



**Survey of Pakistan (SoP)
Ministry of Defence
Government of Pakistan**

BIDDING DOCUMENTS

**FEASIBILITY STUDY FOR ESTABLISHMENT OF
NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI)
FOR PAKISTAN**

January, 2021

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LETTER OF INVITATION (TECHNICAL & FINANCIAL PROPOSALS)

To: -----

Subject: **REQUEST FOR CONSULTANCY SERVICES FOR FEASIBILITY STUDY FOR ESTABLISHMENT OF NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) FOR PAKISTAN**

Survey of Pakistan (SoP) invites proposals to provide Consultancy Services for the Feasibility Study for Establishment of National Spatial Data Infrastructure (NSDI) for Pakistan.

1. This document includes the following:
 - Letter of Invitation
 - Prescribed Application Form for Bidding
 - Introduction / background
 - Scope and Objectives of the study
 - Section 1 – Instructions to bidders
 - Section 2 – Data Sheet
 - Section 3 – Technical Proposal- Standard Forms
 - Section 4 – Financial Proposal- Standard Forms
 - Section 5 – Evaluation Criteria
2. The Bidding documents can be obtained on any working day, from 9.00 am to 05.00 pm before the closing date from the office of **Mr. Asmat Ali, Project Director, Survey Training Institute, Survey of Pakistan, Faiz Ahmad Faiz Road, H-8/2, Islamabad (Phone No. 051-9250673), Email: aliasmat@gmail.com**. Price of the Bidding documents is **Rs. 3,000/-** (non-refundable). **The Bidding documents can also be downloaded from PPRA Website www.ppra.org.pk & Survey of Pakistan website www.sop.gov.pk or www.surveyofpakistan.gov.pk or www.nsd.gov.pk.**
3. Bids shall comprise of single package, clearly indicating **“PROPOSAL FOR CONSULTANCY SERVICES FOR FEASIBILITY STUDY OF ESTABLISHMENT OF NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) FOR PAKISTAN”** containing two separate sealed envelopes of technical and financial proposals, marked as **“TECHNICAL PROPOSAL”** & **“FINANCIAL PROPOSAL”** in bold legible letters, respectively.
4. Technical and Financial Proposals should reach to the office of the **Chairman Procurement Committee** on or before **11:00 hours on March 29, 2021**.

5. The Technical Proposals will be opened on **11:30 hours on March 29, 2021** and evaluated first. Firms securing **50%** or above marks will be technically qualified.
6. **Pre-bid conference will be held at 11:00 hours on February 15, 2021** at Survey of Pakistan, Faizabad, Murree Road, Rawalpindi.
7. A firm will be selected that has technically qualified and has submitted lowest financial proposal.
8. The proposals should be duly signed by the authorized signatory of the firms and JV partner (if any)
9. The proposal shall be valid for a period of **90 days** from the date of opening of financial proposal.
10. According to PPRA Rule, 38A Bid Discount “the procuring agencies may seek un-conditional discount by incorporating the same in bid solicitation documents. The bidder may offer un-conditional discount, in percentage of their quoted price or bids, before opening of the financial proposal. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened.” The bidder will offer discount in term of percentage of financial bid in writing on firm letter head. The bidder may not forget to **bring firm letter head on the day and time of opening of Financial Bid.**
11. Please note that the job is time bound demanding high-quality investigations/ data collection/ reporting. The consultancy firm should be able to prepare detailed **Feasibility Report for the Establishment of National Spatial Data Infrastructure for Pakistan.**
12. As per provision in para 33 of PPRA Rules-2004, Survey of Pakistan reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids, at any time prior to award of Contract.
13. The bidding documents received after the due date and time shall not be entertained.
14. Any other information related to this can be asked through the below mentioned address and Nos.

Noor Elahi
Deputy Surveyor General
Chairman Procurement Committee
Survey of Pakistan
Faizabad, Murree Road Rawalpindi, Pakistan
Postal Code: 46000
Tel: +92-51-9290222, 223, 226

PRESCRIBED APPLICATION FORM FOR BIDDING

(To be printed on firm's letter head duly signed by the authorized representative)

To

The Chairman Procurement Committee,
Survey of Pakistan,
Faizabad, Rawalpindi.

In response to press advertisement dated: - -2021 appeared in the daily
..... we M/s.
have obtained/downloaded Bidding Documents for Tendering.

We have gone through all the terms and conditions contained in bidding documents and those,
which are part of the tender.

We fully agree to abide by the terms and conditions contained in the said documents and therefore
hereby submit Technical as well as Financial Proposals for the following:

**AUTHORISED SIGNATURE
NAME & SEAL OF FIRM**

1. Introduction / Background

The world's most valuable resource is no longer oil, but data (The Economist). Spatial data needs to be treated as an essential component in decision-making processes (UN). Spatial data is used for decision and policy making throughout the world. It is indispensable element of activities such as planning, implementation, monitoring and evaluation of socio-economic development projects. The development of Geographic Information Systems (GIS) and related technologies over the last two decades has changed the way in which spatial information is handled by a wide range of public and private sector bodies throughout the world.

However, the full potential of these technologies is unlikely to be realized until governments take necessary steps to create Spatial Data Infrastructures (SDIs) to facilitate access to spatial information assets that are held by various organizations to maximize their overall usage. As a result, governments all over the world are developing SDIs. Such a framework can be implemented to enable the sharing of spatial information at a national, regional, or global level. The focus of this document is SDI at national level commonly known as National Spatial Data Infrastructure (NSDI).

As per Surveying and Mapping Act, 2014, Survey of Pakistan (SoP) has been mandated by the federal government to establish SDI at national level i.e. National Spatial Data Infrastructure (NSDI) of Pakistan. So as a first step Survey of Pakistan is going to initiate the **Feasibility Study for the Establishment of National Spatial Data Infrastructure for Pakistan.**

2. Scope & Objectives of the Study

The scope, objectives and details of outcome to be provided by the consulting firm(s) are as the following:

i. Background Research

The consultancy firm should determine the number of established National Spatial Data Infrastructure (NSDI) in the region and their impact on socioeconomic development. In this regard, the consultancy firm must identify the impact of absence of NSDI on Pakistan's economy. The consultancy firm is also required to conduct a need-benefit analysis for establishing NSDI in Pakistan with Survey of Pakistan as a lead organization and identify potential impact on economic growth. This task also involves identifying potential stakeholders from various sectors that can benefit from the NSDI. The consultancy firm is also required to conduct a detailed benchmarking exercise, study local/regional/international NSDIs and identify

critical success/failure factors. The consultancy firm must be aware of the Government's relevant legislation(s), science, technology and policy initiatives, instruments and incentives, as well as GoP budget for financing this project. This task shall entail conducting relevant surveys.

ii. Need Analysis

The consultancy firm is required to carry out a need analysis study that includes and is not limited to the following; any additional areas which are considered essential may also be included:

- a) Evaluate the resources at hand for development/implementation of the NSDI, and determine Survey of Pakistan's present and future needs.
- b) Demonstrate that the NSDI aligns with strategic objectives, policies and priorities of Government of Pakistan (GoP).
- c) Identify whether Survey of Pakistan (SoP) has the capacity to undertake and manage the NSDI.
- d) Conduct a detailed assessment of the SoP's institutional capacity to provide the services that the NSDI will need to offer to its potential users and to propose the optimal arrangement and structure to ensure the seamless provision of such services.
 - ✓ In this context, the consultancy firm shall be required to assess the on ground situation and hold in-depth interviews/discussions with key stakeholders.
 - ✓ In this context, the consultancy firm would be required to critically assess the existing technical infrastructure at SoP and give a detailed mechanism and methodology for its integration with the NSDI.
 - ✓ The Need Analysis should also include identification of;
 - Significant Government assets which will be used for the NSDI Extent of adequacy/suitability of the existing facilities at SoP.
 - How NSDI will complement other developments taking place in the area through review of sector master plans/studies.

iii. Stakeholder Analysis

Stakeholder analysis is vital step in the NSDI development from scientific perspective. The consultancy firm is required to carry out a detailed assessment of all the relevant stakeholders from federal level to provincial level including public as well as private sector organizations. This includes, but is not limited to, identifying stakeholders, categorizing them, identifying their roles, interests as well as motivation and investigating the relationship between the stakeholders.

iv. Identification of Critical Prerequisites

The consultancy firm is required to carry out a detailed assessment of all the critical prerequisites that need to be in place to ensure the NSDI sustainability. This includes, but is not limited to, identifying essential technological, legal, policy and fiscal framework. The consultancy firm must ensure that institutional and legal aspects pertaining to development and implementation of the NSDI are identified, and addressed. The consultancy firm has to analyze site ownership and availability issues in order to determine whether the land designated for the construction of the NSDI secretariat is clear of all legal, institutional, technical and other issues pertaining to its availability. The consultancy firm should also assess energy requirements, as well as other physical infrastructure requirements pertaining to the NSDI secretariat.

v. Phase-Wise Development Plan

The overall development of NSDI is envisioned to be carried out in phases spanning over a period of 5-7- years. This phase-wise development is envisaged to involve consolidation of existing facilities as well as development of new infrastructure to accommodate start-ups as well as engage different stakeholders. This arrangement will provide requisite momentum to the NSDI, while capitalizing on the existing areas of expertise available within SoP and other key stakeholders. The consultancy firm shall be required to prepare a complete Phase-Wise Development Plan as per the stipulated timeframe along with a detailed Program Implementation and Execution Plan for the NSDI. Market analysis and identification of potential stakeholders can have a presence in the initial phase of the establishment of the NSDI.

vi. Plan of NSDI Secretariat

There is a designated building for NSDI secretariat in SoP.

- a) The consultancy firm is required to incorporate in the Feasibility Report, a detailed analysis of the adequacy of the designated building, keeping in view its phase-wise expansion.
- b) The consultancy firm should develop specifications regarding the architecture and design of the NSDI secretariat and resultantly furnish a conceptual design of the infrastructure in the Feasibility Report.
- c) The consultancy firm should identify critical ICT infrastructure and equipment requirements, resulting capital expenditure and operating costs.
- d) The consultancy firm should identify requirements of furniture and other basic amenities for these facilities, and should also provide cost details of the same.

vii. Proposed Features/Services offered in the NSDI

The NSDI is envisioned to offer a wide range of services to support planning, development and monitoring of various socio-techno-economic projects as well as programme. This includes: -

- a) Facilitated access to spatial data from multiple domain areas.

The Consultancy firm shall be required to give a detailed analysis of proposed features/ services and also suggest other facilities that may be required by the stakeholders.

viii. Success Indicators & Risk Factors

The Consultancy firm is required to identify Success Indicators & Risk Factors and suggest/identify suitable strategy to make NSDI self-sustaining.

ix. Management Structure

The NSDI Prefeasibility Report prepared by the Core Team gives a detailed NSDI management structure. The consultancy firm shall be required to analyze the proposed management structure, the possible future role of the aforementioned committees/ or members of the committee and resultantly prepare a detailed Organizational/Management Structure. This structure must clearly delineate reporting lines and interrelationships between key stakeholders.

x. Human Resource Requirement and Induction Plan

The consultancy firm is required to prepare a Human Resource Requirement and Induction Plan in line with the operational model. This Human Resource Requirement and Induction Plan should include but is not limited to:

- a) Phased HR Induction Plan based on NSDI occupancy rate/growth.
- b) Define respective roles of the personnel.
- c) Review current human capital deployment along with required capacity building measures.
- d) Qualification of required HR.
- e) Remuneration packages.

xi. Environmental Impact Assessment

The consultancy firm will be required to conduct an Environmental Impact Assessment of NSDI development and compatibility with both local regulations and the requirements of potential stakeholders. The consultancy firm needs to evaluate as to how any potential significant negative impacts can be minimized, identify stakeholders' expectations, priorities, opportunities, and trends. The NSDI is envisaged as a green initiative. The consultancy firm should suggest in the

Feasibility Report energy efficiency measures in the NSDI architecture, alternate/ renewable means of energy provision.

xii. Financing/Investment Options for NSDI

The consultancy firm shall be required to prepare and present different financing/investment options for the NSDI. These options can include, but are not limited to investment based on grant from GoP etc. The consultancy firm shall recommend the most optimal method of financing and sustaining the NSDI based on an implementable business model and supported by a detailed financial model.

xiii. Financial Study

The consultancy firm is required to propose and recommend a Business Model for the NSDI. The model must be designed with the objective of ensuring financial soundness and sustainability of the NSDI. In developing the business model, the consultancy firm is expected to review the successful business models of the existing NSDI in the world especially in developing countries similar to Pakistan. Based on the business model, the consultancy firm is required to prepare a detailed financial model for the program. The consultancy firm is also required to identify the viability gap funding, if required, to make this program commercially viable and also show the relevant financial indicators for the investors.

The financial model shall include but is not limited to the following:

- a) Revenues of NSDI including all direct and other revenues.
- b) All costs of NSDI differentiating between fixed and variable costs and direct and indirect costs.
- c) Assumptions of the model.
- d) Option function in the model (scenario analysis).
- e) The consultancy firm is required to construct a risk matrix so it can be integrated with the construction of the financial model. It involves the following interrelated stages:
 - ✓ Identifying risks (such as completion risks, operational performance risks, market risks, financial risks, environmental risks, political risks, regulatory risks, legal risks etc.) involved in NSDI.
 - Assessing the impact of these risks.
 - Assessing the likelihood of these risks.
 - Calculating the impact of risk (and ranges of possible outcomes).
 - Allocating risks to party best able to manage risk.
 - Identifying strategies for mitigating/managing risk.

- ✓ The cost estimates & comprehensive financial plan shall be prepared keeping in view the phase-wise development of the NSDI. The financial model shall include but is not limited to the following financial indicators:
 - Return on Investment (financial, economic & social returns),
 - Net Present Value,
 - Internal Rate of Return,
 - Break-Even Analysis,
 - Payback Period.
 - Economic rate of return

xiv. Economic Assessment

The consultancy firm is required to assess the possible benefits and costs of the NSDI.

The consultancy firm is also required to:

- a) Determine the economic costs (investment cost and operating cost) derived from the financial costs.
- b) Undertake calculation of Economic Internal Rate of Return (EIRR) and Economic Net Present Value (ENPV).
- c) Determine major assumptions to be applied to the economic analysis and estimate expected economic benefits to be generated from NSDI.

xv. Governance Structure

Options for governance depend on the proposed leadership i.e. SoP and how NSDI is finally funded. Once the approved appropriate mode of funding, the consultancy firm shall accordingly prepare an optimized and performance-based governance structure for the NSDI.

xvi. NSDI Viability Demonstration

Based on the above, the consultancy firm is required to assess NSDI viability taking into account if NSDI is:

- a) Technically deliverable.
- b) Affordable to users.
- c) Economically viable.
- d) Financially viable and potential financiers.
- e) Socially and environmentally sustainable.

xvii. PC-I Documentation

The consultancy firm should prepare all documents related to PC-I as per approved format of Planning Commission of Pakistan.

xviii. Verify Information and Sign-Off

The consultancy firm must ensure that all information used in the feasibility study is as accurate and verified as possible. This will include:

- a) A statement from all stakeholders on the reasonableness of the information collected and the process by which the information was collected.
- b) A description of how the assumptions used in constructing the financial model are realistic and appropriate, taking into account past practice, performance, current practice and anticipated future developments. In this context, the financial model prepared by the consultancy firm shall be required to be audited independently
- c) A record of the methodologies used for valuing various costs, including the costs of key risks.
- d) Ensuring that all the inputs into the feasibility study are signed off as accurate and verified by the consultancy firm.
- e) Once this information verification and sign off has been completed the approval process must be completed in accordance with applicable law.

SECTION-1

INSTRUCTIONS TO BIDDERS

1. Definitions

- i. "Procuring Agency (PA)" means the department with which the selected Consultancy Firm signs the Contract for the Services.
 - ii. "Consultancy Firm " means a firm which can study, design, organize, evaluate and manage projects or assess, evaluate and provide specialist advice or give technical assistance for making or drafting policies, institutional reforms and includes private entities, consulting firms, legal advisors, engineering firms, construction managers, management firms, procurement agents, inspection agents, auditors, international and multinational organizations, investment and merchant banks, universities, research institutions, government agencies, non-governmental organizations, and individuals
 - iii. "Contract" means an agreement enforceable by law and includes General and Special Conditions of the contract.
 - iv. "Data Sheet" means such part of the Instructions to Bidders that is used to reflect specific assignment conditions.
 - v. "Day" means calendar day including holiday.
 - vi. "Government" means the Government of Pakistan.
 - vii. "LOI" means the Letter of Invitation sent by the procuring agency to the Consultancy Firm.
 - viii. "Proposal" means the Technical Proposal and the Financial Proposal.
 - ix. "Bidding documents" means the Document prepared by the Procuring Agency for the selection of Consultancy Firms.
2. The **Survey of Pakistan**, a National Surveying & Mapping Organization will select a Consultancy Firm, in accordance with the method of selection specified in the Data Sheet.

- i. The eligible Consultancy Firms 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 Consultancy Firm.
- ii. Consultancy Firms should familiarize themselves with rules / conditions and take them into account while preparing their Proposals. Consultancy Firms may liaise with **Mr. Asmat Ali, Project Director, Survey Training Institute, Survey of Pakistan, Faiz Ahmad Faiz Road, H-8/2, Islamabad (Phone No. 051-9250673), Email:aliasmat@gmail.com** for gaining better insight into the assignment.
- iii. Consultancy Firms 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 Consultancy Firms.

3. Conflict of Interest

Consultancy Firms are required to provide professional, objective, and impartial advice, holding the Procuring Agency interest paramount.

4. Fraud and Corruption

- i. It is Government's policy that Consultancy Firms under the contract(s) observe the highest standard of ethics during the procurement and execution of such contracts.
- ii. "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;
- iii. "The PA can inter-alia blacklist Bidders found to be indulging in corrupt or fraudulent practices. Such barring action shall be duly publicized. Provided that any Consultancy Firm which is to be blacklisted shall be accorded adequate opportunity of being heard.

5. Evaluation of bids

Bids shall be evaluated as per prescribed criteria laid down in Section-V

6. Only one Proposal

If a Consultancy Firm submits or participates in more than one proposal, such proposals shall be disqualified.

7. Proposal Validity

Proposals must remain valid for **ninety (90) days** from the date of opening of financial proposal. During this period, Consultancy Firms shall maintain the availability of Professional staff nominated in the Proposal.

8. Clarification and Amendment in Bidding Documents

- i. Consultancy Firms may request for a clarification of the contents of the Bidding Documents 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 proposals. Should the PA deem it necessary to amend the Bidding documents 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 Bidding documents by issuing an addendum/ corrigendum in writing.

9. Preparation of Proposals

- i. In preparing their Proposals, Consultancy Firms are expected to examine in detail the Bidding documents. Material deficiencies (deviation from scope, experience and qualification of personnel) in providing the information requested may result in rejection of a Proposal.
- ii. Inclusion of any condition or qualification or any other stipulation not covered/provided under this RFP shall render the bid liable to rejection as a non-responsive bid.

10. Language

The Proposal as well as all related correspondence exchanged by the Consultancy Firms 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.

11. Joint Venture

- i. The international Consultancy Firms are encouraged to seek the participation of local Consultancy Firms by entering into a joint venture (JV) and vice versa.

- ii. A bidder, bidding as a member of a joint venture shall not be entitled to submit another bid individually.
- iii. In case the bidder is a joint venture, the members thereof should furnish a Power of Attorney duly Registered in favour of the Lead Member in the format at **Appendix-1**.
- iv. Where the bidder is a joint venture, change in composition of the joint venture shall not be permitted after submission of the bid and subsequently after award of work.

12. Grievances Redressal Committee

In case of any dispute arising between Survey of Pakistan & Consultancy Firm, the decision of "Grievances Redressal Committee" would be final as per Rule 48 of PPRA Rules, 2004. The committee will finalize the matter within 15 days on receipt of complaint, if any.

13. Arbitration

In case of any dispute after contract, only court of jurisdiction at Rawalpindi /Islamabad shall have the jurisdiction to decide the matter.

14. Technical Proposal Format and Content

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

- i. It is desirable that the majority of the key professional staff proposed be permanent employees of the firm.
- ii. Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) shall be submitted for each position.
- iii. The Technical Proposal shall provide the following information using the attached Standard Forms (Section 3):
- iv. A brief description of the Consultancy Firm and an outline of recent experience on assignments (Form TECH-2).
- v. A detailed description of the proposed methodology, work plan for performing the assignment, and staffing schedule (Form TECH-3).
- vi. The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member, and their timing (Form TECH-4).
- vii. CVs recently signed by the proposed professional staff and the authorized representative submitting the proposal (Form TECH-5).

15. Financial Proposals

The Financial Proposal shall be prepared using the attached Standard Forms (Section 4). It shall list all costs associated with the assignment.

16. Taxes

The Consultancy Firm 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.

17. Submission, Receipt, and Opening

- i. Proposal shall contain no interlineations or overwriting. Submission letters for both Technical and Financial Proposals should be in the format of Section-3 and Section-4 respectively. All pages of the original Technical and Financial Proposals will be initialled by an authorized representative of the Consultancy Firms.
- ii. The original (hardcopy) and softcopy of the Technical Proposal shall be placed in a sealed envelope clearly marked "TECHNICAL PROPOSAL" Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by name of the assignment, and with a warning "DO NOT OPEN WITH THE TECHNICAL PROPOSAL." If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive.
- iii. The Proposals must be sent to the address indicated in the Data Sheet and received by the PA no later than the time and the date indicated in the Data Sheet, or any extension to this date. Any proposal received by the PA after the deadline for submission shall not be entertained. In order to avoid any delay, Consultancy Firms should ensure that proposals sent through couriers should reach a day before the deadline for submission.

18. Influencing the PA in Evaluation Process

- i. From the time, the Proposals are opened to the time the Contract is awarded, the Consultancy Firms should not contact the PA on any matter related to its Technical and/or Financial Proposal. Any effort by Consultancy Firms to influence the PA in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Proposal.

- ii. Evaluators of Technical Proposals shall have no access to the Financial Proposals until the Technical Evaluation is concluded.

19. Evaluation of Technical Proposals

The departmental technical evaluation committee shall evaluate the Technical Proposals on the basis of evaluation criteria. Each Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it fails to achieve the minimum technical score of 50%.

Financial proposals of those Consultancy Firms which failed to secure minimum qualifying marks shall be returned unopened.

20. Evaluation of Financial Proposals

Financial Proposals shall be opened publicly in the presence of Consultancy Firms' representatives who choose to attend. The name of Consultancy Firm and the technical scores of the Consultancy Firms shall be read aloud.

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.

21. Award of Contract

The Procuring Agency shall award Contract to the selected Consultancy Firm. After the award of contract, Consultancy Firm is required to submit a Performance Guarantee at the rate indicated in data sheet.

22. Confidentiality

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

23. Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its Bid and the PA will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

24. **Right to Accept or Reject any or all Bids**

As per provision in para 33 of PPRA Rules-2004, the PA reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids, at any time prior to award of Contract.

25. **Late Bid**

Any Bid received by the PA after the deadline for submission of Bids will be returned unopened to such Bidder.

Delays in the mail, delays of person in transit, or delivery of a Bid to the wrong office shall not be accepted as an excuse for failure to deliver a Bid at the proper place and time. It shall be the Bidder's responsibility to determine the manner in which timely delivery of his Bid will be accomplished either in person, by messenger, courier service or by mail.

26. **Bid Security**

Each Bidder shall furnish, as part of his Bid, a Bid Security of an amount not less than **3%** of the Total Bid money in Pak Rupees.

- i. The **Bid Security** shall be, at the option of the Bidder, in the form of Deposit at Call or a **Bank Guarantee issued by A-Plus Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan** valid for a period of **ninety (90) days**.
- ii. The Bid Security is required to protect the PA against the risk of Bidder's conduct which would warrant the security's forfeiture.
- iii. **Any Bid not accompanied by an acceptable Bid Security shall be considered by the PA as non-responsive.**
- iv. The Bid securities of unsuccessful Bidders will be returned upon award of contract to the successful Bidder or on the expiry of validity of Bid Security whichever is earlier.
- v. The Bid Security of the successful Bidder will be returned when the Bidder has furnished the required Performance Guarantee.
- vi. The Bid Security may be forfeited:
 - a) if a Bidder withdraws its Bid during the period of Bid validity
 - b) If a Bidder does not accept the correction of his Bid Price
 - c) In the case of a successful Bidder, if he fails to:
 - ✓ Furnish the required Performance Guarantee or
 - ✓ Sign the Contract Agreement

27. Performance Guarantee

The consultancy firm shall provide to PA, a Performance Guarantee issued by **A-Plus Pakistani Scheduled Bank or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan**, having a value of **10% of the contract price** and which is valid until completion of this feasibility study project. Performance Guarantee is required to be submitted within **fifteen (15) days** after the receipt of the Letter of Intent / Acceptance.

28. Claims under Performance Guarantee

Whether or not the Performance Guarantee is stated by its terms to be payable on the demand of the PA. The PA shall not make a claim under the Performance Guarantee unless one of the following conditions are satisfied:

- i. If the Consultancy Firm is in breach of the Contract and fails to remedy the breach **within forty-two (42) days** after receiving written notice from the PA requiring him so to do. The notice shall state the intention to claim under the Performance Security, the amount claimed and the breach relied upon, or
- ii. The PA and the Consultancy Firm have agreed in writing that the amount demanded is payable to the PA, and the amount has not been paid within **forty-two (42) days** thereafter, or
- iii. The PA has obtained an award in arbitration under PPRA Rule 49 and the amount awarded has not been paid within **forty-two (42) days** after the award.
- iv. The Consultancy Firm has gone into liquidation or is bankrupt.

In every case the PA shall, when making the claim, send a copy to the Consultancy Firm.

SECTION-2:
DATA SHEET

DATA SHEET

S.No.	Details
1.	Name of the Procuring Agency (PA): Survey of Pakistan (SoP), Ministry of Defence, Government of Pakistan.
2.	Name of the assignment is: Feasibility Study for Establishment of National Spatial Data Infrastructure (NSDI) for Pakistan
3.	Financial Proposal to be submitted together with Technical Proposal, however, both should be in separate sealed envelopes , clearly marked with name of Assignment and Consultancy Firm.
4.	Proposals must remain valid for ninety (90) days from the date of opening of financial proposal.
5.	Clarifications may be requested not later than seven (7) days before the submission date.
6.	Proposals shall be submitted in English language.
7.	Withholding / Advance Income Tax will be deducted as per prevailing Government of Pakistan Rules.
8.	Consultancy Firm must submit one original (hardcopy) and softcopy of the Technical Proposal (in 01 sealed envelope) and the original of the Financial Proposal (in the separate sealed envelope).
9.	Bid Security: 3% of the bid amount
10.	Performance Guarantee: 10% of the contract price
11.	Duration of the assignment: Maximum 12 months after signing the contract agreement
12.	Proposals must be plagiarism free with similarity index less than 20% and authenticated report should be attached as a separate annexure.
13.	The Proposal submission address is: <p style="text-align: center;">Noor Elahi Deputy Surveyor General Chairman Procurement Committee Survey of Pakistan, Faizabad, Murree Road, Rawalpindi, Pakistan</p>

Section 3: Technical Proposal – Standard Forms

Consultancy Firms are required to prepare Technical Proposal as per the following format:

TECH-1 Technical Proposal Submission Form

TECH-2 Consultancy Firm's Organization and Experience

A Consultancy Firm's Organization

B Consultancy Firm's Experience including list of projects completed in the last five years

TECH-3 Description of the Approach, Methodology and Work Plan for Performing the Assignment

TECH-4 Composition of Team to be deployed for this assignment and Task Assigned

TECH-5 Curriculum Vitae (CV) of Proposed Professional Staff

TECH-6 Financial Position

FORM TECH-1 TECHNICAL PROPOSAL SUBMISSION FORM

(Please submit on Company's Letterhead)

To:

Noor Elahi,
Deputy Surveyor General,
Chairman Procurement Committee,
Survey of Pakistan, Faizabad,
Murree Road, Rawalpindi, Pakistan.

SUBJECT: FEASIBILITY STUDY FOR ESTABLISHMENT OF NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) FOR PAKISTAN

Dear Sir,

We, the undersigned, offer to provide the Feasibility Study for Establishment of National Spatial Data Infrastructure (NSDI) for Pakistan, in accordance with your Request for Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal, and a Financial Proposal sealed under separate envelopes.

We are submitting our Proposal in association with: _____ [*Insert a list with full name and address of each associated Consultancy Firm if any*]

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.

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 of the proposal.

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 Consultancy Firm: _____

Address: _____

FORM TECH-2 CONSULTANCY FIRM'S ORGANIZATION AND EXPERIENCE

A - Consultancy Firm's Organization

Please provide the following of your Consultancy Firm and each associate / partner (if any) for this assignment

1. Consultancy Firm Background and Achievements (min two pages)
2. Organogram.
3. List of Staff with Qualification and Experience.

(Signature & Seal)
Authorized person of the firm

FORM TECH-2 CONSULTANCY FIRM'S ORGANIZATION AND EXPERIENCE

B - Consultancy Firm's Experience

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

Assignment name:	Value of the Project (in Pak Rs or US\$):
Country: Location within country:	Duration of assignment (months):
Name of Employer:	
Start date (month/year): Completion date (month/year):	Value of consultancy services provided by your firm under the agreement (in Pak Rs or US\$):
Name of associated Consultancy Firms, if any:	Percentage of input provided by associated Consultancy Firms:
Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):	
Narrative description of Project:	
Description of actual services provided by your staff within the assignment:	

FORM TECH-3 DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

[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:

- a) Technical Approach and Methodology
- b) Work Plan
- c) Organization and Staffing

a) **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, 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. Risks involved in the accomplishment of the task may also be highlighted.

b) **Work Plan**

In this chapter, you should propose the main activities of the assignment, their content & duration, phasing & interrelations, milestones (including interim approvals by the Employer), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach & methodology, showing understanding of the objectives of the study and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings and tables etc to be delivered as final output, should be included here.

c) **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, key expert responsible and proposed technical & support staff.

FORM TECH-4**COMPOSITION OF PROFESSIONAL STAFF TEAM TO
BE DEPLOYED FOR THIS ASSIGNMENT AND TASK
ASSIGNED**

Name of Staff	CNIC No./Passport	Firm	Area of Expertise	Position Assigned

*** Note: List of key personnel to be provided separately for evaluation**

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:** _____ **Nationality:** _____

5. **CNIC No** (if Pakistani): _____ **or Passport No:** _____

6. **Education:**

<i>Degree</i>	<i>Major/Minor</i>	<i>Institution</i>	<i>Date (DD/MM/YYYY)</i>

7. **Membership of Professional Associations:** _____

8. **Other Training** [*Indicate significant training since degrees under 6 - Education were obtained*]:

9. **Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]:

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

11.

<i>Employer</i>	<i>Position</i>	<i>From</i> <i>(DD/MM/YYYY)</i>	<i>To</i> <i>(DD/MM/YYYY)</i>

Detailed Tasks Assigned

[*List all tasks performed under this assignment*]

12. 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 11.]

1) Name of assignment or project: _____

Year: _____

Location: _____

Employer: _____

Main project features: _____

Positions held: _____

Activities performed: _____

2) Name of assignment or project: _____

Year: _____

Location: _____

Employer: _____

Main project features: _____

Positions held: _____

Activities performed: _____

3) Name of assignment or project: _____

Year: _____

Location: _____

Employer: _____

Main project features: _____

Positions held: _____

Activities performed: _____

4) Name of assignment or project: _____

Year: _____

Location: _____

Employer: _____

Main project features: _____

Positions held: _____

Activities performed: _____

- 5) **Name of assignment or project:** _____
 Year: _____
 Location: _____
 Employer: _____
 Main project features: _____
 Positions held: _____
 Activities performed: _____

13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience.

I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

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

Full name of authorized representative: ____

Note:-

CVs need to have been recently signed by the Professional staff by themselves with date in blue indelible ink and countersigned by the authorized official of the firm. Photo copy or unsigned CVs shall be rejected.

FORM TECH-6 FINANCIAL CAPABILITIES

1. Total Assets = (in Million Pak Rs or US\$)
2. Total Liabilities =

3. **Annual Turnover**

For the year		
2017-18	2018-19	2019-20

4. **Income**

For the year		
2017-18	2018-19	2019-20

For assessment purpose average turnover/income of last three years shall be considered for Joint Venture. Average turnover/income will be summed for evaluation.

(In case of Joint Venture please provide above information for all partners and average annual turnover/income of firm having high value shall be considered)

Please provide Bank statements mentioning details of all the transactions in the given periods

5. **Firm Registration**

Firm registration certificate must be submitted for evaluation. *(In case of Joint Venture average score will be awarded)*

SECTION 4: FINANCIAL PROPOSAL - STANDARD FORMS

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal.

FIN-1 Financial Proposal Submission Form

FIN-2 Summary of Costs

FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM

(Please submit on Company's Letterhead)

To:

Noor Elahi,
Deputy Surveyor General,
Chairman Procurement Committee,
Survey of Pakistan, Faizabad,
Murree Road, Rawalpindi, Pakistan.

**Subject: FEASIBILITY STUDY FOR ESTABLISHMENT OF NATIONAL SPATIAL
DATA INFRASTRUCTURE (NSDI) FOR PAKISTAN**

Dear Sir,

We, the undersigned, offer to provide Feasibility Study for Establishment of National Spatial Data Infrastructure (NSDI) for Pakistan in accordance with your Request for Proposal and our Technical Proposal. Our attached Financial Proposal is for the sum of *[Insert amount(s) in words and figures]*. This amount is inclusive of all taxes.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Agreement negotiations, up to expiration of the validity period of the Proposal.

No commissions or gratuities have been or are to be paid by us to agents relating to this Proposal and Agreement execution.

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

Yours sincerely,

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

Name and Title of Signatory: _____

Name of Consultancy Firm: _____

Address: _____

FORM FIN-2 SUMMARY OF COSTS

(Pak Rupees)

Item	Cost	
	In Figure	In Words
Cost of Feasibility Study		

Note:

- i. Cost of Feasibility Study should be inclusive of all taxes, overheads and any other cost required to complete the assignment.
- ii. Any tax imposed by the Government after submission date of Bidding documents shall be paid separately to Consultancy Firm, in addition to accepted Financial Proposal.

Authorized Signature of Consultancy Firm along with seal

SECTION – 5
Evaluation Criteria

PROPOSALS EVALUATION CRITERIA

1. EVALUATION CRITERIA

- 1.1 All the firms will be technically assessed first. Any firm scoring below the minimum **qualifying marks i.e. 50%** in technical evaluation will not be technically qualified and it's financial proposal will be returned un-opened.
- 1.2 In case of JV, each firm will be evaluated separately then average score will be awarded to the JV.

2. TECHNICAL PRPOPOSAL EVALUATION

2.1 The technical evaluation criteria divided into the following categories: -

a)	Qualification and experience of consultants to cover capacity, proficiency and specific experience.	350 Points
b)	Approach and Methodology proposed by the consultants to carry out the assignment.	250 Points
c)	Qualifications, experience and quality of proposed Key Staff.	400 Points

2.2 Qualification/Experience of Consultancy Firms

2.2.1 Capacity and experience of Consultancy Firms is divided into the following sub-factors:

a) Work Experience

- i. Specific experience in Feasibility studies of National Spatial Data Infrastructure. Minimum one project.
- ii. Experience in Projects related to national level GIS.
- iii. Experience in similar projects

b) Capacity of the Consultancy Firms to carry out the assignment

2.2.2 Each **work experience** should be submitted in a **specific format**. The firm should also submit a **letter of award**/or copy of the **Contract Agreement** and **Completion/work in hand** Certificate from the Employer.

2.2.3 Detailed sub-criteria for evaluation of the experience of the firm is provided on **Form- 1**

2.3 Approach and Methodology

2.3.1 Approach and Methodology proposed by the firm to carry out the assignment is subdivided into the following heads:

a) Understanding of Objectives

b) Quality of the methodology

(The methodology should cover all phases of the Project, all components of the project and all deliverables of the project individually).

c) Risk Analysis

(The consultancy firm have covered/mentioned risks involved including technical risks, timing risks, and methodology to overcome above-mentioned risks)

d) Work Program including activity schedule(s), staffing schedule, and estimate of staff /months

e) Conciseness, clarity, and completeness in proposal presentation

2.3.2 Detailed sub-criteria for evaluation of approach and methodology are provided on **Form- 2**

2.4 Evaluation of Key Staff

2.4.1 Evaluation for quality of the Key staff is made based on the following elements.

a) Academic Qualifications

b) Professional experience

i. Specific Experience

ii. General Experience

c) Knowledge of languages

2.4.2 This sub-criteria will be applied to the team leader and other key professional staff proposed by the Consultancy Firm for the feasibility study.

2.4.3 CV's of all key professional staff should be signed by the respective employees and verified by the Firm/JV authorized representatives.

2.4.4 The weights for each element of Key-Personnel listed above in the Bidding documents are as follows:

Elements		Percentage Points
A.	Academic Qualifications General	120
B.	Professional experience	260
C.	Knowledge of Languages	20
Total Points		400

2.4.5 Detailed sub-criteria for evaluation of key staff is provided on **Form- 3**

3. FINANCIAL PROPOSAL EVALUATION

3.1 The evaluation committee will assess the Financial Proposal of each technically qualified firm. The contract will be awarded to the firm that submitted Lowest Financial Proposal.

4. PAYMENT RELEASE SCHEDULE

The payment will be made after deducting applicable government taxes as per the schedule given below:

Sl. No.	Upon Submission of	Payment to be made
i.	Inception Report including work methodology along with time lines etc for the deliverables	10%
ii.	Deliverables 1-4 1. Background Research 2. Need Analysis 3. Stakeholder Analysis 4. Critical Prerequisites Identification	20%
iii.	Deliverables 5-10 5. Phase-Wise Development Plan 6. Plan of NSDI Secretariat 7. Proposed Features/Services offered in the NSDI 8. Management Structure of NSDI 9. Human Resource Requirement and Induction Plan 10. Governance Structure of NSDI	30%
iv.	Deliverables 11-16 11. Success Indicators & Risk Factors 12. Environmental Impact Assessment 13. Financing/Investment Options for NSDI 14. Financial Study 15. Economic Assessment 16. NSDI Viability Demonstration	20%
v.	Deliverables 17-19 17. PC-I Documentation 18. Verify Information and Sign-Off 19. Complete feasibility study report in consolidated form	20%
	Total	100%

**FEASIBILITY STUDY FOR ESTABLISHMENT OF NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) FOR PAKISTAN
(EVALUATION OF TECHNICAL PROPOSALS)**

1- QUALIFICATION/EXPERIENCE OF FIRM: MAXIMUM POINTS = 350

Name of the Consultancy Firm: _____

Sr. No.	Project Components	Points
A	Experience of projects relevant to NSDI lasting no less than 06 months each.	250
a	Specific Experience Experience in Feasibility studies of National Spatial Data Infrastructure. At least 1 project.	120
b	General Experience Experience in Feasibility studies of national-level GIS. Maximum marks for 2 or more Projects.	100
	<i>No of Projects</i>	1 2
	<i>Points</i>	50 100
c	Experience in similar feasibility projects not covered in a and b Maximum Marks for 3 or more Projects.	30
	<i>No of Projects</i>	1 2 3
	<i>Points</i>	10 20 30
	Sub-Total (A) = (a+b+c)	250

S No.	Project Component				Points
B	The capacity of the firm to carry out the assignment				100
a	Financial Capacity				50
	(1) Average Annual Turn Over (Last 3 years) in Rs Million				30
	<i>Turn Over Range</i>	<i>200 and more</i>	<i>More than 100 and less than 200</i>	<i>Less than 100</i>	
	<i>Points</i>	<i>30</i>	<i>20</i>	<i>10</i>	
	(2) Income in Rs Million				20
	<i>Income Range</i>	<i>20 and more</i>	<i>More than 10 and less than 20</i>	<i>Less than 10</i>	
	<i>Points</i>	<i>20</i>	<i>15</i>	<i>10</i>	
b	Firm Registration				20
	<i>Firm Existence</i>	<i>More than 5 years</i>		<i>Up to 5 years</i>	
	<i>Points</i>	<i>20</i>		<i>10</i>	
c	Organizational Capacity Permanent Technical Staff for the last 03 years				30
	<i>Permanent Staff</i>	<i>Minimum 3</i>	<i>Up to 5</i>	<i>More than 5</i>	
	<i>Points</i>	<i>20</i>	<i>25</i>	<i>30</i>	
	Total Points= (A+B)				350

**FEASIBILITY STUDY FOR ESTABLISHMENT OF NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) FOR
PAKISTAN**

(EVALUATION OF TECHNICAL PROPOSALS)

2- APPROACH AND METHODOLOGY: MAXIMUM POINTS = 250

Name of the Consultancy Firm: _____

S No.	Project Component	Points
a	Quality of Methodology	125
	i. Understanding of objectives	25
	ii. Study design	50
	iii. Key strengths of the study design	20
	iv. Relevant Literature Cited	30
b	Risk Analysis	25
	i. Technical Risks	5
	ii. Timing Risks	5
	iii. Methodology to overcome above-mentioned Risks	15
c	Work Program	75
	i. Activity Schedule	45
	ii. Staffing Schedule	15
	iii. The estimate of Staff /Months	15
d	Proposal Presentation	25
	i. Conciseness & Clarity	10
	ii. Completeness	10
	iii. Presentation	5

**FEASIBILITY STUDY FOR ESTABLISHMENT OF NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI) FOR
PAKISTAN**

(EVALUATION OF TECHNICAL PROPOSALS)

3- EVALUATION OF KEY PERSONNEL FOR FEASIBILITY STUDY: MAXIMUM POINTS = 400

Name of the Consultancy Firm: _____

Position: _____

Name of Nominated Staff: _____

Ph.D.in relevant disciplines (one Ph.D. is minimum required to get points) = **50 points**

Max credit for 05 personnel = 70 x 5 = **350 points**

Total points = **400 points**

S No.	Project Components	Points
a	Academic Qualification	15
	i. Master's Degree in relevant disciplines.	10
	ii. Bachelor Degree in relevant disciplines	05
b	Professional Experience	50
	i. NSDI Feasibility Study Experience	25
	ii. NSDI Implementation Experience	10
	iii. Feasibility study of National level GIS	10
	iv. Implementation of National level GIS	5
c	Knowledge of Languages	5
	i. English	3
	ii. Urdu	2
	Total	70

Power of Attorney for Lead Member of Joint Venture

Whereas the *****[("the Authority" (Survey of Pakistan)] has invited bids for the ***** Projects ("the Project"). Whereas, _____ , _____ and (collectively the "Joint Venture") being Members of the Joint Venture are interested in bidding for the Projects in accordance with the terms and conditions of the Request for Proposal and other connected documents in respect of the Project, and Whereas, it is necessary for the Members of the Joint Venture to designate one of them as the Lead Member with all necessary powers and Survey of Pakistan to do for and on behalf of the Joint Venture, all acts, deeds and things as may be necessary in connection with the Joint Venture's bid for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, _____ having our registered office at _____ , M/s. _____ , having our registered office at _____ , and M/s _____ , having our registered office at _____ , [the respective names and addresses of the registered office] (hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorize M/s _____ , having its registered office at _____ , being one of the Members of the Joint Venture, as the Lead Member authorized to act as a true and lawful attorney of the Joint Venture (hereinafter referred to as the "Attorney") and hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Joint Venture and any one of us during the bidding process and, in the event the Joint Venture is awarded the Concession/ Contract, during the execution of the Project, and in this regard, to do on our behalf and on behalf of the Joint Venture, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, participation in bidding and other conferences/meetings, respond to queries, submit information/ documents, sign and execute contracts and undertake consequent acceptance of the bid of the Joint Venture and generally to represent the Joint Venture in all its dealings with the Authority, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Joint Venture's bid for the Project and/ or upon award thereof till the Agreement is entered into execution with the JV partner.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ JV.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS _____ DAY OF _____ 2021.

For _____ (Name & Title) For _____ (Name & Title) For _____ (Name & Title)

Witnesses:

- 1.*
 - 2. (Executants)*
- (To be executed by all the Members of the Joint Venture)*

Notes:

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

Also, wherever required, the Applicant should submit for verification the extract of the charter documents and documents such as a resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Applicant.

Relevant Disciplines

- 1- Geoinformatics
- 2- Geographic Information System
- 3- Geo-Information Management
- 4- Geomatics
- 5- Spatial Information Technology
- 6- Geographic Information Science
- 7- Geo-Information Science
- 8- Remote Sensing