>
<td>PKI Web Server (Primary)</td>
<td>OPS PKI Web Server Primary (UniCERT Components) &amp; OPS LDAP Slave (Internal LAN)</td>
<td>Production</td>
<td>DataCentre</td>
<td>Tomcat Probe UniCERT UPI UniCERT WebHandler UniCERT WebRAO OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Tomcat v6.0.24 Open LDAP v2.4.40 OpenSSL v1.0.1e UniCERT Web 5.4.1</td>
</tr>
<tr>
<td>19</td>
<td>PKI Web Server (Secondary)</td>
<td>OPS PKI Web Server Secondary (UniCERT Components) &amp; OPS LDAP Slave (Internal LAN)</td>
<td>Production</td>
<td>DataCentre</td>
<td>Tomcat Probe UniCERT UPI UniCERT WebRAO OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Tomcat v6.0.24 Open LDAP v2.4.40 OpenSSL v1.0.1e UniCERT Web 5.4.1</td>
</tr>
<tr>
<td>20</td>
<td>PKI Portal (Primary)</td>
<td>Primary OPS PKI PORTAL &amp; OPS LDAP Slave (DMZ5)</td>
<td>Production</td>
<td>DataCentre</td>
<td>Tomcat Probe CACRL PKI Portal OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Tomcat v6.0.24 Open LDAP v2.4.40 OpenSSL v1.0.1e</td>
</tr>
<tr>
<td>21</td>
<td>PKI Portal (Secondary)</td>
<td>Secondary OPS PKI PORTAL &amp; OPS LDAP Slave (DMZ5)</td>
<td>Production</td>
<td>DataCentre</td>
<td>Tomcat Probe CACRL PKI Portal OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Tomcat v6.0.24 Open LDAP v2.4.40 OpenSSL v1.0.1e</td>
</tr>
<tr>
<td>22</td>
<td>OPS LDAP Master</td>
<td>Production system LDAP Master (Backend)</td>
<td>Production</td>
<td>HP DL360 OPS cluster</td>
<td>OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Open LDAP v2.4.40</td>
</tr>
<tr>
<td>23</td>
<td>Test LDAP Master (ULSU)</td>
<td>Test system LDAP Master for ULSU (Backend)</td>
<td>Test</td>
<td>HP DL360 TST/MGMT cluster</td>
<td>OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Open LDAP v2.4.40</td>
</tr>
<tr>
<td>Item</td>
<td>Server</td>
<td>Server Role</td>
<td>Environment</td>
<td>Physical Server</td>
<td>Services Running</td>
<td>OS</td>
<td>Application Version</td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------</td>
<td>-------------</td>
<td>---------------------------------------</td>
<td>------------------</td>
<td>---------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>24</td>
<td>Test LDAP Master (pki team)</td>
<td>Test system LDAP Master for pki team (Backend)</td>
<td>Test</td>
<td>HP DL360 TST/MGMT cluster</td>
<td>OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Open LDAP v2.4.40</td>
</tr>
<tr>
<td>25</td>
<td>Test LDAP Slave (ULSU)</td>
<td>Test system LDAP Slave for ULSU (Internal LAN)</td>
<td>Test</td>
<td>DataCentre</td>
<td>OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Open LDAP v2.4.40</td>
</tr>
<tr>
<td>26</td>
<td>Test LDAP Slave (pki team)</td>
<td>Test system LDAP Slave</td>
<td>Test</td>
<td>DataCentre</td>
<td>OpenLDAP</td>
<td>RedHat 6 (6.10)</td>
<td>Open LDAP v2.4.40</td>
</tr>
<tr>
<td>27</td>
<td>Backend DB Connection Manager</td>
<td>Database Connection Manager Server for Backend Services</td>
<td>Production/Test</td>
<td>DataCentre</td>
<td></td>
<td>Oracle Linux 6</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Backend DB Server</td>
<td>Main Database Server (Farm) for Backend Services</td>
<td>Production/Test</td>
<td>DataCentre</td>
<td>keyring llavero</td>
<td>Oracle Linux 6</td>
<td>Oracle 18c Server</td>
</tr>
<tr>
<td>29</td>
<td>Frontend DB Connection Manager</td>
<td>Database Connection Manager Server for Frontend Services</td>
<td>Production/Test</td>
<td>DataCentre</td>
<td></td>
<td>Oracle Linux 6</td>
<td>Oracle 18c Server</td>
</tr>
<tr>
<td>30</td>
<td>Frontend DB Server</td>
<td>Main Database Server (Farm) for Frontend Services</td>
<td>Production/Test</td>
<td>DataCentre</td>
<td>webapps.test webapps.prod</td>
<td>Oracle Linux 6</td>
<td>Oracle 18c Server</td>
</tr>
<tr>
<td>31</td>
<td>RAO Officer Desktop</td>
<td>RAO authorized WebRAO desktop</td>
<td>Production/Test</td>
<td>Desktop (LAN)</td>
<td>RDP Client SSH Client</td>
<td>Windows 10</td>
<td>UniCERT 5.4.1 WebRAO Client Safenet Authentication Client 8.1</td>
</tr>
<tr>
<td>32</td>
<td>RAO Officer (backup) Desktop</td>
<td>OPS 2nd line support authorized WebRAO desktop</td>
<td>Production/Test</td>
<td>Desktop (LAN)</td>
<td>RDP Client SSH Client</td>
<td>Windows 10</td>
<td>UniCERT 5.4.1 WebRAO Client Safenet Authentication</td>
</tr>
</tbody>
</table>

PKI ToR Version 1.0 Final Page 16 of 17 July 2020
<table>
<thead>
<tr>
<th>Item</th>
<th>Server</th>
<th>Server Role</th>
<th>Environment</th>
<th>Physical Server</th>
<th>Services Running</th>
<th>OS</th>
<th>Application Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>ISM Desktop</td>
<td>ISM authorized desktop</td>
<td>Production/Test</td>
<td>Desktop (LAN)</td>
<td>RDP Client, SSH Client</td>
<td>Windows 10</td>
<td>UniCERT 5.4.1, WebRAO Client, Safenet Authentication Client 8.1</td>
</tr>
</tbody>
</table>