

GOVERNMENT OF SINDH



REQUEST FOR PROPOSAL (RFP) FOR CONSULTANCY SERVICES

Of

**CONDUCTING BASELINE / FEASIBILITY STUDY FOR SEISMIC,
TSUNAMI AND CYCLONE HAZARDS ALONG COAST OF SINDH AND
IDENTIFICATION OF SUITABLE SITES FOR INSTALLATION OF MULTI-
HAZARD EARLY WARNING SYSTEM**

**REHABILITATION DEPARTMENT THROUGH
PROVINCIAL DISASTER MANAGEMENT AUTHORITY
GOVERNMENT OF SINDH**

Estimated Cost PKR 15 (M)

IMPORTANT NOTICE

This Request for Proposal is provided to the Bidders solely for use in preparing and submitting Bids in connection with the competitive bidding process to undertake Assignment. This Request for Proposal is being issued by the Provincial Disaster Management Authority, Government of Sindh solely for use by Consultant Firm in considering the Project. *Unless expressly specified otherwise, all capitalized terms used herein shall bear the meaning ascribed thereto in the Glossary of this Request for Proposal.*

The evaluation criteria were determined by Provincial Disaster Management Authority, Government of Sindh. Neither any of these entities, nor their employees, personnel, agents, make any representation (expressed or implied) or warranties as to the accuracy or completeness of the information contained herein, or in any other document made available to a person in connection with the tender process for the Project and the same shall have no liability for this Request for Proposal or for any other written or oral communication transmitted to the recipient in the course of the recipient's evaluation of the Project. Neither any of these entities, nor their employees, personnel, agents, consultants, advisors and contractors etc. will be liable to reimburse or compensate the recipient for any costs fees, damages or expenses incurred by the recipient in evaluating or acting upon this Request for Proposal or otherwise in connection with the Project as contemplated herein.

The Bids submitted in response to the Request for Proposal by any of the Bidders shall be upon the full understanding and agreement of any and all terms of the Request for Proposal and such submission shall be deemed as an acceptance to all the terms and conditions stated in the Request for Proposal. Any Bids in response to the Request for Proposal submitted by any of the Bidder shall be construed based on the understanding that the Bidder has done a complete and careful examination of the Request for Proposal and has independently verified all the information received (whether written or oral) from the Government of Sindh (including from its employees, personnel, agents, consultants, advisors and contractors etc.).

This Request for Proposal does not constitute a solicitation for consultancy, or otherwise participate, in the Project, nor shall it constitute a guarantee or commitment of any manner on the part of the Government that the Project will be awarded. The Provincial Disaster Management Authority, Government of Sindh reserves its right, in its full discretion, to modify the Request for Proposal and/or the Project at any time to the fullest extent permitted by law, and shall not be liable to reimburse or compensate the recipient for any costs, taxes, expenses or damages incurred by the recipient in such an event.

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1. INVITATION LETTER

To

Name & address of particular firm,

Subject: HIRING OF SERVICES OF CONSULTANCY FIRM – CONDUCTING BASELINE / FEASIBILITY STUDY FOR SEISMIC, TSUNAMI AND CYCLONE HAZARDS ALONG COAST OF SINDH AND IDENTIFICATION OF SUITABLE SITES FOR INSTALLATION OF MULTI-HAZARD EARLY WARNING SYSTEM

The Rehabilitation Department through Provincial Disaster Management Authority, (PDMA) Government of Sindh, is mandated to execute Tsunami Early Warning System works in the public interest. The Department intends to take several protective measures to protect vulnerable public places and infrastructure from disasters like Tsunami, Earthquake and Cyclone Early Warning System for the said purpose, the Government of Sindh aims to hire the services of consultancy firms to conduct survey/ baseline study for site identification at coastal belt of Karachi Division, Badin Thatta and Sujawal Districts for installation of Tsunami Early Warning System (TEWS). The main objectives of this assignment shall be to conduct Baseline / Feasibility Study for coastal hazard like Seismic, Tsunami Cyclone Hazards and associated Risk Assessment Coast of Sindh (Karachi Division, Badin Thatta & Sujawal Districts) and Identification of Suitable Sites for Installation of Equipment for Seismic monitoring, Tsunami Early Warning and Cyclone storm surge, track, intensity prediction System.

2. For the execution of the project, the PDMA Sindh (hereinafter shall be termed as “Client”) requires services of a Consultancy Firm who shall Conduct Feasibility study for Seismic, Tsunami, Cyclone Hazards along Coast of Sindh and identification of Suitable Sites for Installation of Multi Hazards Early Warning System and identification of evacuation sites. More details of the required services are provided in Terms of Reference (TOR).

3. A Consultancy Firm will be selected under “**Quality and Cost Based Selection Method**” (QCBSM) described in this RFP, in accordance with the Procurement Procedures set out by the Project Director PDMA Karachi Sindh:

4. The RFP includes the following documents:

Section 1 - Letter of Invitation

Section 2 - Instructions for Proposals’ Preparation

Section 3 - Technical Proposal - Forms

Section 4 - Financial Proposal - Forms

Section 5 - Terms of Reference

Section 6 – Draft Contract

Project Director

*Provincial Disaster Management Authority)
Address: Rehabilitation Department, Government of Sindh
26-C, Main Khayaban-e-Jami, DHA Phase-7, Karachi.*

Telephone No: : 021-99332003-5.

E-mail Address:dd.hyd@pdma.gos.pk

Yours sincerely,

*Deputy Director (Operations) / Hyd
Secretary Consultants Selection Committee,
Provincial Disaster Management Authority
Rehabilitation Department, Government of Sindh*

2. INSTRUCTIONS TO CONSULTANTS

Definition

All capitalized terms not defined herein shall have the meaning set forth in the Consultancy Services Contract.

Bid(s)	Any and all proposals and bids submitted by the Consultants as a response to this RFP or the Revised RFP, that are prepared and submitted in accordance with this RFP or Revised RFP and are in compliance of the same.
Bid Price	The consultancy fee for the Assignment quoted by the Consultant in its Financial Bid
Bid Security	The security deposit that a consultant must provide, <u>in the form of a pay order</u> issued by a scheduled commercial bank operating in Pakistan acceptable to the Procuring Agency in the amounts and conditions specified in this RFP.
Contract	Means Consultancy Services Contract to be executed between selected Consultant and Procuring Agency.
Consultant	Means a professional who can study, and identify 14 points for installation of said system in Karachi Division, Badin Thatta and Sujawal Districts
Consultant Selection Committee	The Consultant Selection Committee notified by the Procuring Agency pursuant to SPPRA rules to undertake procurement process to hire Consultants for the Assignment.
Data Sheet	Means such part of the Instructions to Consultants that is used to reflect specific assignment conditions.
Day	Means calendar day including holiday.
Facility	conducting baseline / feasibility study for seismic, tsunami and cyclone hazards coast of Sindh and identification of suitable sites for installation of multi-hazard warning system.
Government	Means the Government of Sindh.
Instructions to Consultants	(Section 2 of the RFP) means the document which provides Consultants with all information needed to prepare their Proposals.
Key Professional Staff	means the professionals assigned by the Consultant to undertake assignment as listed under Evaluation Criteria and Scoring System

	given in Section 6-B (2).
LOI	(Section 1 of the RFP) means the Letter of Invitation sent by the Procuring Agency to the Consultant.
Performance Security	The security deposit that a consultant must provide, <u>in the form of a pay order</u> issued by a scheduled commercial bank operating in Pakistan acceptable to the GoS in the amounts and conditions specified in this RFP.
Procuring Agency	means the Provincial Disaster Management Authority with which the selected Consultant signs the Contract for the Assignment.
Proposal	means the Technical Proposal and the Financial Proposal.
Proposal Deadline	The deadline for the Consultants to submit their Proposal as given in the Data Sheet
Request for Proposal / RFP	means the Request for Proposal prepared by the Procuring Agency for the selection of consultant Firm.
SPPRA	Sindh Public Procurement Regulatory Authority
Terms of Reference	(TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the Procuring Agency and the Consultant, and expected results and deliverables of the assignment.

Introduction

The Procuring Agency named in the Data Sheet will select a consultant in accordance with the method of selection specified in the Data Sheet.

The Consultants are invited to submit a Technical Proposal and a Financial Proposal as specified in the Data Sheet. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Consultant.

The Consultants should familiarize themselves with rules / conditions and take them into account while preparing their Proposals. The Consultants may liaise with Procuring Agency's representative named in the Data Sheet for gaining better insight into the assignment.

The Consultants shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Procuring Agency reserves the right to annul the selection process at any time prior to contract award, without thereby incurring any liability to the Consultants in line with Sindh Public Procurement Rules, 2010(amended from time to time).

While submitting the Technical Proposal, the composition of the proposed team and task assignment to individual personnel shall be clearly stated.

If a Consultant is qualified/selected on the strength of experience of a foreign company, requisite Key Professional Staff from that foreign company shall be fielded along with other Consortium members.

In case a firm is proposing Key Professional Staff from educational/research institutions, a 'No Objection Certificate' from the concerned institution shall be enclosed with the CV of such person.

Timetable

The estimated timetable for the bidding process is as follows

Activity	Target Date
Bid Purchase Deadline	5.06.2023
Bids Submission Deadline	6.06.2023
Technical Bid Opening Deadline	6.06.2023

Conflict of Interest

The Consultants are required to provide professional, objective, and impartial advice and holding the Procuring Agency interest paramount. They shall strictly avoid conflict with other assignments or their own corporate interest. The Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the Procuring Agency, or that may reasonably be perceived as having such effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its contract.

Without limitation on the generality of the foregoing, Consultants, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:

- i. A Consultant that has been engaged by the Procuring Agency to provide goods, works or services other than consulting services for a project, any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, any of its affiliates, shall be disqualified from subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation.
- ii. A Consultant (including its Consortium members) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant to be executed for the same or for another Procuring Agency.
- iii. A Consultant (including its Consortium members) that has a business or family relationship with a member of the Procuring Agency's staff who is directly or indirectly involved in any part of (i) the preparation of the Terms of Reference of the assignment, (ii) the selection process for such assignment, or (iii) supervision of the contract, may not be awarded a contract, unless the conflict stemming from this relationship has been resolved.

Conflicting Relationships

Government officials and civil servants may be hired as consultants only if:

- i. They are on leave of absence without pay;

- ii. They are not being hired by the agency they were working for, six months prior to going on leave; and
- iii. Their employment would not give rise to any conflict of interest.

Fraud and Corruption

It is Government's policy that Consultants under the contract(s), observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Procuring Agency follows the instructions contained in Sindh Public procurement Rules 2010 which defines:

"Corrupt and fraudulent practices" includes the offering, giving, receiving, or soliciting, directly or indirectly of anything of value to influence the act of another party for wrongful gain or any act or omission, including misrepresentation, that knowingly or recklessly misleads or attempt mislead a party to obtain a financial or other benefit or to avoid an obligation;

Under Rule 35 of SPPR2010, "The Procuring Agency can inter-alia blacklist bidders found to be indulging in corrupt or fraudulent practices. Such barring action shall be duly publicized and communicated to the SPPRA, provided that any supplier or contractor who is to be blacklisted shall be accorded adequate opportunity of being heard".

Integrity Pact

Pursuant to Rule 89 of SPPR 2010 Consultant undertakes to sign an Integrity pact in accordance with prescribed format attached hereto for all the procurements estimated to exceed Rs. 15 million.

Only one Proposal

Consultants may only submit one proposal. If a Consultant submits or participates in more than one proposal, such proposals shall be disqualified. Participation of the same Consultant, including individual experts, to more than one proposal is not allowed.

Proposal Validity

- i. The Data Sheet indicates Proposals validity period. During this period, Consultants shall maintain the availability of Key Professional staff nominated in the Proposal. The Procuring Agency will make its best effort to complete negotiations within this period. Should the need arise; however, the Procuring Agency may request Consultants to extend the validity period of their proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Consultants may submit new staff in replacement, who would be considered in the final evaluation for contract award. The Consultants who do not agree have the right to refuse to extend the validity of their Proposals.
- ii. The Consultants shall submit required Bid Security, along with financial proposal defined in the data sheet. Bid security shall be released to the unsuccessful bidders once the contract has been signed with the successful bidder or the validity period has expired. The Consultant shall provide the Bid Security in accordance with the Sindh Public Procurement Rules, 2010 acceptable to the Procuring Agency. The Bid shall be summarily rejected if it is not accompanied with the Bid Security.

Clarification and Amendment in RFP Documents

- i. The Consultants may request for a clarification of contents of the bidding document in writing, and procuring agency shall respond to such queries in writing within three calendar days, provided they are received at least five calendar days prior to the date of opening of Proposal. The procuring agency shall communicate such response to all parties who have obtained RFP

document without identifying the source of inquiry. Should the Procuring Agency deem it necessary to amend the RFP as a result of a clarification, it shall do so.

- ii. At any time before the submission of Proposals, the Procuring Agency may amend the RFP by issuing an addendum/ corrigendum in writing. The addendum shall be sent to all Consultants (or uploaded on procuring agency website) and will be binding on them. The Consultants shall acknowledge receipt of all amendments. To give Consultants reasonable time in which to take an amendment into account in their Proposals the Procuring Agency may, if the amendment is substantial, extend the deadline for the submission of Proposals.

Preparation of Proposals

- i. In preparing their Proposal, the Consultants are expected to examine in detail the documents comprising the RFP. Material deficiencies (deviation from scope, experience and qualification of personnel) in providing the information requested may result in rejection of a Proposal.
- ii. Your proposal shall be prepared in two separate parts, each to be contained in a separate cover as follows:

Cover 1: Technical Proposal

Cover 2: Financial Proposal

Language

The Proposal as well as all related correspondence exchanged by the Consultants and the Procuring Agency shall be written in English. However it is desirable that the firm's Personnel have a working knowledge of the national and regional languages of Islamic Republic of Pakistan.

Technical Proposal Format and Content

While preparing the Technical Proposal, the Consultants must give particular attention to the following:

- i. It is desirable that majority of the Key Professional Staff proposed be permanent employees of the firm or have an extended and stable working relationship with it.
- ii. The proposed Key Professional Staff must, at a minimum, have the experience indicated in the Evaluation Criteria as given in Section 6, preferably working under similar geographical condition.
- iii. Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) shall be submitted for each position.

The Technical Proposal shall provide the following information using the attached Standard Forms (Section 3):

- i. A brief description of the Consultant organization and an outline of recent experience on assignments of a similar nature. For each assignment, the outline should indicate, inter alia, the profiles of the staff, duration of the assignment, contract amount, and firm's involvement.
- ii. Any comments or suggestions on the Terms of Reference and on the data, a list of services, and facilities to be provided by the Procuring Agency .
- iii. A detailed description of the proposed methodology, work plan for performing the assignment, staffing

- iv. The list of the proposed Key Professional Staff team by specialty, the tasks that would be assigned to each staff team member, and their timing
- v. CVs recently signed by the proposed Key Professional Staff and the authorized representative submitting the proposal. Key information should include number of years working for the Consultant and degree of responsibility held in various assignments.
- vi. Estimates of the total staff input (professional and support staff; staff time) needed to carry out the assignment, supported by bar chart diagrams showing the time proposed for each professional staff team member.
- vii. Any additional information requested in the Data Sheet.

The Technical Proposal shall not include any financial information.

Financial Proposals

The Financial Proposal shall be prepared using the attached Standard Forms . It shall list all costs associated with the assignment. All activities and items described in the Technical Proposal must be priced separately; activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.

Taxes

The Consultant will be subject to all admissible taxes including stamp duty and service charges at a rate prevailing on the date of Contract agreement unless exempted by relevant tax authority.

Submission, Receipt, and Opening of Proposals

Proposal shall contain no interlineations or overwriting. Submission letters for both Technical and Financial Proposals should respectively be in the format of TECH-1 of Section 3, and FIN-1 of Section 4. All pages of the original Technical and Financial Proposals will be initialed by an authorized representative of the Consultants (Individual Consultant).

All required copies of the Technical Proposal are to be made from the original. If there are discrepancies between the original and the copies of the Technical Proposal, the original governs.

The Technical Proposal shall be submitted, in triplicate (one original and two copies). Each Technical Proposal shall be in a separate sealed envelope indicating the proposal as original or copy clearly marked as “ORIGINAL” and “COPY”, as appropriate. The Technical Proposal shall be placed in a sealed envelope clearly marked as “**TECHNICAL PROPOSAL**” and the Financial Proposal shall be placed in a sealed envelope clearly marked “**FINANCIAL PROPOSAL**”. The two envelopes, in turn, shall be sealed in an outer envelope bearing the address and information indicated in the Data Sheet. The envelope shall be clearly marked: “**DO NOT OPEN, EXCEPT IN PRESENCE OF THE CONSULTANT SELECTION COMMITTEE**”. Any Consultant who submits or participates in more than one Bid will be disqualified.

The Proposals must be sent to the address indicated in the Data Sheet and received by the Procuring Agency no later than the time and the date indicated in the Data Sheet, or any extension to this date. Any proposal received by the Procuring Agency after the deadline for submission shall be returned unopened. In order to avoid any delay arising from the postal or Procuring Agency’s internal dispatch workings, Consultants should ensure that proposals to be sent through couriers should reach a day before the deadline for submission.

Bid Security

A Bid submitted by each Consultant must be accompanied by a Bid Security in an amount equal to two (2%) percent of the bid price, in Pakistani Rupees, which shall remain valid for a period of at least ninety (90) days plus twenty-eight (28) days beyond the original bid validity period making it a total of one hundred and eighteen (118) days from the Proposal Deadline. The Bid Security must be in a form pay order or bank gurantee.

The Bid Security submitted by the unsuccessful Consultants shall be released to the unsuccessful Consultants upon signing of the Consultancy Services Contract.

Any Bid not accompanied by the required Bid Security, or accompanied by a Bid Security in an amount less than that required in accordance with SPPRA rules or other than in the required form by this RFP shall be, in each case, rejected by the GoS as non-responsive. It is further clarified that no Bid Security in the form of insurance guarantee shall be entertained.

The Bid Security (or the Performance Security as the case may be) may be encashed by the GoS in the following circumstances:

- a. In the case of a successful Consultant, if it fails within the specified times to:
 - comply with the instructions laid down in the Letter of Acceptance within the time period stipulated therein;
 - furnish the necessary Performance Security when required;
 - sign the Consultancy Services Contract;
 - achieve all the conditions precedents agreed in the signed Consultancy Services Contract.
- b. In case the Bid Security expires prior to the date falling ninety (90) days plus twenty eight (28) days beyond the original bid validity period making it a total of one hundred and eighteen (118) days from the Proposal Deadline;
- c. In case of an occurrence of Consultant's event of default in terms of the Consultancy Services Contract;
- d. Consultant withdraws its Bid during the Bid Validity Period;

Basic Eligibility Criteria

Registration with Sindh Revenue Board and/or relevant tax authority (In case of Consortium, every consortium member firm should provide).

Registration with Survey of Pakistan

The Consultant is not black listed by any Procuring Agency / GoS. An affidavit from consultant shall be signed and submitted with technical proposal (In case of consortium, every Consortium member firm should provide)

For a consortium to be eligible for bidding, every consortium member firm should place at least one (1) Key Professional Staff.

In case of Consortium, the Consortium Agreement shall be submitted.

The Consultant had been in business for at least three (3) years. (Attach company/firm registration certificate and articles of incorporation or documents of constitution).

The Consultant / consultant Firm shall provide 3 years last Similar / related Experience

The Consultant firm shall provide three-year last bank statement / audit report

Firm must submit all details along with RFP signed and Stamp.

Proposal Evaluation

The evaluation committee shall first check the basic eligibility criteria pursuant to section 2.18 in Technical Proposal of all bids / proposal received. Any technical proposal which does not meet basic eligibility criteria shall not be evaluated further for technical score. Such bid / proposal will stand non-compliant and rejected.

From the time the Proposals are opened to the time the contract is awarded, the Consultants should not contact the Procuring Agency on any matter related to its Technical and/or Financial Proposal. Any effort by consultants to influence the Procuring Agency in the examination, evaluation, ranking of Proposals, and recommendation for award of contract may result in the rejection of the Consultants' Proposal. Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.

QCBSM will be adopted in evaluating the proposal. In the first stage a technical evaluation will be carried out. Only those Technical proposals, which score **at least 80 points** out of 100, shall be considered for financial evaluation in the second stage. The evaluation of the technical and financial bids shall be held under the **"Quality and Cost Based Selection Method" (QCBSM)**.

Evaluation of Technical Proposals

The evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score (TS). A Proposal shall be rejected at this stage if it fails to achieve the minimum technical score indicated in the RFP.

After the technical evaluation is completed, the Procuring Agency shall notify in writing Consultants that have secured the minimum qualifying marks, the date, time and location, allowing a reasonable time, for opening the Financial Proposals. Consultants' attendance at the opening of Financial Proposals is optional. Financial proposals of those Consultant(s) who failed to secure minimum qualifying marks shall be returned un-opened.

Evaluation of Financial Proposals

Financial Proposals shall be opened publicly in the presence of the Consultants' representatives who choose to attend. The name of the Consultants and the technical scores of the Consultants shall be read aloud. The Financial Proposal of the Consultants who met the minimum qualifying marks will then be inspected to confirm that they have remained sealed and

Un opened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copy of the record shall be sent to all Consultants.

The Evaluation Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the formers will prevail. In addition to the above corrections, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.

The lowest Financial Bid Price shall be determined as Preferred Bidder. Proposal will be ranked according to their Financial Bid Price from lowest to highest thus firm with the lowest bid price will be invited for negotiations, if required as per SPPRA rules.

Negotiations

Negotiations will be held at the date and address to be communicated by the Procuring Agency. The invited Consultant will, as a pre-requisite for attendance at the negotiations, confirm availability of all Key Professional Staff. Failure in satisfying such requirements may result in the Procuring Agency proceeding to negotiate with the next-ranked Consultant. Representatives conducting negotiations on behalf of the Consultant must have written authority to negotiate and conclude a contract.

Technical Negotiations

Technical Negotiations will include a discussion of the Technical Proposal, the proposed technical approach and methodology, work plan, organization and staffing, and any suggestions made by the Consultant to improve the Terms of Reference. The Procuring Agency and the Consultants will finalize the Terms of Reference, staffing schedule, work schedule, logistics, and reporting. These documents will then be incorporated in the Contract as part of the Scope of Work. Minutes of negotiations, which will be signed by the Procuring Agency and the Consultant, will become part of Contract agreement.

Availability of Key Professional Staff

Having selected the Consultant on the basis of, among other things, an evaluation of proposed Key Professional Staff, the Procuring Agency expects to negotiate a Contract on the basis of the Key Professional staff named in the Proposal. Before contract negotiations, the Procuring Agency will require assurances that the Key Professional staff will be actually available. The Procuring Agency will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or for reasons such as death or medical incapacity. If this is not the case and if it is established that Key Professional staff were offered in the proposal without confirming their availability, the Consultant may be disqualified. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate and be submitted by the Consultant within the period of time specified in the letter of invitation to negotiate.

Award of Contract

After completing negotiations, the Procuring Agency shall award the contract to the selected Consultant and within seven days of the award of contract, Procuring Agency shall publish on the website of the SPPRA and on its own website, if such a website exists, the result of the bidding process, identifying the bid through procuring identifying number, if any and the following information, evaluation report, form of contract and letter of award, bill of quantity or schedule of requirement, as the case may be.

After publishing of award of contract Consultant required to submit a Performance Security at the rate indicated in date sheet.

Confidentiality

Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Consultants who submitted the Proposals or to other persons notofficially concerned with the process, until the publication of the award of Contract. The undue use by any Consultant of confidential information related to the process may result in the rejection of its Proposal.

Consortium Agreement

In case of Consortium of firms, the proposal shall be accompanied by a certified true copy of the **Consortium Agreement**. The Consortium Agreement as applicable shall confirm thefollowing therein:

- i. Date and place of signing;
- ii. Purpose of Consortium (must include the details of contract works for which the consortium has been invited to bid) ;
- iii. A clear and definite description of the proposed administrative arrangements for the management and execution of the assignment;
- iv. Delineation of duties, responsibilities and scope of work to be undertaken by each along with resources committed by each partner/member of the Consortium for the proposed services;
- v. An undertaking that the firms are severally liable to the Procuring Agency for the performance of the services;
- vi. Consortium must have a separate FBR Tax Number;
- vii. Duties, responsibilities and powers of the lead firm;
- viii. The authorized representative of the Consortium.

In case of Consortium, it is expected that the lead partner would be authorized to incurliabilities and to receive instructions and payments for and on behalf of the consortium. For a consortium to be eligible for bidding, the experience of lead partner and other partner should beindicated.

Any alternative proposal, such as one by a firm in sole capacity and another in Consortium with another firm or as a part of 2 or more consortiums, for the assignment will be summarily rejected. In such an event, all the proposals submitted by such firm and its Consortium or associate shall be rejected.

The proposal of a firm is liable to be rejected if the firm makes any false or misleading statement in the proposal(s) without prejudice to the rights of the Procuring Agency to initiate further proceedings against the said firm(s).

Notwithstanding anything to the contrary contained in this RFP, the detailed terms specified in the draft Contract agreement shall have overriding effect; provided, however, that any conditions or obligations imposed on the Bidder hereunder shall continue to have effect in addition to its obligations under the Contract.

Schedule of Deliverables

Sr.)	Deliverable	Duration in Months / week (after signing of contract)	Payment (% of total contract price)
01	<p>Submission of Inception Report. Inception Report to cover, detailed methodology, detailed project plan, detailed data description, data collection mechanism, study progress monitoring mechanism etc.</p> <p>Payment for this deliverable is contingent upon acceptance of the Inception Report duly endorsed and signed by the respective authorized person of the Client</p>	First 2 Week	25%
02	<p>Mapping and site selection for sites along coast of Karachi Division (district East ,West and Kemamari).</p> <p>Payment for the deliverable is contingent upon issuance of acceptance letter by the Client for approval of Mapping and sites selection along coast of Karachi Division (district East and West).</p>	Second 2 Weeks	25%
03	<p>Mapping and site selection for sites along the coast of Thatta, Sujawal and Badin districts.</p> <p>Submission of GIS and Remote Sensing and Auto CAD data in its original. formats</p> <p>Submission of Draft Report.</p> <p>Payment for the deliverable is contingent upon issuance of acceptance letter by the Client for approval of Mapping and site selection along the coast of Thatta, Sajawal and Badin district.</p>	Third 2 Week	25%
04	<p>Submission / approval of complete and Final Report.</p> <p>Payment for this deliverable is contingent upon acceptance of the Final report duly endorsed and signed by the respective authorized person of the Client</p>	Fourth 2 Week	25%
			100%

Data Sheet

The following specific data shall supplement the provisions in the Document.

1	Assignment Name	Consultancy Services Baseline / Feasibility Study for Seismic, Tsunami and Cyclone Hazards along Coast of Sindh and Identification of Suitable Sites for Installation of Multi-Hazard Early Warning System .
2	Address and Contact Person of Procuring Agency	Name: Mr.Ajay Kumar: DeputyDirector(Ops Hyd) / Member Secretary CSC Address: Plot C 26 Khayaba e Jami DHA Phase 7 Karachi. Tel: +92-21-99332701-2.
3	Address for Submission of Bids	Director General, Provincial Disaster Management Authority Address: Plot C 26 Khayaba e Jami DHA Phase 7 Karachi.
5	Pre-Bid Meeting	11:00 A.M, April 19, 2023 Committee Room of Provincial Disaster Management Authority
6	Submission Deadline date and time	As per RFP/advertisement
7	Bid Opening	As per RFP/ advertisement
8	Envelops	“ORIGINAL PROPOSAL” Documents In Technical Proposal Or Financial Proposal as Appropriate; And, Do Not Open, Except in Presence Of The Consultant Selection Committee On Outer Envelope.
9	Language of Bid and correspondence	English
10	Proposal Validity	90 days from the closing date of submission of proposal.

11	Evaluation Criteria	Minimum 80 points for technical proposal qualification. Refer Section 6A
12	Scoring System	As per RFP
13	Method of Selection	Quality and Cost Based Selection
14	Bid Security	The Consultant shall deposit a Bid Security <u>in original Financial Proposal</u> of an amount equivalent to 2% (two per cent) of the bid price in the shape of Pay Order.
15	Performance Security	05% of Consultancy contract amount
16	Contract Stamping	Duly stamped @ 0.35% of bid price by successful bidder at its own cost
17	Tax Liability	The Procuring Agency will deduct all applicable taxes as per government rules.

3. TECHNICAL PROPOSAL – STANDARD FORMS

[Comments in brackets [] provide guidance to the Consultants for the preparation of their Technical Proposals; they should be deleted from the Technical Proposals to be submitted.]

Form TECH-1. Technical Proposal Submission Form

Form TECH-2. Consultant's Organization and Experience

A – Consultant's Organization

B – Consultant's Experience

Form TECH-3. Comments and Suggestions on the Terms of Reference

Form TECH-4. Description of Approach, Methodology and Work Plan for Performing the

AssignmentForm TECH-5. Team Composition and Task Assignment

Form TECH-6. Curriculum Vitae (CV) for proposed Key Professional Staff

Form TECH-7. Staffing Schedule

Form TECH-8. Work Schedule

FORM TECH-1.**TECHNICAL PROPOSAL SUBMISSION FORM**

[Location, Date]

To:
Director General,
Provincial Disaster Management Authority
Government of Sindh

Dear ,

We, the undersigned, offer to provide the consultancy services Baseline / Feasibility Study for Seismic, Tsunami and Cyclone Hazards along Coast of Sindh and Identification of Suitable Sites for Installation of Multi-Hazard Early Warning System in accordance with your Request for Proposal dated [Insert Date] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under a separate envelope.

We are submitting our Proposal in association with: *[Insert a list with full name and address of each associated Consultant]*

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, i.e., before the date indicated in the Data Sheet, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in the Data Sheet.

We understand you are not bound to accept any Proposal you receive.

We remain,
Yours sincerely,

Authorized Signature *[In full and initials]*: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

A – Consultant's Organization

[Provide here a brief (two pages) description of the background and organization of your firm/entity and each associate for this assignment.]

B – Consultant's Experience

[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted either individually or as a corporate entity or as one of the major companies within an association, for carrying out consulting services similar to the ones requested under this assignment.]

Assignment Name:	Country:	
Location within Country :	Professional Staff Provided by your firm	
Name of Procuring Agency :	No. of Staff :	
Address :	No. of Staff Months :	
Start Date (Month / Year)	Completion Date (Month / Year)	Approx. Value of Services : (in current PKR) :
Name of Association Firm(s) if any :	No. of Months of Professional Staff provided by Associated Firm(s)	
Name of Senior Staff (Project Director / Coordinator, Team Leader) involved and functions performed:		
Narrative Description of Project:		
Description of actual services provided by your staff within the assignment:		

Firm's Name: _____

FORM TECH-3. COMMENTS AND SUGGESTIONS ON THE TERMS OF REFERENCE

On the Terms of Reference (TORs)

[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to improve performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding another, or proposing a different phasing of the activities). Such suggestions should be concise and to the point, and incorporated in your Proposal.]

1.

2.

3.

4.

5.

..

..

Understanding of the Assignment

FORM TECH-4. DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

The approach and methodology will be detailed precisely under the following topics.

[Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal divided into the following three chapters:

- 1) **Technical Approach and Methodology.** *In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.*
- 2) **Work Plan.** *In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Procuring Agency), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form-VIII.*
- 3) **Organization and Staffing.** *In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]*

FORM TECH-5. TEAM COMPOSITION AND TASK ASSIGNMENT

I. Key Professional Staff					
S. No	Name	Firm	Area of expertise	Position	Task Assignment
1					
2					
3					
4					
..					
...					

FORM TECH-6. FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY PROFESSIONAL STAFF

1. **Proposed Position** *[only one candidate shall be nominated for each position]*: _____
2. **Name of Firm** *[Insert name of firm proposing the staff]*: _____
3. **Name of Staff** *[insert full name]*: _____
4. **Date of Birth**: _____
5. **Nationality**: _____
6. **Educational Qualification**: *[Summarize college/university and other specialized education of staff member, giving names of schools, dates attended and degrees obtained]*: _____
7. **Membership of Professional Societies**: _____
8. **Other Training** *[indicate significant training since degrees under 6 – Education were obtained]*: _____
9. **Countries of Work Experience**: *[list countries where staff has worked]*: _____
10. **Languages** *[for each language indicate proficiency: good, fair, or poor in speaking, reading and writing]*: _____

11. Employment Record:

[Starting with present position, list in reversed order, every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, position held]:

From [Year]: _____ To [Year]: _____
Employer: _____
Position held: _____

12. Detailed Tasks Assigned *[List all tasks to be performed under this assignment]*:

13. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 12]:

Name of assignment or project: _____
Year: _____
Location: _____
Line Department: _____
Main project features: _____
Positions held: _____
Activities performed: _____

14. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualification and my experience. I understand that any willful misstatement

described herein may lead to my disqualification or dismissal, if engaged.

[Signature of staff member or authorized representative of the staff] Date: _____
Day/Month/Year

Full name of authorized representative: _____

FORM TECH-7. STAFFING SCHEDULE

Months (in the Form of Bar Chart)

S. No.	Name	Position	Report Due/ Activities	Months								Number of Months
1												Sub Total (1)
2												Sub Total (2)
3												Sub Total (3)
4												Sub Total (4)
...												
....												

Part Time :

FORM TECH-8. WORK SCHEDULE

S.No	Activity ¹	Months													
		1	2	3	4	5	6	7	8	9	10	11	12	n	
1															
2															
3															
4															
5															
N															

1 Indicate all main activities of the assignment, including delivery of reports (e.g. inception, interim, and final reports), and other benchmarks such as line department approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.

2 Duration of activities shall be indicated in the form of a bar chart.

4. FINANCIAL PROPOSAL – STANDARD FORMS

[Comments in brackets [] provide guidance to the Consultants for the preparation of their Financial Proposals; they should be deleted from the Financial Proposals to be submitted.]

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under Section 2. Such Forms are to be used as per the selection method.

Form FIN-1. Financial Proposal Submission Form
Form FIN-2. Summary of Costs

FORM FIN-1. FINANCIAL PROPOSAL SUBMISSION FORM

[Location, Date]

To:
Director General,
Provincial Disaster Management Authority
Government of Sindh

Subject: **Consultancy Services for Baseline / Feasibility Study for Seismic, Tsunami and Cyclone Hazards along Coast of Sindh and Identification of Suitable Sites for Installation of Multi-Hazard Early Warning System**

Dear Sirs:

We, the undersigned, offer to provide the Consultancy Services for Baseline / Feasibility Study for Seismic, Tsunami and Cyclone Hazards along Coast of Sindh and Identification of Suitable Sites for Installation of Multi-Hazard Early Warning System in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures¹].

Our Financial Proposal shall be binding upon us up to expiration of the validity period of the Proposal, i.e. before the date indicated in the Data Sheet.

Yours faithfully,

Authorized Signature [*In full and initials*] _____
Name and Title of Signatory _____
Name of Firm _____
Address _____

[*The Financial Proposal is to be filled strictly as per the format given in RFP.*]

¹ Amounts must coincide with the ones indicated under Total Cost of Financial proposal in Form FIN-2.

Sr.)	Deliverable	Duration in Months / week (after signing of contract)	Payment (% of total contract price)
01	<p>Submission of Inception Report. Inception Report to cover, detailed methodology, detailed project plan, detailed data description, data collection mechanism, study progress monitoring mechanism etc.</p> <p>Payment for this deliverable is contingent upon acceptance of the Inception Report duly endorsed and signed by the respective authorized person of the Client</p>	2 Week	25%
02	<p>Mapping and site selection for sites along coast of Karachi Division (district East and West).</p> <p>Payment for the deliverable is contingent upon issuance of acceptance letter by the Client for approval of Mapping and sites selection along coast of Karachi Division (district East ,West Kaemari).</p>	2 Week	25%
03	<p>Mapping and site selection for sites along the coast of Thatta, Sujawal and Badin districts.</p> <p>Submission of GIS and Remote Sensing and Auto CAD data in its original. formats</p> <p>Submission of Draft Report.</p> <p>Payment for the deliverable is contingent upon issuance of acceptance letter by the Client for approval of Mapping and site selection along the coast of Thatta, Sujawal and Badin district.</p>	2 Week	25%
04	<p>Submission / approval of complete and Final Report.</p> <p>Payment for this deliverable is contingent upon acceptance of the Final report duly endorsed and signed by the respective authorized person of the Client</p>	2 Week	25%
			100%

FORM FIN-2 SUMMARY OF COSTS (in Local Currency PKR)

Description	%	Amount (in Rs)
<ul style="list-style-type: none"> Submission of Inception Report. Inception Report to cover, detailed methodology, detailed project plan, detailed data description, data collection mechanism, study progress monitoring mechanism etc. Payment for this deliverable is contingent upon acceptance of the Inception Report duly endorsed and signed by the respective authorized person of the Client 	25	
<ul style="list-style-type: none"> Mapping and site selection for sites along coast of Karachi Division (district East and West). Payment for the deliverable is contingent upon issuance of acceptance letter by the Client for approval of Mapping and sites selection along coast of Karachi Division (district East West and Keamari). 	25	
<ul style="list-style-type: none"> Mapping and site selection for sites along the coast of Thatta, Sujawal and Badin districts. Submission of GIS and Remote Sensing and Auto CAD data in its original. formats Submission of Draft Report. Payment for the deliverable is contingent upon issuance of acceptance letter by the Client for approval of Mapping and site selection along the coast of Thatta, Sujawal and Badin district. 	25	
<ul style="list-style-type: none"> Submission / approval of complete and Final Report. Payment for this deliverable is contingent upon acceptance of the Final report duly endorsed and signed by the respective authorized person of the Client 	25	
Total Costs inclusive of Taxes	100	

** Total Costs net of taxes shall be considered for financial evaluation
Note: No escalation shall be payable during the services

5 TERMS OF REFERENCE

Attached

Project Background

Tsunami the wrath of series of waves has the potential to create large scale multi-definitional short- and long-term damages. Recent tsunamis in Indonesia and Japan which caused havoc were eye opening for rest of the world specially for coastal countries. Though, historical evidence for tsunami along the shores of the Arabian Sea is rare and in cases contradicting, still Makran Subduction Zone (MSZ) near Balochistan coast has the potential to generate large tsunami in the region, as it happened after 8.6 magnitude earthquake of November 1945 which generated tsunami in the region. Record of the event suggest that majority of fatalities happened in villages along or near tidal creeks specially in Indus Delta. Cyclones and tsunami are key hazards to coastal belt of Sindh. Small fisherman villages and towns are scattered along the coast of Sindh and many of them still lack basic communication infrastructure. These villages and towns are extremely vulnerable to coastal hazards when personal notification is the only way of evacuation warnings. Most of these villages do not have landlines, electricity, roads, and mobile phone networks, etc.

Tsunami normally triggered by seismic activity and also by other reasons/ activity in ocean likely land sliding etc. In addition to seismic and tsunami, cyclone hazard is also associated with major coastal areas of Sindh Makran. Karachi, the largest city of Pakistan lies 150 km east of the triple junction between the Arabian, Indian and Asian Plates and is surrounded by active faults. Karachi is thus prone to high intensity Tsunami- genic earthquakes and Cyclone threat.

End-to-end Early Warning System (EWS) is one of the key factors in minimizing disaster losses. In modern technological era, prediction development and monitoring of cyclone and tsunami is possible and consequently, dissemination of timely alerts and warning to the communities at risk can be achieved. This project funded Government of Sindh aims to strengthen tsunami and earthquake preparedness in coastal areas of Sindh.

The Assignment

Tsunami Early Warning System (TEWS) is efficient and viable method to broadcast and disseminate real-time warnings at local level in vulnerable communities. This system is already installed along the coast of Balochistan with technical and financial assistance of Government of Pakistan and UN organizations / INGOs. At site, the system is comprised of siren pole, solar panels, batteries and Seismic Network along with early warning center. The system is controlled by remote command and control center, which in case of Pakistan is National Tsunami and Cyclone Warning Center at Pakistan Meteorological Department, Karachi. This system can be used for multi-hazards EWS with certain additional equipment and associated SOPs for all types of coastal hazards.

Provincial Disaster Management Authority (PDMA), Sindh is planning to install TEWS in coastal belt of Sindh in close association of Pakistan Meteorological Department (PMD), PDMA Balochistan. In initial phase of the project, system is planned to be installed at suitable locations in Korangi, district East West and Keamari of Karachi division and districts Thatta, Sujawal & Badin.

Before installation of TEWS, baseline study and survey are required for coastal hazards (particularly tsunami / cyclone) risk assessment, populations and physical infrastructure; and then identification of most feasible and suitable sites for installation of TEWS (Sirens /Alarms) , Evacuation sites and equipment. PDMA Sindh invites the services of reputable and experienced consulting firms / companies / organizations to conduct this study.

Objectives

The objectives of Baseline / Feasibility Study for Seismic, Tsunami Cyclone Hazards and associated Risk Assessment Coast of Sindh and Identification of Suitable Sites for Installation of Equipment for Seismic monitoring, Tsunami Early Warning and Cyclone storm surge, track, intensity prediction System are:

The objectives of Baseline / Feasibility Study for Seismic, Tsunami Cyclone Hazards and associated Risk Assessment for Coast of Sindh and Identification of Suitable Sites for Installation of Equipment for Seismic monitoring, Tsunami Early Warning and Cyclone storm surge, track, intensity prediction System are:

- a) Hazard Assessment regarding tsunami, cyclone and seismic risks along coastal belt of Sindh;
- b) Risk assessment and mapping and identification of elements at risk in detail (human settlements (including socio-economic), critical physical infrastructure and high loss facilities);
- c) Determine the overall feasibility of the proposed project and evaluate the anticipated impacts;
- d) Zonation (low, medium, high) of coastal belt in Sindh in terms of tsunami, cyclone and seismic hazards following SOPs of PMD / NDMA / relevant international organizations;
- e) Taking detailed historical account, current status and operational analysis of such EWS installed in coastal belt of Pakistan. It also includes any ongoing or planned activity as well.
- f) Identification of most suitable sites / alternate sites in close coordination and consensus of PMD for installation of Tsunami& Cyclone Early Warning System in terms of maximum services to the most vulnerable communities, and ensuring sustainability of TEWS sites in multi-hazard environment (cyclones, winds and other weathering effects), for durable and dependable services etc. Later on, TEWS will be handed over to PMD for O&M, therefore, PMD ownership is critical;
- g) Identification of residual (manmade and natural) risks associated with selected sites.

Scope

- i. Risk Assessment and Mapping of 03 Km inland corridor extending from coast of Sindh (entire coast up to Tharparkar district) with the help of high-resolution satellite imageries for detailed land use and land cover with specific emphasis on human settlements and strategic assets with verification of physical survey, Geographic data / maps must be prepared using Survey of Pakistan coordinates.

Risk Assessment and estimation of tsunami, cyclone and seismic risk along coastal belt of Sindh on the basis of documentation of historical events with the help of software simulation modelling and impacts, geological and geophysical knowledge of the sources and of their dynamics, tsunami generation, propagation, Tsunami and Cyclone inundation modelling, the exploration of an expected range of scenarios. (Consultation with PMD, National Tsunami Warning Center (NTWC), NDMA (Policy Guidelines for Conduct of MHVRA-2016) UN-ESCAP SOPs on Tsunami, UNESCO Regional Working Group on Tsunami and Japan Metrological Agency (JMA) in order to monitor information on the Indian Ocean. Also, consultation with DDMA, Local NGO's and coastal rural and urban communities' structures, Pakistan Coast Guards/ Pak Navy should also be consulted).

- ii. Population / population density mapping within the corridor (based on National Census 2017).
- iii. Infrastructure and housing mapping (high resolution / large scale).
- iv. Estimation of seismic, cyclone and tsunami risks using relevant models or previously conducted documented studies on the subject matter (special reference and compatibility be made with Multi-Hazard Risk Assessment of all Districts of Sindh – PDMA, funded by World Bank); and NDMA Policy Guidelines on MHVRA.
- v. Zonation of corridor according to seismic, cyclone and tsunami risk (low, medium, high), following SOPs of PMD / NDMA / relevant international organizations.
- vi. Identification, mapping and analysis of already installed EWS in the past for similar purposes under any organization (whether working or abundant); OR any other similar activity going on in the coastal belt of Pakistan.

- vii. Identification of technically suitable sites / alternate sites for installation of Equipment of Earthquake Monitoring, Tsunami and Cyclone EWS in terms of optimum benefits, safety and security of site equipment, durable operation-ability and accessibility, in consultation with PMD, as PMD has officially mandate to issue earthquake and tsunami / cyclone warnings. Moreover, later on, TEWS will be handed over to PMD for O&M.
- viii. Conduct detailed topographic survey of identified sites for final selection, and installation of Equipment for Earthquake monitoring. Tsunami and Cyclone EWS including Alarms system
- ix. Preparation and submission of hard and soft copies of maps, reports and technical details of site (exact location and topographic survey) in GIS, AutoCAD formats, (including Physical Survey) etc.
- x. Identification and risk assessment of any adverse impact (Env. / Social etc.) due to installation of EWS on the selected sites.
- xi. Identification of technically suitable sites / alternate sites for installation of Equipment of Earthquake Monitoring, Tsunami and Cyclone EWS in terms of optimum benefits, safety and security of site equipment, durable operation-ability and accessibility, in consultation with PMD and land mark where the system needs to be installed.

Phase wise

Terms of Reference

PHASE-I

Submission of Inception Report. Inception Report to cover, detailed methodology, detailed project plan, detailed data description, data collection mechanism, study progress monitoring mechanism etc.

PHASE-II

Mapping and site selection for sites along coast of Karachi Division (Karachi Division). Payment for the deliverable is contingent upon issuance of acceptance letter by the Concern Authority /Client for approval of Mapping and sites selection along coast of Karachi Division.

PHASE-III

Mapping and site selection for sites along the coast of Thatta, Sajawal and Badin districts

Submission of GIS and Remote Sensing and Auto CAD data in its original formats

Submission of Draft Report. Payment for the deliverable is contingent upon issuance of acceptance letter by the Concern Authority /Client for approval of Mapping and sites selection

PHASE-IV

Submission / approval of complete and Final Report

Scope of Project. / Detail of Work

Stage –I (Phase-I & IV)

The Consultant shall provide following services: -

Risk Assessment and Mapping of 03 Km inland corridor extending from coast of Sindh (entire coast up to Tharparkar district) with the help of high-resolution satellite imageries for detailed land use and land cover with specific emphasis on human settlements and strategic assets with verification of physical survey, Geographic data / maps must be prepared using Survey of Pakistan coordinates.

Risk Assessment and estimation of tsunami, cyclone and seismic risk along coastal belt of Sindh on the basis of documentation of historical events with the help of software simulation modelling and impacts, geological and geophysical knowledge of the sources and of their dynamics, tsunami generation, propagation, Tsunami and Cyclone inundation modelling, the exploration of an expected range of scenarios. (Consultation with PMD, National Tsunami Warning Center (NTWC), NDMA (Policy Guidelines for Conduct of MHVRA-2016) UN- ESCAP SOPs on Tsunami, UNESCO Regional Working Group on Tsunami and Japan Metrological Agency (JMA) in order to monitor information on the Indian Ocean. Also, consultation with DDMA, Local NGO's and coastal rural and urban communities' structures, Pakistan Coast Guards / Pak Navy should also be consulted). Population / population density mapping within the corridor (based on National Census 2017).

Infrastructure and housing mapping (high resolution / large scale). Estimation of seismic, cyclone and tsunami risks using relevant models or previously conducted documented studies on the subject matter (special reference and compatibility be made with Multi-Hazard Risk Assessment of all Districts of Sindh – PDMA, funded by World Bank); and NDMA Policy Guidelines on MHVRA.

Zonation of corridor according to seismic, cyclone and tsunami risk (low, medium, high), following SOPs• of PMD / NDMA / relevant international organizations.

Identification, mapping and analysis of already installed EWS in the past for similar purposes under any organization (whether working or abundant); OR any other similar activity going on in the coastal belt of

Pakistan.

Identification of technically suitable sites / alternate sites for installation of Equipment of Earthquake Monitoring, Tsunami and Cyclone EWS in terms of optimum benefits, safety and security of site equipment, durable operation-ability and accessibility, in consultation with PMD, as PMD has official mandate to issue earthquake and tsunami / cyclone warnings.

Moreover, later on, TEWS will be handed over to PMD for O&M. Conduct detailed topographic survey of identified sites for final selection, and installation of Equipment for Earthquake monitoring.

Tsunami and Cyclone EWS including Alarms system Preparation and submission of hard and soft copies of maps, reports and technical details of site (exact location and topographic survey) in GIS, AutoCAD formats, (including Physical Survey) etc.

Identification and risk assessment of any adverse impact (Env. / Social etc.) due to installation of EWS on the selected sites.

Identification of technically suitable sites / alternate sites for installation of Equipment of Earthquake Monitoring, Tsunami and Cyclone EWS in terms of optimum benefits, safety and security of site equipment, durable operation-ability and accessibility, in consultation with PMD and land mark where the system needs to be installed.

Final Completion Reports

The Consultant will prepare a comprehensive final report (5 hard copies with one soft copy) for Procuring Agency. This report shall summarize the method of work location, details of works carried out, supervision performed during the project with visible and invisible benefits of the project by considering various indicators such as social-economic uplift, literacy, industrialization, job opportunities. The report shall contain, Stage –I (Phase-V & IV)

Bid Management

The consultant shall prepare the tender documents of next phase for installation of warning system which is suitable for domestic bidding in compliance of SPPRA along-with up-to-date amendments and additional conditions. After the approval of these documents, Consultant shall be responsible for printing and production of required numbers of bidding documents sets. The bidding documents shall be provided to the Procuring Agency for sale.

Prepare Expressions of Interests (the **EOI's**), pre-qualification criteria, Request for Proposal (the **RFP**) documents, contracting agreements if required.

Supervise and monitor the work/ installation of the tsunami system according to the final report. Provide any detail regarding any changes or work that needs to be done during the installations period. After the completion of the work give clearance and satisfactory certificate for work completion. Handing over of the respective sites to the PA after successful completion of work.

Documentation

The Consultant shall indicate the availability of construction material (imported / domestic). Detailed information about the locally available construction material shall be provided with the leads of different sources if available in TORs.

Preparation of Cost Estimates

On the basis of approved design reports and with the consultation of Procuring Agency, the Consultant shall prepare cost estimate supported with unit rate analysis of Non- Scheduled Items on the basis of latest Input Rates. Consultant shall keep on updating Rough Cost Estimates, BOQ till final approval by the Procuring Agency by incorporation the changes, resulting from the revision unit rate analysis or due to any change and design and scope of work if required if available in TORs.

The Consultant shall provide following services: -

As per TORs attached

- Miscellaneous details / Ancillary works including training work if any.
- Incidental construction detail drawings.

Modifications / Amendments of Contract Drawings

The Consultant only on the clearing instruction of the Procuring Agency shall modify / amend or issue fresh drawings to the contractor without any extra cost to the Procuring Agency.

Construction Supervision

The Consultant will be responsible for supervision of Identification of Suitable Sites for Installation of Multi-Hazard Early Warning System

The Consultant shall ensure that the schedule provided in the contract agreement is strictly followed.

The Consultant shall report I advise to the Procuring Agency I Deputy Director (Hyd Ops) PDMA Sindh on any issue I problem arising during the execution of work / study and suggest remedial measures.

The Consultant shall be responsible for reports.

The Consultant shall submit the reports to the Procuring Agency I Deputy Director (Hyd Ops) PDMAS in hand send the copies to Director (Operations) PDMA Sindh and Director General PDMAS in clearly pointing out the deficiencies (if any) in the work and suggest its remedial measures.

The Consultant shall release the payment as stage wise as per deliverable as defined in TORs in RFP.

The Consultant shall recommend to the Deputy Director (Hyd Ops) for issuance of completion certificate stating that the work has been completed as per TORs and contract agreement.

Prior to the expiry of the contract period of the work, the Consultant shall carry out a detailed final inspection of the work and submit a report to the Procuring Agency pointing out the defects short-comings and deficiencies if any.

The Consultant shall ensure that the project is completed as per targeted schedule set forth by the Procuring Agency.

Reporting Requirement

Deliverables:

The Consultants will prepare a detailed progress report (5hard copies with one soft copy) summarizing the work completed in the preceding month, The progress report shall essentially contain the following information.

- a. Original and executed (to date) B.O.Q quantities as per specified work break down structure
- b. Activities his to gram in the form of linear progress chart, monitored physically to date.
- c. Activity-wise works started, completed and ongoing.
- d. Status for payment besides highlighting problems encountered in the execution of work with recommendations to resolve these issues.
- e. Maintaining estimate and comparative statement of project costs. All record at the end of the project shall become the property of Procuring Agency and consultant is bound to not share the same to any other.

Inspection Reports

- a. The Consultant shall keep the record work done and submit it to the Procuring Agency on monthly basis.
- b. One month prior to the expiry of completion period, the Consultant shall carry out a detailed final inspection of the work and submit a report to the Procuring Agency (PA) pointing out the defects in the

work, if any.

- c. Give notices to the PA any defect I deficiency and PA ensure their timely rectifications. In case of persistent delay in the compliance of the directions issued by him.
- d. The Consultant shall keep record of the inspection report and inform the Project Director / Director Operations about the potential problems which may arise a hamper progress of work besides making suitable recommendations for their solution at a minimum expense.
- e. The Consultant shall also be responsible for maintaining complete record of correspondence with the PA. Project Diary the Consultant shall monitor and appraise progress of work and maintain project diary by recording all events pertaining, which may be of assistance in resolving claims, disputes and queries if any.

Role of Procuring Agency.

The Rehabilitation Department, Government of Sindh will provide necessary inputs and support

5. EVALUATION CRITERIA AND SCORING SYSTEM

A – Evaluation Criteria

The evaluation of the technical and financial bids shall be held under the selection method. The total score of the technical evaluation shall be 100, out of which 80% shall be the technical qualification. The lowest financial bid price of technically qualified bidder shall be the preferred bidder.

1. Evaluation of Technical Proposals

The Technical Proposal will be evaluated on the basis of Consultants' relevant experience, its understanding of assignment, proposed methodology, financial capability and Work Plan, the experience of Key professional staff. Only those Consultants' whose Technical Proposals score 80 % marks or more shall qualify for further consideration, and shall be ranked from highest to lowest on basis of their raw technical score. Financial proposals of those bidders who secure less than 80% marks shall be returned un-opened to the firm/consortium.

2. Financial Bid opening

A public Financial Bid opening shall be held at the time, date and venue which shall be communicated to all technically qualified Bidder(s).

Confirm submission of bid security shall be checked first. In case the bid security is not submitted along with the financial proposal in the same sealed envelope, such proposal(s) shall be rejected without being evaluated.

The Bid with the lowest financial bid price shall be declared as the preferred bidder and issued Letter of Acceptance, containing invitation for contract negotiation. Any factor having a bearing on the quoted price shall not be subject to negotiations.

The Contract shall however, be signed after getting the same duly vetted and approved from the competent authority.

B – Scoring System

The Technical Proposal will be evaluated on the basis of the criteria given below:

Criteria		Marks
1. Firm's relevant Experience	<ul style="list-style-type: none"> • Experience in conduct of multi-sensor satellite remote sensing-based mapping • Experience in conduct and development of geospatial databases, GIS based solutions and application development in resource mapping • Experience in conduct of multi hazard vulnerability and risk assessment studies or studies of similar nature • Experience in conduct of physical surveys • Experience in processing of multi-platform geospatial databases 	40
	Marking Thresholds: <ul style="list-style-type: none"> • 05 or more projects: 40 Marks • 04 projects: 30 Marks • 03 projects: 20 Marks • 02 projects: 10 Marks • Less than 2 project: No Marks 	
	Sub-total	40
2. Key Professional Staff	<ul style="list-style-type: none"> • Project Manager • GIS Specialist • Disaster Management Specialist • Surveyor • Team comprising 5 or more Remote Sensing and GIS Analyst 	20
	Note: Total marks shall be awarded to the firm having all key professional staff.	
	Sub-total	20
3. Financial Capability	Completed project (in last 5 years) of <ul style="list-style-type: none"> • PKR 15 million or above: 10 Marks • PKR 13 million to 15 million: 05 Marks • PKR 10 million to 13 million: 03 Marks • PKR less than 10 million: No Marks 	10
	Sub-total	10

4. Understanding of the Assignment and Proposed Methodology	Appreciation of TOR and understanding of the assignment	10
	Proposed Methodology	15
	Work Plan and Manning Schedule	05
	Sub-total	30
Total		100

The Provincial Disaster Management Authority may conduct a Presentation from bidders during the technical evaluation period for clarity on Technical Proposal for the assignment.

The weight age points given to evaluation sub-criteria for qualifications and competence of key staff are:

Weight-age points for Key Professional Staff

Description		Weight (%)
1. General Qualifications		25%
Masters or higher or equivalent degree in social sciences / physical sciences / project management / geography / relevant subject (25%)		
Bachelors in social sciences / physical sciences / project management / geography / relevant subject (15%)		
2. Relevant Experience and suitability for the Project		75%
Relevant Experience		
Project Manager Experience: Project Development and Management	GIS Specialist Experience: Spatial Data Development, Management, Processing and Analysis	
5 years of relevant experience – 75% 4 years of relevant experience – 40% 3 years of relevant experience – 25% Less than 3 years – 0%	5 years of relevant experience – 75% 4 years of relevant experience – 40% 3 years of relevant experience – 25% Less than 3 years – 0%	
Disaster Management Specialist Experience: Hazard and Risk Assessment, Disaster Risk Treatment Planning	Surveyor Experience: Physical Surveys through various surveying platforms	
5 years of relevant experience – 75% 4 years of relevant experience – 40% 3 years of relevant experience – 25% Less than 3 years – 0%	3 years of relevant experience – 75% 2 years of relevant experience – 40%	
Team comprising 5 or more Remote Sensing and GIS Analyst		
3 years of relevant experience – 75% 2 years of relevant experience – 40%		
Total		100%

7. INTEGRITY PACT

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS 10.00 MILLION OR MORE

Contract No. _____ Dated _____

Contract Value: _____

Contract Title: _____

..... [name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GoS) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoS through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoS, except that which has been expressly declared pursuant hereto.

[name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoS and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoS under any law, contract or other instrument, be voidable at the option of GoS.

Notwithstanding any rights and remedies exercised by GoS in this regard, [name of Supplier] agrees to indemnify GoS for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoS in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoS.

Name of Buyer:

Signature:

[Seal]

Name of Seller/Supplier:

Signature:

[Seal]

8. AFFIDAVIT

To:

Director General,
Provincial Disaster Management Authority,
Government of Sindh

Re: Baseline / Feasibility Study for Seismic, Tsunami and Cyclone Hazards along Coast of Sindh and Identification of Suitable Sites for Installation of Multi-Hazard Early Warning System

[Date]

Pursuant to the Request for Proposal document dated [*Please insert the Date*] in respect of the Project, [*Name of Prospective Bidder/Lead Member of Consortium*] hereby represents and warrants that, as of the date of this letter [*Name of Prospective Bidder/Lead Member of Consortium*], and each member of our Consortium (if applicable):

- (a) is not in bankruptcy or liquidation proceedings;
- (b) has not been convicted of, fraud, corruption, collusion or money laundering;
- (c) is not aware of any conflict of interest or potential conflict of interest arising from prior or existing contracts or relationships which could materially affect its capability to comply with the obligations under the Consultancy Contract; and
- (d) does not fall within any of the circumstances for ineligibility listed in Section 2.16 (Basic Eligibility Criteria) of the Invitation for Proposal.

Yours Sincerely,

Authorized Signature
Name and Title Signatory
Name of Firm

Address

THANKYOU