REQUEST FOR PROPOSAL

To:	ALL BIDDERS	***CTBTO Ref. No.:***	**2023-0117/JIBRIL**
		(PLEASE QUOTE ON ALL COMMUNICATIONS)	

	Tel. No.:	+43 (1) 26030-6350
	E-mail:	procurement@ctbto.org
Attn:		
Phone:	***Date:***	16 Aug 23
Fax:		
Email:		

Subject: Provision of Software Engineering Services Waveform Data Acquisition, Processing and Dissemination (SWES-SHI) as per attached Terms of Reference

Deadline for Submission: 18 Sep 23   ***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 acknowledgment form by email as soon as possible.

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

Yours Sincerely,   for

Sally ALVAREZ DE SCHREINER
Chief, Procurement Services Section

CTBTO
PREPARATORY COMMISSION

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

ACKNOWLEDGEMENT FORM

Solicitation No: 2023-0117	**Closing Date:** 18 Sep 23
Title: Provision of Software Engineering Services Waveform Data Acquisition, Processing and Dissemination (SWES-SHI) as per attached Terms of Reference	**Vienna Local Time:** 17:00

Procurement Staff: Othman Jibril   **CTBTO Req. No.:** 0010022628

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

<u>WITHIN FIVE (5) DAYS</u>
THE PREPARATORY COMMISSION FOR THE
COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (CTBTO)

by email to
procurement@ctbto.org

A: We shall submit our proposal

Company Name: _____

By: _____   Contact Name: _____
   (date)

Email/Tel: _____

B: We may submit and will advise

Company Name: _____

By: _____   Contact Name: _____
   (date)

Email/Tel: _____

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

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

Company Name: _____

Contact Name: _____

Email/Tel: _____

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

CTBTO

PREPARATORY COMMISSION

INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PROPOSALS

1.   General

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

This Request for Proposal (RFP) is for the provision of services as described in the attached Terms of Reference.

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

2.   Documents included in this RFP

This RFP consists of the following documents:

(a)   Letter of Invitation
   -   These Instructions for Preparation and Submission of Proposals, Bidder's Statement Form and with the following Attachments:
   -   Attachment 1: Mandatory Requirements of the Technical Proposal.
   -   Attachment 2: Evaluation Criteria and Method.
   -   Attachment 3: Price Schedule Form
   -   Attachment 4: Procedure for submission of electronic offers in 2 sealed files
(b)   List of CTBTO States Signatories
(c)   Statement of Confirmation
(d)   Vendor Profile Form
(e)   The Commission's Model Contract and its Annexes A – B;
   o   The Commission's General Conditions of Contract (Annex A)
   o   The Commission's Terms of Reference

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

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 Bid

The Bid shall be typed, dated and signed by an official legally authorized to enter into contracts on behalf of your organization. The Bid 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 Bid.

The Proposal shall be submitted electronically according to the attached "PROCEDURE FOR SUBMISSION OF ELECTRONIC OFFERS IN 2 SEALED FILES".

Bids sent by regular e-mail, unless clearly submitted as electronically sealed bids as indicated above and following the instructions outlined in Attachment 3 will not be considered and may lead to the rejection of the bidder from the procurement process.
The Bid shall be received not later than the closing date indicated in the Letter of Invitation.

Alternatively, the Bids may be submitted in <u>two sealed envelopes.</u>

a)   One sealed envelope shall contain 1 (one) original of the Financial Section of the Bid clearly marked as "Original Financial Bid".
b)   The second sealed envelope shall contain 1 (one) original of the Technical Section of the Bid marked as "Original Technical Bid". No pricing/financial information shall be included in the Technical Section of the Bid. Note however that the list of items (without the prices) shall be included in the Technical Section of the Bid.

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

The envelope shall be clearly marked as follows:
NAME OF PROJECT: [Description indicated in Letter of Invitation]
CLOSING DATE: [Date indicated in Letter of Invitation]
CTBTO REF. NO.: [Number indicated in the Letter of Invitation]
"DO NOT OPEN BEFORE THE CLOSING DATE"

Mailing Address and Closing Date

a)   The Bid shall be sent to the following addressee:

   Chief, Procurement Services Section
   Office E0918
   CTBTO, Vienna International Centre
   Wagramer Strasse 5, A-1400 Vienna
   AUSTRIA
b)   The Bid 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 <u>only</u> be accepted via e-mail be sent to:

E-mail: procurement@ctbto.org
Subject: Request for Clarifications re RFP No. RFP 2023-0117/JIBRIL

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

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

7. **Eligible Goods and Services**

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

8. **Type of Contract and Payment**

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

9. **Preparation of the Proposal**

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

The Proposal shall be composed of the following separate parts:

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

providing, but not limited to, the following information:

PART I: TECHNICAL PROPOSAL

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

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

Bidders are required to follow *Attachment 1: Mandatory Requirements of the Technical Proposal* provided as part of these Instructions for Preparation and Submission of Bids.

Point of Contact
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, Bidder's Statement and Vendor Profile Form
The attached Statement of Confirmation, Bidder's Statement and Vendor Profile Form shall be duly signed and submitted together with the Proposal.

Documents Establishing the Eligibility and Qualifications of the Bidder
The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor in accordance with the requirements set forth in the Terms of Reference. In order to award a contract to a Bidder, its qualifications must be demonstrated and documented in the Proposal to the Commission's satisfaction.

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 by providing a section-by-section response to the Terms of Reference indicating how the Bidder meet or will meet each of the technical requirements.

> The Commission will take into consideration the on-boarding time (off-site/on-site) needed to get familiar with the systems. The Proposal shall clearly state how many person-days are expected to be necessary for the Contractor's staff to familiarize with the system landscape. The estimated on-site/off-site days needed to get familiar with the systems shall be listed as a separate item in the proposal.

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.

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.

Personnel
Curriculum vitae of key personnel proposed for this contract, including technical experience to perform the Work, to be include in the technical proposal.

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

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

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

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

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

Team Roster

The Contractor shall establish and maintenance a Team Roster, which at a minimum, the following information shall be provided for each of these staff: Name; Role; Employed since; Type(s) of Service(s) from Section **Error! Reference source not found.** in which the staff may be involved and Curriculum Vitae

Each member of the Team Roster shall be appropriately skilled and experienced to carry out the role and service(s) listed in the Team Roster.

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.

PART II: FINANCIAL PROPOSAL

Bidders are required to prepare the Price Schedule using *Attachment 3 (Price Schedule Form) as applicable*, attached to these Instructions for Preparation and Submission of Bids. In presenting the cost for each item, adequate justification and calculation must be included in the Financial Proposal.

Bidders are required to define, at the minimum:

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

(ii) A breakdown of each item quoted, indicating the price, as applicsble:

All individual costs shall be stated in EURO or US Dollars and be computed to constitute the total Contract Price. Clear and detailed explanations would enable the Commission 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.

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) <u>For Austrian companies</u>

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

(3) <u>For Non-EU Companies</u>
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.

10.   **Completeness and Correctness of the Proposal**

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

11.   **Validity of the Proposal**

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

12.   **Correction of Errors**

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

13.   **Evaluation of the Proposal and Award**

(a)   The Commission will conduct the evaluation based on the criteria and method specified in Attachment 2 "Evaluation Criteria and Method".

(b)   The Commission, based on the evaluation criteria and method given in Attachment 2, will determine the Proposal(s) that "most effectively satisfies the technical and operational requirements set out in the solicitation documents", subject to contractual and financial compliance.

(c)   The Commission reserves the right, as it deems appropriate, to award to a single bidder, to award to multiple bidders in any combination or not to award to any of the bidders as a result of this RFP.

(d)

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 the 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.

BIDDER'S STATEMENT
PLEASE STATE BELOW & SUBMIT WITH PROPOSAL

Delivery Time:

Shipping weight (kg) and Volume (m^3) – if applicable:

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

☐ For one year period ☐ For a period of ………………………….

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

☐ For a two-year period ☐ For a period of ………………………….

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

State country of origin or assembly of all items quoted:

Quantity discount and early payment discount (if any):

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

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

Confirmation that the bidder has reviewed the Commission's General Conditions of Contract, Model Contract, and agreed to all terms and conditions.
Yes ☐ **No** ☐
Remarks:

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

Yes ☐ No ☐ Not applicable ☐
Remarks:

Name:

Name & Title of Contact Person:

Signature & date:

ATTACHMENT 1

For the Provision of Software Engineering Services for Waveform Data Acquisition, Processing and Dissemination on A Call-Off Basis

Mandatory Requirements of the Technical Proposal

Item	Minimum content
1. Executive Summary	• Provide an overview of proposal
2. Experience, Resources and Project Management	

2.1 Corporate Profile and Values	• Brief background of the company, mission/vision, ownership, size, location, number of personnel by type (technician, engineer, etc.), departments, profile, etc.
	 • Company business structure and its authority to execute all Work under the Contract.
	 • Explain the management structure to demonstrate the ability to effectively provide the specified goods and/or services to the required quantity, quality, timeliness and delivery.
	 • If a consortium, provide a clear explanation of the business relationship between the members and governance for execution of this project.
	 • In case the Bidder requires the services of subcontractors, the Proposal shall include:
	     (a) Relationship of the Bidder's business to any subcontractor(s) that will be used.
	     (b) Names, addresses, legal status and qualifications of major sub-contractor(s) proposed by your organisation.
	     (c) The scope of work and nature of subcontracting; and
	     (d) A statement that any subcontractors are legally established in one of the CTBTO state signatories (see list attached to the RFP).
	     (e) A statement that the Bidder's organisation, shall act as the main contractor, bearing full responsibility for the performance of its subcontractors.

2.2 Corporate Experience	Demonstrate and provide documentary evidence the Contractor's qualification to provide the Commission with satisfactory guarantee of its technical and financial capability to deliver the services required as per the Terms of Reference for a time period of up to six (6) years. The proposal should detail the Bidder's experience in managing and executing work of similar scope and complexity. In particular, the proposal should cover: • Past experience in the area of digital signal processing, environmental monitoring, scientific visualization, software testing and testing automation • The challenges that such projects presented, and the strategies used to overcome these challenges.
2.3 Project Management Team and Staffing	Describe the software development methodologies used in past and current projects, including on experience with Agile software development methodologies, in particular Scrum and Kanban, and the way the company may have customized Scrum or Kanban to address challenges posed by individual projects.

2.4	Availability of resources	- Please address in as much detail as reasonable what resources you will make available for the successful provision of software development such as: – key personnel – hardware – software – offsite facilities for developers. - Please describe how the requirements in section V.1 of the Terms of Reference (ToR) are satisfied. The bidder's proposal should explain to extent (as a percentage of a Full-time Equivalent) each member of the Team Roster's is available during the initial 2-year contractual period
2.5	Quality and Project Management Processes	- List and describe any quality and/or process management systems in use by the Bidder in its software projects. Include copies of any relevant current certifications as attachments to the Technical Proposal. - List and describe any project management methodologies in use by the Bidder in its software projects. Include copies of any relevant current certifications as attachments to the Technical Proposal - Describe any established risk management and risk mitigation measures in use by the Bidder. Provide an overview of what strategies are in place to manage and mitigate key risks that could affect the delivery of the services. - Please describe the governance mechanisms on the side of the contractor, including monitoring of the performance of the staff executing the project and how complaints regarding non-performance of the staff involved in the project should be raised and will be addressed by the bidder. - The bidder's response should describe the expected inputs/resources to be made available by the Commission.

3. Meeting the Requirements

3.1	Understanding of the project	Please describe your understanding of the services that are to be provided under this ToR (Section III), detailing key assumptions that impact the Technical Proposal.
3.2	Documentation and Reporting	- Provide written assurance that all reports, documentation and communication (written and oral) supplied to the Commission shall be in English and submitted in an electronic form. - Provide written assurance that all documentation will adhere to the IDC Documentation Standards, samples of which will be provided to the successful Contractor.
3.3	Warranty	Confirm a warranty period of at least one year after the completion of the user acceptance testing. Terms and conditions of post-warranty support and bug fixes shall be available and clearly specified.
3.4	Pre-screening process for Software Team	Briefly describe a proposed pre-screening process to identify suitable staff to Software Teams from the Team Roster (ToR Section V.2).
3.5	No-obligation to call-off	Provide a written acknowledgement and acceptance of the Commission's no obligation clause i.e. the Commission reserves the right, at its sole discretion, to call-off more, less or no person-days at all under the Contract.

4. Skills and Experience of key staff

4.1 Key Personnel Experience	• Include at least 4 key personnel meeting the requirements to be included in the Team Roster as described in Section V.2 of the ToR, and their CVs. • Describe the proposed role; how long each of the key personnel has been employed with the Bidder; and the type(s) of Service(s) from Section III of the ToR in which each proposed staff may be involved. Justify how each member of the Team Roster is appropriately skilled and experienced to carry out the role and service(s) listed in the proposed Team Roster. Please note that one proposed staff can have expertise in more than one of the key services described in section III. List past projects in which each of the proposed staff has acquired the experience described in sections III and V.2.4 of the ToR. • A statement that the capacity, in terms of qualified human resources in the proposed Team Roster, is adequate to tackle all Services described in Section III of the ToR, including maintaining availability of personnel to start Work under FRDs when required for the duration of the Contract. • A statement on the capability and capacity of the suggested Team Roster to provide Software Services in the environment described in Section II of the ToR. • Identify the key point(s) of contact for the full scope of the Contract.
4.2 Visa & Work Permits	Provide written confirmation that the Bidder understands and agrees to taking responsibility for obtaining any Visa and/or work permits, which may be required to perform the Work under the Contract.
5. Attachments	
	• Statement of Confirmation • Vendor Profile Form • Statement regarding Model Contract

Attachment 2
Evaluation Criteria and Method

Ref No. in TOR	1.QUALIFICATION REQUIREMENTS (PASS/FAIL)	PASS/FAIL
	Requirements for the Contractor (PASS /FAIL)	**PASS/FAIL**
V.1	The Contractor is a company established for at least seven (7) years	PASS/FAIL
V.1	The Contractor has a minimum of five (5) years of experience in providing software development services using an Agile methodology, preferably Scrum	PASS/FAIL
V.1	The Contractor has a minimium of three (3) years experince working with an issues tracking and ticket management system, preferrably Jira	PASS/FAIL
V.1	The Contractor has successfully executed projects in the area of digital signal processing, environmental monitoring and scientific visualization in the past five (5) years	PASS/FAIL
	Requirement for the Contractor's Personnel (PASS /FAIL)	**PASS/FAIL**
V.2.4	A university degree in Computer Science, Mathematics, Physics or a related scientific/technical subject	PASS/FAIL
V.2.4	A minimum of seven (7) years of experience Experience in object oriented development and using design patterns, in depth experience with at least one of the following programming languages: C++, Java or Python	PASS/FAIL
V.2.4	A minimum of five (5) ears of professional experience with SQL and database programming, ideally using Oracle and/or PostgreSQL databases, experience designing data access layers and data models for an application;	PASS/FAIL
V.2.4	A minimum of five (5) years of experience in providing services for the development of UNIX and Linux-based client/server systems	PASS/FAIL
V.2.4	A minimum of five (5) years of experience providing software maintenance and support services for complex and custom software systems;	PASS/FAIL
V.2.4	A minimum of three (3) Years of experience with one or more Agile frameworks, preferrably Scrum	PASS/FAIL
V.2.4	A minimum of three (3) Years of experience with issue tracking tools, preferrably Jira	PASS/FAIL

Only bidders who pass all above criteria will be considered for the point system evaluation (2nd stage)

No.	2.TECHNICAL REQUIREMENTS - EVALUATION CRITERIA AND METHOD	Points		
	Meeting the overall requirements	Max Points	Factor	Weigted score
I - VII	Extent to which all aspects of the ToR have been addressed in sufficient detail and clarity.	10	1	10
II - VII	Demonstrated understanding of the of the work as well as the duties and responsibilities of the Contractor.	10	1.5	15
V	The Bidder possess the proven project management and quality assurance skills (e.g. ISO 9001:2015)	10	1	10
	Subtotal	**30**		**35**
	Capacity and technial expertise to deliver requested services	Max Points	Factor	Weigted score
III.1	Capacity and technical expertise to provide Digital Signal Processing Software Engineering Support	10	1.5	15
III.2	Capacity and technical expertise to provide Scientific Visualization Software Engineering Support	10	1.5	15
III.3	Capacity and Technical Expertise to provide Messaging Software Engineering Support	10	1.5	15
III.4	Capacity and Technical Expertise to provide Software Testing Support	10	1.5	15
	Subtotal	**40**		**60**
	Extent to which the Contractor meets the Requirements	Max Points	Factor	Weigted score
V.1	Extent to which the company has successfully executed projects in the area of digital signal processing, environmental monitoring and scientific visualization in the past	10	1.5	15
V.1	Amount of experience in providing software development services using an Agile methodology, preferably Scrum	10	1	10
V.1	Amount of experience working with an issues tracking and ticket management systems, preferrably Jira	10	1	10
	Subtotal	**30**		**35**
	Extent to which the Contractor's proposed staff meets the Requirements (collectively considered)	Max Points	Factor	Weigted score
V.2.4	A university degree in Computer Science, Mathematics, Physics or a related scientific/technical subject	10	0.5	5
V.2.4	Experience in object oriented development and using design patterns, in depth experience with at least one of the following programming languages: C++, Java or Python	10	0.5	5
V.2.4	Recent professional experience with SQL and database programming, ideally using Oracle and/or PostgreSQL databases, experience designing data access layers and data models for an application	10	0.5	5
V.2.4	Experience in providing services for the development of UNIX and Linux-based client/server systems	10	0.5	5
V.2.4	Experience providing software maintenance and support services for complex and custom software systems	10	0.5	5
V.2.4	Experience with all elements of the software development lifecycle: eliciting and documenting business process flows, use cases, requirements, quality management plans, user acceptance testing, and end-user training	10	0.5	5
V.2.4	Direct experience with one or more Agile frameworks, preferably Scrum and Experience with issue tracking tools, preferably Jira	10	0.5	5

V.2.4	Working knowledge of written and fluent in spoken English	10	0.5	5
	Subtotal	80		40
	TOTAL - Technical Evaluation	180		170

The minimum acceptable Total Points is 54 and the minimum weighted score is 51
The maximum number of points is 180 and the maximum weighted score is 170

EVALUATION METHOD:

1. Technical Evaluation:

The technical evaluation process will be done in two stages:

1) Stage 1: Technical proposals will first be evaluated against the mandatory requirements outlined in section 1 above, on a PASS/FAIL basis.

Compliance with all mandatory requirements is required in order to pass stage 1 of the technical evaluation and to be further considered for stage 2 of the evaluation process;

2) Stage 2: The technical proposals that have passed stage 1 of the technical evaluation process, will be evaluated against the weighted criteria set forth in the evaluation matrix above.
In order to pass this stage, bidders must obtain a score of at least 51 and in accordance with the scoring table indicated below:

TABLE 2

Points	Explanation - to be considered when assigning the points
0	Response incomplete, inadequate and/or non-responsive to the criterion. Bidder does not clearly understand the criterion
1 - 2	Does not meet the minimum technical, functional, or performance related criterion. Response incomplete, inadequate and/or non-responsive to the criterion. Bidder does not clearly understand the criterion.
3 - 4	Meets the criterion in *most* areas but is lacking details and responsiveness in some areas of the criterion.
5 - 6	Meets the criterion in all areas.
7 - 8	Meets the criterion to minimum acceptable levels in all areas and exceeds it in some areas.
9 - 10	Response exceeds the criterion in all areas and adds additional technical, functional and performance related value to the proposed services.

2. Financial and commercial evaluation

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

X= Max Available Points * Y/Z

Legend:
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 evaluations.
The weight of the technical and financial components is 60% and 40% respectively, subject to contractual acceptability

Attachment No. 3
Price Schedule Form

Description (ToR)	Unit	QTY	Initial Call-off period 2 years. Max. No of On-site and Off-site days (1200 days)		1st Optional Extension Call-off period 2 years. Max. No of On-site and Off-site days (1200 days)		2nd Optional Extension Call-off period 2 years. Max. No of Off-site and On-site days (1000 days)	
			Unit Price per 1 person- Day Currency:-------		**Unit Price per 1 person- Day** Currency:-------		**Unit Price per 1 person- Day** Currency:-------	
			On-site	Off-site	On-site	Off-site	On-site	Off-site
III.1 Service 1: Digital Signal Processing Software Engineering Support Max. est 400 days per each Call-off period.	Person/Day	1						
III.2 Service 2: Scientific Visualization Software Engineering Support Max. est (340 days in the initial period, 340 days in the 1st optional period and 140 days in the second optional extension period).	Person/Day	1						
III.3 Service 3: Messaging Software Engineering Support. Max. est (160 days per each period).	Person/Day	1						
III.4 Service 4: Software Testing Support. Max. est (240 days per each period).	Person/Day	1						
III.5 Service 5: General Software Engineering Support. Max. est (60 days per each period). **NO On-site work for this Service**	Person/Day	1	▓		▓		▓	

Travel Cost:

	Unit	QTY						
(i) Return Ticket/Trip per person for 5 days: Max. est No. of trips (28 trips in the initial period, 28 trips in the 1st optional extension period and 24 trips in the 2nd optional extension period)	Trip/person	1		▓		▓		▓
(ii) DSA (Daily Subsidiary Allowance) per working on-site day			**Do not quote for DSA -Please see below notes**		**Do not quote for DSA -Please see below notes**		**Do not quote for DSA -Please see below notes**	

NB:

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

2) This is a unit-based Contract. The exact number of working days will be determined/called-off in the form of a Formal Request for Delivery (FRD) at the rates quoted in this Attachment.

3) The estimated person-days above are an upper limit, and the Commission reserves the right, at its sole discretion, to call-off fewer person-days or no person-days at all.

4) For evaluation purposes, bidders shall provide the cost of a return travel, and shall advise whether the On-site unit price includes the DSA and return travel or not.

5) Bidders shall not quote for Daily Subsidiary Allowance (DSA), it shall be calculated based on the values provided by the International Civil Service Commission (ICSC). Daily subsistance/per diem will be reimbursed at the applicable Daily Subsistance Allowance (DSA) rate of the United Nations (and UN EUR/USD exchange rate, if applicable).

Attachment 3

"Procedure for Submission of Electronic Offers in 2 Sealed Files"

The Commission invites you to submit your sealed offer (Bid, or Proposal) in response to the solicitation forming part of this request.

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 the technical offer and the financial offer (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 Offer only* (in accordance with the below instructions)!

Step 2: After the Commission has performed the evaluation of the Technical Offer, if your Technical Offer is considered to be acceptable, the Commission will request the encryption key (password) for the Financial Offer 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 offer will not be accepted.

INSTRUCTIONS:

1. 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)

2. In **LINUX** environment, you can use, for instance, "sha1sum" on the command line.

Creating the archives for submission

Regardless of whether the offer 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 offer in the required format: assuming you are supplier "SOFTCOMP" and have the following files related to the offer for "RFP 2020-0010/EDWALD". *(You will need to replace these elements with the real information for your actual offer in line with the relevant Instructions for Preparation and Submission of Proposals/Bids.)* 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 Offer (Proposal/Bid) component; the Financial Offer (Proposal/Bid) component is similar.
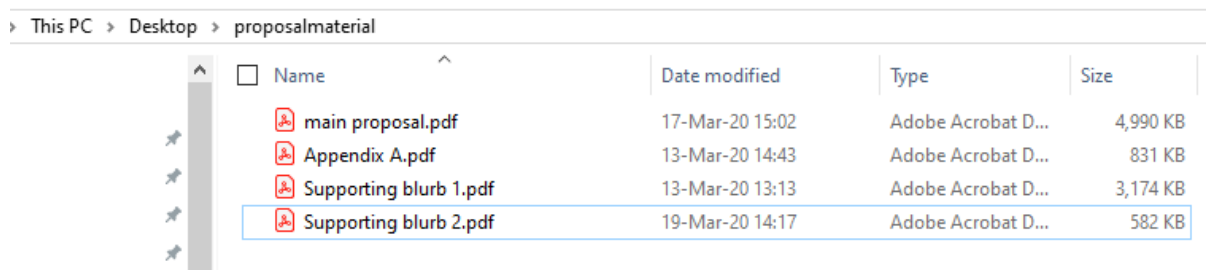
Figure 1 An example set of files to be submitted

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 offer in question: the actual company indicator, and the actual RFP/ITB identification string. Note that it is not possible to put a slash "/" in the filname, 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 Proposal/Bid.
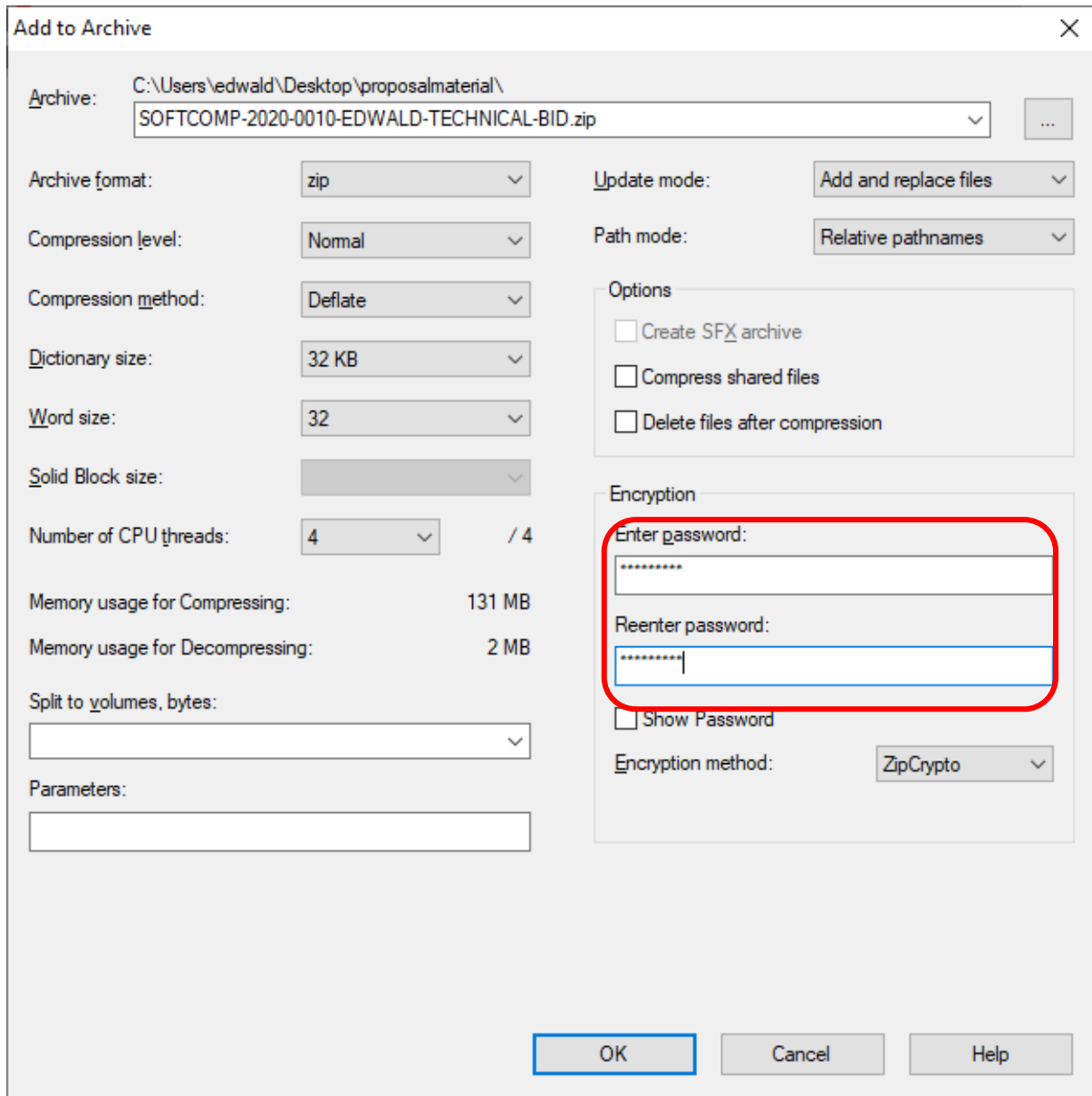
Figure 2 Creating an Archive

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

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

Procedure for Submission of Electronic Offers in 2 Sealed Files

Clicking Ctrl-C grabs the contents of this box. You can close the box after copying the contents. (You can paste the contents into a mail message, for instance.)
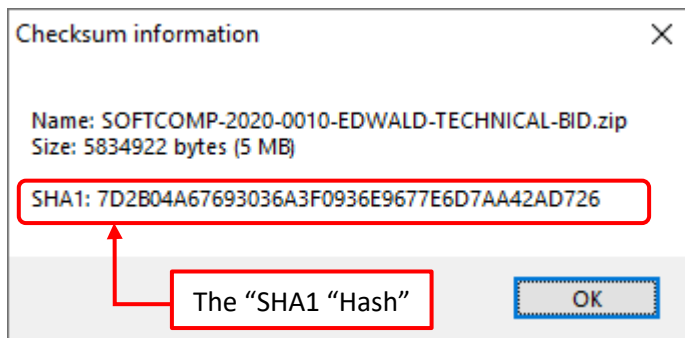

Checksum information ×

Name: SOFTCOMP-2020-0010-EDWALD-TECHNICAL-BID.zip
Size: 5834922 bytes (5 MB)

SHA1: 7D2B04A67693036A3F0936E9677E6D7AA42AD726

The "SHA1 "Hash"

OK

Figure 3 SHA1

If this CRC SHA function is not available by 'right-click' on your Windows version, you can also do this from 'the command line', a slightly more complicated way. Open a CMD window (see sidebar below), move to the folder where your archive is, and execute the command:
"`certutil –hashfile SOFTCOMP–2020–0010–EDWALD–TECHNICAL–BID.zip sha1`"
where you obviously replace the name of the file with your real file name. The output of this command is the SHA1 "hash". You can copy-and-paste the string for use in the email (below).

Sidebar: How to open a CMD window in Windows:

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

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

Finally,

1. Create a new email, Subject: example- "SOFTCOMP-2020-0010-EDWALD". Add the two compressed archives, that is, the Technical Offer and the Financial Offer 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 Offer" the contents of which must contain the Encryption Key for the Technical Offer (the password

Procedure for Submission of Electronic Offers in 2 Sealed Files

you used when creating the Technical Offer). (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 Offer to the bid_keys@ctbto.org mailbox when sending your Technical and Financial Offer to the sealed_bids@ctbto.org mailbox. You shall only send the Encryption Key for the Financial Offer to the Commission if and when informed by the Commission that your Technical Offer had been evaluated as "technically acceptable".

The Financial Offer 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 Offer". If your Offer is not considered "technically acceptable", the Commission will not request an Encryption Key for your Financial Offer, 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 offers will not be accepted.

Procedure for Submission of Electronic Offers in 2 Sealed Files

CONTRACT NO. 20XX-XXXX
SAP No. xxxxxxxx

between

THE PREPARATORY COMMISSION

FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY

ORGANIZATION

and

NAME OF CONTRACTOR

for

[PROVISION OF XXX SERVICES], on a Call-off Basis

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

[Month] [Year]

Table of Contents

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 the Vienna International Centre, Wagramer Strasse 5, 1400 Vienna, Austria, and [Name of Contractor] (hereinafter referred to as the "Contractor"), having its principal office located at [address] (both hereinafter individually referred to as the "Party" and collectively as the "Parties").

The Parties hereto mutually agree as follows:

1. DEFINITIONS

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

"Annex A" means the Commission's General Conditions of Contract.

"Annex B" means the Commission's Terms of Reference.

"Annex C" means the Contractor's Proposal.

"Contract" means this document, its Annexes, FRD and any further modifications or such further documents as may be expressly incorporated in this Contract by the Parties in accordance with Clause 21 (Contract Amendment) below.

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

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

"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.

Contract No. xxxx-xxxx: Software Engineering Services for Waveform Data Acquisition, Processing and Dissemination on a Call-off Basis

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

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

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

2.   AIM OF THE CONTRACT

The aim of this Contract is to provide Software Engineering Services for Waveform Data Acquisition, Processing And Dissemination on a Call-off Basis, as and when required by the Commission.

3.   ENTRY INTO FORCE AND DURATION OF THE CONTRACT

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

(b)   The Commission shall have the right to call-off the Work in the form of FRD within a period of 24 (twenty-four) months from the Effective Date or the performance of a maximum of 1200 person-days by the Contractor, whichever occurs first (hereinafter referred to as the "**Call-off Period**"). The commencement and completion date for the performance of the Work (hereinafter referred to as "**Commencement Date**" and "**Completion Date**", respectively) will be set out in the respective FRD. This sub-Clause (b) shall also apply to any extension exercised under sub-Clause (c) below.

(c)   The Commission shall have the option to extend the Call-off Period twice, the first optional extension period is 24 (twenty-four) months or the performance of a maximum of 1200 person-days by the Contractor, whichever occurs first, and the second optional extension period is 24 (twenty-four) months or the performance of **1000** person-days by the Contractor, whichever occurs first subject to the availability of funds, under the same terms and conditions as those of this Contract. The Commission will inform the Contractor about its intention to extend the Work at least one (1) month prior to the expiry of the Contract. The optional extensions will be implemented through a written notification to the Contractor by the Commission.

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4. RESPONSIBILITIES OF THE CONTRACTOR

(a) The Contractor shall provide the Work as specified in Annexes B and C.

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

(c) The Contractor acknowledges that after the completion of the Work under this Contract, the Commission shall own the Software and source code and the Contractor shall have no rights in that Software or source code unless granted by the Commission under Clause 24 of this Contract.

5. FORMAL REQUESTS FOR DELIVERY

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

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

(c) The performance of Services shall be made in full in accordance with the respective FRD. Partial service performance of FRD will not be accepted and reimbursed without prior written agreement by the Commission.

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

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

6. STANDARD OF WORK

The Contractor shall perform the Work in a workmanlike manner in conformity with standard professional practices, using qualified personnel and in strict accordance with the Contract. The Contractor shall furnish the highest skill and judgement and cooperate with the Commission, including all the Commission's consultants and agents, in best furthering the interests of the Commission and the aim of this Contract. The Contractor shall provide efficient business

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administration and supervision, and it shall perform the Work in the best way and in the most expeditious and economical manner consistent with the requirements of the Contract.

7.   INSURANCE

The Contractor shall provide appropriate insurance, as specified in Clause 9 of Annex A.

8.   WARRANTY

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

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

9.   PERMITS, NOTICES, LAWS AND ORDINANCES

9.1   The Contractor shall obtain and pay for all permits and inspections necessary for the proper execution and completion of the Work that are customarily obtained upon execution of this Contract and that are legally required at the time the Proposal is received by the Commission. This shall include, but not be limited to, work permits, visa, or similar documents.

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

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

10.   PROTECTION OF PERSONS AND PROPERTY

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

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

(i)   all persons on the Commission's or the Station's premises, as applicable, who may be affected thereby.

(ii)   property of the Commission or the Station, as applicable.

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

10.4 The Contractor shall be responsible for the prevention of accidents on the Commission's or the Station's premises, as applicable, during the execution of the Work.

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

10.6 The Contractor shall promptly remedy all damage and loss to any property, referred to in sub-Clause 10.2 above, caused in whole or in part by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under sub-Clause 10.2 above, except damage and loss attributable to the acts or omissions of the Commission or anyone directly or indirectly employed by it, or of anyone for whose acts the Commission may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to its obligations under Clause 9 of Annex A.

11.   RESPONSIBILITIES OF THE COMMISSION

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

12.   PRICES

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

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

   (ii) subject to sub-Clause 12 (b) below, for each FRD issued during the first optional extension of the Call-off Period specified in sub-Clause 3 (c) above, the firm fixed labor rates/fees set out in Annex C;

   (iii) subject to Clause 12 (b) below, for each FRD issued during the second optional extension of the Call-off Period specified in sub-Clause 3 (c) above, the firm fixed labor rates/fees set out in Annex C

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

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

(vi) if applicable, other costs pursuant to Annex C;

hereinafter referred to as the "Contract Price".

(b) In the event that the Commission decides to extend the Call-off Period early, as foreseen in Clause 3 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 sub-Clause (a)(i) above;

(ii) after the expiry of the initial Call-off Period, the daily rate agreed for the respective extension sub-Clause (a)(ii) above.

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

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

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

[Identify type [and amount] of Taxes] is/are applicable under this Contract. The Contractor shall be reimbursed by the Commission for such taxes on the basis of actual amounts paid and duly documented by the Contractor as per sub-Clause 13.2(d) below.

OR

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No Taxes are applicable under this Contract.

13. PAYMENT TERMS

13.1 Upon satisfactory completion of each FRD the Contractor shall submit the following supporting documentation to the Commission for payment:

(a) Original invoice submitted in accordance with sub-Clause 13.2(c) below reflecting the actual costs;

(b) [IF NO TAXES ARE APPLICABLE UNDER THIS CONTRACT, THIS PARAGRAPH SHOULD BE OMITTED:] Documentation referred to in sub-Clause 13.2 (d) below supporting any Taxes paid; and

(c) Any other documentation that might be required under the applicable FRD.

13.2 General Payment Provisions

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

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

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

IF NO TAXES ARE APPLICABLE UNDER THIS CONTRACT, PARAGRAPH (d) BELOW SHOULD BE OMITTED.]

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

14. TEMPORARY SUSPENSION OF WORK

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

15. DELAYS AND EXTENSION OF TIME

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

15.2 Any request for extension of the time for reasons referred to in sub-Clause 15.1 above shall be submitted to the Commission not later than 20 (twenty) days after the commencement of the delay, otherwise said request shall be deemed to be waived. Such request shall state grounds for the delay and shall provide an estimate of the probable effect of such delay on the progress of the Work.

16. CONTRACTOR'S CLAIMS AND REMEDIES

In no event shall the Contractor make any claim against the Commission for or be entitled to additional costs or compensation resulting from any delays in the progress or completion of the Work or any portion thereof, whether caused by the acts or omissions of the Commission,

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including, but not limited to, damages related to overheads, loss of productivity, acceleration due to delay and inefficiency. The Contractor's sole remedy in such event shall be an extension of time for completion of the Work, provided the Contractor otherwise meets the requirements and conditions set forth in this Contract.

17. ENTIRE AGREEMENT

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

18. DISCREPANCIES

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

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

19. SEVERABILITY

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

20. NO WAIVER

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

21. CONTRACT AMENDMENT

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

22. TRANSMISSION OF NOTICES AND OTHER DOCUMENTS

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

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(a)   The Commission:

<u>For Contractual Issues:</u>

Chief, Procurement Section

Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)

Vienna International Centre

Wagramerstrasse 5, P.O. Box 1200

1400 Vienna, Austria

Tel: + (43 1) 26030 6350

E-mail: procurement@ctbto.org

<u>For invoices:</u>

Accounts Payable

CTBTO Financial Services Section

Vienna International Centre

Wagramer Strasse 5, P.O. Box 1200

1400 Vienna, Austria

Tel: + (43 1) 26030 6292

E-mail payable_invoices@ctbto.org

For related enquiries

payments@ctbto.org

(b)   The Contractor:

Name:
Address:
Tel:
Email:

23.   EFFECTIVENESS

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

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

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

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

Contract No. xxxx-xxxx: Software Engineering Services for Waveform Data Acquisition, Processing and Dissemination on a Call-off Basis

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23.2 A communication given under sub-Clause 23.1 above that is received or becomes retrievable on a non-working day or after business hours at the seat of the Commission will only be deemed to be given on the next working day of the Commission.

24. SOFTWARE LICENCE

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

Contract No. xxxx-xxxx: Software Engineering Services for Waveform Data Acquisition, Processing and Dissemination on a Call-off Basis

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

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

_____

[Name, Position/Title]

Date: _____   Place: _____

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

_____

[Name, Position/Title]

Date: _____   Place: _____

Contract No. xxxx-xxxx: Software Engineering Services for Waveform Data Acquisition, Processing and Dissemination on a Call-off Basis

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LIST OF ANNEXES

ANNEX A: THE COMMISSION'S GENERAL CONDITIONS OF CONTRACT

ANNEX B: THE COMMISSION'S TERMS OF REFERENCE

ANNEX C: THE CONTRACTOR'S PROPOSAL

Contract No. xxxx-xxxx: Software Engineering Services for Waveform Data Acquisition, Processing and Dissemination on a Call-off Basis

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CTBTO
PREPARATORY COMMISSION

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

General Conditions of Contract

1. DEFINITIONS

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

2. LEGAL STATUS

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

3. ASSIGNMENT

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

4. SUBCONTRACTING

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

5. SOURCE OF INSTRUCTIONS

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

6. CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES

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

7. ASSIGNMENT OF PERSONNEL

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

8. CONFLICT OF INTEREST

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

9. INSURANCES

(a) The Contractor shall provide and thereafter maintain appropriate insurance, or its equivalent, with respect to its employees to cover claims for personal injury or death in connection with the Contract.

(b) The Contractor shall provide and thereafter maintain insurance against all risk in respect of its property and any equipment used for the execution of the Contract.

(c) The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death, bodily injury, loss of and damage to property arising from any operations carried out by the Contractor in performing its obligations in connection with the Contract or from operation of any vehicles, boats, airplanes and other equipment owned or leased by the Contractor or its agents, servants, employees or subcontractors.

(d) Except for insurance mentioned in paragraph (a), the insurance policies under this clause shall:
  (i) Name the Commission as additional beneficiary;
  (ii) Include a waiver of subrogation of the Contractor's rights to the insurance carrier against the Commission.

(e) The Contractor shall, upon request, provide the Commission with satisfactory evidence of the insurance required under the Contract.

(f) Any amounts not insured, not recovered from or not claimed by the insurer shall be borne by the Contractor.

(g) Information concerning reduction of coverage shall be furnished by the Contractor to the Commission with at least thirty (30) days prior written notice.

(h) The Contractor undertakes that provisions to the same effect as the provisions in sub-clauses (a) through (c) above will be inserted in all subcontracts made in performance of the Contract, except sub-contracts exclusively for furnishing Goods.

10. ENCUMBRANCES/LIENS

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

11. OBSERVANCE OF THE LAW

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

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

12. CONFIDENTIALITY

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

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

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

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

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

13. LANGUAGES, WEIGHTS AND MEASURES

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

14. PUBLICITY

(a) The Contractor shall not advertise or otherwise make public the fact that it is providing or has provided Services and Goods for the Commission. Also, the

Contractor shall not, in any manner whatsoever, use the name, emblem or official seal of the Commission or any abbreviation of the name of the Comprehensive Nuclear-Test-Ban Treaty Organization in connection with its business or otherwise.

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

15. OFFICIALS NOT TO BENEFIT/CONTINGENT FEES

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

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

16. INTELLECTUAL PROPERTY AND OTHER PROPRIETARY RIGHTS

(a) Except to the extent the Contractor has granted a license to the Commission, the Commission, shall be entitled to all intellectual property, including but not limited to copyrights, patents and trademarks, with regard to products, documents or other materials which bear a direct relation to or are produced or collected under the Contract. The Contractor shall take all necessary steps, prepare and process all necessary documents and assist in securing such property rights and transferring them to the Commission and/or to the government where the Services or Goods are to be provided, in compliance with the requirements of the applicable law.

(b) The Contractor declares that it does not know of any intellectual property rights of third parties, which might be infringed in the execution of the Contract. Should, contrary to the Contractor's expectation, claims be raised against the Commission charging it with infringement of intellectual property rights, the Contractor shall hold harmless the Commission and shall indemnify it to the full extent of any damages or awards arising from such claims. This obligation of the Contractor shall continue to be in full force and effect up to the expiration of such intellectual property rights.

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

17. DEFAULT BY THE CONTRACTOR

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

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

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

18. WITHHOLDING OF PAYMENT

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

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

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

19. LIQUIDATED DAMAGES

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

20. FORCE MAJEURE

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

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

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

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

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

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

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

21. INSOLVENCY AND BANKRUPTCY

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

22. INDEMNIFICATION

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

23. AMICABLE SETTLEMENT

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

24. ARBITRATION

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

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

25. PRIVILEGES AND IMMUNITIES

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

25(a). TAX EXEMPTION

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

26. TERMINATION

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

27. GOODS

In the event that the Contract requires the Contractor to supply Goods, Clauses 28-35 shall apply in addition to the above.

28. WARRANTY

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

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

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

29. INSPECTIONS AND TESTS

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

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

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

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

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

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

30. PACKING

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

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

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

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

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

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

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

PURCHASE NO._____
GROSS WEIGHT _____
NET WEIGHT _____

(f) Markings shall be done with weatherproof materials. All non-containerized Goods shall be shipped below deck.

(g) Each case/crate/carton shall carry (outside) a copy of the packing list describing the contents of the case/crate/carton. Outside Case No. 1 should be attached with invoice covering the actual delivery. The accompanying papers must be made out in the English language.

(h) Prior to delivery, a fax (or a letter by courier service) shall be sent to the consignee, if any, advising of the following:
♦ purchase order/Contract number;
♦ waybill number or equivalent reference number of the shipment (if any);
♦ number of boxes/cartons/crates/etc.;
♦ estimated time of departure (ETD);
♦ point of departure and name of freight carrier;
♦ estimated time of arrival (ETA) to final destination.

(i) The following documents shall be enclosed with the shipment in case of shipping by air:
♦ airway bill;
♦ proforma or commercial invoice;
♦ packing list.

(j) The above documents are indispensable and must reach the consignee, if any, on time to permit customs clearance and in order to avoid demurrage charges.

31. DELIVERY AND TRANSPORTATION

(a) Delivery of the Goods shall be made by the Contractor in accordance with the terms specified in the Contract, and the Goods shall remain at the risk of the Contractor until delivery has been completed.

(b) Transport of the Goods to the port of discharge or such other point in the country of destination and/or forwarding to the consignee, if any, (door-to-door) specified in the Contract shall be arranged and paid for by the Contractor and the cost thereof shall be included in the Contract Price.

32. TAKE-OVER/HAND-OVER

Upon successful completion of delivery or of installation and a testing and evaluation period, as specified in the Contract, responsibility for the Goods will be handed over to the consignee or other designated entity.

33. EXPORT LICENCES

If an export licence or any other governmental authorization is required for the Goods, it shall be the obligation of the Contractor to obtain such licence or governmental authorization. In the event of failure to obtain such licence or authorization within reasonable time, the Commission may declare the Contract null and void.

34. SPARE PARTS

In accordance with the Contract, the Contractor may be required to provide any or all of the following materials and notifications pertaining to spare parts manufactured and/or distributed by the Contractor:

(a) Such spare parts as the Commission may choose to purchase from the Contractor, provided that the Contractor is not relieved of any warranty obligations under the Contract;

(b) In the event of termination of production of the spare after delivery of the Goods:
(i) advance notification to the Commission of the pending termination, in sufficient time to permit the Commission to place a final order;
(ii) following such termination, furnishing at no cost to the Commission, the blueprints, drawings and specifications of the spare parts, if and when requested.

35. UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS

Questions concerning matters arising under the Contract, but not settled in it, shall be settled in conformity with the United Nations Convention on Contracts for the International Sale of Goods (Vienna, 1980), which shall be applicable to the Contract. The applicable language version of the Convention shall be the version in which the Contract is written.

36. SUSTAINABLE BUSINESS PRACTICES

The Commission requires the Contractor and its personnel to:

(a) support and respect the protection of internationally proclaimed human rights[1] and to observe the highest standards of ethics and integrity throughout its supply chains.

(b) abide by the United Nations Supplier Code of Conduct[2].

(c) to take appropriate steps, whenever possible to perform its obligations in a manner that takes into account economic, environmental and social considerations.

(d) certify that they have not and will not engage in harassment or sexual harassment, proscribed practices or any further practice described in Clauses 37, 38, 39, 40

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

[2] Available at https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct.

and 41, during the procurement process and the performance of the Contract.

37. PREVENTION OF HARRASSMENT AND SEXUAL HARRASSMENT

(a) The Commission is committed to providing a professional work environment that upholds the highest standards of equality, respect and dignity for all. In this regard, and without limitation to any other provision contained herein:

(i) The Contractor shall adhere to zero tolerance for harassment and therefore accepts and agrees to refrain from any conduct which could, in the view of the Commission, meet the definition of harassment and/or sexual harassment. For the avoidance of doubt, "harassment" shall be understood as any improper or unwelcome conduct that might reasonably be expected or be perceived to cause offence or humiliation to another person when such conduct interferes with work, is made a condition of employment, or creates an intimidating, hostile or offensive work environment. "Sexual harassment" shall be understood as harassment of a sexual nature, and the above definition of harassment applies equally to sexual harassment. Sexual harassment may occur between persons of opposite sex or of the same sex.

(ii) The Contractor shall take all reasonable and appropriate measures to prevent and deter harassment and sexual harassment or abuse of anyone by its employees, agents, officials or any other persons engaged or controlled by the Contractor to perform the Services.

(iii) The Contractor shall promptly report to the Commission any actual, reported or suspected cases of harassment, sexual harassment or abuse of anyone by its employees, agents, officials or any other persons engaged or controlled by the Contractor to perform the Services of which the Contractor becomes aware. Such reports to the Commission may be on a no name basis, if necessary.

(iv) In addition to notifying the Commission pursuant to sub-clause (iii) above, on becoming aware of any allegation of harassment, sexual harassment or abuse of anyone, the Contractor shall take all reasonable and appropriate measures to address the matter, including engaging in good faith consultations with the Commission, while ensuring minimum impact and/or disruption of the Services.

(b) The Contractor acknowledges and agrees that any breach of the provisions of this Clause 37, as determined by the Commission, shall permit the Commission, at its sole discretion, to:

(i) Request the Contractor to remove, temporarily or permanently, from the relevant assignment, any Contractor's personnel reported for having committed harassment, sexual harassment or abuse of anyone.

(ii) Terminate the Contract, and/or any other agreement, arrangement or partnership concluded by the Commission with the Contractor, immediately upon written notice to the Contractor, without any liability for termination charges or any other liability of any kind, on the terms and conditions as are provided for in Clause 26 (Termination) above; and/or

(iii) Exclude the Contractor from participating in any ongoing or future solicitations, and/or entering into any future contractual or collaborative relationships with the Commission and/or suspend the Contractor from the Commissions supplier roster.

(c) The Commission shall be entitled to report any breach of the provisions of this Clause 37, as determined by the Commission, to the Commission's governing bodies, other UN agencies and/or donors.

38. PROSCRIBED PRACTICES

The Commission requires that the Contractor and its personnel certify that they have not and will not engage in proscribed practices and proscribed conduct during the procurement process and the performance of the Contract. The Commission defines Proscribed Practices as follows:

Fraudulent practice: is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;

Corrupt practice is the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;

Coercive practice is the impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of any party in order to influence the actions of that party;

Collusive practice is the proposing or entering into an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;

Unethical practice is conduct or behaviour that is contrary to the conflict of interest, gifts and hospitality, post-employment provisions or other published requirements of doing business with the Commission;

Obstructive practice is any act which deliberately and in an effort to compromise an investigation, destroys, falsifies, alters or conceals information or documents that may be relevant to a fraud and corruption investigation, or material that could become evidence as a result of such investigation; or the making of false statements to investigators during such an investigation.

39. CHILD LABOUR

The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be

protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.

40. MINES

The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiaries or affiliated entities (if any) is engaged in the sale or manufacture of anti-personnel mines or components utilized in the manufacture of anti-personnel mines.

41. TERRORISM

The Contractor shall ensure that none of the funds received from the Commission under the Contract are used, directly or indirectly, to provide support to individuals or entities subject to sanctions or other measures promulgated by the United Nations Security Council and appearing in the Consolidated United Nations Security Council Sanctions List. This provision shall be included in all subcontracts or sub-agreements entered into under the Contract.

42. FULL DISCLOSURE

(a) The Contractor will immediately notify the Commission upon becoming aware of any Proscribed Practices or other prohibited practices or conduct or suspicion thereof, as per Clauses 37-41, by itself or its personnel during the procurement process or the performance of the Contract. The Contractor will take all appropriate measures to prohibit and prevent its personnel from engaging in Proscribed Practices or any other prohibited conduct, as well as to investigate allegations thereof, or to take corrective action when such a Proscribed Practice or any other prohibited conduct has occurred.

(b) The Contractor further warrants that it is not the subject of any sanctions, or otherwise identified as ineligible by any government, supranational organization (e.g., European Union), another entity of the United Nations System or multilateral development finance institution. The Contractor will disclose to the Commission if it becomes subject to any sanction or temporary suspension during the term of the Contract. The Contractor recognizes that a breach of this provision constitutes a fraudulent practice.

43. DATA PROTECTION

(a) **Use of the Commission's data:** Use (including accessing, processing, retention, storage) of the Commission's data is limited to the purposes contained in the Contract and such use will be limited to Contractor's personnel on a "need to know" basis. Use of the Commission's data for internal research, marketing, sales, or promotional purposes is strictly prohibited. Subject to Clause 12 (Confidentiality), the Contractor will treat the Commission's data as confidential and may neither disclose it nor make it available to any third-party except with the prior written authorization of the Commission.

(b) **Compliance:** The Contractor confirms that it has a data protection policy in place that meets applicable legal requirements and that it will apply such a policy to the Commission's data, without prejudice to the privileges and immunities of the Commission. The Contractor will implement technical and organisational measures to ensure appropriate protection of the Commission's data, in conformity with the abovementioned requirements and internationally recognised standards and best practices. In addition, the Contractor will:

(i) at its sole expense and risk, return, delete, or destroy all the Commission's data, including data backups, upon written instruction of the Commission. The Commission will provide a reasonable period of time and take into account the Contractor's legitimate interests, as well as the termination or expiration date of the Contract;

(ii) process, retain or store the Commission's data exclusively in countries that are signatories to the Comprehensive Nuclear-Test-Ban Treaty and that ensure adequate legal protection of the Commission's privileges and immunities; and

(iii) be liable for any resulting damages or penalties for its failure to comply with its obligations.

(c) **Data security:** Upon discovery of a data security breach, the Contractor will immediately notify the Commission and undertake at its sole expense to:

(i) propose immediate remedial actions (including containment);

(ii) implement, as directed by the Commission, all necessary damage mitigation and remedial actions;

(iii) where applicable, as directed by the Commission, restore the Commission's and end-users' access; and

(iv) keep the Commission informed of its progress.

(d) The Contractor, at its sole expense, will cooperate fully with any Commission investigation, remediation steps and response to a data security breach.

44. ESSENTIAL TERMS

The Contractor acknowledges and agrees that each of the provisions in Clauses 36 to 43 above constitutes an essential term of the Contract and that any breach of any of these provisions shall entitle the Commission to terminate the Contract or any other contract the Contractor has with the Commission, immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind. Furthermore, the Commission is entitled to exclude the Contractor from participating in future tenders should the Contractor breach any of the provisions included in Clauses 36 to 43.

ANNEX B

TERMS OF REFERENCE

FOR THE PROVISION OF SOFTWARE ENGINEERING SERVICES FOR WAVEFORM DATA ACQUISITION, PROCESSING AND DISSEMINATION ON A CALL-OFF BASIS

I. INTRODUCTION

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

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

Data are acquired either in continuous mode, in accordance with the specifications of a continuous data protocol, or (together with data from radionuclide stations) in discrete data packets over an e-mail based protocol called "AutoDRM". The data are typically from arrays of sensors, and advanced signal processing methods are required to detect signals of interest, associate them with events, and locate the events accurately enough to be useful for treaty monitoring. The Commission also provides software for acquiring and processing SHI data to its Member States, in support of their treaty verification activities. There is significant overlap between the software provided to Member States and the software used internally.

Most of the software is designed to run on the open-source 64bit Linux operating environment which is currently RHEL 7.9. A limited set of software may run on the previous version of Linux, REHL 6.9. Future upgrades to newer or different operating environments are to be expected.

The software is mostly written in ANSI C, with some supporting libraries in C++, and FORTRAN. A few programs are in Java. Several key applications are written using Scheme as an extension language. All software accesses the CTBTO Oracle RDBMS using ODBC, OCI, and ProC libraries. There are a number of support programs and scripts written in PERL, Python, and Tcl. Motif and Qt are used as widget toolkits for interactive applications. The proportion of Python software within the code case has increased in recent years. Third-party components used by the Python code base include Django, SQLAlchemy, Spring Python, cx_Oracle, Numpy, SciPy. The Rabbit MQ message broker software is currently used to integrate various software components of the SHI automatic processing pipeline. The NASA WorldWind digital globe software provides the basis for a map application released in 2016. Map applications are also developed as a JavaScript application based on the OpenLayers library.

The Commission seeks to establish a contract for the supply of software engineering services for the maintenance and enhancement of the software for SHI data acquisition, processing and data and product dissemination, as well as supporting testing infrastructure and quality assurance software (the Contract) in accordance with these Terms of Reference.

II.   SCOPE OF WORK

The Commission seeks to establish a two (2) years Contract, subject to two (2) optional extensions of two (2) years for a maximum Contract duration of 6 years. These Terms of Reference (hereinafter referred to as "ToR") form the technical framework for the supply of on-site and off-site software engineering services for SHI data acquisition, processing, and dissemination (hereinafter referred to as "Services" or "Work").

The following software engineering services are sought (see Section III):

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

The Contractor will be required to perform:

- Design and development of new software or major enhancements to existing software
- Second level support and maintenance for existing software systems

II.1   Design and development of new software or major enhancements to existing software

Development of new software and major enhancements to existing software generally involves 1) the execution of the software design and implementation phases, and 2) the support of the implementation of these systems through the established change management and release processes of the IDC. The Contractor is also expected to be heavily involved in requirements definition for these systems.

In particular, the work involves the following main activities:

- Defining requirements in accordance with IDC requirements engineering practices, or reviewing and refining existing requirements specifications. The outcome of this step would be a requirements document forming the basis for further planning the work;
- Scheduling of the deliverables and estimating the effort to execute the work;
- Analysis, design, coding and testing;
- Development of acceptance test plans;
- Delivery, acceptance support and implementation support of each deliverable;
- Implementation of CI/CD pipeline and integration into the IDC CI/CD framework, where applicable;
- Delivery of the documentation agreed for each project, typically consisting of Software Design Description, Software User Manual, Software Installation Manual, Software Administration Manual.

It should be noted that the above activities will be executed in an iterative fashion in accordance to Agile software development methodologies.

Examples of software projects that the Contractor may be requested to work on are:

- Development and integration of new modules for processing waveform data into the automatic processing pipeline of the IDC. This may include new types of detectors, waveform quality control or algorithms, new network processing modules, etc. This type of integration may require reconfiguration of the IDC processing pipeline;

- Integration of software modules contributed by external parties, for instance in subsequent phases of the IDC reengineering project. This may require designing and implementing interfaces that allow the contributed software to work with components of the current operational code base;

- Redesign and implementation of major components of the current SHI operational pipeline, such as the data access layer used by automatic processing software for waveform data and by interactive analysis software for waveform data;

- Integration of major new features into the interactive analysis and review software used by SHI analysts at the IDC.

II.2   Second level support and maintenance for existing software systems

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

In particular, the work may involve the following steps:

- Perform troubleshooting;

- Provide proactive and/or reactive support services;

- Analysis of the current functionality of a software system;

- Implement software patches and updates;

- Implement additional testing cases;

- Migrations for major releases of software;

- Implement deployment and release policies;

- Provide installation and usability assistance;

- Provide training or other services associated with operating the software.

Some examples of software systems that the Contractor may be requested to maintain and support are:

1. Sample software system A: Distributed Application Control System (DACS)

The Distributed Application Control System (DACS) software, a custom developed application based on the RabbitMQ message-oriented middleware software, is currently used to integrate various software components of the SHI automatic processing pipeline. The DACS consists of the following software components:

- Application Control Server Programs:

- Data Monitors: Server applications that queue intervals for a processing pipeline based on specific conditions, e.g. data availability, elapsed time or completion states of preceding processing pipelines.
  - Generalized Processing Server (tortoise): A server application that can execute a specific Processing Application, whereby the latter is an application from the business domain that performs the actual interval-based data processing.
  - Database Service (db_rabbit): A server application that updates the interval table.
- Application Control Utilities:
  - Send_rabbit: A command line utility for sending a message (a string) to a Message Queue on the Message Broker (MB). In regular operations it is used from crontab for sending kick messages to the Data Monitors' queues. It is also used for development and testing purposes.
- Monitoring, Controlling and Administration Tools:
  - Workflow: A GUI application that shows the processing status of time intervals.
  - Scheduler: Periodically triggers the running instances of Data Monitors to become active by sending command (kick) messages to their associated Message Queues. It is realized by means of crontab entries calling send_rabbit.
  - Dacsctrl: A command line tool for monitoring, starting and stopping the configured instances (roles) of the Application Control Server Programs.
  - RabbitMQ Management Console: A web application for monitoring and administration of the RabbitMQ MB and the Message Queues on the MB.
  - createQueues.py and destroyQueues.py: Python scripts that facilitate (re-)creation of Message Queues on the MB from the specifications in a configuration file.

2. *Sample software system B: Waveform Quality Control Modules*

Libwaveformqc is a software module that allows the user to detect problem areas in seismic, hydroacoustic and infrasound data on a sample-by-sample basis. A description of the problem is persisted to a database for the benefit of subsequent processing. The library also offers functions to correct the data stream, or otherwise provide an indication of whether the data stream can be used. Some of the data problems the library detects are:

- Calibration status set bit set, indicating that the data was sent while calibration is in process for that station and channel;

- Timing errors as reported by an analysis of the clock bits;

- Authentication of the waveform data failed. In this case the application may choose to use it but will not repair it;

- Gap in the data;

- Data contains consecutive constant values over a long or short period of time;

- Single point spike;

- Unusual noise characteristics.

The module offers a C and C++ interface and optionally interacts with an Oracle database for reading configuration and input data and for storing results. Database access is encapsulated in a separate

module and accessed via a well-defined interface. Because of that the database part can be exchanged with any other storage implementation.

3. Sample software system C: Interactive Review Software for SHI Data

The interactive review software used by analysts consist of the following: ARS, Map, XfkDisplay, SpectraPlot, PolariPlot, HART, eman, nontux, analyst_log.

ARS (Analyst Review Station) is the central application for interactive analysis. It displays the SHI waveform data along with results derived from routine automatic processing. An SHI analyst reviews and edits the output of the automatic processing in ARS. The analyst then refines generated arrivals, events, and location hypotheses and adds new arrivals and events missed during the automated phase. Modifications are saved to an output database. *Map* provides an interactive graphical display of the geographic aspects of SHI data. *XfkDisplay* computes an azimuth-slowness (inverse velocity) map for a selected time window, which is used to determine the propagation direction of a signal and verify that it originated from an event. *SpectraPlot* performs interactive spectral analysis on waveform data. *PolariPlot* is an interactive tool that displays polarization characteristics for three component seismic stations. The Hydroacoustic Azimuth Review Tool (*HART*) is an interactive tool used to determine the propagation direction of a hydroacoustic signal and to verify that a signal can be associated with an event. The applications described above work together using inter-process communication (IPC) via an IPC user-library, called *nontux*, which was developed in-house. *Eman* is a tool that allows the user to control the IPC messages sent between ARS and its associated tools listed above. The analysis applications can also interact with ordinary command-line processes though an application called *ipc-wrapper*. *Analyst_log* is a tool used by SHI analysts to reserve a time block for analysis. This tool also enforces the analysis workflow consisting of first-pass analysis, review, quality control and release of the Reviewed Event Bulletin once the above operations have been completed for an entire time block.

The entire suite of SHI interactive applications is written in C, Java, Scheme and Tcl/Ttk, specifically some 430K lines of C code, around 20K lines each of Java and Scheme and some 3K of Tcl/Tk.

The software uses the Oracle relational database management system through a C library interface. Most applications are based on the Motif/Xlib GUI toolkit.

4. Sample software system D: Verification Data Messaging System (VDMS)

The VDMS software consists of two distinct modules, the *Request and Subscription Module* and the *Acquisition Module*. It was developed using version 2.6 of the Python programming language. This section provides a brief description of these modules of the VDMS and the technologies they use.

The "Request and Subscription Module" is used for delivering IMS data and IDC products to end users through requests or subscriptions and the "Acquisition Module" is used for acquisition of IMS data from auxiliary seismic stations and radionuclide stations and for subsequent storage at the GCI data repository.

The purpose of the request and subscription module is to accept, process, and respond to requests for IMS data and IDC products from registered users in the CTBTO Member States.

Requests for data and products can be sent to the VDMS either via e-mail or via a dedicated command line client installed on the user's machine. In both cases requests have to be formatted in accordance to a prescribed syntax, known as the IMS2.0 version of the formats and protocols Responses to e-mail requests are returned by e-mail. Command line client requests are transmitted via XML-RPC over https.

The software also allows registered users to subscribe to IMS data and IDC products. Subscription deliveries are then sent to the subscribers via e-mail.

The purpose of the acquisition module is to acquire data from IMS auxiliary seismic stations and receive data from IMS radionuclide stations. All data is received in the form of e-mail messages with contents formatted according to the IMS2.0 specification. The acquisition module verifies the signature of the messages, parses the messages, and processes them according to their type:

- Data from IMS auxiliary seismic stations are converted to the "Continuous Data" (CD) frame format 1.1 by calling a separate application contained in the Cdtools suite of applications. The result is stored in a specified directory for further processing by Cdtools applications.
- Data from IMS radionuclide stations are stored in a specified directory for further processing by the radionuclide processing pipeline.

III. PROVISION OF SOFTWARE ENGINEERING SERVICES

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

III.1 Digital Signal Processing Software Engineering Support

III.1.1 Requirements

In addition to requirements listed under section V, the Contractor shall ensure when selecting the Software Team that the following mandatory requirements are met by all members that are to provide Digital Signal Processing Software Engineering Support:

- Minimum five (5) years of experience in the last ten (10) years as a system analyst, designer and software developer in the area of digital signal processing;
- Minimum three (3) years of experience in the last ten (10) years in developing software to automatically process data in near-real-time, preferably in the area of environmental or operational monitoring;
- Involvement in at least one (1) past project in the area of geophysical processing software;
- Experience in array signal processing and applying signal processing to environmental monitoring applications is an advantage.

III.1.2 Work Specifications

In general, digital signal processing engineering support may be requested to support the Commission in complex software engineering tasks, in particular in the area of automatic processing of waveform data.

The work may involve the following tasks:

- Perform system analysis and translate software requirements into architecture and design using Agile software development methodologies;
- Unit-test, black-box testing, and performance testing for the systems being developed or maintained;
- Support the deployment of the software under development in accordance to IDC change management processes;
- Define and support the implementation of release and deployment policies;
- Mentor other Software Team members in development methodologies;
- Audit Software Code in preparation for upgrades / enhancements;
- Provide second-level support for operational systems.

At the time when the work is called-off (see Section V.3), the detailed scope of the service shall be defined.

III.1.3 Deliverables

The deliverables shall be defined at the time when work is called-off (see Section V.3). The Commission may request deliverables deemed relevant to the project.

III.2 Scientific Visualization Software Engineering Support

III.2.1 Requirements

In addition to requirements listed under section V, the Contractor shall ensure when selecting the Software Team, that the following minimum mandatory requirements are met by all members that are to provide Scientific Visualization Software Engineering Support:

- Minimum Five (5) years of experience in the last ten (10) years as a system analyst, designer and software developer in scientific visualization and data analysis systems, preferably in the area of environmental monitoring;
- Minimum Five (5) years of experience in the last ten (10) years with at least one widget toolkit such as Qt, GTK+, VTK, wxWidgets, Swing, JavaFX, Motif;
- Developer on two (2) projects involving programming using 2D/3D scientific visualization libraries (for instance visualizations of time series, histograms, surface plots, scatter plots, spectrograms);
- Minimum Two (2) years of experience within the last ten (10) years in developing geospatial/digital mapping applications. Experience with NASA Worldwind or OpenLayers is an advantage;
- Minimum Five (5) years of experience in the last ten (10) years applying signal processing methods to interactive environmental monitoring applications is an advantage;
- Minimum Five (5) years of experience in the last ten (10) years in array signal processing and applying signal processing to environmental monitoring applications is an advantage;
- Team member on at two (2) projects concerning geophysical concepts from involvement in past projects in the area of geophysical processing software.

III.2.2 Work Specifications

In general, scientific visualization engineering support may be requested to support the Commission and/or the Software team in complex software engineering tasks, in particular for maintenance and enhancement of the interactive analysis tools currently used by SHI analysts at the IDC.

The Work may involve the following tasks:

- Perform system analysis and translate software requirements into architecture and design using Agile software development methodologies;
- Prototype GUI elements with end users and design GUIs that satisfy users' needs;
- Unit-test, black-box testing and performance testing for the systems being developed/maintained;
- Support the deployment of the software under development in accordance to IDC change management processes;
- Define and support the implementation of release and deployment policies;
- Mentor other Software Team members in development methodologies;
- Audit Software Code in preparation for upgrades / enhancements;

- Provide second-level support for operational systems.

At the time when the Work is called-off (see Sections V.3), the detailed scope of the service shall be defined.

III.2.3 Deliverables

The deliverables shall be defined at the time when Work is called-off (see Section V.3). The Commission may request deliverables deemed relevant to the project.

III.3 Messaging Software Engineering Support

III.3.1 Requirements for the Software Team

In addition to requirements listed under section V, the Contractor shall ensure when selecting the Software Team, that the following mandatory requirements are met by all members that are to provide Messaging Software Engineering Support:

- A minimum of three (3) years of experience in the last ten (10) years with distributed processing, queuing and messaging systems and developing applications based on these technologies. Experience with RabbitMQ is an advantage.

III.3.2 Work Specifications

In general, messaging software engineering support may be requested to support the Commission and/or the Software team in complex software engineering tasks, in particular in the area of automatic processing of waveform data.

The Work may involve the following tasks:

- Perform system analysis and translate into software requirements, architecture and design using Agile software development methodologies;
- Unit-test, black-box and performance testing for the systems being developed/maintained;
- Support the deployment of the software under development in accordance to IDC change management processes;
- Define and support the implementation of release and deployment policies;
- Mentor other Software Team members in development methodologies;
- Audit Software Code in preparation for upgrades / enhancements;
- Provide second-level support for operational systems.

At the time when the Work is called-off (see Sections V.3), the detailed scope of the service shall be defined.

III.3.3 Deliverables

The deliverables shall be defined at the time when Work is called-off (see Section V.3). The Commission may request deliverables deemed relevant to the project.

III.4 Software Testing Support

III.4.1 Requirements for the Software Team

In addition to requirements listed under section V, the Contractor shall ensure when selecting the Software Team, that the following mandatory requirements are met by all members that are to provide Software Testing Support:

- Minimum four (4) years of experience within the last ten (10) years using a disciplined approach for planning, designing, executing and reporting on software testing;
- Minimum four (4) years of experience in the last ten (10) years using, configuring and customizing the Jenkins or Hudson Continuous Integration Servers;
- Minimum four (4) years of experience in the last ten (10) years with scripting techniques for automated testing.

III.4.2 Work Specifications

The Work may involve the following core tasks:

- Maintain and enhance the Continuous Automatic Testing System (CATS);
- Develop, maintain and integrate tests into CATS;
- Audit code coverage;
- Work from software specifications to identify test data requirements and generate required test data;
- Report software defects and support developers in troubleshooting problems in the CATS environment;
- Integrate tests into new or existing CI/CD pipelines;
- Help document standards for software testing at the IDC.

At the time when the Work is called-off (see Sections V.3), the detailed scope of the service shall be defined.

III.4.3 Deliverables

The deliverables may include:

- Test Plans;
- Unit and black box tests integrated into CATS;
- New versions of CATS with enhanced functionality as per the requirements of the users;
- Test result reports (of unit test, integration and system test and when applicable regression test).

Deliverables will be developed for tasks and responsibilities as they are assigned when the Work is called-off (see Section V.3). They will include meeting operational or project task objectives, following established standards, and writing technical documentation.

III.5   General Software Engineering Support

III.5.1   Requirements for the Software Team

The intent of this service is to perform software engineering works, in addition to the more specialized types of support described in sections III.1 to III.4. The Contractor's staff providing General Software Engineering support must meet the requirements for each member of the team roster laid out in section V.

III.5.2   Work Specifications

The Work may involve the following core tasks:

- Perform system analysis and translate into software requirements, architecture and design using Agile software development methodologies;
- Unit-test, black-box testing, and performance testing for the systems being developed/maintained;
- Support the deployment of the software under development in accordance to IDC change management processes;
- Define and support the implementation of release and deployment policies;
- Mentor other Software Team members in development methodologies;
- Audit Software Code in preparation for upgrades / enhancements;
- Provide second-level support for operational systems.

At the time when the Work is called-off (see Sections V.3), the detailed scope of the service shall be defined.

III.5.3   Deliverables

Deliverables will be developed for tasks and responsibilities as they are assigned when the Work is called-off (see Section V.3).

IV. Location of Performance

The majority of the Work is expected to be carried out off-site. On-site days may be requested by the Commission and will be agreed upon prior to the issuance of the FRD. When On-site days are requested, the Contractor's staff may be required to spend up to 20 days per Call-off Period on-site at the premises of the Commission in Vienna, Austria. The staff may need to travel to the premises of the Commission up to 4 times per Call-off Period.

V. Requirements for the Contractor

V.1 General requirements

The Contractor shall satisfy the following minimum mandatory requirements:

- To be a company established for at least seven (7) years
- At least four (4) staff meeting the requirements to be included in the Team Roster as described in Section V.2;
- A staff turnover below 20% per year over the past 3 years;
- Use of a formal project management methodology such as Scrum or PRINCE2;
- Minimum Five (5) years of experience in providing software development services using an Agile methodology, preferably Scrum;
- Minimum Three (3) years of experience working with an issues tracking and ticket management systems, preferably Jira;
- Use of the English language for all written and oral communication with the Commission;
- The company has successfully executed projects in the area of digital signal processing, environmental monitoring and scientific visualization in the past five (5) years;
- Warranty period of two (2) years after the completion of the user acceptance testing. Terms and conditions of post-warranty support and bug fixes shall be available and clearly specified;
- Documented evidence that the Contractor will be able to adjust the working hours of staff assigned to the Software Team, to overlap at least two hours with the Commission's working hours (9am to 5pm CET), as deemed necessary by the Commission.

For on-site Work performed at the Commission's premises in Vienna, Austria, the Commission will provide at its premises a suitable work environment (office, room for meetings, presentations and trainings, stationary, Internet connection, fax service) for the Contractor's personnel to perform the services under the Contract, as required. The Commission will also make reasonable efforts to cooperate with the Contractor in connection with its performance under the Contract, including, but not limited to, reasonable and timely access to Commission's personnel, documentation, and databases and other necessary identified sources of information.

For off-site work, the Contractor shall provide its own infrastructure, hardware and software environment necessary for the completion of its Work under the Contract. The Contractor shall communicate with the Commission by telephone, or electronic mail, as appropriate.

V.2 Team Roster

V.2.1 Constitution of the Team Roster

The Contractor shall establish and maintenance a Team Roster, which at a minimum, the following information shall be provided for each of these staff:

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

- Curriculum Vitae

Each member of the Team Roster shall be appropriately skilled and experienced to carry out the role and service(s) listed in the Team Roster.

The Contractor shall demonstrate and ensure, through the Contract duration:

- The capacity of the suggested Team Roster to tackle all Services described in section III;
- The compliance of the suggested Team Roster with requirements set out in sections V.1, V.2.3 and V.2.4;
- The capability and capacity of the suggested Team Roster to provide Software Services in the environment described in Section II.

V.2.2 Software Team

Prior to the issuance of an FRD, as described in sections **VI.1** and **VI.2**, the Contractor is requested to propose to the Commission a list of staff (Software Team) that will be working under this FRD. This Software Team shall be selected from the Team Roster.

The Contractor shall ensure that each staff of the Software Team:

- is dedicated to the project during the development period (unless otherwise agreed); and
- is not re-assigned from the project without the prior written consent of the Commission.

The Contractor shall satisfy the following mandatory requirements:

- An established pre-screening process to identify suitable staff;
- Provide reasonable evidence that the proposed Software Team is appropriately skilled and experienced to carry out the work plan;
- Replacement of poor performing Software Team members or provision of specific training to address a gap in knowledge identified after a Software Team member has started his or her assignment, at no cost for the Commission, upon request by the Commission;
- Establishment of an induction program to help new members of the Software Team become productive within a predefined period after the start of their assignment for the Commission. The duration of the period will be from one to three months depending on the type of service.

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

The Commission reserves the right to seek an immediate replacement for any Software Team member who is found unsuitable for the assigned tasks as determined by the Commission. In such cases, the Commission will request a replacement Contractor staff, with equal or better qualifications and experience, to complete the tasks. If no suitable replacement consultant can be agreed upon, the Commission reserves the right to terminate the assignment of the unsuitable Software Team member with immediate effect. Continuity of staff is an important consideration. The Contractor shall therefore take necessary measures to ensure a seamless transition when taking over the services and keep changes to staff being assigned to the Commission to a minimum throughout the duration of the Contract.

V.2.3 Requirements for each staff on the Team Roster

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

- A university degree in Computer Science, Mathematics, Physics or a related scientific/technical subject;

- A minimum of seven (7) years of experience in object-oriented development and using design patterns, in depth experience with at least one of the following programming languages: C++, Java or Python;

- Professional experience in the past five (5) years with SQL and database programming, ideally using Oracle and/or PostgreSQL databases, experience designing data access layers and data models for an application;

- A minimum of five (5) years of experience in providing services for the development of UNIX and Linux-based client/server systems;

- A minimum of five (5) years of experience, providing software maintenance and support services for complex and custom software systems;

- A minimum of three (3) years of experience with one or more Agile frameworks, preferably Scrum;

- Scrum certification (e.g. certified Scrum Master or Scrum Developer) is an advantage;

- Experience with all elements of the software development lifecycle: eliciting and documenting business process flows, use cases, requirements, quality management plans, user acceptance testing, and end-user training;

- Communicates effectively in English with meaningful and articulate verbal discussions;

- Minimum Three (3) years of experience with issue tracking tools, preferably Jira;

- Demonstrated business presentation and facilitation skills;

- Working knowledge of written and fluent in spoken English.

V.2.4 Skills and experience that shall be available amongst the members of the Team Roster

The following skills and experience shall be available in the initial Team Roster, and maintained for the duration of the Contract:

- Experience of seven (7) years or more with Linux operating systems and TCP/IP;

- Experience of seven (7) years or more using the C, Scheme, Perl, Python and UNIX shell scripting languages;

- Experience of five (5) years or more using the GNU Autotools and RPM for software packaging, compilation and distribution;

- Experience of five (5) years or more programming with the Public Key Cryptography Standards, PKCS#11 API and OpenSSL libraries;

- Ability to write quality Software Documentation in English language, please provide in CV.

V.3 Risk Management

The Contractor shall provide a thorough risk assessment plan at the project's commencement to identify potential risks that could impact the successful execution of the outlined software development activities in these Terms of Reference (ToR) and propose adequate risk mitigation measures. Risks may include, but are not limited to, technical challenges, changes in project requirements/scope, resource constraints, schedule delays, integration difficulties, and third-party software dependencies. The risk assessment and mitigation measures plans shall be consistently updated, aligning with the delivery of project milestones or significant accomplishments. Upon the project's satisfactory completion, the

Contractor is obligated to conduct a final review of the identified risks and mitigation measures. Risks that have been effectively mitigated or did not materialize should be officially closed, accompanied by appropriate documentation. The insights gained from the risk management process should be methodically documented and shared with the CTBTO, thereby contributing to the knowledge repository for forthcoming software development endeavors.

VI. ORGANIZATION OF WORK

The Commission may ask for services as described in section III. The Commission will call off Work through the issuance of a Formal Request for Delivery (FRD), by the Commission to the Contractor.

VI.1 Initiating Work

Before the issuance of an FRD, the Commission will provide the Contractor with a written request containing elaborations and definitions as to the nature of the particular Service(s) to be provided under the FRD including,

- An estimate of how the total work in the FRD is split (in percentages) into individual Services described in section III of these ToR ("Digital Signal Software Engineering Support", "Scientific Visualization Software Engineering Support", "Messaging Software Engineering Support", "Software Testing Support", "General Software Engineering Support");

- Additional requirements to the team members for the implementation of the detailed work specification in the FRD;

- Any other skills from section V.2.5 of this ToR that are required among the team members in order to execute the work in the FRD;

- Place of work (on-site/off-site for a combination thereof) for each of the Services specified in the FRD;

- A cap of the total number of person-days to be called-off within the FRD;

- An estimate of the duration of the project in calendar weeks.

The Contractors shall provide, at a minimum, within one (1) week of receiving the written request, the following information in the form of a work plan for each Service identified in the written request:

- A list of staff (Software Team) who will be working under this FRD. These staff shall be a subset of the Team Roster, as described in Section V.2;
- Work plan and key schedule to accomplish the Service, including commencement date and completion date of the Service.
- Number of person-days to be allocated to the Service and total estimated cost using the rates contractually agreed upon;
- Where applicable, the cost of travel to the site based on the most economical and direct route. The Commission reserves the right, based on the information provided by the Contractor, to approve the type of airfare or to purchase a ticket as outlined in Section IV above. The DSA shall be paid in accordance with Section IV;
- Place of work (on-site/off-site).

After review of the work plan for each Service identified in the written request, and only after acceptance by the Commission, the FRD shall be issued to the Contractor.

Each FRD shall be based on one (1) or more of the Services described in section III of this ToR and on the approved work plan for each of the Services to be completed. The Commission will forward FRDs to the Contractor with adequate advance notice and containing all necessary details, expected deliverables, and minimum requirements for satisfactory performance.

The Commission will evaluate the Contractor's FRD proposal to determine whether they are technically acceptable, considering the below criteria and decide whether a FRD would be issued to the Contractor.

- Feasibility of the proposed work plan and approach to execute the Work;
- Existence of the required skills for the FRD, within the proposed team;
- Availability of the staff proposed

The Commission shall not be held liable for any costs or the performance of any particular Service(s) which have been performed before the formal issuance of a FRD to the Contractor or if the Commission decides not to issue at all a FRD to the Contractor.

VI.2 Execution of Work

The Work called off in an FRD will be organized into one or more regular sprints. Each sprint is of fixed duration and will consist of one or more work items which will be recorded in JIRA-based tracking system. The sprint duration is typically one month; the exact start and end dates shall be agreed upon before the beginning of each sprint. The work items shall be agreed upon between the Commission and the Contractor before the beginning of each sprint. All non-administrative Work performed by the Contractor shall be associated to the agreed-upon work items.

VI.3 Sprint Report

The Contractor shall submit a Report to the Commission, electronically via email and within the first five (5) working days following the completion of each sprint, describing all the activities performed during the preceding month, including but not limited to:

- Summary of technical support activities done;
- Status of active technical support issues;
- Status of work items, bug reports and possible fixes;
- Working time spent on each work item
- Status and updated plan for all active development tasks.

VI.4 Completion and Acceptance

At the end of the performance period of the FRD, the Contractor shall submit to the Commission the deliverables as specified in the respective FRD. The Work will be reviewed by the Commission staff and by the Commission management against the requirements of the FRD and the Commission internal working practices and standards.

If requested by the Commission in an FRD, upon completion of the Service(s) under the FRD, the Contractor may be required to provide an oral presentation (including slides/handouts as required) to the Commission at its Headquarters in Vienna.

VI.5 Invoicing and Payment

The Work and deliverables, after being evaluated and accepted as satisfactory by the Commission, will form the basis for invoicing and payment of a particular Service performed under the FRD.

VII. Methodology, Standards, and Technology

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

Generally, the Commission favours the use of a small number of technologies centered around the programming languages C, C++ and Python. Some existing interactive applications that are maintained under this Contract use Java, Perl, and shell scripting. The Contractor should use the same technologies unless otherwise agreed with the Commission in the course of the performance period under this Contract.

All software developed under this Contract shall follow the IDC Coding Standards (which includes recommended coding style, the required implementation of unit tests, and use of open standards and open-source libraries where possible) and shall compile and run under the Linux operating system family (RHEL/CentOS 6.x, 7.x, 9.x, or compatible). The IDC guidelines for requirements engineering shall form the basis for eliciting and documenting requirements.

The software that the Contractor shall be working on is being maintained in the Git/Github version control system and all software releases shall be delivered via this version control system.

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

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

VII.1 Work environment

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

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

CTBTO Member States

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

Eswatini
Ethiopia
Fiji
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Holy See
Honduras
Hungary
Iceland
Indonesia
Iran (Islamic Republic of)
Iraq
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kiribati
Kuwait
Kyrgyzstan
Lao People's Democratic
  Republic
Latvia
Lebanon
Lesotho
Liberia
Libya
Liechtenstein
Lithuania
Luxembourg
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Marshall Islands
Mauritania
Mexico
Micronesia, Federated States of
Monaco
Mongolia
Montenegro

Morocco
Mozambique
Myanmar
Namibia
Nauru
Nepal
Netherlands (Kingdom of the)
New Zealand
Nicaragua
Niger
Nigeria
Niue
North Macedonia
Norway
Oman
Palau
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Republic of Korea
Republic of Moldova
Romania
Russian Federation
Rwanda
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the
  Grenadines
Samoa
San Marino
Sao Tome and Principe
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
Solomon Islands
South Africa
Spain
Sri Lanka
Sudan
Suriname
Sweden
Switzerland
Tajikistan
Thailand
Timor-Leste
Trinidad and Tobago
Togo
Tunisia
Türkiye

Turkmenistan
Tuvalu
Uganda
Ukraine
United Arab Emirates
United Kingdom
United Republic of Tanzania
United States of America
Uruguay
Uzbekistan
Vanuatu
Venezuela
Vietnam
Yemen
Zambia
Zimbabwe

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.

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

j) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any), is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

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

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

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

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

o) The firm/organization expressly agrees to abide by the United Nations Supplier Code of Conduct.[1]

Name (print):_____   Signature: _____

Title/Position: _____

Place (City and Country):_____   Date: _____

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[1] https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct

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)
   PLEASE INCLUDE A COPY OF THE CERTIFICATE OF INCORPORATION

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:

Product/Service/Work #	Product/Service/Work Description

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

Name: Title: Signature: Date:

Bank Details	**Beneficiary Details**
Bank Name:	Beneficiary Name: (exactly as stated on bank statements)
Bank Address:	IBAN: (if applicable)
Exact Account Holder Name:	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		
Evaluated By:	Initials	Date:
Updated By:	Initials	Date:
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.