



# NATIONAL HIGHWAY AUTHORITY

Procurement & Contract Administration Section

28-Mauve Area, G-9/1, Islamabad Tel: 9032727, Fax: 9260419

No. 6(499-B)/GM(P&CA)/NHA/2021/

Islamabad, <sup>20th</sup>..... January, 2021

## Director General

Public Procurement Regulatory Authority  
1<sup>st</sup> Floor FBC Building near State Bank,  
Sector G-5/2, **Islamabad**

Subject: **ANNOUNCEMENT OF EVALUATION REPORT (PPRA RULE-35):  
Consultancy Services for Design and Construction Supervision  
of Intelligent Transportation System (ITS) Installation at  
Hakla- D. I. Khan Motorway**

Reference: *PPRA Rule-35*

Find enclosed herewith the combined Bid Evaluation Report along with Evaluation Criteria (Annex-I) for the subject Services in line with PPRA Rule-35 for uploading on PPRA website at the earliest, please.

  
(MUHAMMAD TANWEER ISHAQ)  
General Manager (P&CA)

**Encl:** Evaluation Report along with **Annex- I**

### **Copy for kind information to:**

- Member (Planning), NHA, Islamabad;
- Director (Tech. to Chairman), NHA, Islamabad;
- Director (P&CA)-III, NHA, Islamabad.

# EVALUATION REPORT

## (As Per Rule 35 of PP Rules, 2004)

1.	Name of Procuring Agency:	National Highway Authority
2.	Method of Procurement:	Single Stage Two Envelope Procedure
3.	Title of Procurement:	Consultancy Services for Design and Construction Supervision of Intelligent Transportation System (ITS) Installation at Hakla- D. I. Khan Motorway
4.	Tender Inquiry No.:	6(499-B)
5.	PPRA Ref. No. (TSE):	TS428975E
6.	Date & Time of Bid Closing:	8 <sup>th</sup> September, 2020 at 1130 hours local time
7.	Date & Time of Bid Opening:	8 <sup>th</sup> September, 2020 at 1200 hours local time
8.	No of Bids Received:	Three (03) Proposals were received
9.	Criteria for Bid Evaluation:	Criteria of Bid Evaluation is attached at Annex-I
10.	Details of Bid(s) Evaluation:	As below

Name of Bidder	Marks			Evaluated Cost (EC)* (PKR)	Rule/Regulation/ SBD**/Policy/ Basis for Rejection / Acceptance as per Rule 35 of PP Rules, 2004.
	Technical (if applicable)	Financial (if applicable)	Total (out of 1000)		
1) M/s National Engineering Services Pakistan (Pvt.) Ltd. in JV with M/s Data View	625	200	825	41,337,380	Top scoring firm in combined evaluation (PPRA Rule 36(b) (ix))
2) M/s Prime Engg & Testing (Pvt.) Ltd. in JV with M/s ESS-I-AAR and M/s Concept Engineering Services	466	Financial Proposal not opened			PPRA Rule 36(b) (v)
3) M/s Republic Engineering Corporation (Pvt.) Ltd. in JV with M/s HA Consulting	380	Financial Proposal not opened			PPRA Rule 36(b) (v)

*\*EC is the Evaluated Cost used for evaluation purpose and includes only the cost of competitive component (i.e. Remuneration and Direct Non-Salary Cost) and is exclusive of Provisional Sum, Contingency and Indirect Taxes.*

✱



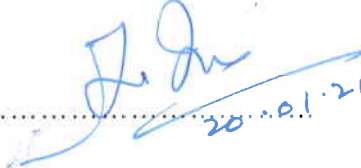
# EVALUATION REPORT

## (As Per Rule 35 of PP Rules, 2004)

Top Ranked Bidder: M/s National Engineering Services Pakistan (Pvt.) Ltd. in  
JV with M/s Data View

11. Any other additional/supporting information, the procuring agency may like to share: The Procurement was carried out in line with PPRA Rules & Regulations. The bidding was done on QCBS method with 80:20 Technical to Financial Proposals ratio. The Contract is being awarded to M/s National Engineering Services Pakistan (Pvt.) Ltd. in JV with M/s Data View at evaluated financial proposal of Pak. Rs. 41,337,380/-.

Signature:.....

  
20.01.21

Official Stamp:.....

General Manager (P&CA)  
National Highway Authority  
\*\*Standard Bidding Documents (SBD)ad



# **National Highway Authority**



**Annex-I**

**Criteria**

***FOR***

**Bid Evaluation**

**Consultancy Services for Design and  
Construction Supervision of Intelligent  
Transportation System (ITS) Installation at  
Hakla- D. I. Khan Motorway**

**January, 2021**



# NATIONAL HIGHWAY AUTHORITY

Procurement & Contract Administration Section  
28 Mauve Area, G-9/I, Islamabad ☎ 051-9032727, 📠 051-9260419

Ref: 6(499-B)/Dir-III (P&CA/NHA/2020/138

Dated: 4<sup>th</sup> September, 2020

## All Prospective Consultants

Subject: Consultancy Services for Design and Construction Supervision of Intelligent Transportation System (ITS) Installation at Hakla D.I Khan Motorway

“Minutes of Pre-Proposal Meeting & Addendum No.1 ”

Reference: Pre-Proposal meeting held on 25<sup>th</sup> August, 2020.

Minutes of Pre-Proposal Meeting alongwith Addendum No.1 being integral part of RFP for the subject Consultancy services are enclosed herewith for necessary action, please.

  
(SAJJAD ALI SHAH) 4/9/2020  
Director (Consultancy) P&CA

### Enclosure:

- Minutes of Pre-Proposal Meeting (05 Pages)
- Annex- A & Annex-B (02 Pages)
- Addendum No.1 (01 Page)
- Attachment to Addendum No.1 (01 Page)


### Copy for information to:

- Member (Planning), NHA, Islamabad;
- General Manager (Planning), NHA, Islamabad;
- General Manager (Design), NHA, Islamabad;
- General Manager (P&CA) NHA, Islamabad;
- DD (MIS) NHA, Islamabad.


**MINUTES OF PRE-PROPOSAL**  
**MEETING HELD ON 25<sup>th</sup> August, 2020**

**Consultancy Services for Design and Construction Supervision of Intelligent Transportation System (ITS) Installation at Hakla - D. I. Khan Motorway**

A Pre-Proposal Meeting was held in NHA Auditorium on 25<sup>th</sup> August, 2020 to discuss the Request for Proposal (RFP) for subject Services in the presence of NHA officials and prospective consultant. During the said meeting the prospective consultant submitted queries. The clarifications/replies are summarized below for information of all prospective bidders:

Sr. No.	Queries	Reply
1.	<p>Could we get detailed information regarding Motorway Hakla – D.I. Khan currently in construction. The tender/design documents would assist us in understanding elements that impacts the extent of ITS solution, such as:</p> <p>a. Length b. Technical condition c. Number of road lanes d. Permitted speed e. Traffic congestion forecasts f. Number of intersections g. Number of installed cameras or type of camera's installed if any h. Extent of illumination of the highway i. Number of toll plaza's j. Number of bridges k. Weigh-in-motion stations and Slow speed- weigh-in motion stations included in design, Type of sensors used, Over-height detectors l. Is there a BOQ available for the ITS system, which will help with identification of the extent of equipment projected for use or the infrastructure available? m. Is design of power supply included in this tender? Including back up power? n. Please provide a list of ITS based structures planned/included in the motorway construction tender currently in the works o. Any other information</p> 	<p>a. Length: P-1 (54.60 Km), P-2 (70 Km), P-3 (52.5 Km), P-4 (50 Km), P-5 (63 Km). Drawing attached (<b>Annex-A</b>)</p> <p>b. The project is a fenced motorway facility to connect DI Khan (Yarik) with Hakla. Project is in construction phase.</p> <p>c. Major Bridges/ Flyovers 6- Lanes, Rest 4- Lane with shoulders.</p> <p>d. Design Speed is 120 KPH</p> <p>e. Traffic Study prepared by Design Consultant in year 2016 will be shared with successful consultant, if deemed necessary by NHA.</p> <p>f. 10 Interchanges including start and end.</p> <p>g. Nil</p> <p>h. Interchanges and Service Areas.</p> <p>i. Toll Plazas to be established on all interchanges</p> <p>j. Relevant page of PC-1 attached. Major Bridges 03, Normal Bridges 15. (<b>Annex-B</b>)</p> <p>k. Design of ITS components is not available in Tender Drawings.</p> <p>l. BOQ for ITS is not available</p> <p>m. Yes, design of power supply including backup power is included in this tender.</p> <p>n. The scope related to ITS was deleted from construction contracts.</p>




Sr. No.	Queries	Reply
2.	Would like to understand business intent/concept for ITS which is already existing in NHA. If there is any technical documentation available for such system, please provide.	The same will be shared with the successful consultant.
3.	Liability Insurance, please specify the coverage value and if this needs to be local or can be foreign as well.	It is post evaluation matter which will be discussed at the time of finalization of contract agreement with top ranked consultants; however, for ready reference, please refer to Clause 3.4 of General Condition of Model Agreement attached with RFP document.
4.	PEC registration for a JV, can this be done post award. Without this JV registration with PEC at the time of proposal submission, what effect this may have on rating of submitted bids	Valid Registration Certificate of PEC with relevant Project Profile Code is the mandatory requirement for eligibility of all prospective consultants (lead and JV members).
5.	Can the project submission deadline be extended?	Not acceded to, proceed as per RFP.
6.	Please clarify the type of reports expected as per form A-6	Types of Reports which has to be submitted by consultant that are mentioned in the TOR.
7.	Please clarify how many man hours a week (40 or 48 hrs) are assumed in a man-month	Proceed as per RFP
8.	Please provide a copy of clarifications/addendums released to date so we could ensure those are accounted for on our end as well. Please also provide a tentative date of when these will be issued so we could plan accordingly	Minutes of Pre-proposal Meeting and Addendum will be uploaded on NHA website prior to submissions.
9.	Refer to page 53 of RFP, it is mentioned that there is existing ITS application which has already been installed in various NHA projects and plans for more applications. Will you please share the significant features of the existing facilities to understand the current operations of ITS.  	The ITS has been installed on Lahore-Abdul Hakeem Motorway (M-3), Sukkur-Multan (M-5) and Havelain Thakot. The Consultant will use these as reference. <b>Major Components:</b> i) Road Monitoring Systems • Traffic Operation/ Control Center, TOC/TCC. • Roadside Weather Information Systems, WIS • Closed Circuit Television, CCTV ii) Road User Facilitation Systems • Advance Traveler Info System, ATIS • Variable Message Signs, VMS • Web Portal, Travel Information • Motorway Advisory Radio, MAR • Emergency Road slide Telephone, ERT

Sr. No.	Queries	Reply
		iii) Enforcement Systems <ul style="list-style-type: none"> <li>• Speed Enforcement System, SES</li> <li>• E-Fine Collection System, EFCS</li> <li>• Weigh in Motion, WIM</li> </ul> iv) ITS Communication Infrastructure v) Electronic Toll Collection System, ETC
10.	Refer to Page 53 para 4, it is mentioned that NHA Plans to build their own optical fibre based transmission infrastructure along motorway. Is the optical fibre already been laid along Hakla- DI Khan Motorway? If installed, will you shared the as built drawings of the FOC.	OFC will be laid by ITS Contractor. However, Design Section and Project Office may respond whether OFC corridor and ducts have been allocated.
11.	In case, OFC is not installed, does any FOC corridor, utility power locations, and spare crossing ducts were reserved along the Hakla- DI Khan Motorway. Can you share the As built drawings of the project.	OFC will be laid by ITS Contractor.
12.	Section 3.1.1; It is mentioned in the RFP that consultant is expected to review the ITS infrastructure. Will you please let us know where these systems were installed? Can the consultant receive the As build drawings.	Please refer to point 9 above.
13.	Section 3.3.1 page 56, para 1. It is mentioned that the location and high level design of control centre will be provided. We understand that the consultant scope will be limited to high level conceptual layout design of the control centre only which may include screen walls, layout of workstations etc. Further design such as physical layouts/rooms/partitions will be developed by other consultants. Please confirm.	The consultant will propose the location of control centre and other requirements along with the detailed design.
14.	Section 3.2 page 55; Is there an existing architecture for all existing ITS system on NHA's Motorways?	Please refer to point 9 above.
15.	Section 3.3.2 page 56; Are there existing standards and specification that governed the ITS infrastructure deployment. Does the consultant has to follow the same while design the ITS for Hakla-DI Khan Project.	Please refer to point 9 above.
16.	The design period for ITS system is only 3 months, which is too short for such task. It is requested to increase to 6 month at least.	Not acceded to.
17.	The time period allocated for construction supervision 6 months is considered unrealistic. Requested to increase to at least 12 month.	Not acceded to.
18.	Please clarify the timeline of the project including different phases of the projects.	Please refer RFP - Clause 5 at page # 73.
19.	In case of consortium of foreign and local companies, is it necessary for all the companies to be registered as "consultants" with PEC, or the consortium leader's registration as a "consultant" will suffice in case other members have valid PEC registration.	Lead and all JV members should be registered with PEC having relevant profile code.
20.	What is the limit on number of member firms forming the consortium?	Please refer RFP Data Sheet Clause 1.7(vii) at page # 13.
21.	Please indicate the "Ceiling Cost" as percentage of total project cost.	Please proceed as per information provided in the RFP.





Sr. No.	Queries	Reply
22.	It highly suggested that the registration of the Foreign companies with PEC could be accepted after winning the project	Foreign Consultant participation in procurement process and its registration requirement is the prerogative of PEC and the matter will be evaluated as per PEC bylaws and regulations.
23.	It is urged to please extend the proposal submission deadline by at least two weeks to prepare a substantial proposal.	Not acceded to.
24.	<p>There exists a conflict between the qualification requirements mentioned in “Qualification and Experience of Key Personnel” and “Personnel Evaluation Sheet” for the following positions:</p> <ul style="list-style-type: none"> <li>· ITS Application Expert</li> <li>· Design Manager</li> <li>· Procurement Coordinator</li> </ul> <p>ITS Application Expert Qualification: In the “Personnel Evaluation Sheet”, Civil/Electrical Engineers are required for this position. Since this project aims at establishing multiple systems of ITS, which requires intricate and very specialized knowledge in ITS applications. So, only Electrical Engineer with specialization in Electronics and Communication shall be suitable for this position. This needs to be corrected in “Personnel Evaluation Sheet” on page No. 21 in order to make it in line with the qualification and experience of key personnel on page No. 65 of the RFP.</p> <p>Design Manager Qualification: In the “Personnel Evaluation Sheet”, Civil/Transportation/Electrical Engineers are required for this position. Since this project aims at establishing multiple systems of ITS, therefore a professional who has academic background in Civil/Transportation Engineering shall not be appropriate to manage this project. So, only Electrical Engineer should be hired against this position for effective and efficient implementation of the mentioned project. This needs to be corrected in “Personnel Evaluation Sheet” on page No. 21 in order to make it in line with the qualification and experience of key personnel on page No. 66 of the RFP.</p> <p>Procurement Coordinator Qualification: In the “Personnel Evaluation Sheet”, Civil/ Electrical/ Telecommunication/ Computer Engineers are required for this position. This project aims at establishing multiple systems for procurement of ITS equipment, therefore a professional who has academic background in Civil Engineering shall not be an appropriate personal for the post of Procurement Coordinator in this project. So, only Electrical/Telecommunication/Computer Engineer should be hired against this position. This needs to be</p>	<p>See <b>Addendum No. 1.</b></p> 

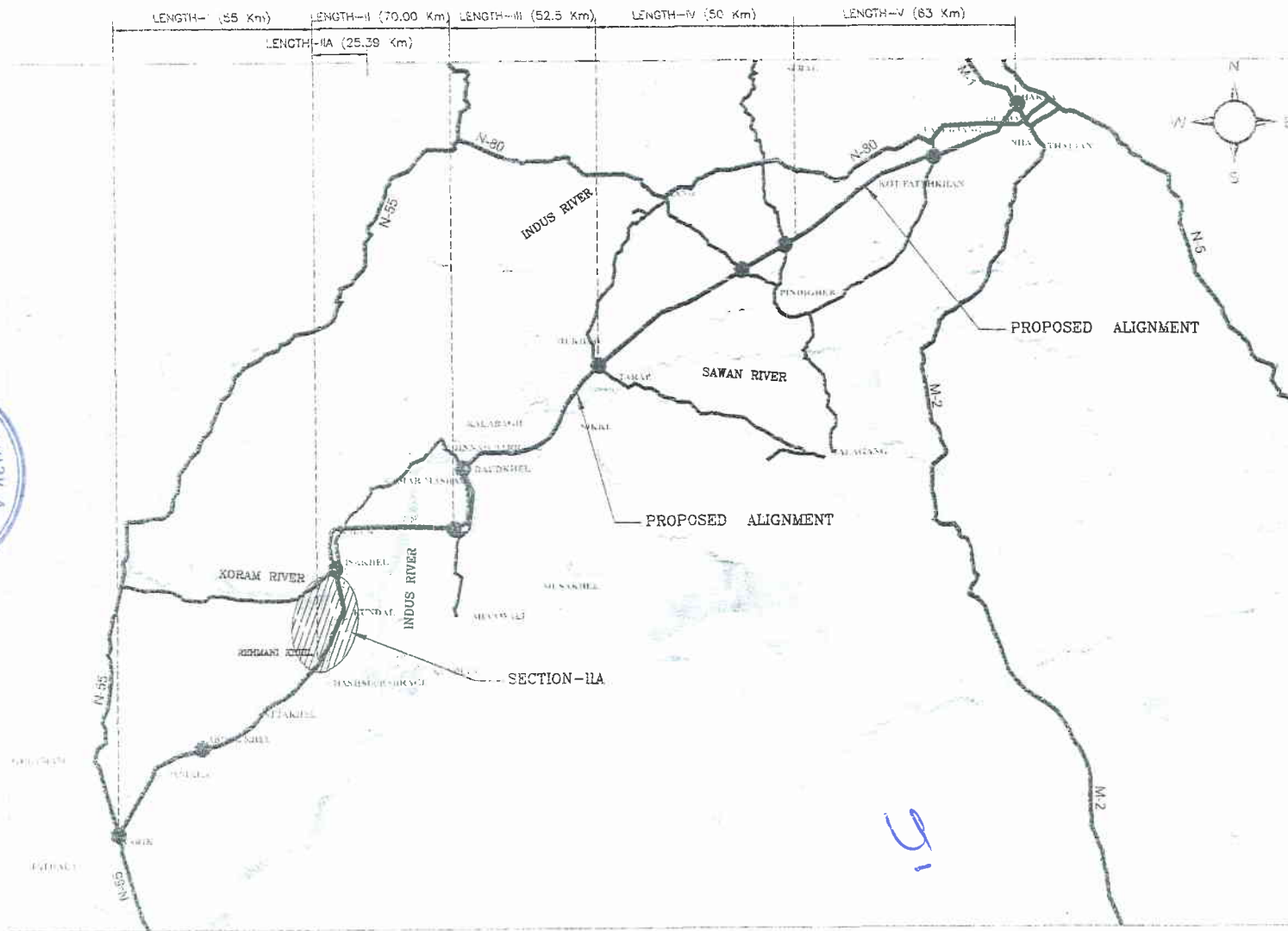
Sr. No.	Queries	Reply
	corrected in "Personnel Evaluation Sheet" on page No. 21 in order to make it in line with the qualification and experience of key personnel on page No. 69 of the RFP.	
25.	Kindly extend the tender submission date as most part of the world is closed because of Corona virus, so it would not be possible for our principal to send us the offer. And as well as for us to prepare a compressive & an attractive offer for this proposal. Thus we request for extension proposal submission date.	Not acceded to.

---ooOoo---



*[Handwritten signature]*

# PROPOSED M-1 (HAKLA) - D.I. KHAN MOTORWAY



### PACKAGES

- P-I YARIK TO REHMANI KHEL (55 KM)
- P-II REHMANI KHEL TO KOT BALIAN (70 KM)  
(SECTION - IIA) L = 25.39 KM
- P-III TARAP TO KOT BELIAN (52.5 KM)
- P-IV PINDIGHEB TO TARAP (50 KM)
- P-V HAKLA TO PINDIGHEB M-1 (63 KM)

**TENDER DRAWINGS**

### LEGEND:-

- INTERCHANGES
- N-55
- N-80
- N-6
- M-2
- PROPOSED ALIGNMENT
- ROADS
- RIVER

4



GOVERNMENT OF PAKISTAN MINISTRY OF COMMUNICATIONS NATIONAL HIGHWAY AUTHORITY	NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LTD. IN ASSOCIATION WITH MM PAKISTAN (PVT.) LTD.	NO. _____ DATE _____	DRAWN BY _____ SUBMITTED BY _____ RECOMMENDED BY _____ CHD./MR. BY _____ APPROVED BY _____	TITLE <b>HAKLA (M-1)          TO D.I. KHAN MOTORWAY          PACKAGE-II (REHMANI KHEL TO KOT BALIAN)          (SECTION - IIA)</b>	SCALE _____
		DATE NOVEMBER 2014	DRAWING NO. 2717/102/TS/LP/052A	REV. _____	

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**Service Road  
(Where Required)**  
Metale'd TST,WBM  
(100mm),Subbase  
(150 mm)

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Detail of Pavement Design is attached as **Annex -IV**.

**Interchanges, Bridges/Flyovers, Underpasses,  
Culverts & Retaining structures:**

For facilitation of local commuters at route of new alignment, clover leaf (Partial/Full) and Diamond Type Interchanges arrangement will be provided for traversing between new alignment and existing road network. For toll operations, toll plaza structure fully equipped as per NHA M-2 standards aided with weigh stations will be used.

Bridge structure will be constructed as six lane for crossing existing streams and river crossing (on major river crossing like Sawan, Indus & Koram), while six flyover structure will be accommodated on existing roads, railways and canal crossings at different locations.

Underpasses and cattle creeps will also be provided for passage of existing roads beneath the new alignment where necessary. Box & pipe culverts (where required) will be provided on the steams/water courses. Plum concrete & RCC type retaining walls will be provided as per site requirement where necessary, while RCC breast walls will be provided mostly in hilly terrain.

Package wise detail of structures to be constructed is attached at **Annex-V**, while sum up detail is as under:

Major Bridges (6 Lane)	03 (At River Indus, River Sawan & River Koram)
Interchanges:	11 Nos.
Bridges (Four Lane):	15 Nos.
Flyovers (Six Lane):	19 Nos.
Underpasses	74 Nos.
Culverts	259 Nos.

**C. Acquisition of Land:**

Separate PC-1 relating land acquisition, affected properties compensation and relocation of utilities has already been submitted for approval.

**D. Hydrology:**

The project is to be constructed on new virgin alignment and a number of streams and nullahs cross it. The hydrological study pertaining to the project primarily covers the cross-drainage analysis for natural streams and canals which cut across the proposed alignment



**ADDENDUM No.1**

**Consultancy Services for Design and Construction Supervision of Intelligent Transportation System (ITS) Installation at Hakla - D. I. Khan Motorway**

Following amendments have been made in the Request for Proposal (RFP) for subject Services under this Addendum No.1, which shall be read and construed as an integral part of RFP and shall take precedence in case of any conflict(s)/ambiguity(s) amongst this Addendum No.1 and other provisions of the RFP.

**1. Personnel Evaluation Sheet:**

Refer page-21 "Personnel Evaluation Sheet"; is deleted and replaced with the revised page "Personnel Evaluation Sheet" attached as **Attachment-I**.

**2.** All other terms and conditions shall remain same.

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8

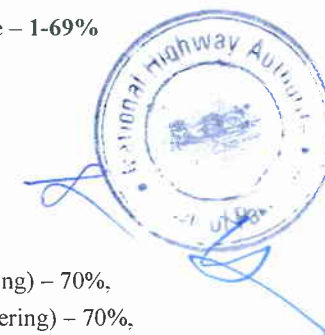
**PERSONNEL EVALUATION SHEET**

POSITION / AREA OF EXPERTISE	Name	Academic and General Qualification* Weightage 30%		Project related Experience Weightage 65% for Design Review and 60% for Construction Supervision		Status with the Firm** 10% for Design Review and 5% for Construction Supervision		OVERALL RATING (Sum of Weighted Ratings)  (A+B+C)
		Percentage Rating	Weighted Rating (A)	Percentage Rating	Weighted Rating (B)	Percentage Rating	Weighted Rating (C)	
(Show all experts to be evaluated)								
<b>Design Phase:</b>								
a) Project Manager								
b) ITS Applications Expert								
c) Design Manager								
d) Power Works/ Sensors Expert								
e) IT/ Communication Systems Expert								
f) Transportation Engineer								
<b>Procurement Phase:</b>								
g) Procurement Coordinator								
h) ITS Applications Expert								
<b>Supervision Phase:</b>								
i) Project Manager								
j) ITS Applications Expert								

Rating: - Excellent - 100%    Very good – 90-99%    Above Average – 80-89%    Average – 70-79%    Below Average – 1-69%  
Non-complying - 0%

Score: Maximum Weightage X rating / 100.

- \* For Project Manager: Masters in Transportation/ Electrical Engineering – 100% and B. Sc. Engineering (Electrical/ Civil/ Transportation) – 70%,  
For ITS Applications Expert: M. Sc. (Electrical Engineering) – 100% and B. Sc. (Electrical Engineering) – 70%,  
For Design Manager: Masters in Electrical Engineering – 100% and B. Sc. Engineering (Electrical Engineering) – 70%,  
For Power Works/ Sensors Expert: M. Sc. (Electrical/ Electronics/ Computer Engineering) – 100% and B. Sc. (Electrical/ Electronics/ Computer Engineering) – 70%,  
For IT/ Communication Systems Expert: M. Sc. (Electrical/ Telecom / Computer Engineering) – 100% and B. Sc. (Electrical/ Telecom / Computer Engineering) – 70%,  
For Transportation Engineer: M. Sc. (Transportation Engineering) – 100% and B. Sc. (Civil Engineering) – 70%,  
For Procurement Coordinator: Masters in Procurement Management/Project Management – 100% and Bachelor’s Degree in (Civil/Elect/Telecom/Computer Engineering) – 70%.
- \*\* 6 months’ older employee - 100%;  
Less than 6 months or associates- 0%





# National Highway Authority



## REQUEST FOR PROPOSAL

*FOR*

### CONSULTANCY SERVICES FOR DESIGN AND CONSTRUCTION SUPERVISION OF INTELLIGENT TRANSPORTATION SYSTEM (ITS) INSTALLATION AT HAKLA – D. I. KHAN MOTORWAY

Tender No. 6(499-B)

*(Page 1 to 130)*

**AUGUST, 2020**

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**GOVERNMENT OF PAKISTAN  
NATIONAL HIGHWAY AUTHORITY  
28-Mauve Area, G-9/1, Post Box No. 1205,  
ISLAMABAD**

Dated the \_\_\_\_\_  
Ref No. \_\_\_\_\_

**LETTER OF INVITATION**

To,  
All consultants

Gentlemen!

We extend warm welcome to you and invite you to participate in this project. We hope that you will live up to your reputation and provide us accurate information so that the evaluation is carried out "just and transparent". Please understand that the contents of this RFP, where applicable, shall be deemed part of the contract agreement. An example to this effect can be the contents of your work plan and methodology which you shall be submitting in your Technical Proposal. Since that is the basis of the selection, therefore, it shall become part of the contract agreement subject to approval/revisions of the same by NHA during the negotiations. Similarly, all other services and the content contributing to services shall be deemed part of the contract agreement unless it is specifically mentioned for any particular item up-front in your Technical Proposal which obviously will make your Proposal a conditional proposal whereby, authorizing NHA to may or may not consider to evaluate your Proposal. Please understand that if no such mention appears up-front (i.e. on front page of Technical Proposal) then it shall be deemed that the consultant is in 100% agreement to the above. You are also advised to kindly read the RFP thoroughly as it can drastically affect the price structure for various services which may not be appearing directly in the terms of reference. In the end, we appreciate your participation and hope that you will feed a good proposal to merit consideration by NHA.

Your attention is particularly drawn towards paragraph 1.10, 3.1.1, subparagraph 3.1.2 (d), paragraphs 3.1.3, 3.1.5, 5.2.1 and 6.5 of Instructions to Consultants as well as subparagraphs 1.7 (v), 1.7 (vii), 1.7 (viii), 1.8 (a) and 1.8 (b) in Data Sheet and other instructions provided in the RFP to avoid the risks of Disqualification/ Rejection/ losing marks/ Penalty.

However, the Client at its own discretion reserves the right to EITHER seek clarification on non-compliance of the Instructions and rectify or not the shortcomings only in Technical Proposals (under similar treatment to each consultant), OR not, prior to opening of Financial Proposals (which shall be kept unopened till complete evaluation of Technical Proposals). No alteration in Financial Proposals shall be made except during the negotiations subject to Procurement of Consultancy Services Regulations 2010 as notified by Public Procurement Regulatory Authority.



**General Manager (P&CA)**  
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Website: [www.nha.gov.pk](http://www.nha.gov.pk)

## ATTACHMENTS

1. Instructions to Consultants
2. Data Sheet
3. Technical Proposal Forms
4. Financial Proposal Forms
5. Appendix A (Terms of Reference)
6. Appendix B (List of Supporting Documents)
7. Appendix C (Person-Months and Activity Schedule)
8. Appendix D (Client's Requirements from the Consultants)
9. Appendix E (Personnel, Equipment, Facilities and other services to be provided by the Client).
10. Appendix F (Copy of Model Agreement)



**INSTRUCTIONS TO CONSULTANTS****1. GENERAL**

- 1.1 Desiring consultants are invited to submit a technical and a financial proposal for consulting services required for the assignment named in the attached Data Sheet (Annex B). The proposals could form the basis for future negotiations and ultimately a Contract between the selected Consultant and the Client named in the Data Sheet.
- 1.2 A brief description of the assignment and its objectives are given in the Data Sheet which are elaborated in Appendix A (Terms of Reference) to this RFP.
- 1.3 The assignment shall be implemented in accordance with the phasing indicated in the Data Sheet. (When the assignment includes several phases, continuation of services for the next phase shall be subject to satisfactory performance of the previous phase, as determined by the Client).
- 1.4 The Client (NHA) has been entrusted the duty to implement the Project as Executing Agency by GOP and funds for the project have been approved and provided in the budget for utilization towards the cost of the assignment, and the Client intends to apply part of the funds to eligible payments under the Contract for which this LOI is issued.
- 1.5 To obtain first-hand information on the assignment and on the local conditions, you are encouraged to pay a visit to the Client before submitting a proposal and attend a pre-proposal conference if specified in the Data Sheet. Your representative shall meet the official named in the Data Sheet. Please ensure that the official is advised of the visit in advance to allow adequate time for him to make appropriate arrangements. You must fully inform yourself of local conditions and take them into account in preparing your proposal.
- 1.6 The Client shall provide the inputs specified in the Data Sheet, assist the Consultants in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 1.7 It is notified that:
- i. The cost of preparing the proposal and of negotiating the Contract, including visit to the Client, are not reimbursable as a direct cost of the Assignment, and
  - ii. The Client is not bound to accept any or all of the proposals submitted.
- 1.8 An invitation to submit proposals has been sent to the firms as listed/stated in the Data Sheet.
- 1.9 **Conflict of Interest**

The Consultant is required to provide professional, objective, and impartial advice, at all times holding the Client's interest's paramount, strictly avoiding conflicts with other assignments or its own corporate interests, and acting without any consideration for future work.



The Consultant has an obligation to disclose to the Client any situation of actual or potential conflict that impacts its capacity to serve the best interest of its Client. Failure to disclose such situations may lead to the disqualification of the Consultant or the termination of its Contract and/ or debarring by the Client.

Without limitation on the generality of the foregoing, and unless stated otherwise in the **Data Sheet**, the Consultant shall not be hired under the circumstances set forth below:

a. **Conflicting activities**

Conflict between consulting activities and procurement of goods, works or non-consulting services: a firm that has been engaged by the Client to provide goods, works, or non-consulting services for a project, or any of its Affiliates, shall be disqualified from providing consulting services resulting from or directly related to those goods, works, or non-consulting services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, or any of its Affiliates, shall be disqualified from subsequently providing goods or works or non-consulting services resulting from or directly related to the consulting services for such preparation or implementation.

b. **Conflicting assignments**

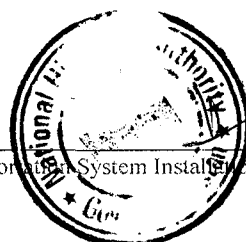
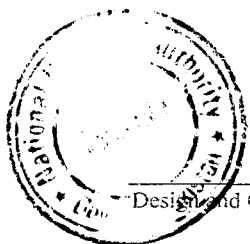
Conflict among consulting assignments: A Consultant (including its Experts and Specialist Sub-consultants) or any of its Affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant for the Client.

c. **Conflicting relationships**

Relationship with the Client's staff: a Consultant (including its Experts and Specialist Sub-consultants) that has a close business or family relationship with a professional staff of the Client, who are directly or indirectly involved in any part of (i) the preparation of the Terms of Reference for the assignment, (ii) the selection process for the Contract, or (iii) the supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Client throughout the selection process and the execution of the Contract.

d. Any other types of conflicting relationships as indicated in the **Data Sheet**.

1.10 A firm may submit its proposal for the Assignment either as an independent Consultant or as a Member of a JV Consultants but participation of a firm occurring in more than one proposal for the Assignment is not allowed. In case a firm participates in more than one proposal, all such proposals shall be **disqualified and rejected**. However, this condition does not apply for individual Specialist Sub-consultant(s).





## 2. DOCUMENTS

- 2.1 To prepare a proposal, please use the attached Forms/Documents listed in the Data Sheet.
- 2.2 Consultants requiring a clarification of the Documents must notify the Client, in writing, not later than Fourteen (14) days before the proposal submission date. Any request for clarification in writing, or by cable, telex or tele-fax shall be sent to the Client's address indicated in the Data Sheet. The Client shall respond by cable, telex or telefax to such requests and copies of the response shall be sent to all invited consultants.
- 2.3 At any time before the submission of proposals, the Client may, for any reason, whether at its own initiative or in response to a clarification requested by an invited consulting firm, modify the Documents by amendment. The amendment shall be sent in writing or by cable, telex or telefax to all invited consulting firms and will be binding on them. The Client may at its discretion extend the deadlines for the submission of proposals.

## 3. PREPARATION OF PROPOSAL

Desiring consultants will submit a Technical and a Financial Proposal. The proposals shall be written in English language.

### 3.1 Technical Proposal

- 3.1.1 The Technical Proposal should be submitted using the format specified and shall include duly signed and stamped forms appended with the RFP. This is a mandatory requirement for evaluation of proposals and needs to be filled up carefully.

The proposals should be bound in the hard book binding form to deny the possibility of removal or addition of page(s). All the pages of proposals must be signed and stamped in original by authorized representative of the firm/JV. All the pages must be numbered starting from first page to last. Any proposal found not adhering to these requirements may be **rejected**.

- 3.1.2 In the Technical Proposal, the general approach and methodology shall be proposed for carrying out the services covered in the Term of Reference, including such detailed information as deemed relevant together with consultant's appreciation of the Project from provided details and
- a. A detailed overall work programme to be provided with timing of the assignment of each Key Personnel or other staff member assigned to the Project.
  - b. An estimate of the total number of person-months and Project duration required.
  - c. Clear description of the responsibilities of each Key Personnel within the overall work programme.



A handwritten signature in black ink, appearing to be a stylized 'V' or similar mark.

- d. The Curriculum Vitae of all Key Personnel and an Affidavit on stamp paper duly attested by Oath Commissioner to the effect that the proposed personnel shall be available for the assignment in the project duration and their present place of duty must also be mentioned. Failure to provide the Affidavit may result in to no further evaluation of the proposal. The consultants are advised to suggest such names that shall be available for the Assignment.
  - e. The Technical Proposal shall include duly filled in forms provided in this RFP: the name, background, and professional experience of each Key Personnel to be assigned to the Project, with particular reference to his experience of work of a nature similar to that of the proposed assignment.
  - f. The Technical Proposal shall include duly filled in forms provided in this RFP: the name, background, and professional experience of each Key Personnel to be assigned to the Project, with particular reference to his experience of work of a nature similar to that of the proposed assignment.
  - g. Current commitments and past performance are the basic criteria in evaluation of Technical Proposal. Consultants are required to provide the details of present commitments/ongoing jobs as referred in the Form A-9 of Technical Proposal. Further, the basis for considering the past performance is the report from Design Section and Construction Wing of NHA.
- 3.1.3 While preparing the Technical Proposal, consultants are expected to examine all terms and instructions included in the RFP. Failure to provide all requested information shall be at consultant's risk and may result adversely in the scoring of the proposal. The proposal should be prepared as per RFP and any suggestion or review of staff etc. should be clearly spelt out in Form A-4. This will be discussed at the time of negotiation meeting as and when called.

Penalty against non-compliance with the maximum page requirement based in the '**CHECKLIST OF REQUIRED FORMS**' provided in the Section of Technical Proposal Forms will be one (01) score point per excess page to be deducted from the total technical score. The consultants are instructed to submit the CVs of Key Personnel by truly following the format attached at Form A-5. The CV's submitted on format in deviation to that specified are susceptible of scoring low.

- 3.1.4 During preparation of the Technical Proposal, consultants must give particular attention to the following:
- a. Consultant may utilize the services of expatriate experts but only to the extent for which the requisite expertise is not available with any Pakistani firm. In case of JV, the proposal should state clearly partners will be "Jointly and Severally" responsible for performance under the Contract and One (Representative) partner will be solely responsible for all dealings with the Client on behalf of the JV. Its Power of Attorney on this account is to be enclosed. The Representative partner



shall retain the responsibility for the performance of obligations and satisfactory completion of the consultancy services. PEC registers a foreign consulting firm for issuing license to provide consultancy services in Pakistan, which is based on formation of JV with the condition that the foreign consulting firm shall provide only that share of consultancy services by the JV for which expertise is not available with Pakistani consulting firms. A copy of JV agreement to be provided at the time of finalizing the contract documents with specific responsibilities and assignments to be looked after by each partner.

- b. Subcontracting part of the assignment to the other consultants is discouraged and only individual Specialist Sub-Consultants (having unique expertise which is not available with others) may be included.
- c. The Key Personnel proposed shall preferably be permanent employees of the firm unless otherwise indicated in the Data Sheet.
- d. The estimated number of Key Personnel person-months required for the Assignment is stated in the Data Sheet. The proposal should be based on a number of Key Personnel person-months substantially in accordance with the above number. However, consultants may propose changes in the light of their experience through particular comments on the TOR.
- e. Proposed personnel should have experience preferably under conditions similar to those prevailing in the area of the Assignment. The minimum required experience of proposed Key Personnel shall be as listed in the Data Sheet.
- f. No alternative to Key Personnel may be proposed, and only one curriculum vitae (CV) may be submitted for each position.
- g. If the Data Sheet specifies training as a major component of the Assignment, a detailed description of the proposed methodology, staffing, budget, and monitoring is to be provided.

3.1.5 The Technical Proposal shall not include any financial information. The Consultant's comments, if any, on the data, services, and facilities to be provided by the Client and indicated in the TOR shall be included in the Technical Proposal. A Technical Proposal containing any financial information will be treated as non-responsive resulting into rejection of the proposal.

### 3.2 Financial Proposal

3.2.1 The Financial Proposal should be submitted using the format specified and enclosed with this RFP. This is a mandatory requirement for evaluation of proposals and needs to be filled up carefully. The total cost is to be mentioned in the Form FIN-7 and accordingly in Form FIN-1 too.



- 3.2.2 The Financial Proposal should list the costs associated with the Assignment. These normally cover remuneration for staff in the field and at headquarters, per diem, housing, transportation for mobilization and demobilization, services and equipment (vehicles, office, equipment, furniture, and supplies), printing of documents, surveys, and investigations. These costs should be broken into foreign (if applicable) and local costs. The Financial Proposal should be prepared using the formats attached as Forms A-11 to A-17.
- 3.2.3 The Financial Proposal shall also take into account the professional liability as provided under the relevant PEC Bye-Laws and cost of insurances specified in the Data Sheet.
- 3.2.4 Costs may be expressed in currency (s) listed in the Data Sheet.

#### 4. SUBMISSION OF PROPOSALS

- 4.1 Consultants shall submit one original Technical Proposal and one original Financial Proposal and the number of copies of each indicated in the Data Sheet. Each proposal shall be in a separate envelope indicating original or copy, as appropriate. All Technical Proposals shall be placed in an envelope clearly marked "Technical Proposal" and the Financial Proposals in the one marked "Financial Proposal". These 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 EVALUATION COMMITTEE."
- 4.2 In the event of any discrepancy between the copies of the proposal, the original shall govern. The original and each copy of the Technical and Financial Proposals shall be prepared in indelible ink and shall be signed by the authorized representative of the consultant. The representative's authorization shall be confirmed by a written power of attorney accompanying the proposals. All pages of the Technical and Financial Proposals shall be signed by the person or persons signing the proposal.
- 4.3 The proposal shall contain no interlineations or overwriting except as necessary to correct errors made by the consultants themselves. Any such corrections shall be initialed by the person or persons signing the proposal.
- 4.4 The completed Technical and Financial Proposals shall be delivered on or before the time and date stated in the Data Sheet. The location for the submission of proposals is indicated in the Data Sheet.
- 4.5 The proposals shall be valid for the number of days stated in the Data Sheet from the date of its submission. During this period, consultants shall keep available the Key Personnel proposed for the Assignment. The Client shall make its best effort to complete negotiations at the location stated in the Data Sheet within this period.



## 5. PROPOSAL EVALUATION

### 5.1 Evaluation Procedure and Criteria

5.1.1 A quality cum cost-based procedure shall be adopted in ranking of the proposals. The technical evaluation shall be carried out first, followed by the financial evaluation. Firms shall be ranked using a combined technical/financial score.

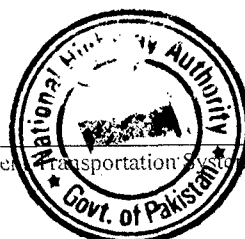
5.1.2 The evaluation committee will correct any computational errors in Financial Proposals. When correcting computational errors, in case of discrepancy (i) between a partial (sub-total) amount and the total amount, or (ii) between the amounts derived by multiplying unit price with quantity and the total price or (iii) between words and figures, the formers will prevail. However, items described in the Technical Proposals but not priced, in the Financial Proposals shall be assumed to be included in the prices of other activities or items and no corrections are made to the Financial Proposal. In case an activity or item is quantified in the Financial Proposal differently from the Technical Proposal, the evaluation committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal for further correction by applying the unit price included in the Financial Proposal to the consistent/corrected quantity. However, the proposals that quote higher than the required input of person-months as per this RFP will not be adjusted. Whereas the proposals quoting lesser than the required input of person-months as per this RFP shall be adjusted as follows. If unit price for the subject person-month is available, the same shall be applied; and if the unit price for the subject person-months is not available, highest unit price for an activity or item of the same category [international or national (Key Personnel or other Personnel)] as provided in the Financial Proposals shall be applied. The Reimbursable direct cost shall not be adjusted and the same shall be capped for the Assignment.

### 5.2 Technical Proposal

5.2.1 The evaluation committee appointed by the Client shall carry out its evaluation for the project(s) as listed in Para 1.1, applying the evaluation criteria and point system specified in the Data Sheet. Each responsive proposal shall be attributed a technical score (St). Firms scoring less than seventy (70) percent points shall be rejected and their financial proposals returned un-opened.

### 5.3 Financial Proposal

5.3.1 The Financial Proposals of the three top-ranking qualifying consulting firms on the basis of evaluation of Technical Proposals shall be opened in the presence of the representatives of these firms, who shall be invited for the occasion and who care to attend. The Client shall inform the date, time and address for opening of Financial Proposals as indicated in the Data Sheet. The total price and major components of each proposal shall be publicly announced to the attending representatives of the firms.



- 5.3.2 The evaluation committee shall determine whether the Financial Proposals are complete and without computational errors; all errors/discrepancies and deviations from respective Technical Proposals as well as RFP shall be dealt with for subsequent scoring in accordance with procedure and criteria given in Para 5.1.2 herein above. The lowest Financial Proposal (Fm) among all shall be given a financial score (Sf) of 1000 points. The financial scores of the proposals shall be computed as follows:

$$S_f = (1000 \times F_m) / F$$

(F = amount of specific Financial Proposal)

- 5.3.3 Proposals, in the quality cum cost based selection shall finally be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal, P = the weight given to the Financial Proposal; and T+P=1) indicated in the Data Sheet:

$$S = S_t \times T \% + S_f \times P \%$$

## 6. NEGOTIATION

- 6.1 Prior to the expiration of proposal validity, the Client shall notify the successful consultant that submitted the highest ranking proposal in writing, by registered letter, cable telex or facsimile and invite it to negotiate the Contract. The proposed Chief Resident Engineer/ Resident Engineer shall also be invited to attend the negotiations.
- 6.2 Negotiations normally take from two to five days. The aim is to reach agreement on all points and initial a draft contract by the conclusion of negotiations.
- 6.3 Negotiations shall commence with a discussion of consultant's Technical Proposal including proposed methodology, work plan, staffing and any suggestions which may have been made to improve the TOR. Agreement shall then be reached on the final TOR, the staffing, and the bar charts, which shall indicate activities, staff, periods in the field and in the home office, staff months, logistics and reporting.
- 6.4 Changes agreed upon shall then be reflected in the Financial Proposal, using proposed unit prices (no negotiation of the person-month rates).
- 6.5 Having selected Consultant on the basis of, among other things, an evaluation of proposed Key Personnel, the Client expects to negotiate a contract on the basis of the staff named in the proposal. Prior to contract negotiations, the Client shall require assurances that the personnel will be actually available. The Client shall not consider substitutions of Key Personnel except in cases of un-expected delays in the starting date or incapacity of Key Personnel for reasons of health. Failure to assure the availability of Key Personnel or substitution (equal or better) as exception only may result in rejection of Consultant's proposal.





6.6 The negotiations shall be concluded with a review of the draft form of the contract. The Client and the Consultant shall finalize the contract to conclude negotiations. If negotiations fail, the Client shall invite the consultant that received the second highest score in ranking to Contract negotiations. The procedure will continue with the third in case the negotiation process is not successful with the second ranked consultant (and so on).

## 7. AWARD OF CONTRACT

7.1 The Contract shall be awarded after successful negotiations with the selected Consultant and approved by the competent authority. Upon successful completion of negotiations/initialing of the draft contract, the Client shall promptly inform the other consultants that their proposals have not been selected.

7.2 The selected Consultant is expected to commence the Assignment on the date and at the location specified in the Data Sheet.



A handwritten signature or set of initials, possibly "A", written in black ink.

## DATA SHEET

LOI Clause #

1.1 The name of the Assignment is:  
**“Consultancy Services for Design and Construction Supervision of Intelligent Transportation System (ITS) Installation at Hakla – D. I. Khan Motorway”.**

The name of the Client is:

**National Highway Authority (NHA)**

1.2 The description and the objectives of the assignment are:

**As per TOR**

1.3 Phasing of the Assignment (if any):

**- Nil -**

1.5 Pre-Proposal Conferences:

Yes  No

Pre-proposal conference will be held on:

**25<sup>th</sup> August, 2020 at 1100 Hours**  
**in NHA Auditorium, National Highway Authority,**  
**28 Mauve Area, G-9/1, Islamabad.**

Name of the official is:

**Muhammad Tanweer Ishaq**  
(General Manager P&CA)  
E-mail: [gmpca.nha@gmail.com](mailto:gmpca.nha@gmail.com)

1.6 The Client shall provide the following inputs:

**As per TOR and Appendix D**

1.7 Following sub-clauses are added:

iii. The supervision of the project shall commence upon undertaking of the construction works by the contractor and shall be notified through issuance of commencement notice to the selected consultant by NHA. Any inordinate delay or cancellation of the construction work for any reason including non-availability of funds shall not entitle the consultants to any financial or legal claims. However, when the project shall commence the supervisory consultants shall maintain the right subject to availability of proposed Key Personnel (professional staff) based on which the consultant was selected or if the delay is beyond six months then equally competent Key Personnel with equal or higher qualification and experience shall be pre-requisite for consideration of issuance of commencement notice by NHA. In case the work is delayed or abandoned for



any reason whatsoever, the consultant shall not have any legal recourse.

- iv. The consultant shall be responsible to have the whole construction work completed in all aspects through the contractor in a professional manner so that all items of construction work are completed from one end to the other including paying attention to site clearance of debris or any other leftover material. All signs of construction work dispensed with. To achieve this objective consultant may include the price for such incidental or ancillary service which will lead to the final completion of the assignment in the price quoted by the consultant who shall remain liable for making final measurements of the Works and to issue Final Payment Certificate of the Contractor. No separate costs are payable as extra costs for this service. All such costs shall be included in these rates submitted by the consultant in its financial proposal. The consultant has to basically ensure that contractor has completed entire construction work as per Works Contract with particular reference to site clearance before taking over the project on completion.
- v.(a) The consultants may better not to propose names of Key Personnel already proposed in other proposals which are being evaluated by NHA or contract(s) awarded recently. This will affect adversely marking of these Personnel in evaluation of the technical proposal. Their secured points are liable to be reduced by 50% if their names appear in more than one previous proposal in which they are ranked No.1. Further the existing load of work with a firm shall be considered as one of the factors for the consideration in the award of the contract. No CV of any alternate Personnel shall be accepted during evaluation.
- v. (b) Availability of the Key Personnel for this job, is the responsibility of the Consultancy firm/ (lead firm in case of JV). However, physical appearance be checked at the time of Contract Negotiation along with the affidavit from individual key personnel for being available for the job.
- vi. Form A-4 is meant for comments on provisions contained in RFP and TOR and unless the observations are noted in this particular Form, anything written elsewhere on this account including financial implications, if any, shall be considered of no consequence in the evaluation process and award of the contract.
- vii. Consultants may form a Joint Venture (JV) to qualify for the Assignment in which case the contract will be signed between the Client and all members of the JV on the prescribed Form included in Appendix F (copy of Model Agreement) subject to the ranking and successful negotiations. A JV may include at the most four members. To promote the consultancy industry in the country, 50 marks (out of 1000 for Evaluation) are allocated for Transfer of Knowledge in the form of JV with a new / less experienced firm by sharing at least 20% of Assignment with them.



viii.

The term associates, if used in the proposal or otherwise shall not be considered

as an alternative of JV member. Any personnel proposed for the Assignment but belonging to the so called associates shall not be marked in evaluation of technical proposal like in case of Sub-consultants (except individual Specialist Sub-consultants having unique expertise which is rarely available OR an expatriate Personnel) who are not supposed to contribute in qualification of their main consultants.

- ix. Consultant's Head Office Support will be mandatory during Supervision; the firm shall be bound to provide design input required on the Site or advice on contractual matters; the cost for the same must be built in the financial proposal. Responsibility for the team in field will be backed by the Consultant's Head Office; the Head Office will assume full responsibility for the team in field. Any key position that remains vacant for more than one month that was required to be filled for that period, a compensation equivalent to the charge rate of that individual will be imposed. For clarification, the invoice will not include the charge rate of the missing individual and additionally, the charge rate of one month for that individual will be deducted from the invoice. This will be replicated for all missing key personnel. For the 2nd month, the compensation payment will be doubled. For the 3<sup>rd</sup> month, an additional warning will be issued. If the issue persists in the fourth month, the firm can be penalized by invoking conditions of contract and even to the extent of consideration for blacklisting.

1.8 The Invited Consultants / **Eligible Consultants** are: Any firm meeting the following requirements:

- (a) Valid Registration Certificate of Pakistan Engineering Council with relevant Project Profile Codes. Foreign consulting firms shall make JV in accordance with Byelaw 6(2) and Byelaw 9 of the Pakistan Engineering Council (Conduct and Practice of Consulting Engineers) Bye-Laws 1986. Failure to provide valid Registration Certificate (license) of the firm (each member in case of JV) by the PEC will entitle the Client to reject the proposal.
- (b) In case of JV members, Letter of Intent to form on firm's letter head (*original is required, scanned copy is not acceptable*). The specimen is attached at **Annexure-A**
- (c) TECHNICAL PROPOSAL FORMS A-1 to A-10 duly completed as per Instructions to Consultants/ Data Sheet and requirements of TOR (To be attached with Technical Proposal *except Form A-4, which can be submitted with or without comments*)
- (d) At the time of proposal submission/ opening, page numbering, signing and stamping of proposals will be checked by Committee Members. If any minor discrepancy is found then same shall be asked by the Committee members to the Authorized Representative of firms to correct it in front of all committee members. In the absence of authorized representative, the



concerned firm will be announced dis-qualified.

- (e) Lists of facilities available with the Consultant to perform their functions effectively (software, hardware, etc.). In case of JV, the same will be provided by the lead firm only.
- (f) FINANCIAL PROPOSAL FORMS A-11 to A-17 duly completed as per Instructions to Consultants/ Data Sheet and requirements of TOR (To be attached with Financial Proposal).
- (g) Audit Reports of the firm (s) for last three years duly certified by Chartered Accountant (from approved list of NHA Finance Wing) (To be attached with Financial Proposal).

2.1

The Documents are:

- (i) Letter of Invitation,
- (ii) Instructions to Consultants,
- (iii) Data Sheet,
- (iv) Technical Proposal Forms,
- (v) Financial Proposal Forms,
- (vi) Appendix – A: TOR and Background Information.
- (vii) Appendix – B: List of Supporting Documents
- (viii) Appendix – C: Man-Months and Activity Schedule
- (ix) Appendix – D: Client’s Requirements from the Consultant.
- (x) Appendix – E: Personnel Equipment, Facilities and Other Services to be provided by the Client.
- (xi) Appendix – F: Copy of Model Agreement/ Draft Form of Contract & Appendices etc.
- (xii) Form of Contract (*For Consultants to perform services as a Joint Venture*)

2.2

The words “Fourteen (14)” is deleted in its entirety and replaced with “Five (05)”. The information will be shared through email or courier. The address for seeking clarification is:

**General Manager (P&CA)**  
 National Highway Authority  
 28 Mauve Area, G-9/1, Islamabad.  
 Phone: +92-51-9032727  
 Fax: +92-51-93260419  
 E-mail: [gmpca.nha@gmail.com](mailto:gmpca.nha@gmail.com)



2.3

Add following clause:

“The information will be shared through email or courier”.

## 3.1.1 Add following:

The proposals should be bound in the hard book binding form to deny the possibility of removal or addition of page(s). All the pages of proposal must be signed and stamped in original by authorized representative of the firm/JV. All the pages must be numbered starting from first page to last. At the time of proposal submission/ opening, page numbering, signing and stamping of proposals will be checked by Committee Members, if any minor discrepancy will be found then same shall be asked by the Committee members to the Authorized Representative of firms to correct it in front of all committee members. In the absence of authorized representative, the concerned firm(s) will be announced **dis-qualified**.

## 3.1.4

- c. Proposed key staff shall preferably be permanent employees who are employed with the consultants at least six months prior to submission of Proposal.

Yes  No

- d. The minimum number of person-months of Key Personnel is:

Total Expatriates:  Person-Months (Not used)

Total Local Key-Experts: **30 Person-Months**

Total Local Non Key-Personnel: **188.5 Person-Months**

- e. The minimum required experience of proposed Key Personnel is mentioned in the Appendix-A: Terms of Reference (TOR).

**Note: The Consultants are advised to submit updated CV's strictly in compliance with the format of CVs given in Technical Proposal Form A-5. CVs submitted without regard to the said format may score low.**

- g. Training is an important feature of this Assignment:

Yes  No

If Yes, details of training are given in TOR

## 3.2.3

Professional liability, insurances (description or reference to appropriate documentation):

- i. The consultants shall be responsible for Professional Indemnity Bond of the required amount at their own cost. This bond shall be in the joint name of Consultant and the Client.
- ii. The consultants are required to insure their Employees and Professionals for Hospitalization/ Medical, Travel and Accident Cover for the duration of the Contract.
- iii. Other details provided in Para 3.5 of Special Conditions of Contract in Model Agreement (Appendix F).





3.2.4 Consultants shall quote the rates of remuneration for local personnel as well as expatriate personnel in Pakistani Rupees.

4.1 The number of copies of the Proposal required is:

**TECHNICAL PROPOSAL:**

**ONE ORIGINAL AND FOUR COPIES WITH CD (SOFT FORM OF COMPLETE TECHNICAL PROPOSAL IN PDF FORM) IN SEALED ENVELOPE**

**FINANCIAL PROPOSAL:**

**ONE ORIGINAL WITH CD (SOFT FORM OF COMPLETE FINANCIAL PROPOSAL IN PDF AS WELL AS MS WORD/ EXCEL FORMS) IN SEALED ENVELOPE**

The address for writing on the proposal is:

**General Manager (P&CA)**  
National Highway Authority  
28, Mauve Area G-9/1 Islamabad  
Telephone: +92-51-9032727  
Facsimile: +92-51-9260419  
Email: gmpca.nha@gmail.com

4.4 The date and time of proposal submission is:

**1130 hours on 8<sup>th</sup> September , 2020**

The location for submission of proposal is:

**National Highway Authority Auditorium  
2<sup>nd</sup> Floor, 27 Mauve Area, G-9/1, Islamabad**

4.5 Validity period of the proposal is:

**180 days**

The bid shall remain valid up to:

**13<sup>th</sup> February, 2021**

Location for Negotiation is:

**National Highway Authority Auditorium  
2<sup>nd</sup> Floor, 27 Mauve Area, G-9/1, Islamabad**

5.2.1 The evaluation of Technical Proposal shall be based on following criteria:

	<b>Description/ Items</b>	<b>Points</b>
<i>As per approved format.</i>	<b>1. Experience of the Firm</b>	<b>100</b>
	1-a. General Experience in road Transport Sector	<u>(25)</u>
	1-b. Specific Experience related to Assignment* (Design, Procurement, Construction, Supervision, Optical Transmission & ITS Networks or similar)	<u>(75)</u>
	<b>2. Approach &amp; Methodology</b>	<b>250</b>
	2-a Appreciation of the Project	<u>(70)</u>
	(i). Clarity of the appreciation	<u>(35)</u>
	(ii). Comprehensiveness of appreciation	<u>(35)</u>
	2-b Problem Statement/ Understanding of Objectives	<u>(50)</u>
	(i). Identification of Problems/ Understanding of Objectives of RFP	<u>(30)</u>



(ii). Components of Proposed Services	(20)
2-c Methodology	(80)
(i). Proposed Solutions for this Project	(30)
(ii). Quality of Methodology	(20)
(iii). Conciseness, clarity and completeness of proposal**	(30)
2-d Suggested changes for improvement in TOR	(10)
2-e Work Program	(20)
2-f Staffing Schedule	(20)
<b>3. Key Personnel***</b>	<b>450</b>
<b>4. Performance Certificate from clients****</b>	<b>100</b>
<b>5. Present Commitments (current engagement and available strength – justification)</b>	<b>50</b>
<b>6. Transfer of Knowledge (Methodology/ Plans)*****</b>	<b>50</b>
<b>Total Points:</b>	<b>1000</b>
Minimum qualifying technical score	70%

\* Assignment Completion Certificate (All completed projects mentioned under TECHNICAL PROPOSAL FORM-A2 CONSULTANT'S EXPERIENCE/ CLIENT'S REFERENCE).

**Note:** Any project mentioned completed under Form TECH-2 (Part-B) will not be considered for evaluation unless Performance Certificate/ Assignment Completion Certificate with satisfactory remarks by the client's representative is not attached. The Client NHA reserves the right to verify the Performance/ Assignment Completion Certificates.

\*\* Conciseness and clarity contains 10 marks and 20 marks will be for the completeness of the proposals which includes but not limited to hard binding, sequential page numbering, signing and stamping of each page of proposal.

*(At the time of proposal submission/ opening, page numbering, signing and stamping of proposals will be checked by Committee Members, if any minor discrepancy will be found then same shall be asked by the Committee members to the Authorized Representative of firms to correct it in front of all committee members. In the absence of authorized representative, the concerned firm(s) will be announced Dis-Qualified.)*

\*\*\* Firm's affidavit for presence of personnel carries 25 marks out of 450 marks (complete in all respect as per specimen annexed at Annex-C placed in Technical Proposal Forms).

\*\*\*\* 25 out of 100 marks will be allocated for provision of affidavit on stamp paper duly attested by the Oath Commissioner to the effect that the firm has neither been blacklisted nor any contract rescinded in the past for non-fulfillment of contractual obligations (complete in all respect as per specimen annexed at Annex-B placed in Technical Proposal Forms).

\*\*\*\*\* Transfer of knowledge would be in the form of joint venture with new/ less experienced firm(s) by sharing at least 20% of Assignment with them for promoting the consultancy industry in the country. *Criteria for New firm are the one which has carried out maximum 3 projects in 6 years.*

The percentage distribution of weightage earmarked for evaluation sub-criteria for suitability of Key Personnel are:



**(a) Design and Procurement Assistance Team:**

Description/ Items	Percentage
i. Academic and General Qualifications	30%
ii. Professional experience related to the Project	60%
iii. Status with the firm (Permanent & duration with Firm)	10%

**(b) Supervision Phase Team:**

Description/ Items	Percentage
i. Academic and General Qualifications	30%
ii. Professional experience related to the Project	65%
iii. Status with the firm (Permanent & duration with Firm)	05%

Form of Summary Evaluation and Personnel Evaluation Sheets for Technical Proposal (QCBS) is attached at the end of Data Sheet.

- 5.3.1 The words “three top-ranking qualifying consulting firms” is deleted in its entirety and replaced with the words “qualifying consultants”.

The date, time and address of the Financial Proposal opening are:

**After evaluation and approval of Technical Proposals (to be informed later).**

- 5.3.3 The weightages given to the Technical and Financial Proposals are:

<b>Technical:</b>	<b>80%</b>
<b>Financial:</b>	<b>20%</b>

- 6.3 Add following at the end of this Para:

The final person-months of each personnel, if required, are subject to adjustment at the stage of contract negotiation in line with demonstrated approach & methodology and need basis.

- 6.5 Add following at the end of this Para:

The Consultant is bound to replace all the Key Personnel proposed who scored less than 70% marks in the Personnel Evaluation, if the Client so requests. If the Consultant refuses to replace such Key Personnel, the Client reserves the right to reject its proposal and invite the Consultant that received the second highest score in ranking to Contract negotiations.

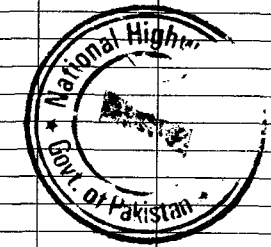
- 7.2 The Assignment is expected to commence in:

**September, 2020**



**SUMMARY EVALUATION SHEET FOR FULL TECHNICAL PROPOSALS (QCBS)**

EVALUATION CRITERIA		Max. Weightage	Firm 1		Firm 2	
			Rating	Score	Rating	Score
<b>1. Firms Experience</b>		<b>100</b>				
	General Experience in road Transport Sector	25				
	Specific Experience related to particular Assignment	75				
<b>2. Approach and Methodology</b>		<b>250</b>				
2-a	Appreciation of the Project	(70)				
(i).	(i) Clarity of the appreciation	(35)				
(ii).	(ii) Comprehensiveness of appreciation	(35)				
2-b	(iii) Problem Statement/ Understanding of Objectives	(50)				
(i).	Identification of Problems/ Understanding of Objectives of RFP	(30)				
(ii).	(i) Components of Proposed Services	(20)				
2-c	(ii) Methodology	(80)				
(i).	Proposed Solutions for this Project	(30)				
(ii).	(i) Quality of Methodology	(20)				
(iii).	(ii) Conciseness, clarity and completeness of proposal*	(30)				
2-d	(iii) Suggested changes for improvement in TOR	(10)				
2-e	Work Program	(20)				
2-f	Staffing Schedule	(20)				
<b>3. Key Personnel**</b>		<b>450</b>				
	<b>Design Phase:</b>					
a)	Project Manager	60				
b)	ITS Applications Expert	45				
c)	Design Manager	35				
d)	Power Works/ Sensors Expert	35				
e)	IT/ Communication Systems Expert	35				
f)	Transportation Engineer	35				
	<b>Procurement Phase:</b>					
g)	Procurement Coordinator	40				
h)	ITS Applications Expert	35				
	<b>Supervision Phase:</b>					
i)	Project Manager	60				
j)	ITS Applications Expert	45				
<b>4. Performance Certification from clients***</b>		<b>100</b>				
<b>5. Present Commitments (current engagement and available strength – justification)</b>		<b>50</b>				
<b>6. Transfer of Knowledge (Methodology/ Plans)****</b>		<b>50</b>				
<b>TOTAL:</b>		<b>1000</b>				



Excellent - 100% Very Good - 90-99% Above Average – 80-89% Average – 70-79% Below Average – 1-69% Non-complying – 0%

Score: Maximum Weightage x rating / 100. Minimum qualifying score is 70% or 700 marks.

\*Conciseness and clarity contains 10 marks and 20 marks will be for the completeness of the proposals which includes but not limited to hard binding, sequential page numbering, signing and stamping of each page of proposal.

\*\*Firm affidavit for presence of personnel carries 25 marks out of 450 marks (complete in all respect as per specimen annexed at Annex-C placed in Technical Proposal Forms).

\*\*\*25 out of 100 marks will be allocated for provision of affidavit on stamp paper duly attested by the Oath Commissioner to the effect that the firm has neither been blacklisted nor any contract rescinded in the past for non-fulfillment of contractual obligations (complete in all respect as per specimen annexed at Annex-B placed in Technical Proposal Forms).

\*\*\*\*Criteria for New firm is the one which has carried out maximum 3 projects in 6 years.

**PERSONNEL EVALUATION SHEET**

POSITION / AREA OF EXPERTISE	Name	Academic and General Qualification* Weightage 30%		Project related Experience Weightage 65% for Design Review and 60% for Construction Supervision		Status with the Firm** 10% for Design Review and 5% for Construction Supervision		OVERALL RATING (Sum of Weighted Ratings)  (A+B+C)
		Percentage Rating	Weighted Rating (A)	Percentage Rating	Weighted Rating (B)	Percentage Rating	Weighted Rating (C)	
(Show all experts to be evaluated)								
<b>Design Phase:</b>								
a) Project Manager								
b) ITS Applications Expert								
c) Design Manager								
d) Power Works/ Sensors Expert								
e) IT/ Communication Systems Expert								
f) Transportation Engineer								
<b>Procurement Phase:</b>								
g) Procurement Coordinator								
h) ITS Applications Expert								
<b>Supervision Phase:</b>								
i) Project Manager								
j) ITS Applications Expert								

Rating: - Excellent - 100%    Very good – 90-99%    Above Average – 80-89%    Average – 70-79%    Below Average – 1-69%  
 Non-complying - 0%

Score: Maximum Weightage X rating / 100.

- \* For Project Manager: Masters in Transportation/ Electrical Engineering – 100% and B. Sc. Engineering (Electrical/ Civil/ Transportation) – 70%,  
 For ITS Applications Expert: M. Sc. (Civil/ Electrical Engineering) – 100% and B. Sc. (Civil/ Electrical Engineering) – 70%,  
 For Design Manager: Masters in Transportation/ Electrical Engineering – 100% and B. Sc. Engineering (Electrical/ Civil/ Transportation Engineering) – 70%,  
 For Power Works/ Sensors Expert: M. Sc. (Electrical/ Electronics/ Computer Engineering) – 100% and B. Sc. (Electrical/ Electronics/ Computer Engineering) – 70%,  
 For IT/ Communication Systems Expert: M. Sc. (Electrical/ Telecom / Computer Engineering) – 100% and B. Sc. (Electrical/ Telecom / Computer Engineering) – 70%,  
 For Transportation Engineer: M. Sc. (Transportation Engineering) – 100% and B. Sc. (Civil Engineering) – 70%,  
 For Procurement Coordinator: Masters in Procurement Management/Project Management – 100% and Bachelor’s Degree in (Civil/Elect/Telecom/Computer Engineering) – 70%,

- \*\* 6 months’ older employee - 100%;  
 Less than 6 months or associates- 0%



*[Handwritten signature]*

# TECHNICAL PROPOSAL FORMS



*[Handwritten signature]*

## Technical Proposal – Forms

{Notes to Consultant shown in brackets throughout this Section provides guidance to the Consultant to prepare the Technical Proposal; they should not appear on the Proposals to be submitted.}

### Checklist of Required Forms (subparagraph 3.1.3 of ITC)

Required, (√)	FORM	DESCRIPTION	Page Limit
√	A-1	Technical Proposal Submission Form	
√	A-1 Attachment	Proof of legal status and eligibility	
“√” If applicable	A-1 Attachment	If the Proposal is submitted by a joint venture, attach a letter of intent.	
“√” If applicable	A-1 Attachment Power of Attorney	Power of attorney for the authorized representative of the led firm as per instructions given in specimen of letter of intent ( <b>Annexure-B</b> ).	
√	A-2	Consultant's Organization and Experience.	As given below
		A. Consultant's Organization	3
		B. Consultant's Experience/ Client's Reference	20
		C. Client's satisfaction Certificates along with their details	9
√	A-3	Approach Paper on Methodology proposed for Performing the Assignment	50
√	A-4	Comments/ Suggestions of Consultant	[See footnote] <sup>1</sup>
		A. On the Terms of Reference	n/a
		B. On the Counterpart Staff and Facilities	2
√	A-5	Format of Curriculum Vitae (CV) for proposed Key Personnel	8 pages each CV
√	A-6	Completion and Submission of Reports as per TOR	n/a
√	A-7	Composition of the Team Personnel and the Tasks to be Assigned to each Team Member	n/a
√	A-8	Work Plan /Activity Schedule	n/a
√	A-9	Work Plan and Time Schedule for Key Personnel ( <i>Man-months of staff and Project Duration as per TOR.</i> )	n/a
√	A-10	Current Commitments of the Firm	n/a



**Note: Failure to provide required attachments with Form A-1 will entitle the Client to reject the proposal**

<sup>1</sup> The total number of pages for combined forms A-3 and A-4 should not exceed 50. A page is defined as one printed side of A4 or letter-size paper with font size of 10 or more.

## TECHNICAL PROPOSAL SUBMISSION FORM

(To be required from lead firm only)

{Location, Date}

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the ... [NAME OF THE PROJECT]....in accordance with your Request for Proposals. We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed in a separate envelope.

(If the Consultant is a joint venture, insert the following):

We are submitting our Proposal in a joint venture with: (Insert a list with full name and the legal address of each member, and indicate the lead member). We have attached a copy of our letter of intent to form a joint venture, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture.

OR

(If the Consultant's Proposal includes Sub-consultants, insert the following):

We are submitting our Proposal with the following firm(s) as Sub-consultants: (Insert a list with full name and country of each Sub-consultant.)

We hereby declare that:

- (a) All the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification and/or imposition of any sanction by the client.
- (b) Our Proposal shall be valid and remain binding upon us for the period of time specified in the Data Sheet, Clause 4.5.
- (c) We have no conflict of interest in accordance with ITC Clause 1.9.
- (d) We meet the eligibility requirements as stated in Data Sheet Clause 1.8.
- (e) Neither we, nor our JV Partner(s)/sub-consultant(s) or any of the proposed experts prepared the TOR for this consulting assignment.
- (f) Within the time limit stated in the Data Sheet, Clause 4.5, we undertake to negotiate a Contract on the basis of the proposed Key Personnel. We accept that the substitution of Key Personnel for reasons other than those stated in ITC, Clause 6.5 may lead to the termination of Contract negotiations.
- (g) Our Proposal and any modifications resulting from the Contract negotiations are binding upon us.





(h). Our firm/ each member of our JV is not participating in any other proposal for this Project.

We undertake, if our Proposal is accepted and the Contract is signed, to initiate the Services related to the Project not later than the date mentioned in Data Sheet 4.5 (*or the date extended with the written consent of Consultant in case of delay in procurement process*)

We understand that the Client reserves the right to reject all proposals as per PPRA Rules.

We remain,

Yours sincerely,

Signature of Authorized Representative\* of the Lead Firm:

{In full} \_\_\_\_\_ {and initial} \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

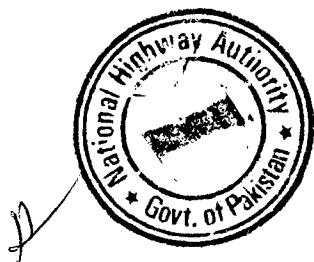
Name of Consultant (Firm's name or JV's name): \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Address: \_\_\_\_\_

Contact information (phone and e-mail): \_\_\_\_\_

*\* The above signatory or his authorized representative should attend the proposal submission and opening with authority to sign and stamp any missing pages of proposal in line with instructions given in clause 1.8 of the Data Sheet. The specimen of authorization for submission is given at Annexure-D.*



### CLIENT'S REFERENCE

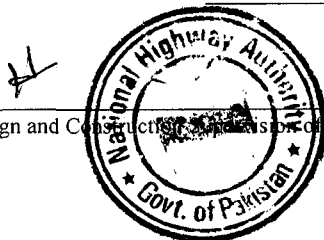
- **A. Detail about consultant(s) Organization.**
- Hierarchy/ organizational chart, Office address, Employees details, etc.,
- **B. Relevant Services (as per RFP notice) Carried Out in the Last Ten Years Which Best Illustrate Qualifications**
- General experience in road Transport Sector
  - Specific experience related to particular assignment should be given on following format:

Using in the format below, provide information/ evidence on each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was largely contracted.

Assignment Name:		Country.
Location within Country:		Professional Staff Provided by Your Firm:
Name of Client:		No. of Staff:
Address:		No. of Staff Months:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current US\$/Rs.)
Name of Associated 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		

- **C. Attach Client's Satisfaction Certificates (Performance Reports) for the last three specific assignment alongwith project details also be given on above format.**

Consultants' Name: \_\_\_\_\_



**APPROACH PAPER ON METHODOLOGY PROPOSED FOR PERFORMING THE  
ASSIGNMENT**

---



**Form A-4 (A and B)****COMMENTS/SUGGESTIONS OF CONSULTANT**

[Provide here comments and suggestions on the Terms of Reference that could improve the quality/effectiveness of the Assignment; and on requirements for counterpart staff and facilities, which are provided by the Client, including: administrative support, office space, local transportation, equipment, data, etc., separately under Forms Form-4A and Form-4B respectively.]

**A. On the Terms of Reference (TOR)**

1.

2.

Etc.,

**B. On the data, services and facilities to be provided by the Client specified in the TOR.**

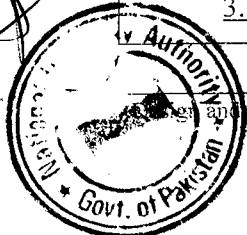
1.

2.

Etc.

**Note:**

1. The Consultant may propose a team of experts to best achieve the scope of service and activities and to deliver outputs as required in TOR. Proposed changes in position/individual inputs should be indicated and reasoned in the Technical Proposal but incorporated only in the Financial Proposals (showing excess/saving, in datum Price as worked out with the person months indicated in the RFP, which must be clearly bifurcated and marked red at each place for acceptance or otherwise by the Client at its prerogative during negotiations).
  - (i) The Proposal may assign person-month inputs differently from TOR. However, Key Personnel input totals in the Proposal should not be less than the minimum totals of person-months inputs mentioned in Data Sheet Sub-Clause-3.1.4 respectively.
  - (ii) The Proposal may include additional expert position/s. However, additional expert will be considered Non Key Personnel for the purpose of proposal evaluation.
  - (iii) If the Proposal drops or replaces a Key Personnel position with a different one, the original position will receive zero score in the technical evaluation and the new position added in the Proposal will be considered Non Key and will not be evaluated.
  - (iv) **DO NOT INCLUDE EXCESS/SAVING INFORMATION IN TECHNICAL PROPOSAL. If Technical Proposal includes financial information, the Proposal will be rejected under Clause-3.1.5 of ITC.**
2. When the Consultant suggests a change in scope of service, activities or output, the Consultant must describe the details in Form-4A and the change should not be incorporated in the Proposal. Enumerate each suggestion in Form-4A with incremental cost as a separate attachment to Financial Proposal indicating breakdown into individual remuneration and expenses for each suggestion. Forms A-11 to 17 should be prepared without incorporating the changes.
  - (i) If Financial Proposal provides no separate attachment about incremental cost to a suggestion, the suggestion will be considered at no additional cost to the Client and no negotiations for an incremental cost shall be done;
  - (ii) **DO NOT INCLUDE INCREMENTAL COST INFORMATION IN TECHNICAL PROPOSAL. If Technical Proposal includes financial information, the Proposal will be rejected under Clause-3.1.5 of ITC.**



### FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY STAFF

1. Proposed Position: \_\_\_\_\_
2. Name of Firm: \_\_\_\_\_
3. Name of Staff: \_\_\_\_\_
4. Profession: \_\_\_\_\_
5. Date of Birth: \_\_\_\_\_
6. Years with Firm: \_\_\_\_\_
7. Nationality: \_\_\_\_\_
8. N.I.C Number: \_\_\_\_\_
9. Cell Number: \_\_\_\_\_
10. Membership in Professional Societies: \_\_\_\_\_  
(Membership Certificate of PEC/ relevant council is Mandatory for Engineers. Copy of online updated PEC/relevant council details, as per Membership Number will be attached)
11. Detailed Tasks Assigned on the Project: \_\_\_\_\_  
\_\_\_\_\_

◆ Key Qualifications:

[Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use up to one page].

◆ Education

[Summarize college/university and other specialized education of staff member, giving names of institutions, dates attended and degrees obtained].

◆ Employment Record

[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, title of positions held and location of assignments. For experience, also give types of activities performed and Client references, where appropriate].



## ◆ Languages

[Indicate proficiency in speaking, reading and writing of each language: excellent, good, fair, or poor].

## ◆ Certification

I, the undersigned, certify to the best of my knowledge and belief that

- (i) This CV correctly describes my qualifications and experience.
- (ii) I am not a current employee of the Executing or the Implementing Agency.
- (iii) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the inputs specified for me in Form A-9 provided team mobilization takes place within the validity of this proposal.
- (iv) I was not part of the team who wrote the terms of reference for this consulting services assignment
- (v) I am not currently debarred by any department/organization/ (semi-autonomous/ autonomous) bodies or such like institutions in Pakistan.
- (vi) I certify that I have been informed by the firm that it is including my CV in the Proposal for the {name of project and contract}. I confirm that I will be available to carry out the assignment for which my CV has been submitted in accordance with the implementation arrangements and schedule set out in the Proposal.

If CV is signed by the firm's authorized representative:

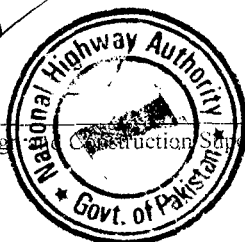
- (vii) I, as the authorized representative of the firm submitting this Proposal for the {name of project and contract}, certify that I have obtained the consent of the named expert to submit his/her CV, and that s/he will be available to carry out the assignment in accordance with the implementation arrangements and schedule set out in the Proposal, and confirm his/her compliance with paras (i) to (v) above.
- (viii) Latest colored attested photograph stapled attached with the CV.

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

\_\_\_\_\_  
Signature of authorized representative of the  
Lead firm

Date: \_\_\_\_\_  
Day/Month/Year

Note: copy or scanned signatures are not allowed



COMPLETION AND SUBMISSION OF REPORTS AS PER TOR

Reports		Date
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		



*[Handwritten signature]*

**COMPOSITION OF THE TEAM PERSONNEL AND THE TASKS TO BE ASSIGNED TO EACH TEAM MEMBER**

1. **Key Personnel (and Specialist Sub-consultant, if any)\***

Name	Position	Task Assignment	Present location	Details of Current Commitments			
				Name of assignment involved and clients names at present			
				Name of assignment	Name of client	Date of engagement <sup>3</sup>	Expected date of relieving <sup>4</sup>



\* Refer to ITC, Data Sheet, Sub-Clause 1.7 v (b).

2. **Other Personnel**

Name	Position	Task Assignment

<sup>3</sup>Substantiate with documentary evidence

<sup>4</sup>Substantiate with documentary evidence



WORK PLAN/ ACTIVITY SCHEDULE

Items of Work/Activities	Monthly Program from date of commencing Assignment (in the form of a Bar Chart)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15



**WORK PLAN AND TIME SCHEDULE FOR KEY PERSONNEL (AND SPECIALIST SUB-CONSULTANT, IF ANY)**

Name	Position	Months (in the form of a Bar Chart)															Number of Months	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		

Continuous: \_\_\_\_\_  
 Intermittent: \_\_\_\_\_

Activities Duration \_\_\_\_\_

Yours faithfully,

Signature \_\_\_\_\_  
 (Authorized Representative)

Full Name \_\_\_\_\_  
 Designation: \_\_\_\_\_  
 Address \_\_\_\_\_



**CURRENT COMMITMENTS OF THE FIRM  
[OF EACH MEMBER IN CASE OF JV AND THE SPECIALIST SUB-CONSULTANT, IF ANY]**

List must be comprehensive including project from clients other than NHA as well

Name of project	Single or JV	Task assignment	Start date of the project	Expected date of completion



Annex-A

*Specimen*  
*(On Firm(s) letterhead)*

**LETTER OF INTENTION**

**Subject: Technical and Financial Proposals for Consultancy Services for (Name of Project)**

This Joint Venture (JV) is made among following parties;

- 1) M/s \_\_\_\_\_ as Lead Firm having \_\_\_% share.
- 2) M/s \_\_\_\_\_ as JV Partner having \_\_\_% share.
- 3) M/s \_\_\_\_\_ as JV Partner having \_\_\_% share.
- 4) M/s \_\_\_\_\_ as JV Partner having \_\_\_% share.

The above firms are jointly and severally liable to the Client for preparation of Technical and Financial Proposals for Consultancy Services for “[NAME OF THE PROJECT]” (hereinafter called “The Project”).

The Firm hereto confirms the understanding as follows:

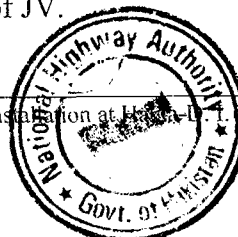
**1. Objective**

It is hereby agreed to form a Joint Venture for preparation of Technical and Financial Proposals for Consultancy Services for “The Project” to be submitted to National Highway Authority, Islamabad (hereinafter called “The Client”).

The Parties intend to do the following:

- a. Prepare and submit a mutually agreed Technical and Financial Proposals for the Project;
- b. Agree to propose suitable staffing with high level of competence to form a competitive team for the Project.
- c. Enter into the mutually agreed Consultancy Contract Agreement with the Client, if the project is awarded.
- d. Perform all the services to be undertaken for the Project under the Consultancy Contract Agreement if signed.

2. The authorized representative of JV shall be M/s..... for the future official correspondence with the client on behalf of JV.



3. The original letter of intention(s) of the JV member(s) on their letterhead is/are attached at...

For and on behalf of

.....  
*Sign & Seal of the Lead Firm*  
.....

*(Authorized Representative\* of the Firm)*

*\* Authorized Representative to sign the Letter of Intention can be;*

- o For Sole Proprietor firm; Owner of the Firm, otherwise Owner may authorize any person. (provided Authorization Letter be submitted)*
- o For Partnership firm; Director of the Firm; otherwise, authorized personnel (provided Authorization Letter be submitted).*
- o For Private Limited firm; Director of the Firm, otherwise, authorized personnel (provided Authorization Letter be submitted).*
- o For Public Private Limited firm; Director of the Firm, otherwise, authorized personnel (provided Authorization Letter be submitted).*



Annex-B

**AFFIDAVIT**  
**(Regarding Blacklisting)**

Subject: [NAME OF THE PROJECT]

I, the undersigned, do solemnly declare that M/s [NAME OF THE FIRM] has neither been blacklisted nor any contract rescinded in the past for non-fulfillment of contractual obligations.

\_\_\_\_\_  
Signature of Authorized  
Representative of the firm(s)

Date: \_\_\_\_\_  
Day/Month/Year

\_\_\_\_\_  
(Seal)

Attested by  
the Oath  
Commissioner

**Note:**

- The Affidavit is to be submitted on Stamp Paper of minimum Rs. 30/- duly attested by the Oath Commissioner.
- In case of Single Entity, to be provided by the firm.
- In case of JV, to be provided by all the JV members



Annex-C

**UNDERTAKING**  
**(Regarding Personnel Availability)**

Subject: [NAME OF THE PROJECT]

I, the undersigned, do solemnly declare that the proposed personnel shall be available for the subject assignment in the project duration as per the terms and condition specified in the Request for Proposal (RFP).

\_\_\_\_\_  
Signature of Authorized  
Representative of the Lead firm

Date: \_\_\_\_\_  
Day/Month/Year

\_\_\_\_\_  
(Seal)

Attested by  
the Oath  
Commissioner

**Note:** The Affidavit, on Stamp Paper of minimum Rs. 30/- duly attested by the Oath Commissioner, is to be submitted by the Lead firm only.



Annex-D

General Manager (P&CA)  
National Highway Authority,  
Islamabad, **Pakistan**

*Power of Attorney*  
*(Regarding submission of proposal)*

Subject: [NAME OF THE PROJECT]

Dear Sir,

I, the undersigned, authorize Mr. \_\_\_\_\_ S/o Mr. \_\_\_\_\_ having CNIC No. \_\_\_\_\_ to attend the submission and Opening of Proposals on behalf of all JV members. *(Insert name of sole consultant in case of single entity else name of all JV members)*. He is authorized to attend, submit, sign and stamp any missing pages of the proposal (Technical and Financial) for above-mentioned project on... *(Insert date)*.

\_\_\_\_\_  
Signature of Authorized  
Representative of the **Lead** firm

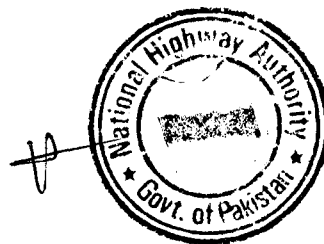
Date: \_\_\_\_\_  
Day/Month/Year

\_\_\_\_\_  
Signature and initial of Authorized  
Representative





# FINANCIAL PROPOSAL FORMS



FINANCIAL PROPOSAL SUBMISSION FORM

{Location, Date}

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for [Insert theProject Name]in accordance with your Request for Proposal dated [Insert Date] and our Technical Proposal.

Our attached Financial Proposal is for the amount of {Insert amount in words and figures}, including all Federal, Provincial & local taxes applicable as per law of the land. {Please note that all amounts shall be the same as in Financial Proposal Form A-17}.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Clause 4.5 of the Data Sheet.

We confirm that we have no condition to state that may have financial implications over and above the amount quoted above.

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

We remain,

Yours sincerely,

Authorized Signature\* {In full} \_\_\_\_\_ {and initial} \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

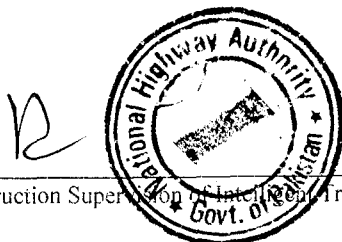
Name of Consultant (Firm's name or JV's name): \_\_\_\_\_

In the capacity of: \_\_\_\_\_

Address: \_\_\_\_\_

Contact information (phone and e-mail): \_\_\_\_\_

\* The above signatory or his authorized representative should attend the proposal submission and opening with authority to sign and stamp any missing pages of proposal in line with instructions given in clause 1.8 of the Data Sheet.



## Form A-12

## BREAKDOWN OF RATES FOR CONSULTANCY CONTRACT

Project: \_\_\_\_\_ Firm: \_\_\_\_\_

Name	Position	Basic Salary Per Cal. Month	Social Charges (%age of 1)	Overhead (%age of 1+2)	Sub-Total (1+2+3)	Fee (%age of 4)	Rate per Month for project Office	Field Allow. (%age of 1)	Rate per Month for Field Work
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

## Notes:

- Item No. 1 Basic salary shall include actual gross salary before deduction of income tax. The highest ranked Consultant shall provide payroll sheet for each proposed personnel at the time of contract negotiations.
- Item No. 2 Social charges shall include Client's contribution to social security, paid vacation, average sick leave and other standard benefits paid by the firm to the employee. Breakdown of proposed percentage charges should be submitted and supported {see Form FIN-3}.
- Item No. 3 Overhead shall include general administration cost, rent, clerical staff and business getting expenses, corporate tax and insurances, etc. Breakdown of proposed percentage charges for overhead should be submitted and supported {see Form FIN-4}.
- Item No. 5 Fee shall include firm's profit and share of salary of partners and directors {if not billed individually for the project} or indicated in overhead costs of the firm.
- Item No. 7 Normally payable only in case of field work under hard and arduous conditions.
- Note 1 The minimum percentage of item (1) should be preferably 50% of (8).
- Note 2 The Consultant is to provide appointment letter and affidavit/undertaking duly signed by each of the individual Personnel showing salary rates as above. Further during execution each invoice will also be provided showing that the Personnel have been paid their salaries as per basic rates mentioned therein; failing to which, NHA will take punitive action against the Consultant and shall deduct the deficient amount from its monthly invoice. Moreover, it will be considered as a negative mark on the Consultant's performance that will be considered for future projects.



Full Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



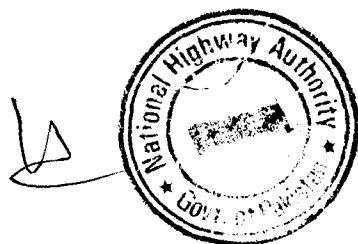




**B-I ESTIMATED LOCAL CURRENCY SALARY COSTS/REMUNERATION**

*[Refer also to Notes under Form A-4]*



Sr. No.	Name	Position	Person-Months	Monthly Billing Rate (Rs.)	Total Estimated Amount (Rs.)
<b>B-I. All Local Key Personnel and Specialist Sub-consultant (if any)</b>					
		<b>Sub-Total:</b>			



**B-II ESTIMATED LOCAL CURRENCY SALARY COSTS/ REMUNERATION***[Refer also to Notes under Form A-4]*

Sr. No.	Position	Person-Months	Monthly Billing Rate (Rs.)	Total Estimated Amount (Rs.)
<b>B-II. Non-Key and other Personnel (Local)</b>				
	<b>Sub Total:</b>			

Note: The bidders are required to quote the rates of Non Key/Support Staff given in the TOR in above table. The bidder(s) may propose Non Key/ Support Staff Person-Months in addition to those given in TOR; however, in such a case tenable reasons must be given in the Technical Proposal Submission Form A-4 "Comments on TOR". The Client's negotiation committee will deliberate on the requirement of additional staff during negotiation meeting. It is also to be noted that the Client is not bound to agree to the reasons given in Form A-4.

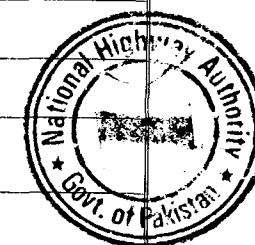





## DIRECT/ NON-SALARY COSTS FOR DESIGN AND SUPERVISION SERVICES

[Refer also to Notes under Form A-4]

Sr. No.	Nomenclature	Unit	Qty.	Unit Price (Pak. Rs.)	Total Amount (Pak. Rs.)
1.	Rent for Office Accommodation	L.S			
2.	Office Utilities Costs	L.S			
3.	Cost / rental of Furniture / Furnishings	L.S			
4.	Rental costs of Office/ Other Equipment	L.S			
	i. Computers and accessories				
	ii. Photo copy machines				
	iii. Communication equipment				
	iv. Drafting / Engineering equipment				
5.	Communication expenses (Transport Cost)	Per Month	13.0		
6.	Drafting/ Reproduction of Reports	L.S			
7.	Office/ Drafting Supplies	L.S			
8.	Others not covered above to comply with TOR requirement*				
	<b>Total</b>				



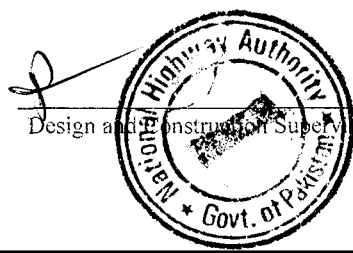
\* Any additional item/ cost quoted against these line items must be supported by solid/ tenable justification(s) detailed in Technical Proposal Submission Form A-4 "Comments on TOR" without indicating financial value therein. The negotiation committee of the Client may negotiate this cost on the basis of justification provided in the form A-4 with the prospective successful bidder in the light of Clause ITC 6.6 of RFP. Moreover, if no justification is given or Client does not agree to the justifications, the Client in both the cases **shall not** include this cost in the total cost offered by the Consultants for this assignment, particularly in case any amount against these line items is deemed to have been covered in other pay items.

**SUMMARY OF COST OF CONSULTANT FOR DESIGN REVIEW AND SUPERVISION SERVICES**

[Refer also to Notes under Form A-4]

Sr.No.	Description	Amount (Pak. Rs.)
1.	Salary Cost	
2.	Direct (Non -Salary Cost)	
3.	Sub Total:	
4.	Sales Tax @ 16% on item 3 above which shall be kept as Provisional Sum in the Contract Agreement	Not Applicable till final decision of the Court of Law <sup>(3)</sup>
5.	Contingencies	-
	<b>Grand Total:</b>	

- Note: 1- The dues and salaries of staff are payable by the Consultant in time and not later than 10<sup>th</sup> of the following month positively. In case of failure to do so Client shall intervene and pay these dues and salaries of the concerned Personnel and recover from the invoice of the Consultant at actual charges paid plus 1% of the amount. This will also be accounted for adversely in making assessment of the Consultant in the next evaluation process for selection of consultants with report of such defaults.
- 2- The grand total is inclusive of all the applicable Federal, Provincial and Local taxes. All these taxes (except the Sales Tax) are required to be built in the quoted rates and not be mentioned separately.
- 3- Relevant documents are attached at the end of RFP.
- 4- Consultant's Head Office Support will be mandatory during Supervision; the firm shall be bound to provide design input required on the Site or advice on contractual matters; the cost for the same is built in the financial proposal. Responsibility for the team in field will be backed by the Consultant's Head Office; the Head Office will assume full responsibility for the team in field.
- 5- Any key position that remains vacant for more than one month that was required to be filled for that period, a compensation equivalent to the charge



rate of that individual will be imposed. For clarification, the invoice will not include the charge rate of the missing individual and additionally, the charge rate of one month for that individual will be deducted from the invoice. This will be replicated for all missing key personnel. For the 2<sup>nd</sup> month, the compensation payment will be doubled. For the 3<sup>rd</sup> month, an additional warning will be issued. If the issue persists in the fourth month, the firm can be penalized by invoking conditions of contract and even to the extent of consideration for blacklisting.



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## APPENDIX - A

# TERMS OF REFERENCE

(Including Description of Services)



4

A

## 1. Project Overview

NHA is planning to deploy a state-of-the-art Intelligent Transport System (ITS) along Hakla - D.I. Khan Motorway for improving road safety, traffic efficiency, passenger facilitation, automated toll collection, logistic management and other applications. Some of the ITS applications are already operational along existing motorways and NHA has prepared a set of requirements for ITS solution for other motorways in the pipeline. These include:

- Traffic Control Center (TCC)
- Closed circuit television cameras;
- Weather information system;
- Variable message signs;
- Emergency roadside telephones;
- Electronic traffic and toll management system;
- Weigh-in motion detection system;
- Motorway FM radio for motorists; and
- Communication System
- Any other ITS activity to be performed by the contractor as per contract.

NHA is interested in further improving the efficiency of the above ITS applications and introducing new applications which add significant value to NHA and motorway users. Hence, current ITS will only serve as a starting point for planning and design of an ITS solution for Hakla – D.I. Khan Motorway. Vehicle-to-vehicle applications are not under consideration at this stage.

Complete ITS solution will include detectors/sensors, displays, application and management software, IT infrastructure, power infrastructure, and OFC based communication backbone for ITS applications. As far as communication infrastructure for ITS solution is concerned, NHA plans to build its own optical fiber cable based transmission infrastructure along the motorway and it is part of the EPC contract for Motorway Construction. An ITS solution will be procured under a separate contract. NHA has no plans to build a wireless access layer of its own at this stage but it will consider using 3G/ 4G networks of licensed cellular mobile operators for ITS applications requiring mobility.

NHA is seeking consultancy which will design ITS solution, assist NHA in procurement and implementation supervision of ITS solution.

## 2. Objectives of Consultancy

The key objectives of this consultancy are as follows:



- 2.1. Development of ITS design for Hakla-DI Khan Motorway
- 2.2. Review of existing ITS applications, infrastructure design, O&M manuals, and recommendations for improvement and standardization;
- 2.3. Study of new ITS applications and recommendation of applications most suited to Pakistani environment and NHA requirements;
- 2.4. Infrastructure planning and design of a modular ITS solution for Hakla-D.I. Khan Motorway with approved applications as per relevant industry standards and international best practices;
- 2.5. Assistance in vendor(s) selection for Hakla-D.I. Khan Motorway ITS solution;
- 2.6. Implementation supervision of ITS along Hakla-D.I. Khan Motorway;

### 3. Scope of Work

The scope of work shall include the following list of tasks:

#### 3.1. Project Inception and Data Collection

##### 3.1.1. Review of Design and Operation & Maintenance

As a first step the consultant will review the employer's requirements and contract specifications. Then the consultant will review the design documents, specifications, of existing ITS applications and infrastructure, currently available and planned along NHA Motorways. The review will cover all the components of the ITS infrastructure defined in the project overview. The consultant will be expected to review the ITS infrastructure keeping in view the employer's requirements, local and international standards, local environment and the budget.

##### 3.1.2. Stakeholder Management Plan and Coordination

In the second step the consultant will prepare stakeholder management plan and obtain feedback from relevant stakeholders, who use, operate and maintain the ITS applications and infrastructure, for impact assessment, improvements, and standardization. During this consultation process with the relevant stake holders the consultant will also discuss new applications that the stakeholders consider valuable. After consultation with NHA and relevant departments, the consultant will consolidate the inputs from all the relevant departments and deliver a presentation to NHA.



### 3.1.3. Field Visit

In the third step the consultant will conduct a field visit to a selected number of sites to develop an insight into implementation of the design, operation and maintenance of the ITS infrastructure. Finally, consultant will recommend improvements and standardization of existing and ITS applications and infrastructure for future motorways including Hakla-D.I. Khan Motorway based on review of documents, consultation with relevant stake holders, and field visit. NHA will deliberate upon these inputs and finalize a set of recommendations for improvement and standardization for ITS applications and infrastructure.

### 3.2. Functional and Operational Framework of New ITS System:

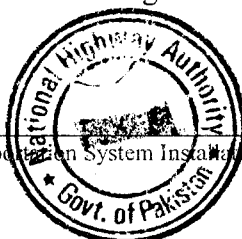
The consultant shall conduct a study of new ITS applications which are not planned/ deployed in NHA so far. Consultant will study two or more feasible ITS solutions and their consequences in line with the project objectives and give recommendations accordingly and secure approval from NHA for preferred option. The consultant should specify the functional, interface, technical, performance, safety, testing, training and operational requirements for all ITS components associated with the preferred option. The study shall be delivered in the form of a report and presentation to NHA officials. The consultant will provide the following requirements for the preferred option but not limited to:

- ITS Architecture requirements;
- Functional requirements, including description of the main functions of the system and its operation
- Interfaces requirements,
- Performance requirements
- Operation requirements;
- Testing requirements;
- Documentation and training requirements
- Local Environment Feasibility

### 3.3. Detailed Design and Specification for ITS Deployment

#### 3.3.1. Development of Design

The consultant will develop a scalable and modular high-level design of the ITS solution which will allow growth in traffic and addition/ integration of new applications. The design will include a consolidated list and deployment map of all the detectors/ sensors, electronic signboards, application management and analysis software, IT



infrastructure, communication requirements, electrical power requirements. Any control center requirements and locations will also be proposed in the high-level design. A single control center for all ITS applications will be preferred. In this task the consultant will define ITS requirements for wireless access layer and optical transmission layer.

The consultant shall design the complete ITS architecture and prepare all ITS and communications layout drawings, including but not limited to the following;

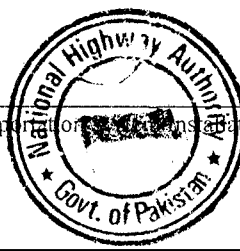
- Control center layout
- System and Subsystems block diagrams
- Wiring diagrams and Fiber optic cable splicing diagrams
- Standard Drawings
- Design calculations, including Communications bandwidth requirements; Power load requirements
- Specifications of Equipment
- Software functional and performance specifications and their licenses
- BOQs and Estimates
- Tender Documents

### 3.3.2. Specifications of ITS Solution Components

In this task the consultant will prepare/ examine the consolidated high-level design requirements of the ITS solution and generate specifications of the complete solution as well as all the components of the ITS solutions defined in the Project Overview. Site-wise BoQs and budgetary cost estimates of sensors, electronic signboards, application management and analysis software, IT infrastructure, communication infrastructure and civil works for control centers.

## 3.4. ITS Infrastructure Planning and Design

- 3.4.1. Survey:** The consultant shall conduct a joint survey with the contractor along the Hakla-D.I. Khan Motorway from the point of view installation of OFC along the motorway, other ITS infrastructure, availability of utility power and 3G or 4G network coverage. The survey report shall include characterization of soil types along the motorway and provide route drawings for OFC installation, identify locations with utility power, and coverage maps of 3 G /4 G networks of all four service providers along the motorway.





**3.4.2. Outside Plant (OSP) Design Codes:** Based on the survey, road construction environment, and industry practices the consultant shall review the design codes proposed by the contractor and recommend modifications. NHA would like to reduce the cost of installation by taking advantage of digging during road construction. The consultant shall develop an NHA OSP Design Code which will be followed for OFC installation. The design code shall include installation specifications, installation technique and processes, joint pits, handholes if required, and any other civil works requirements for OFC or its accessories.

**3.4.3. Specifications for OFC and Accessories:** Consultant shall propose/review specifications for OFC keeping in view the laying technique proposed in OSP Design code, relevant ITU and industry standards and best practices. The optical fiber specifications will meet both short-haul transmission needs of ITS and long-haul transmission requirements of telecom sector. The specifications will include cable construction, optical fiber specifications, splicing specifications, type approval tests, routine acceptance tests and any other requirements deemed necessary by the consultant. Similar specifications shall be provided for joint boxes, cable duct if necessary, and any other accessories.

**3.5. Preparation of RFP(s), Assistance in Vendor Selection and Implementation Phasing Plan:**

**3.5.1. Procurement Strategy and RFP(s) Preparation:** A procurement strategy will be provided by the consultant for procurement of IT infrastructure, communication infrastructure equipment, civil works for control centers and an ITS solution comprising of sensors/ detectors and application management/ analysis software independently or as a turnkey solution. The cost benefit analysis will be presented to NHA and NHA will take a final decision. The consultant will prepare a single or multiple RFPs based on the specifications generated for complete ITS solution and each ITS component depending upon NHA's decision. The RFPs shall comply with PPRA Rules.

**3.5.2. Bidding Assistance:** Consultant will assist NHA in conducting bidders' conference, **responding** to bidders' queries, technical evaluation of proposals, and commercial evaluation as per the criteria defined in the RFP(s). Consultant will be expected to provide recommendations for vendor selection. The final decision will be taken by NHA.

**3.5.3. Implementation Phasing Plan:** Consultant will propose a methodology for implementation phasing and supervision of the ITS



infrastructure for ensuring the quality of build during implantation phase. Consultant shall develop quality assurance and reporting processes, procedures, check lists, and forms, which will be used for implementation supervision after approved by NHA. Consultant shall supervise also participate in the implantation supervision and acceptance testing of the ITS solution.

Consultant shall deploy an experienced field team with vehicles for field activities which will be responsible for implementation supervision.

### 3.6. Contract Administration & Construction Supervision

The scope of construction supervision and contract administration services of the Consultants shall include but will not be limited to the following tasks:

- 1) The consultant shall provide Construction liaison services where consultant will provide specialized services during system installation, testing and commissioning such as Factory Acceptance Test (FAT), Site Integration Test (SIT), Site Acceptance Test (SAT), Operation Acceptance Test (OAT), Performance Acceptance Test (PAT))
- 2) Prepare the Pre-Construction meeting agenda, and conduct the Pre-construction meeting, record and distribute the minutes;
- 3) Appoint various members of the Engineer's construction supervision team as the Engineer's Assistants (Resident Engineer/ Assistant Resident Engineers, Material Engineers, Inspectors, etc.) and notify the Contractor and the Employer, and approve the Contractor's Representative;
- 4) Interpret the specific provisions of the contract related to the Employer's obligation to give possession of the Site, and the Contractor's Work Program, assess the contractual consequences of any specific land acquisition issue and advise the Employer on the appropriate mitigation measures;
- 5) Obtain the Parties' confirmation that all conditions in relevant clause of the Conditions of Contract pertaining to possession of Site are fulfilled;
- 6) Issue instruction to the Contractor to commence the Works;
- 7) Verify whether the form and substance of the evidence of the Contractor's insurances is satisfactory, whether insurance premiums have been paid and the required insurances are effective on the dates required by the Contract;
- 8) Verify that the terms of the Contractor's insurance policies fully comply with the requirements of the contract;



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- 9) Monitor whether the Contractor maintains adequate insurance in the course of performance of the contract, particularly if the Contractor provides insurances for a fixed period which is shorter than the period required under the contract;
- 10) Advise the Employer on the appropriate action and contractual remedies in case that the Contractor does not perform its insurance obligations in accordance with contract;
- 11) Without relieving the Contractors of their obligations under the contract, review and approve the traffic management and safety plan, and ensure compliance such that the Works are carried out at all times in a safe and secure manner and damage or injury to persons or property is avoided;
- 12) Obtain the bench marks and other information from the NHA Design Section as required for commencement of construction activities;
- 13) ensure that the Contractors have all necessary data for setting out and check the Contractors' setting out including staking the right-of-way limits, centerline, and grade and confirm permanent monuments in the construction area;
- 14) carry out the following duties related to environmental management with particular reference to the technical requirements of sound environmental standards on the basis of the Environmental Assessment and Review Framework (EARF), the Initial Environmental Examinations (IEEs), and the Environmental Management Plans during construction: (i) review and endorse site specific Environmental Management Plans (EMPs) for the projects sections, prepared by the Contractors; (ii) ensure that all the environmental mitigation measures required to be implemented are incorporated into the contract documents; (iii) ensure that the Contractors comply with the measures and requirements relevant to the Contractors set forth in each IEE and EMP, and any corrective or preventative actions set out in Environment Monitoring Reports; (iv) conduct environmental monitoring and ensure that the day-to-day construction activities are carried out in an environmentally sound and sustainable manner; (v) prepare and submit semi-annual environmental monitoring reports on the implementation of the 'Environmental management Plan (EMP) to PIU within 14 days after a completion of the monitoring period;
- 15) with respect to the prevention of HIV/AIDs and Human Trafficking, monitor that the Contractors comply and carry out required actions as provided in the respective contract documents, such as awareness and education of laborers and workers;
- 16) ensure that the Contractors do not involve child labor for the execution



- of the Works contracts in accordance with the provisions of the contract agreement;
- 17) without relieving the Contractors of their obligations under the contract, check and approve the Contractors' Working Drawings, Method Statements and Temporary Works proposals;
  - 18) review the Contractor's Work Program and notify the Contractor if the program does not comply with the contract;
  - 19) monitor the progress against the Work Program and the cash flow estimate and request revisions, if required;
  - 20) report in the Consultants' Monthly Report the work progress against the Contractor's Work Program and the cash flow estimate;
  - 21) verify whether the progress charts in the Contractor's Monthly Progress Report reflect the actual progress and correspond to the latest revision of the Work Program and the cash flow estimate, and instruct the Contractor to correct the report, if required;
  - 22) if required, determine the Contractor's entitlements to time extensions based on the Contractor's Work Program;
  - 23) determine the Employer's entitlement to Delay Damages on the basis of the Work Program and advise the Employer of the relevant contractual remedies if the Contractor's progress is behind schedule;
  - 24) verify the Contractor's Monthly Progress Reports and notify the Contractor of any incorrect or inconsistent information;
  - 25) conduct regular weekly site meetings and monthly progress review meetings, record and distribute the minutes;
  - 26) perform quantity take-offs from drawings to verify BoQ quantities;
  - 27) issue regular notices to the Contractors of intended field measurements, measure the Works, compute the quantities for payment, and determine the amounts due to the Contractor within the period specified in the contract;
  - 28) carry out any subsequent design changes, and expeditiously issue supplementary drawings, site instructions, variation orders and day work orders to avoid delay to the works and to ensure that the works are executed in accordance with contract;
  - 29) establish and maintain throughout the Works contracts a structured system of measurement records, supporting documents and calculations for the payment of all BOQ items, that is transparent for auditing purposes;
  - 30) provide all necessary assistance to the Employer and external auditors



- for conducting regular quarterly audits of the measurement records, supporting documents and calculations for the payment of all BOQ items;
- 31) verify the sources of indices or prices for price adjustment, determine a provisional value of an index/reference price until it is published, but, if the index is not published in certain period(s), apply the last available published value;
  - 32) establish with the Contractor a standard format for the Contractor's Statement and the Interim Payment Certificates;
  - 33) issue the interim certificates to PIU for payment to the Contractors in accordance with the Conditions of Contract, having regard to any contractual provisions for advance payment, variation of price, and exchange rate fluctuation etc. Certify the completion of the Activities/ Works or parts thereof and process final payments to the Contractors;
  - 34) Prepare and maintain the Estimates of Cost of Works to Completion continuously, update the Estimates after each Variation instruction or a Variation Order issue and after each IPC, and present the latest Estimate in the Consultants' Monthly Progress Reports;
  - 35) initiate and process variations promptly, when it is necessary for the construction of the Works;
  - 36) request the Contractor's technical and cost proposal, as required, consult both parties in all matters in connection to variation work;
  - 37) Value variations, obtain the Employer's approval of any variation, issue variations under the contract, keep record of all variations issued under the contract and report the summary of the variations in the Consultants' Monthly Progress Reports;
  - 38) discharge fully the Engineer's obligations with respect to approval of materials and workmanship, approval and auditing of the Contractor's Quality Assurance System and the QA Personnel and the compliance testing by the Engineer;
  - 39) inspect quarries and borrow pits, and crushing plants, and order tests of materials and ensure adherence to specifications, and approve the sources of materials;
  - 40) give notice to Contractors of any defects and deficiencies, and issue instructions for the removal and substitution of the improper works, where provided under the contract. If required, order suspension of the Work(s) and/or recommend to PIU other recourse available under the contract;
  - 41) when the Works are completed in accordance with the contract, issue a



Taking Over Certificate to the Contractor(s);

- 42) undertake an inspection of the Works at the completion of the respective road sections, and certify the Contractor(s)' final accounts;
- 43) obtain the Employer's specific approval before taking any action for determination of extension of time, additional costs and the Contractor's claims for additional time or costs, for all events for which the Employer's express approval is required under the Conditions of Contract;
- 44) assess objectively the Contractor's claims and give professional and objective advise to the Employer, consult both parties before determining an extension of time;
- 45) determine Contractor's claims on the basis of the Contractor's Work Program, the impact of the delay(s) event on the Critical Path and the particulars submitted by the Contractor, and not to act as the Contractor's advisor in this matter;
- 46) prepare standard Daily Diary forms and ensure that all supervision staff maintain daily diaries of Contractor's and its own activities;
- 47) maintain an Events Log starting at beginning of contract;
- 48) assist the parties establish Dispute Board, if required under the Conditions of Contract, provide all necessary information to DB members and attempt to facilitate amicable settlement of the dispute between the Employer and the Contractor;
- 49) establish and maintain an effective documents management system in the Engineer's office, which provides for separate filing of incoming and outgoing correspondence and documents, as well as the filing by subject matter;
- 50) carry out detailed inspections of the Works during the Defects Notification Period and prepare detailed inspection and recommendation reports for the Employer after each inspection;
- 51) ensure that the Contractor(s) provide a safe workplace for their workforce, supervisory personnel and for members of the public requiring access through the Sites in full conformity with Health and Safety regulations;
- 52) ensure that the Contractor(s) comply fully with contractual obligations relating to care of the environment (both specified and legislated) and provide all reports and obtain all permits and permissions required in relation to spoil areas, borrow areas quarries and the like;
- 53) keep and maintain daily records of labor, equipment and weather conditions on the Site along with records of activity, progress and other



- events happening on the Site and having relevance to the Works;
- 54) ensure the receipt of and maintain as permanent records of all warranties required under terms and conditions of the contract for materials including their source and equipment accepted and incorporated in the project;
  - 55) advise PIU on need for effective liaison with local authorities, police, landowners, utility owners, complainants, the public and other organizations affected by the Works in order to minimize or avoid unnecessary delays or disputes;
  - 56) maintain consolidated project accounts and assist NHA for settlement of Audit Para's and objections raised, prepare replies related to project, and provide the entire relevant documents/papers/letters etc. to support the replies-until 1 year after completion of Works. The cost to be incurred may be built in the rates;
  - 57) develop training programs for NHA staff and develop on the job training on innovative construction methods, project management and value engineering;
  - 58) If required, prepare revised PC-1 for the project including economic analysis and Environmental Impact Assessment (EIA) on Performa of PC-1 prescribed by Planning Commission;
  - 59) provide any other specialist services requested by PIU under conditions to be mutually agreed;
  - 60) ensure that the construction methods as proposed by the Contractor for carrying out the Works are satisfactory, inspection of Contractor's construction equipment; and safety of the Works, property, personnel, and general public; the schedule of mitigation measures for adverse environmental impacts; and
  - 61) For any laps in quality, quantity, or financial irregularity related to the performance of the Services, the Consultants will indemnify the Client.



**4. Qualification and Experience of Key personal****1. Title: Project Manager****Experience:**

Minimum fifteen (15) years, preferably twenty (20) years of which minimum 5 years, as ITS Planning and Implementation work on major highway projects. Proven ability to perform in a management capacity and a thorough knowledge of industry practices. In addition, must be knowledgeable of current technology and how it can be effectively utilized on the project. Moreover,

- Demonstrable track record in the delivery of large multidisciplinary projects
- Must be a self-starter/pro-active
- Should be ambitious and willing to take initiatives
- Technically proficient in all aspects of project management such as technical, commercial, project controls (programmed, planning, risk, systems compliance etc. with various project stakeholders
- Effective in building good working relationships within complex projects, both internally and
- Strong working knowledge of MS Office and other related software.

**Qualification:**

Minimum B.Sc. Engineering (Electrical/ Civil/ Transportation) preferably Masters in Transportation/ Electrical Engineering) from a recognized University.

**Responsibilities:**

The Project Manager will be responsible for stakeholder coordination, sole contact person with NHA and will be able to draft, review or recommend any project management related documents as required and assist the NHA team in delivery of Project Management requirements for project managed by NHA. In addition, the project manager will be responsible for;

- Ensure and review project management compliance related to Projects
- Liaise with various internal teams and external stakeholders to effectively manage various Projects.
- Lead planning and implementation of project
- Facilitate the definition of project scope and goals
- Define project tasks and resource requirements
- Assemble and coordinate project staff
- Manage project budget and Manage project resource allocation





- Plan and schedule project timelines
- Provide direction and support to project team
- Quality assurance
- Strong presentation skills (creating and delivering) and preparing presentations for workshops, management meetings, etc.
- Managing Senior Management Team meetings and strategic workshops
- Collaboration and communication with internal and external stakeholders
- Provide progress reports as and when required
- Attendance at relevant meetings

## 2. Title: ITS Applications Expert

### Experience:

Minimum 08 preferably 10 years post graduate experience in development of Intelligent Transportation System (ITS) architecture related to road and highway infrastructure projects.

- Experience in traffic engineering studies and analysis.
- Experience in the design and operation of ITS infrastructure. In depth knowledge of ITS design standards and procedures.
- Experience in the operation and maintenance requirements of ITS infrastructure.
- Experience with electrical, electronics, telecommunications systems as related to ITS.
- Proficiency in computer and software applications

### Qualification:

Minimum B.Sc. (Electrical Engineering) preferably M.Sc. (Electrical Engineering) from a recognized University.

### Responsibilities:

The Subject Matter Intelligent Transportation System (ITS) Application Expert is primarily responsible for development of an ITS Strategy and Action Plan for Implementation. He will also be responsible and lead the team for the development of ITS Architecture for road and highway projects of NHA in accordance with international best standards, specifications and procedures.

- Reviews the exiting ITS infrastructure deployment and conduct the assessment and gap/ overlap analysis.
- Prepares and issues specifications, data sheets, and other documents
- Providing ITS advice and guidance into various road and highway infrastructure projects.



- Carrying out studies for the implementation and operation of ITS.
- May act in an advisory capacity to senior management of NHA and other Stakeholders on engineering related matters.
- Completes a wide variety of difficult engineering assignments, applying engineering techniques and analyses within one discipline. The Engineer at this level is a fully qualified professional, proficient in the utilization of most engineering theories and practices.
- Performs complex engineering tasks and particularly important engineering work efficiently and accurately.
- Performs other responsibilities associated with this position as may be appropriate.

### 3. Title: Design Manager

#### Experience:

Minimum 10 years' preferably 12 years of relevant experience in design of national highway projects of which 3 years minimum as Design Engineer in ITS design projects.

#### Qualification:

Minimum B.Sc. Engineering (Electrical) preferably Masters in Electrical Engineering from a recognized University.

#### Responsibilities:

Generally, role of a Design Manager is to decide the placement of the ITS equipment with respect to surrounding physical environs and give a shape to its configuration with due care for mobility, access management, traffic control and best possible road safety mechanism.

- The Design manager will design the ITS equipment. The Design manager will improve the design as per client directions. Design Manager will be part of the supervision services team too and will be providing all necessary assistance to the construction supervision team with respect to any design issues. He/she shall ensure that the ITS equipment is installed according to the design and providing information to NHA on the monthly progress reports.
- He/ She will generate typical and standardized design details of various elements as appropriate; Produce the design folder in hard and soft formats; and Keep liaison with the Client for design review matters.

### 4. Title: Power Works/Sensors Expert

#### Experience:

Minimum 15 years' preferably 18 years' relevant professional experience of which 8 years minimum and 10 years' desirable experience as Power/ Sensors expert on construction projects of National Highways/ Expressways/ Motorways.



*[Handwritten signatures]*

**Qualification:**

Minimum B.Sc. (Electrical/ Electronics/ Computer Engineering) preferably M.Sc. (Electrical/ Electronics/ Computer Engineering) from a recognized University.

**Responsibilities:**

Responsibilities of the Power Works/Sensors Expert will include, but is not limited to the following:

- Ensure the power requirements for ITS equipment.
- Ensure the implementation of Power design
- Ensure that backup power is provided by the contractor
- Helps in sensors procurement
- Advise the client about the best sensors available
- Make comparison of different sensors available worldwide and will recommend the best with good qualities and reliability to the client
- Ensure that the sensors installing by the contractor are according to the international standards.
- Will make SOP for sensors

**5. Title: IT/Communication Systems Expert****Experience:**

Minimum 5 years post graduate experience in development of communication and instrumentation systems related to road and highway infrastructure projects with an overall experience of 10 years.

- Have experience in SCADA, ATC, ATS, IXL, MSS, DCS, TETRA systems.
- Previous strong management experience of Multicultural teams.
- Very good knowledge of ITS products and systems.
- Conflict management and interpersonal skills.
- Team spirit approach and good communication skills.
- Proficiency in computer and software applications

**Qualification:**

Minimum B.Sc. (Electrical/ Telecom/ Computer Engineering) preferably M.Sc. (Electrical/ Telecom/ Computer Engineering) from a recognized University.

**Responsibilities:**

- Reporting to Project Manager and ITS application specialist.
- Support in preparation and execution of internally produced documents, procedures, services/ parts and in accordance with NHA expectations whilst adhering to the requirements of ITS standards and policies.



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**6. Title: Transportation Engineer****Experience:**

Minimum 5 years' experience in transportation and traffic studies with an overall experience of 10 years. The transportation engineer will be able to demonstrate recent transportation engineering experience in the consulting industry and/or experience working with, or for, public sector clients.

- Must have proven experience in Transportation and Traffic planning and studies,
- Transportation engineering experience in corridor planning and design
- Familiarity with use ITS system with transportation engineering
- Strong time management and organizational skills
- Excellent verbal, writing and communication skills

**Qualification:**

Minimum B.Sc. (Civil Engineering) preferably M.Sc. (Transportation Engineering) from a recognized University.

**Responsibilities:**

- Reporting to Project Manager and ITS subject matter specialist.
- Transportation planning, traffic engineering, preliminary engineering and detailed design
- Conducting studies/survey and preparing professional reports
- Oversee the preparation and review of reports, plans and specifications
- Quality control checks on engineering and design deliverables
- Providing technical support to the team
- Preparing and delivering presentations to NHA and other stakeholders.

**7. Title: Civil Works Expert/ Utilities Expert****Experience:**

Minimum 10 years overall post graduate experience in civil works on National Highways and Motorways, with preferably 5 years' experience in civil works of ITS on National Highway and Motorways.

**Qualification:**

Minimum B.Sc. (Civil Engineering) preferably M.Sc. (Civil Engineering) from a recognized University.

**Responsibilities:**

The civil works expert/utilities expert will be responsible for design of civil works for ITS.

- Will design civil works for ITS
- Will design the handhole,
- Design man hole for fiber
- Designing for poles of ITS equipment
- Design and supervise civil works of ITS.



**8. Title: Architecture Engineer****Experience:**

Minimum 10 years overall post graduate experience as Architecture Engineer preferably 5 years' experience in National Highways and Motorway/Expressway Projects.

**Qualification:**

Bachelor's degree in Architecture Engineering from a recognized university.

**Responsibilities:**

The Architecture Engineer will be responsible for:

- Design of Civil Works of ITS
- Design of ITS equipment poles etc.

**9. Title: Procurement Coordinator:****Experience:**

Minimum 10 years' preferably 15 years' relevant professional experience of which 5 years minimum and 8 years' desirable experience as procurement specialist in an IT/ Network/ Electronics Company.

**Qualification:**

Bachelor's degree in Elect/ Telecom/ Computer engineering with Masters in Procurement Management/ Project Management.

**Responsibilities:**

Overall responsibility of the procurements including but not limited to the following:

- Making cost comparisons of different ITS equipment
- Making specifications comparison of different ITS equipment
- Taking Presentations from different vendors
- Assist NHA in procurement of ITS equipment

**10. Title: Field Team Lead****Experience:**

Minimum 10 years' preferably 15 years' relevant professional experience of which 5 years minimum and 8 years desirable experience as Field Team Lead on construction projects of National Highways/ Expressways/ Motorways

**Qualification:**

Minimum B.Sc. (Elect/ Telecom/ Computer Engineering) preferably M.Sc. (Elect/ Telecom/ Computer Engineering) from a recognized University. The candidate should have worked as Team Leader on three (03) similar projects.



**Responsibilities:**

Overall responsibility for the organization, conduct and delivery of consultancy services and reporting to NHA. The Team Leader will head the Consultants' team and will work directly to manage the project and will maintain liaison with NHA.

Responsibilities of the Team Leader will include, but is not limited to the following:

- Ensure the Project implementation;
- Assume full responsibility for the consulting team and performance of services under the Consultancy Contract;
- Ensure that the consulting team undertakes comprehensive review of the designs and specifications which were prepared by the design consultant;
- Ensure that the consulting team undertakes comprehensive construction supervision and contract administration of the Works;
- Oversee the Consultants activities ensuring compliance to details provided in the construction drawings and strict adherence to construction specifications;
- Oversee and supervise construction of Works in accordance with details provided in the construction drawings ensuring strict adherence to construction specifications;
- Ensure preparation of detailed and quantitative progress reports to support the Contractor's requests for progress payments;
- Keep the Employer informed of technical issues and progress of all Works both by informal and formal meetings and correspondence and assist in any project issue which the Employer may require;
- Ensure implementation of environment and social safeguards requirements;
- Assist the Employer in preparing responses to audit objections and queries of the financiers or other Government Authorities;
- Coordinate with all concerned Employer's organizations on project issues;
- At the end of the construction activities, guide and ensure that the team prepares a comprehensive Construction Completion Report inclusive of "as-built drawings" as appropriate;
- The Team Lead will be responsible for quality, cost, scope, time, safety, and environmental control of the subprojects;
- Certifying work volume and recommending interim certificates for progress payments, maintaining consolidated project accounts, and preparation of financial statements, ensuring minimum disruption/damage to the environment by approval of Contractors' work statement/ methodology;
- Monitoring the impact of construction Works on the environment and local settlements and providing information to the Consultants and NHA on the monthly progress reports;
- Preparing and issuing reports as defined subsequently;
- Taking measurements and keep measurement records;
- Maintaining records, correspondence, and diaries;



- Certifying work volume and recommending interim certificates for progress payments;
- Maintaining consolidated project accounts, and preparing of financial statements;
- Certifying completion of part or all the Works;
- Inspecting the Works at appropriate intervals during the defects notification period and issuing the defects notification certificate;
- Processing the Contractor's possible claims;
- Ensuring minimum disruption/damage to the environment by approval of Contractors' work statement/ methodology, including monitoring the impact of construction Works on the environment and local settlements and providing information to NHA on the monthly progress reports;
- Providing the Employer with complete records and reports, and approving the Contractors' as - built drawings for the Works; and
- Compile a Project completion report providing details of Project implementation, problems encountered, and solutions adopted, and detailing and explaining any variation in Project costs and implementation schedules from the original estimates.

#### 11. Title: ITS Implementation Supervisors

##### Experience:

Minimum 10 years' preferably 15 years' relevant professional experience of which 5 years minimum and 8 years' desirable experience as ITS implementation supervisors on construction projects of National Highways/ Expressways/ Motorways

##### Qualification:

Minimum DAE (Elect/ Telecom/ Computer Engineering) preferably B.Sc. (Elect/ Telecom/ Computer Engineering) from a recognized University.

##### Responsibilities:

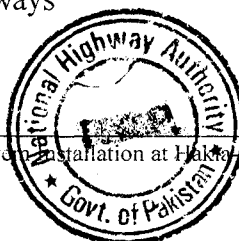
Overall responsibility for the organization, conduct and delivery of ITS services and reporting to NHA.

- Ensure that the equipment is installed according to the design.
- Reporting on daily basis to Project Manager and Client.
- Supervising the installation and direct the contractor that installation is in line with the design and best practices.
- Performs complex engineering tasks and particularly important engineering work efficiently and accurately.

#### 12. Title: Civil Works Supervisors

##### Experience:

Minimum 10 years' preferably 15 years' relevant professional experience of which 5 years minimum and 8 years' desirable experience as Civil works supervisors on construction projects of National Highways/ Expressways/ Motorways



*[Handwritten signature]*

**Qualification:**

Minimum DAE (Civil Engineering) preferably B.Sc. (Civil Engineering) from a recognized University.

**Responsibilities:**

- Supervising the Civil Works of ITS
- Ensuring that all the Poles are erected according to the safety conditions
- Direct contractor to perform Safety tests for poles of ITS equipment.
- Ensuring that pavement is not damaged during installation
- Provide details about existing structures, damages and assessment;
- Assist and recommend approval of Contractor's work program, method statements, material sources, etc.;
- Oversee and supervise construction of Works in accordance with details provided in the construction drawings ensuring strict adherence to construction specifications;
- Ensure preparation of detailed and quantitative progress reports to support the Contractor's requests for progress payments;
- Keep the Employer informed of technical issues and progress of all Works both by informal and formal meetings and correspondence and assist in any project issue which the Employer may require;
- Ensure implementation of environment and social safeguards requirements;
- Assist the Employer in preparing responses to audit objections and queries of the financiers or other Government Authorities;
- Coordinate with all concerned Employer's organizations on project issues;
- At the end of the construction activities, guide and ensure that the team prepares a comprehensive Construction Completion Report inclusive of "as-built drawings" as appropriate;
- Certifying work volume and recommending interim certificates for progress payments, maintaining consolidated project accounts, and preparation of financial statements, ensuring minimum disruption/damage to the environment by approval of Contractors' work statement/ methodology;
- Monitoring the impact of construction Works on the environment and local settlements and providing information to the Consultants and NHA on the monthly progress reports;
- Preparing and issuing reports as defined subsequently;
- Approving and/or issuing working drawings, approving the setting out of the Works, and instructing the Contractor;
- Taking measurements and keep measurement records;
- Certifying work volume and recommending interim certificates for progress payments;
- Maintaining consolidated project accounts, and preparing of financial statements;
- Certifying completion of part or all the Works;





- Inspecting the Works at appropriate intervals during the defects notification period and issuing the defects notification certificate.

### 5. Staffing Requirements

Team Required for	Sr. No.	Key/ Non-Key Staff	Position	Nos.	Months	Total Man Months
1. Design Phase	1.1	Key Staff	Project Manager*	1	3	3
	1.2		ITS Applications Expert*	1	3	3
	1.3		Design Manager	1	3	3
	1.4		Power Works/ Sensors Expert	1	3	3
	1.5		IT/ Communication Systems Expert	1	3	3
	1.6		Transportation Engineer	1	3	3
	1.7	Non-Key Staff	Civil Works Expert/ Utilities Expert	1	1.5	1.5
	1.8		Architecture Engineer	1	1	1
			<b>Sub Total (1)</b>	<b>8</b>		<b>20.5</b>
2. Procurement Phase	2.1	Key Staff	Procurement Coordinator	1	4	4
	2.2		ITS Applications Expert*	1	2	2 Intermittent
			<b>Sub Total (2)</b>	<b>2</b>		<b>6</b>
3. Supervision phase	3.1	Key Staff	Project Manager*	1	3	3 Intermittent
	3.2		ITS Applications Expert*	1	3	3 Intermittent
	3.3	Non-Key Staff	Field Team Lead	6	6	36
	3.4		ITS Implementation Supervisors	6	6	36
	3.5		Civil Works Supervisors	4	6	24
		<b>Sub Total (3)</b>	<b>18</b>		<b>102</b>	
4. Support Staff	4.1	Non-Key Staff	CAD Operator	2	3	6
	4.2		Computer Operator	2	12	24
	4.3		Helper/ Office Boy	3	8	24
	4.4		Drivers	3	12	36
			<b>Sub Total (4)</b>	<b>10</b>		<b>90</b>
<b>Total (1 to 4)</b>				<b>38</b>		<b>218.5</b>
<b>Total Key Staff</b>				<b>10</b>		<b>30</b>
<b>Total Non-Key Staff</b>				<b>28</b>		<b>188.5</b>

\* Having five (05) years International experience



## 6. Mode of Payment

Sr./ TOR	Description	% age
3.1	Inception Report	10%
3.2	Functional and Operational Framework of New ITS System	5%
3.3.1	Development of Design	5%
3.3.2	Specifications of ITS Solution Components	5%
3.4	ITS Infrastructure Planning and Design	10%
3.5.1	Procurement Strategy and RFP(s) Preparation	5%
3.5.2	Bidding Assistance	5%
3.5.3	Implementation Phasing Plan	5%
3.6	Contract Administration & Construction Supervision and Daily progress reporting	40% (will be paid in 6 equal monthly installments)
3.7	Review/modification of Acceptance testing procedures proposed by vendor (PAT & FAT)	10%
<b>Total</b>		<b>100%</b>

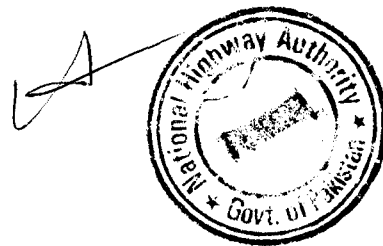
The client will make the payments to the consultant in line with the above deliverables. Payments will be made upon acceptance of deliverable by the client as a completed task. The payment shall be made as per following:

- a) Ten percent (10%) of the Contract Price shall be paid on submission of the Inception Report and against the submission of Advance Bank Guarantee for an amount equal to 10% of the contract price;
- b) Total contractual worth of the activities mentioned in above table starting from S.No.3.2 to S.No.3.5.3 shall be forty percent (40%). Upon completion of each activity and acceptance of report by client, percentage as mentioned above of the total contract value will be paid to the consultant.
- c) Total contractual worth of field implementation and construction supervision activities will be forty percent (40%) of the total contract value. This amount will be paid to consultant in 6 equal monthly installments.
- d) Ten percent (10%) of the Contract price shall be paid after review/modification of acceptance testing procedures proposed by vendor (PAT & FAT).



**APPENDIX B**  
**(List of Supporting Documents)**

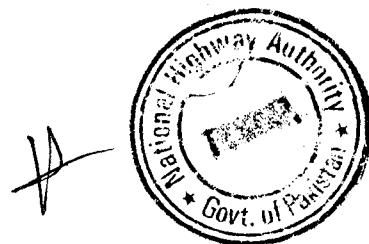
S. No	Description	Page No
1.	Valid Registration Certificate of Pakistan Engineering Council with relevant Project Profile Codes. Foreign consulting firms shall make JV in accordance with Byelaw 6(2) and Byelaw 9 of the Pakistan Engineering Council (Conduct and Practice of Consulting Engineers) Bye-Laws 1986.	
2.	Lists of facilities available with the Consultant to perform their functions effectively (software, hardware, etc.). In case of JV, the same will be provided by the lead firm only.	
3.	Client's satisfaction certificates (Performance Reports) for the last three relevant assignments from the respective Clients.	
4.	Affidavit on stamp paper duly attested by the Oath Commissioner to the effect that the firm has neither been blacklisted nor any contract rescinded in the past for non-fulfillment of contractual obligations	
5.	Firm affidavit for availability of personnel.	
6.	Letter of Intention on lead firm's letter head along with original letter of intention of all JV members.	
7.	Power of attorney or authorization letter of authorized person of the lead firm.	
8.	Declaration of inclusion of new/ less experienced firm(s) in joint venture by sharing at least 20% of Assignment with them for promoting the consultancy industry in the country.	
9.	Audit Reports of the firm (s) for last three years duly certified by Chartered Accountant (To be attached with Financial Proposal).	
10.	Any other document.	



## APPENDIX C

### PERSON-MONTHS AND ACTIVITY SCHEDULE

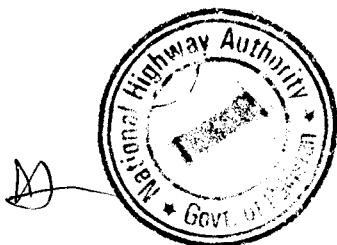
[To estimate Consultant's inputs and costs for the Assignment, person-month and activity schedules are to be provided as per enclosed format (Forms A-7 and A-8). These two schedules should correlate.]



**APPENDIX D****CLIENT'S  
REQUIREMENTS  
FROM THE  
CONSULTANTS**

- [1 Selecting a Consulting Firm is one of the most important decisions a Client makes. The specific criteria for consideration are technical competence, managerial ability, professional integrity and fairness of fee structure. The Client will seek information on all these aspects by:
- a. Obtaining comprehensive written information from the consultants in the form of proposals (against the RFPs) which should be complete in all respects by providing all details as correctly known as possible. It has been experienced that some consultants try to hide their deficiencies viz-a-viz the requirements of TOR by making unclear and vague statements. It will be policy of evaluators that vague statements and lack of clarity in proposals on specific issues may be made the reason to downgrade the rating.
  - b. Talking to the senior personnel of the consultants.
  - c. Consulting other clients of the consultants.
  - d. Viewing the projects the consultants have accomplished and visiting/ interviewing the users of the projects.
  - e. Visiting the office premises of the consultants and examining systems and method of working as well as, personnel, hardware and software abilities available therein. Seeking information or visits to the sites for backup support and holding meetings with client's representatives.
2. The approach and methodology proposed including work plan, activity and man-month schedule should be meaningful and fully coordinated to judge the understanding of the proposed Assignment by the competing consultants.

**Note:** For Items 1 (b) to 1 (e), inspections can be held any time prior to or after award of the Assignment to the Consultant. If the situation is not found compatible with what is presented during procurement of Consultant or as per Contract, the Consultant will be liable for a suitable punitive action.]



Say No to Corruption

Personnel, Equipment, Facilities and Other  
Services to be Provided by the Client

## APPENDIX E

**PERSONNEL, EQUIPMENT,  
FACILITIES AND OTHER  
SERVICES TO BE  
PROVIDED BY THE CLIENT**

As per TOR



A handwritten signature or set of initials, possibly "R", written in dark ink.

## APPENDIX-F

### **COPY OF MODEL AGREEMENT (To be finalized during Negotiations)**



*[Handwritten signature]*

**Contract for Engineering Consultancy Services  
(Time Based)**

Between

\_\_\_\_\_  
(NAME OF CLIENT)

**SAMPLE**

And

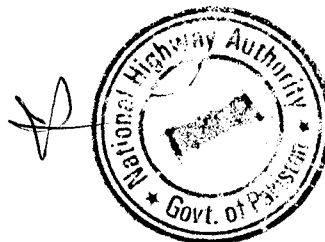
(NAME OF THE CONSULTANTS)

For

\_\_\_\_\_  
(BRIEF SCOPE OF SERVICES)

OF \_\_\_\_\_ (NAME OF PROJECT)

\_\_\_\_\_  
Month and Year





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  - 5.1.1 Assistance
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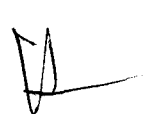
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- Appendix F- Services and Facilities to be Provided by the Client and Counterpart Personnel to be Made Available to the Consultants by the Client.
- Appendix G- Integrity Pact

**V. ALTERNATE TITLE PAGE IN CASE OF JV**  
**ALTERNATE FORM OF CONTRACT IN CASE OF JV**



*[Handwritten signature]*

**FORM OF CONTRACT**

- [Notes: 1. Use this Form of Contract when the Consultants perform Services as Sole Consultants.
2. In case the Consultants perform Services as a Member of the joint venture, use the Form included at the end.
3. All notes should be deleted in the final text.]

This CONTRACT (hereinafter called the "Contract") is made on the \_\_\_\_ day of \_\_\_\_ (month) of \_\_\_\_ (year), between, on the one hand,

(hereinafter called the "Client" which expression shall include the successors, legal representatives and permitted assigns) and, on the other hand,

(hereinafter called the "Consultants" which expression shall include the successors, legal representatives and permitted assigns).

**WHEREAS**

- (a) the Client has requested the Consultants to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services"); and
- (b) the Consultants, having represented to the Client that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the Parties hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:
- (a) the General Conditions of Contract;
- (b) the Special Conditions of Contract;
- (c) the following Appendices:

*[Note: If any of these Appendices are not used, the words "Not Used" should be inserted below/next to the title of the Appendix and on the sheet attached hereto carrying the title of that Appendix.]*



- Appendix A: Description of Services
- Appendix B: Reporting Requirements
- Appendix C: Key Personnel and Sub-consultants
- Appendix D: Breakdown of Contract Price in Foreign Currency
- Appendix E: Breakdown of Contract Price in Local Currency

Appendix F: Services & Facilities to be Provided by the Client and Counterpart Personnel to be Made Available to the Consultants by the Client.

Appendix G: Integrity Pact (for Services above Rs. 10 million)

2. The mutual rights and obligations of the Client and the Consultants shall be as set forth in the Contract, in particular:

(a) the Consultants shall carry out the Services in accordance with the provisions of the Contract; and

(b) the Client shall make payments to the Consultants in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names in two identical counterparts, each of which shall be deemed as the original, as of the day, month and year first above written.

For and on behalf of

\_\_\_\_\_

Witness

(CLIENT)

Signatures \_\_\_\_\_

Signatures \_\_\_\_\_

Name \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

(Seal)

For and on behalf of

(CONSULTANTS)

Witness

Signatures \_\_\_\_\_

Signatures \_\_\_\_\_

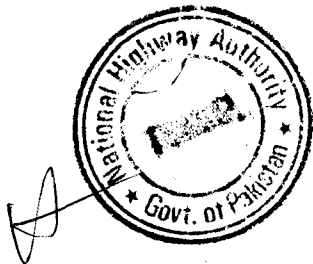
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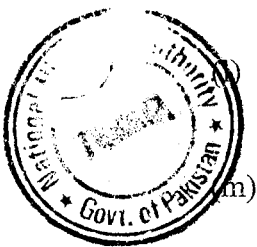
## II. GENERAL CONDITIONS OF CONTRACT

### 1. GENERAL PROVISIONS

#### 1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in the Islamic Republic of Pakistan, as those may be issued and in force from time to time;
  - (b) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
  - (c) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;
  - (d) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Sub-Clause 2.1;
  - (e) "GC" means these General Conditions of Contract;
  - (f) "Government" means the Government of the Islamic Republic of Pakistan;
  - (g) "Foreign Currency" means currency other than the currency of Islamic Republic of Pakistan;
  - (h) "Local Currency" means the currency of the Islamic Republic of Pakistan;
  - (i) "Member" in case the Consultants consist of a joint venture of more than one entity, means any of the entities, and "Members" means all of these entities;
  - (j) "Party" means the Client or the Consultants, as the case may be, and "Parties" means both of them;
  - (k) "Personnel" means persons hired by the Consultants or by any Sub-consultant as employees and assigned to the performance of the Services or any part thereof;
- "SC" means the Special Conditions of Contract by which the GC are amended or supplemented;
- "Services" means the work to be performed by the Consultants pursuant to this Contract, as described in Appendix A;



- (n) "Sub-consultant" means any entity to which the Consultants subcontract any part of the Services in accordance with the provisions of Sub-Clause 3.6;
- (o) "Third Party" means any person or entity other than the Client, the Consultants or a Sub-consultant; and
- (p) "Project" means the work specified in SC for which engineering consultancy services are desired.

## 1.2 Law Governing the Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

## 1.3 Language

This Contract has been executed in the English language which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All the reports and communications shall be in the English language.

## 1.4 Notices

Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an Authorised Representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, or facsimile to such Party at the address of the Authorised Representative specified under Sub-Clause SC 1.6. A Party may change its address for notice hereunder by giving the other Party notice of such change.

## 1.5 Location

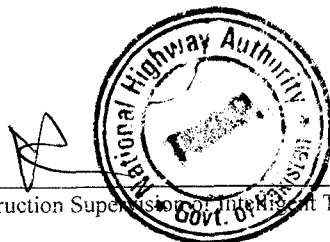
The Services shall be performed at such locations as are specified in Appendix A and, where the location of a particular task is not so specified, at such locations as mutually agreed by the Parties.

## 1.6 Authorised Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Client or the Consultants shall be taken or executed by the Authorised Representatives specified in the SC.

## 1.7 Taxes

Unless specified in the SC, the Consultants, Sub-consultants, and their Personnel shall pay such taxes, fees, and other impositions as may be levied under the Applicable Law.



**1.8 Leader of Joint Venture**

In case the Consultants consist of a joint venture of more than one entity, the Consultants shall be jointly and severally bound to the Client for fulfillment of the terms of the Contract and designate the Member named in SC, to act as leader of the Joint Venture, for the purpose of receiving instructions from the Client.

**1.9 Relation between the Parties**

Nothing contained herein shall be construed as establishing a relation of master and servant or of principal and agent as between the Client and the Consultants. The Consultants, subject to this Contract, have complete charge of Personnel and Sub-consultants, if any, performing the Services and shall be fully responsible for the Services performed by them or on their behalf hereunder.

**1.10 Headings**

The headings shall not limit, alter or affect the meaning of this Contract.

**2. COMMENCEMENT, COMPLETION, MODIFICATION,  
AND TERMINATION OF CONTRACT****2.1 Effectiveness of Contract**

This Contract shall come into force and effect on the date (the "Effective Date") of the Client's notice to the Consultants instructing the Consultants to begin carrying out the Services. This notice shall confirm that the effectiveness conditions, if any, listed in the SC have been met.

**2.2 Termination of Contract for Failure to Become Effective**

If this Contract has not become effective within such time period after the date of the Contract signed by the Parties as shall be specified in the SC, either Party may, by not less than twenty eight (28) days written notice to the other Party, declare this Contract to be null and void, and in the event of such a declaration by either Party, neither Party shall have any claim against the other Party except for the work (if any) already done or costs already incurred by a Party at the request of the other Party.

**2.3 Commencement of Services**

The Consultants shall begin carrying out the Services at the end of such time period after the Effective Date as shall be specified in the SC.

**2.4 Expiration of Contract**

Unless terminated earlier pursuant to Sub-Clause 2.9, this Contract shall expire when, pursuant to the provisions hereof, the Services have been completed and the payments





of remunerations including the direct costs if any, have been made. The Services shall be completed within a period as is specified in the SC, or such extended time as may be allowed under Sub-Clause 2.6.

The term "Completion of Services" is as specified in the SC.

## 2.5 Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made in writing, which shall be mutually agreed and signed by both the Parties.

## 2.6 Extension of Time for Completion

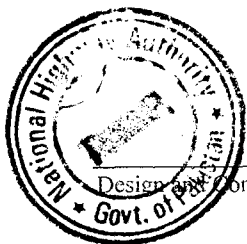
If the scope or duration of the Services is increased:

- (a) the Consultants shall inform the Client of the circumstances and probable effects;
- (b) the increase shall be regarded as Additional Services; and
- (c) the Client shall extend the time for Completion of the Services accordingly.

## 2.7 Force Majeure

### 2.7.1 Definition

- (a) For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial actions (except where such strikes, lockouts or other industrial actions are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.
- (b) Force Majeure shall not include (i) any event which is caused by the negligence or intentional action of a Party or such Party's Sub-consultants or agents or employees, nor (ii) any event which a diligent Party could reasonably have been expected to both (A) take into account at the time of the conclusion of this Contract and (B) avoid or overcome in the carrying out of its obligations hereunder.
- (c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder.



### 2.7.2 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the Contract shall not be considered to be a breach of, or default under this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event; (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract; and (b) has informed the other Party in writing not later than fifteen (15) days following the occurrence of such an event.

### 2.7.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

### 2.7.4 Payments

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultants shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purpose of the Services and in reactivating the Services after the end of such period.

## 2.8 Suspension of Payments by the Client

The Client may, by written notice of suspension to the Consultants, suspend all payments to the Consultants hereunder if the Consultants fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultants to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultants of such notice of suspension.

## 2.9 Termination

### 2.9.1 By the Client

The Client may terminate this Contract, by not less than thirty (30) days written notice of termination to the Consultants, to be given after the occurrence of any of the events specified in paragraphs (a) through (e) of this Sub-Clause 2.9.1 and sixty (60) days in the case of the event referred to in paragraph(f):

- (a) if the Consultants do not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the Client may have subsequently approved in writing;
- (b) if the Consultants become (or, if the Consultants consist of more than one entity, if any of their Members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any



law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;

- (c) if the Consultants fail to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 8 hereof;
- (d) if the Consultants submit to the Client a statement which has a material effect on the rights, obligations or interests of the Client and which the Consultants know to be false;
- (e) if, as the result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (f) if the Client, in its sole discretion, decides to terminate this Contract.

### 2.9.2 By the Consultants

The Consultants may terminate this Contract, by not less than thirty (30) days written notice to the Client, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Sub-Clause 2.9.2:

- (a) if the Client fails to pay any monies due to the Consultants pursuant to this Contract and not subject to dispute pursuant to Clause 8 within forty-five (45) days after receiving written notice from the Consultants that such payment is overdue;
- (b) if the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultants may have subsequently approved in writing) following the receipt by the Client of the Consultants' notice specifying such breach;
- (c) if, as a result of Force Majeure, the Consultants are unable to perform a material portion of the Services for a period of not less than sixty (60) days;
- (d) if the Client fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause 8 hereof.

### 2.9.3 Cessation of Services

Upon receipt of notice of termination under Sub-Clause 2.9.1, or giving of notice of termination under Sub-Clause 2.9.2, the Consultants shall take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultants, and equipment and materials furnished by the Client, the Consultants shall proceed as provided, respectively, by Sub-Clauses 3.8 or 3.9.



#### 2.9.4 Payment upon Termination

Upon termination of this Contract pursuant to Sub-Clauses 2.9.1 or 2.9.2, the Client shall make the following payments to the Consultants:

- (a) remuneration and reimbursable direct costs expenditure pursuant to Clause 6 for Services satisfactorily performed prior to the effective date of termination. Effective date of termination for purposes of this Sub-Clause means the date when the prescribed notice period would expire;
- (b) except in the case of termination pursuant to paragraphs (a) through (d) of Sub-Clause 2.9.1, reimbursement of any reasonable cost incidental to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel, according to Consultants Traveling Allowance Rules.

#### 2.9.5 Disputes about Events of Termination

If either Party disputes whether an event specified in paragraphs (a) through (e) of Sub-Clause 2.9.1 or in paragraphs (a) through (d) of Sub-Clause 2.9.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to Clause 8 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

### 3. OBLIGATIONS OF THE CONSULTANTS

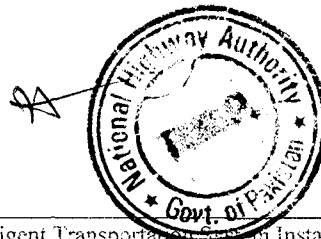
#### 3.1 General

##### 3.1.1 Standard of Performance

The Consultants shall perform the Services and carry out their obligations with all due diligence, efficiency, and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultants shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Client, and shall at all times support and safeguard the Client's legitimate interests in any dealings with Sub-consultants or third parties.

##### 3.1.2 Law Governing Services

The Consultants shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub-consultants, as well as the Personnel of the Consultants and any Sub-consultants, comply with the Applicable Law.



### 3.2 Consultants Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Consultants pursuant to Clause 6 shall constitute the Consultants' sole remuneration in connection with this Contract or the Services, and the Consultants shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultants shall use their best efforts to ensure that the Personnel, any Sub consultants, and agents of either of them similarly shall not receive any such additional remuneration.

### 3.3 Confidentiality

The Consultants, their Sub-consultants, and the Personnel of either of them shall not, either during the term or after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract, or the Client's business or operations without the prior written consent of the Client.

### 3.4 Liability of the Consultants

The Consultants are liable for the consequence of errors and omissions on their part or on the part of their employees in so far as the design of the Project is concerned to the extent and with the limitations as mentioned herein below.

If the Client suffers any losses or damages as a result of proven faults, errors or omissions in the design of a project, the Consultants shall make good such losses or damages, subject to the conditions that the maximum liability as aforesaid shall not exceed twice the total remuneration of the Consultants for design phase in accordance with the terms of the Contract.

The liability of the Consultants expires after one (1) year from the stipulated date of completion of construction or after three (3) years from the date of final completion of the design whichever is earlier.

The Consultants may, to protect themselves, insure themselves against their liabilities but this is not obligatory. The extent of the insurance shall be up to the limit specified in second para above. The Consultants shall procure the necessary cover before commencing the Services and the cost of procuring such cover shall be borne by the Consultants up to a limit of one percent of the total remuneration of the Consultants for the design phase for every year of keeping such cover effective.

The Consultants shall, at the request of the Client, indemnify the Client against any or all risks arising out of the furnishing of professional services by the Consultants to the Client, not covered by the provisions contained in the first para above and exceeding the limits set forth in second para above provided the actual cost of procuring such indemnity as well as costs exceeding the limits set forth in fourth para above shall be borne by the Client.



**3.5 Other Insurances to be Taken out by the Consultants**

In addition to the insurance stated in Sub-Clause 3.4 above, the Consultants shall take out and maintain the various insurances as are specified in the SC, at the cost and expense of the Client.

**3.6 Consultants' Actions Requiring Client's Prior Approval**

The Consultants shall obtain the Client's prior approval in writing before taking any of the following actions:

- (a) appointing such Personnel as are listed in Appendix-C merely by title but not by name;
- (b) entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of Sub-consultants and the terms and conditions of the subcontract shall have been approved in writing by the Client prior to the execution of the subcontract, and (ii) that the Consultants shall remain fully liable for the performance of the Services by the Sub-consultants and its Personnel pursuant to this Contract;
- (c) any other action that may be specified in the SC.

**3.7 Reporting Obligations**

The Consultants shall submit to the Client the reports and documents specified in Appendix B in the form, in the numbers, and within the periods set forth in the said Appendix.

**3.8 Documents Prepared by the Consultants to be the Property of the Client**

All plans, drawings, specifications, reports, and other documents and software prepared by the Consultants in accordance with Sub-Clause 3.7 shall become and remain the property of the Client, and the Consultants shall, not later than upon termination or expiration of this Contract, deliver (if not already delivered) all such documents and software to the Client, together with a detailed inventory thereof. The Consultants may retain a copy of such documents and software.

Restriction(s) about the future use of these documents, is specified in the SC.

**3.9 Equipment and Materials Furnished by the Client**

Equipment and materials made available to the Consultants by the Client, or purchased by the Consultants with funds provided by the Client, shall be the property of the Client and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultants shall make available to the Client an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Client's instructions or afford salvage value of the same. While



in possession of such equipment and materials, the Consultants, unless otherwise instructed by the Client in writing, shall insure them at the expense of the Client in an amount equal to their full replacement value.

### **3.10 Accounting, Inspection and Auditing**

The Consultants (i) shall keep accurate and systematic accounts and records in respect of the Services hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time charges, and cost, and the basis thereof, and (ii) shall permit the Client or its designated representatives periodically, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Client.

## **4. CONSULTANTS' PERSONNEL AND SUB-CONSULTANTS**

### **4.1 General**

The Consultants shall employ and provide such qualified and experienced Personnel and Sub-consultants as are required to carry out the Services.

### **4.2 Description of Personnel**

- (a) The title, activities of job description and estimated period of engagement in the carrying out of the Services of each of the Consultants' Personnel are described in Appendix C.
- (b) Adjustment with respect to the estimated periods of engagement of various salary grades of the Personnel set forth in Appendix C may be made by the Consultants in accordance with the actual requirements of the Contract to ensure efficient performance of the Services, provided that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Sub-Clause 6.1(a) of this Contract.

### **4.3 Approval of Personnel**

The Key Personnel and Sub-consultants listed by title as well as by name in Appendix C are deemed to be approved by the Client. In respect of other Key Personnel which the Consultants propose to use in carrying out of the Services, the Consultants shall submit to the Client for review and approval a copy of their biographical data. If the Client does not object in writing (stating the reasons for the objection) within fourteen (14) calendar days from the date of receipt of such biographical data, such Key Personnel shall be deemed to have been approved by the Client.



#### 4.4 Working Hours, Leave, Overtime, etc.

Working Hours for Key Personnel are set forth in Appendix-C hereto.

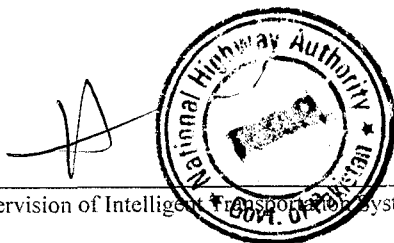
Except for the staff covered under reimbursable direct costs expenditure, the Consultants' remuneration given in Appendix D and Appendix E shall be deemed to cover paid casual leave, sick leave and earned leave. The Client will reimburse overtime payments to eligible Personnel provided by the Consultants, in respect of support staff and work charged staff. Any taking of leave by Personnel shall be subject to the prior approval by the Consultants who shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services. Such leave taking of the Authorized Representative of the Consultants at site, if any, shall be preceded by the Client informed in writing.

#### 4.5 Removal and/or Replacement of Personnel

- (a) Except as the Client may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes necessary to replace any of the Key Personnel, the Consultants shall provide as a replacement a person of equivalent or better qualifications.
- (b) If the Client;(i)finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action; or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultants shall, at the Client's written request specifying the grounds therefore, provide as a replacement a person with qualifications and experience acceptable to the Client.
- (c) Any of the Personnel provided as a replacement under Sub-Clauses (a) and (b) above, the rate of remuneration applicable to such person as well as any reimbursable expenditures (including expenditures due to the number of eligible dependents) the Consultants may wish to claim as a result of such replacement, shall be subject to the prior written approval by the Client. Except as the Client may otherwise agree, (i) the Consultants shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and (ii) the remuneration to be paid for any of the Personnel provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced.

#### 4.6 Resident Engineer

If required by the SC, the Consultants shall ensure that at all times during the Consultants' performance of the Services, a Resident Engineer acceptable to the Client, shall take charge of the performance of such Services





**5. OBLIGATIONS OF THE CLIENT****5.1 Assistance, Coordination and Approvals****5.1.1 Assistance**

The Client shall use its best efforts to ensure that the Client shall:

- (a) provide at no cost to the Consultants, Sub-consultants and Personnel such documents prepared by the Client or other consulting engineers appointed by the Client as shall be necessary to enable the Consultants, Sub-consultants or Personnel to perform the Services. The documents and the time within which such documents shall be made available, are as specified in the SC;
- (b) assist to obtain the existing data relevant to the carrying out of the Services, with various Government and other organizations. Such items shall be returned by the Consultants upon completion of the Services under this Contact;
- (c) issue to officials, agents and representatives of the concerned organizations, all such instructions as may be necessary or appropriate for prompt and effective implementation of the Services;
- (d) provide to the Consultants, Sub-consultants, and Personnel any such other assistance and exemptions as may be specified in the SC;
- (e) assist to obtain permits which may be required for right-of-way, entry upon the lands and properties for the purposes of this Contract.

**5.1.2 Co-ordination**

The Client shall:

- (a) coordinate and get or expedite any necessary approval and clearances relating to the work from any Government or Semi-Government Agency, Department or Authority, and other concerned organization named in the SC.
- (b) coordinate with any other consultants employed by him.

**5.1.3 Approvals**

The Client shall accord approval of the documents within such time as specified in the SC, whenever these are applied for by the Consultants.

**5.2 Access to Land**

The Client warrants that the Consultants shall have, free of charge, unimpeded access to all land of which access is required for the performance of the Services.



### 5.3 Change in the Applicable Law

If, after the date of this Contract, there is any change in the Applicable Law which increases or decreases the cost of the Services rendered by the Consultants, then the remunerations and direct costs otherwise payable to the Consultants under this Contract shall be increased or decreased accordingly, and corresponding adjustment shall be made to the amounts referred to in Sub-Clause 6.1 (a). Rate in the Appendix-E shall be revised in case of revision in salary made in an organization due to statutory Notification. Such revised rate(s) shall be applicable from the respective date(s) of implementation of such Notification by the concerned organizations for which necessary proof shall be provided to the Client.

### 5.4 Services and Facilities

The Client shall make available to the Consultants, Sub-consultants and the Personnel, for the purpose of the Services and free of any charge, the services, facilities and property described in Appendix F at the times and in the manner specified in said Appendix F, provided that if such services, facilities and property shall not be made available to the Consultants as and when so specified, the Parties shall agree on; (i) any time extension that it may be appropriate to grant to the Consultants for the performance of the Services; (ii) the manner in which the Consultants shall procure any such services, facilities and property from other sources; and (iii) the additional payments, if any, to be made to the Consultants as a result thereof pursuant to Sub-Clause 6.1(b) hereinafter.

### 5.5 Payments

In consideration of the Services performed by the Consultants under this Contract, the Client shall make to the Consultants such payments and in such manner as is provided by Clause 6 of this Contract.

### 5.6 Counterpart Personnel

- (a) If so provided in Appendix-F hereto, the Client shall make available to the Consultants, as and when provided in such Appendix-F, and free of charge, such counterpart personnel to be selected by the Client, with the Consultants' advice, as shall be specified in such Appendix-F. Counterpart personnel shall work under the exclusive direction of the Consultants. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Consultants which is consistent with the position occupied by such member, the Consultants may request the replacement of such member, and the Client shall not unreasonably refuse to act upon such request.
- (b) If counterpart personnel are not provided by the Client to the Consultants as and when specified in Appendix-F, the Client and the Consultants shall agree on; (i) how the affected part of the Services shall be carried out; and (ii) the additional payments, if any, to be made by the Client to the Consultants as a result thereof pursuant to Sub-Clause 6.1(c) hereof.



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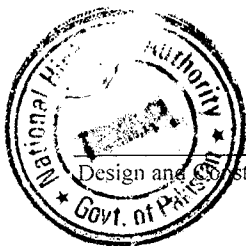
## 6. PAYMENTS TO THE CONSULTANTS

### 6.1 Cost Estimates, Ceiling Amount

- (a) An estimate of the cost of Services payable in foreign and local currencies is set forth in Appendices D and E respectively. Except as may be otherwise agreed under Sub-Clause 2.5 and subject to Sub-Clause 6.1 (b), payments under this Contract shall not exceed the ceilings in foreign currency in Appendix D and in local currency in Appendix E, excluding adjustments made under Sub-Clause 6.2(a) of the SC. The Consultants shall notify the Client as soon as cumulative charges incurred for the Services have reached 80% of either of these ceilings.
- (b) Notwithstanding Sub-Clause 6.1(a) hereof, if pursuant to any of the Sub-Clauses 5.3, 5.4 or 6.6 hereof, the Parties shall agree that additional payments in local and/or foreign currency, as the case may be, shall be made to the Consultants in order to cover any necessary additional expenditures relating to remuneration not envisaged in the cost estimates referred to in Sub-Clause 6.1(a) above, and the ceiling or ceilings, as the case may be, set forth in Sub-Clause 6.1(a) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.
- (c) Notwithstanding Sub-Clause 6.1(b) hereof, if pursuant to any of the Sub-Clauses 5.3, 5.4 or 5.6 hereof, the Parties shall agree that additional payments in local and/or foreign currency, as the case may be, shall be made to the Consultants in order to cover any necessary additional expenditures relating to reimbursable direct cost not envisaged in the cost estimates referred to in Sub-Clause 6.1(a) above, the ceiling or ceilings, as the case may be, set forth in Sub-Clause 6.1(b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.

### 6.2 Remuneration and Reimbursable Direct Costs (Non-salary Costs)

- (a) Subject to the ceilings specified in Sub-Clause 6.1(a) hereof, the Client shall pay to the Consultants; (i) remuneration as set forth in Sub-Clause 6.2(b); and (ii) reimbursable direct costs expenditure as set forth in Sub-Clause 6.2(c). Remuneration shall be subject to price adjustment as specified in the SC.
- (b) Remuneration for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services after the date determined in accordance with Sub-Clause SC 2.3 (including time for necessary travel via the most direct route) at the rates referred to, and subject to such additional provisions as are set forth in the SC.
- (c) Reimbursable direct costs (non-salary costs) actually and reasonably incurred by the Consultants in the performance of the Services. The reimbursable direct costs expenditure shall be for the items specified in the SC.



### 6.3 Currency of Payment

- (a) Foreign currency payment shall be made in the currency or currencies specified as foreign currency or currencies in Appendix D, and local currency payment shall be made in Pakistani Rupees.
- (b) The SC shall specify which items of remuneration and reimbursable expenditures shall be paid, respectively, in foreign and in local currency.

### 6.4 Mode of Billing and Payment

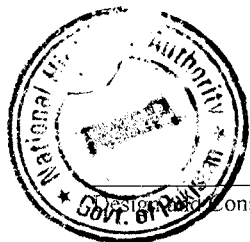
Billing and payments in respect of the Services shall be made as follows:

- (a) To cover payments due under Sub-Clauses 6.1 and 6.2 of this Contract, the Client shall establish a revolving fund in foreign currency and local currency accounts, each account to be separately and distinctly maintained by the Consultants, and shall deposit into the said accounts, amounts in the currencies specified above as follows:
  - (i) Not later than thirty(30) days following the signing of Contract by both the Parties amounts estimated to be the requirements in the respective currencies for the three (3) months of the Services immediately following the signing of Contract calculated on the basis of the applicable estimates set forth in Appendices D and E.
  - (ii) Not later than the 15th day of each succeeding month, the amount equal to the preceding monthly estimate in accordance with Appendices D and E shall be recouped by the Client in the revolving fund against foreign currency and local currency amounts.

Any bank interest accruing in a revolving fund shall be credited by the Consultants to the Client.

- (b) As soon as practicable and preferably within thirty (30) days after the end of each calendar month during the period of the Services, the Consultants shall submit to the Client, in duplicate, itemized statements, accompanied by copies of receipted invoices, vouchers and other appropriate supporting materials, of the amounts payable pursuant to Sub-Clauses 6.3 and 6.4 for such month. Separate monthly statements shall be submitted in respect of amounts payable in foreign currency and in local currency. Monthly statement shall distinguish that portion of the total eligible costs which pertains to remuneration from that portion which pertains to reimbursable direct costs expenditure.

In case of a joint venture, separate monthly statements shall be submitted in respect of amounts payable to each Member of the joint venture of the Consultants.



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- (c) The Client shall cause the payment of the Consultants' monthly statements within twenty-eight (28) days for amounts in local currency and within fifty six (56) days for amounts in foreign currency after the receipt by the Client of such statements with supporting documents. Only such portion of a monthly statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Consultants, the Client, after seeking clarification from the Consultants, may add or subtract the difference from any subsequent payments.
- (d) The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Consultants and approved as satisfactory by the Client. The Services shall be deemed completed and finally accepted by the Client and the final report and final statement shall be deemed approved by the Client as satisfactory ninety (90) calendar days after receipt of the final report and final statement by the Client unless the Client, within such ninety (90) days period, gives written notice to the Consultants specifying in detail deficiencies in the Services, the final report or final statement. The Consultants shall thereupon promptly make any necessary corrections, and upon completion of such corrections, the foregoing process shall be repeated. Any amount which the Client has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract shall be reimbursed by the Consultants to the Client within thirty (30) days after receipt by the Consultants of notice thereof. Any such claim by the Client for reimbursement must be made within fifty six (56) days after receipt by the Client of a final report and a final statement approved by the Client in accordance with the above. The Client shall cause the final payment to the Consultants within fifty six (56) days of receipt of final invoice from the Consultants, after completion of Services finally accepted along with the final report and statement of the Consultants by the Client.
- (e) All payments under this Contract shall be made to the bank account of the Consultants to be notified later.

### 6.5 Delayed Payments

If the Client has delayed payments beyond the period stated in paragraph (c) of Sub-Clause 6.4, interest charges shall be paid to the Consultants for each day of delay at the rate specified in the SC.

### 6.6 Additional Services

Additional Services means:

- (a) Services as approved by the Client outside the Scope of Services described in Appendix A;



- (b) Services to be performed during the period extended pursuant to Sub-Clause 2.6, beyond the original schedule time for completion of the Services; and
- (c) any re-doing of any part of the Services as a result of client's instructions.

If, in the opinion of the Client, it is necessary to perform Additional Services during the currency of the Contract for the purpose of the Project, the Consultants, with the prior written authorization of the Client, shall carry out such Additional Services on the basis of the billing rates set out in the Contract. In case for any reasons these rates and prices are determined by both the Parties to be not applicable for said Additional Services, then suitable billing rates and the additional time, shall be agreed upon between the Client and the Consultants.

#### **6.7 Consultants' Entitlement to Suspend Services**

If the Client fails to make the payment of any of the Consultants' invoice within twenty-eight (28) days after the expiry of the time stated in paragraph (c) of Sub-Clause 6.4, within which payment is to be made, the Consultants may after giving not less than twenty-eight (28) days' prior notice to the Client, suspend the Services or reduce the rate of carrying out the Services, unless and until the Consultants have received the payment.

This action will not prejudice the Consultants' entitlement to financing charges under Sub-Clause 6.5.

### **7. FAIRNESS AND GOOD FAITH**

#### **7.1 Good Faith**

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization to the objectives of this Contract.

#### **7.2 Operation of the Contract**

The Parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Sub-Clause shall give rise to a dispute subject to arbitration in accordance with Clause 8 hereof.



## 8. SETTLEMENT OF DISPUTES

### 8.1 Amicable Settlement

The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

### 8.2 Dispute Settlement

Any dispute between the Parties as to matters arising pursuant to this Contract which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions of the Arbitration Act, 1940 (Act No. X of 1940) and Rules made thereunder and any statutory modifications thereto.

Services under the Contract shall, if reasonably possible, continue during the arbitration proceedings and no payment due to or by the Client shall be withheld on account of such proceedings.

## 9. INTEGRITY PACT

9.1 If the Consultant or any of his Sub-consultants, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Consultant as Appendix-G to this Form of Contract, then the Client shall be entitled to:

- (a) recover from the Consultant an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Consultant or any of his Sub-consultant, agents or servants;
- (b) terminate the Contract; and
- (c) recover from the Consultant any loss or damage to the Client as a result of such termination or of any other corrupt business practices of the Consultant or any of his Sub-consultant, agents or servants.

On termination of the Contract under Sub-Para (b) of this Sub-Clause, the Consultant shall proceed in accordance with Sub-Clause 2.9.3. Payment upon such termination shall be made under Sub-Clause 2.9.4 (a) after having deducted the amounts due to the Client under Sub-Para (a) and (c) of this Sub-Clause.



III. SPECIAL CONDITIONS OF CONTRACT

Clause Amendments of, and Supplements to, Clauses in the General Conditions of
No. Contract
of GC

1.1 Definitions

(p) "Project" means

1.2 Law Governing the Contract

All Personnel shall at all times endeavor to observe and respect all laws, rules, regulations and customs prevailing within the Islamic Republic of Pakistan.

1.6 Authorized Representatives

The Authorized Representatives are the following:

For the Client:

Three horizontal lines for signature/initials.

Telephone : \_\_\_\_\_
Facsimile : \_\_\_\_\_
Email : \_\_\_\_\_

For the Consultants:

\_\_\_\_\_(Name of Project Manager)
\_\_\_\_\_(Project)
\_\_\_\_\_(Address)
\_\_\_\_\_

Telephone : \_\_\_\_\_
Facsimile : \_\_\_\_\_
Email : \_\_\_\_\_

1.7 Taxes

Payment of Taxes will be the responsibility of the Consultants in accordance with Pakistan Tax Laws.



Handwritten signature/initials.

All notes should be deleted in final text. All blanks should be filled in.



**1.8 Leader of Joint Venture**

The leader of the Joint Venture is ..... (name of the Member of the Joint Venture).

[Note: If the Consultants do not consist of more than one entity, the Sub-Clause 1.8 should be deleted.]

**2.1 Effectiveness of Contract**

This Contract shall come into effect after issuance of the Letter of Commencement by the Client.

**2.2 Termination of Contract for Failure to Become Effective**

The time period shall be one hundred twenty (120) days or such other time period as the Parties may agree in writing.

**2.3 Commencement of Services**

The Consultants shall commence the Services within twenty-one (21) days after receipt of Letter of Commencement, or such other time period as the Parties may agree in writing.

**2.4 Expiration of Contract**

The period of completion of Services shall be ----- days from the Commencement Date of the Services or such other period as the Parties may agree in writing. The Services are estimated to be completed before ..... 20 ...

"Completion of Services" means.....  
.....

[Note: In the blank space, the last activity (such as submission of As Built Drawings, Completion Report etc.) which declares the Contract to be completed in all respect, may be stated]

**2.7.4 Payments**

Following text is added at the end of the para:

“excluding overheads and profits”



**3.1.1 Standard of Performance (Final Payment of Construction Works Contract)**

If final bill, pertaining to the Construction Works being supervised by the Consultants, is not processed by the Consultants within stipulated time, the Consultants will not be considered for next project consultancy. It will also be taken as the Consultants’ failure to provide satisfactory performance under Rule 19 of the Public Procurement Rules.

All such costs of Consultants for processing the final payment of the Contractor are deemed included in its Financial Proposal. The Consultants have to ensure that the Contractor has completed total work as per Works Contract with particular reference to site clearance before taking over the project on completion.

### 3.4 Liability of the Consultants

The Consultants shall be held liable for all losses or damages suffered by the Client on account of any misconduct and unsatisfactory performance by the Consultants in performing the Services. The Consultants shall be liable for consequence of errors and omissions on their part and the extent of such liability shall be twice the Remunerations (excluding reimbursable direct/ non-salary costs) under the Contract.

### 3.5 Insurance to be Taken out by the Consultants

The risks and the coverage shall be as follows:

- (a) Third Party motor vehicle liability insurance in respect of motor vehicles which are purchased or used in Pakistan by the Consultants or their Personnel or any Sub-consultants or their Personnel, with a minimum coverage of **Pak. Rupees One Hundred Thousand (Rs.100,000)**.
- (b) Insurance against loss of or damage to equipment purchased in whole or in part with funds provided under this Contract.
- (c) Third Party liability insurance with a minimum coverage of **Pak. Rupees One Million (Rs.1,000,000)**.
- (d) Professional liability insurance, with a minimum coverage of **not less than twice the Remunerations**.

### 3.6 Consultants' Actions Requiring Client's Prior Approval

- (c) The Consultants shall also clear with the Client, before commitments on any action they propose to take under the following:
  - i) Issuing Variation Orders in respect of:
    - additional quantities of items of Construction Works as determined by the Engineer to be necessary for the execution of Works.
    - any new item of the Works not envisaged in the Construction Works Contract Documents and which is determined by the Engineer to be necessary for the execution of Works.
    - any item of Construction Works covered under Provisional Sums.



- ii) Claim from the Contractor for extra payment with full supporting details and Consultants recommendations, if any, for settlement.
- iii) Details of any sub-contracts for Construction Works.
- iv) Any action under terms of Performance Guarantee or Insurance Policy for the Construction Works.
- v) Any action by the Consultants affecting the costs under the following clauses of Conditions of Contract of the Construction Works Contract.
- To Be  
Finalized  
During  
Contract  
Negotiation**
- Adverse Physical Conditions and Artificial Obstructions
  - Suspension of Works
  - Bonus and Incentives/ Penalties
  - Certificate of Completion of Works
  - Defect Liability Certificate
  - Forfeiture
  - Special Risks
  - Force Majeure
  - Any other as per the Conditions of Contract of the Construction Works Contract.
- vi) Final Measurement Statement.
- vii) Release of Retention Money.
- viii) Any change in the ratios of various currencies of payment.

### 3.8 Documents Prepared by the Consultants to be the Property of the Client

The Client and the Consultants shall not use these documents for purposes unrelated to this Contract without the prior written approval of the other Party.

### 4.2 Description of Personnel

The word "Personnel" in this Sub-Clause is construed to include "Specialist Sub-consultant", if any.

### 4.4 Working Hours, Leave, Overtime, etc.

The Client shall not reimburse overtime payments to any Personnel provided by the Consultants. The Financial Proposal submitted by the Consultants is deemed to have covered it under Overhead costs of the firm. However, any such provision, if available in the Works contract of the Contractor will be deemed applicable to the specific Personnel of the Consultants.



*[Handwritten signature]*

4.6 Resident Engineer

[Note: Name and address of the Consultants' Resident Engineer, if applicable will be provided here]

5.1.1 Assistance

(a) The Client shall make available within ..... days from the Commencement Date, the documents namely.....

To Be Finalized During Contract Negotiation

This list if warranted shall be supplemented subsequently.

(d) Other assistance and expenses to be provided by the Client are .....

5.1.2 Coordination

(a) The department of ..... shall be .....

5.1.3 Approvals

The Client shall accord approval of the documents immediately but not later than fourteen (14) days from the date of their submission by the Consultants.

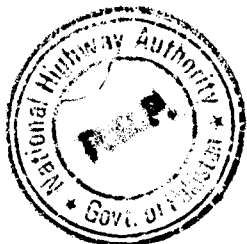
6.2 Remuneration and Direct Costs (Non-Salary Costs)

6.2(a) Payments for remuneration made in accordance with Sub-Clause 6.2(a) shall be adjusted as follows:

(i) Remuneration paid in foreign currency pursuant to the rates set forth in Appendix-D shall be adjusted after every 12 months (and, the first time, with effect from the remuneration earned in the 13th calendar month after the date of the Contract) by applying the following formula:

Rf = Rfo x If/Ifo

where Rf is the adjusted remuneration, Rfo is the remuneration payable on the basis of the rates set forth in Appendix-D for remuneration payable in foreign currency, If is the official index for salaries in the country of the foreign currency for the first month for which the adjustment is supposed to have effect, and Ifo is the official index for salaries in the country of the foreign currency for the month of the date of the Contract.



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(ii) Remuneration paid in local currency pursuant to the billing rates agreed for each person shall be adjusted in July of every year (and, for the first time, with effect from the remuneration earned in July following submission of financial proposal) by considering the following subject to maximum of prevalent CPI as per given formula plus salary revision due to statutory notification, if applicable pursuant to Sub-Clause 5.3 upon substantiation:

- annual increment
- Increase due to promotion
- Salary revision, if applicable pursuant to Sub-Clause 5.3 or otherwise

OR,

to be computed with the following formula:

$$RI = RI_0 \times I_1 / I_0$$

Where RI is the adjusted billing rate, RI<sub>0</sub> is the billing rate payable on the basis of the agreed billing rate in local currency as on July (i.e. the year in which the Consultants submitted its financial proposal to the Client). I<sub>1</sub> is the Combined Consumer Price Index (CPI) "General" for Government Employees as published by the Federal Bureau of Statistics, Government of Pakistan for the month of July for which the adjustment is to have effect, and I<sub>0</sub> is the Consumer Price Index "General" for Government employees as published by the Federal Bureau of Statistics Government of Pakistan for the month of July (i.e. the Year in which the Consultants submitted its financial proposal to the Client).

## To Be Finalized During Contract Negotiation

*[Note: One of the two options given above under (ii) is to be deleted as a result of negotiations before signing the Contract Agreement]*

6.2(b) The rates for foreign Personnel set forth in Appendix D, and the rates for local Personnel set forth in Appendix E, after adjustments, if any, pursuant to Sub-Clause 6.2(a) hereof shall be used for billing purposes.

It is understood that the remuneration rates shall cover salary and allowances as the Consultants shall have agreed to pay to the Personnel as well as factors for social charges and overhead based on the Consultants' average cost as represented by the financial statements of Consultants' latest three fiscal years and fee of the Consultants.

The remuneration rates have been agreed upon based on the representations made by the Consultants during finalization of this Contract with respect to the Consultants' costs and charges as referred above as such representations are evidenced by the form "Breakdown of Agreed Fixed Rates in Consultants' Contract" (A model of such form is attached at the end of these SC. The Consultants should be requested to execute this Form at the conclusion of the Contract negotiation when the Parties have agreed on the fixed rates and their breakdown).



Remuneration for periods of less than one month shall be calculated on hourly basis for the time spent by the Head Office staff or Project Office staff and directly attributable to the Services (one hour being equivalent to 1/170 of a month) and on calendar day basis for time spent by the Site Office staff (one day being equivalent to 1/30th of a month).

### 6.2(c) Direct Costs (Non Salary Costs)

Direct Non-salary Costs are such incurred non-salary costs which are directly allocable to specific engagements and projects. These costs include but are not limited to the following:

- To Be  
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- (i) Provisions for office, light, heat and similar items for working space, costs or rental for furniture, drafting equipment and engineering instrument and automobile expenses identifiable to specific projects for which special facilities other than head office of the firm are arranged.
  - (ii) Provision for labor or work charge establishment.
  - (iii) Daily and travelling allowances / expenses of employees, partners and principals when away from home / office on business connected with the project.
  - (iv) Identifiable communication expenses, such as long distance telephone, telegraph, cable, telex, express messages, and postage other than general correspondence.
  - (v) Services directly applicable to the projects such as special legal and accounting expenses, computer rental and programming costs, special consultants, borings, laboratory charges, perspectives, renderings, photos, model costs, commercial printing and binding and similar costs which are not applicable to the overhead costs, professional liability insurance cover in accordance with the provisions set out in Sub-Clause 3.4.
  - (vi) Identifiable drafting supplies and office supplies and expenses charged to the employers work, as distinguished from such supplies and expenses applicable to several projects.
  - (vii) Identifiable reproduction cost applicable to the work such as blue printing, Photostatting, mimeographing, printing, binding etc.

### 6.3 Currency of Payment

- 6.3(b) Remuneration for foreign personnel shall be paid in foreign currency and remuneration for local personnel shall be paid in local currency.

The direct cost expenditures in foreign currency shall be as stated in Appendix-D.

The direct cost expenditures in local currency shall be as stated in Appendix-E



**6.4 Mode of Billing and Payments**

Sub-Clause GC 6.4 is deleted and substituted as under:

**6.4.1** The Client shall affect payments to the Consultants in accordance with the payment schedules and in the manner set forth in Appendices-D & E as per NHA accounts procedure.

**6.4.2** Amounts due to the Consultants shall be paid within thirty (30) calendar days from the date of submission of its invoice. Payments against interim (monthly) invoices shall be made after retaining two per cent (2%) of the payable amounts, in accordance with paragraph 5.5 – Revision of PC-I-under TOR; all the amounts so retained shall be released along with the final invoice subject to fulfillment of the condition set in the said paragraph 5.5.

An affidavit or certificate for salary payment of personnel and all other charges will be furnished to the Client by the Consultants

**6.4.3** If the item or part of an item of an invoice submitted by the Consultants is disputed or subject to question by the Client, the payment of the undisputed part of the invoice which is not contested shall not be withheld on those grounds and the provisions of Clause 6.4.2 shall apply to such remainder and also to the disputed or questioned item to the extent that it shall subsequently be agreed or determined to have been due to the Consultants.

**6.4.4** The Consultants will be required to submit as much as are available records of the work carried out under this Contract.

The Client may audit accounts, as much as are available by the Consultants, for the Services provided by the Consultants under this Contract. Should any error be found, this shall be called to the attention of the Consultant and if so it shall be adjusted accordingly.

Advance written notice of not less than seven (7) working days shall be given to the Consultants, by the Client, of such audit which shall be carried out during normal working hours at the place where the records are maintained. Such records shall be kept for a period not less than three (3) years from the completion of the Services or termination of Contract pursuant to provisions hereof, to facilitate any questions arising from the Client's Audit.

**6.4.5** Account number for payment (against an Invoice) to the Consultants, is given below:

*[in case of JV, account numbers of all Members of JV shall be inserted, one after the other]*

Title of Account: .....  
Account Number: .....  
Branch Code: .....  
Bank: .....



### 6.5 Delayed Payments

The compensation on delayed payments for local and foreign currency shall be as follows:

- (i) for foreign currency = Not Applicable
- (ii) for local currency = eight percent (8%) per annum

### 6.6 Additional Services

The Consultants shall be prepared at any time during the Contract to provide expert technical advice and skill to the Client who may ask and seek such assistance in respect of the Project. The Consultants shall be separately compensated for all such services not covered in the original Services.

### 10. Priority of Documents

Following is to indicate priority of documents forming part of this Contract to resolve an ambiguity or non-clarity in the provisions:

- Contract Agreement;
- Minutes of Negotiation Meeting;
- The Special Conditions of Contract;
- The General Conditions of Contract;
- The Minutes of Pre-proposal Meeting & Addendum(s) if any;
- Scope of Services/Terms of Reference;
- Any other document including the JV Agreement in case of JV).

**To Be  
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### 11. Royalties

The Consultants shall save harmless and identify the Client from and against all claims and proceedings on account of or for infringement of any patent right, design, trademark or name or other protected rights in respect to any patented designs, features or equipment they may use for carrying out the Services, and shall pay all royalties etc. thereto.

### 12. Delay Damages

The Consultant shall be liable for delay in providing the Services within the time frame as per the Contract; Failure to comply with the schedule of delivery, due to fault of the Consultants, will attract delay damages which shall be levied @ one twentieth percent (0.05%) per day of the consultancy fee pertaining to the relevant component of the Services beyond the schedule: Provided that the total delay damages shall not exceed ten percent (10%) of the total consultancy fee and that the delay damages may be waived off only if the Consultants catch up the delays by providing final delivery within the time frame and there were no adverse affects caused to the Client's or Project's downstream activities.





**MODEL FORM**

**Breakdown of Agreed Fixed Rates in Consultants' Contract**

We hereby confirm that we have agreed to pay to the staff members listed, who will be involved in this assignment, the basic salaries and field allowances (if applicable) indicated below:

		1	2	3	4	5	6	7	8
Name	Position	Basic Salary per Working Month/Day/Hour	Social Charges (% of 1)	Overhead (% of 1&2)	Subtotal	Fee (% of 4)	Overseas/field Allowance (% of 1)	Agreed Fixed Rate per Working Month/Day/Hour	Agreed Fixed Rate (% of 1)

(Expressed in \_\_\_\_\_ (name of currency) \_\_\_\_\_)




*[Handwritten signature]*

Signature \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Title: \_\_\_\_\_

Date \_\_\_\_\_

**IV APPENDICES**



A handwritten signature or set of initials, possibly "J" or "K", written in black ink.