



**Office of the Municipal Commissioner,
Varanasi Nagar Nigam**

Sigra, Varanasi-221010 Tel Fax No-:+91-542-2222702

Email address: mcvns1@gmail.com

Letter No. 237/JICA-PMU/ 2017-18 /

Date 08.01.2018

**Notice Inviting Tender (NIT)
(National Competitive Bidding)**

Date:	08.01.2018
Name of Country:	INDIA
Loan Agreement No.:	ID-P164
Method of Selection:	Single Stage, Three Envelope, Quality and Cost Based System (QCBS)
Title of Project:	Development Geographical Information System / Management Information System and related works for Varanasi City' under the Institutional Development Program (IDP) of the JICA assisted Ganga Action Plan-2, Project Varanasi.

Loan Agreement: ID-P164

The Government of India (GoI), through the National Mission for Clean Ganga (NMCG), Ministry of Water Resources, River Development and Ganga Rejuvenation has received a loan from the Japan International Cooperation Agency (hereinafter referred to as JICA) to finance an Institutional Development Project (IDP or the "Project") for Varanasi Nagar Nigam (VNN) & Ganga Pollution Prevention Unit (GPPU) Uttar Pradesh Jal Nigam (UPJN) Varanasi.

- Municipal Commissioner VNN intends to apply part of the proceeds of this loan, to cover eligible payments under the loan agreement to Consultants, as per "Guidelines for Procurement of Consultants" under Japanese ODA loans for carrying out 'Development Geographical Information System / Management Information System and related works for Varanasi City' under the Institutional Development Program (IDP) of the JICA assisted Ganga Action Plan Project Varanasi.
- The Overall objective of the Project is the sustainable management, operation and maintenance of current and future water supply and sewerage assets of both Jal Kal Vibhag (JKV), VNN and the UPJN Ganga Pollution Prevention Unit (GPPU) Varanasi, thereby improving the delivery of water supply and sewerage services to the people of Varanasi through organizational and management strengthening measures, training/ capacity development, and Technology based infrastructure enhancement.
- The Specific objective of the services envisaged under this procurement process is to develop Geographic Information System / Management Information System and related works which will become the basis for developing Asset Management Plan and a robust

Decision Support System for Varanasi Nagar Nigam and its wing Jal Kal Vibhag in meeting the overall objective.

The Varanasi Nagar Nigam (VNN), the ultimate beneficiary agency (hereinafter referred to as “the client”) intends to engage suitable Consultants and invites bids for Quality and Cost Based System (QCBS) method of selection, in **Three Envelope System**, specifically:

- **Envelope (A) - Pre Qualification Documents**
- **Envelope (B) - Technical Proposal**
- **Envelope (C) - Financial Proposal**

from eligible Consultants for the said work. Envelope (C) (Price part) also has to be submitted along with Envelope (A)&(B). Consultants shall submit the Pre-Qualification documents supporting eligibility requirements, Technical proposal and Financial Proposal in paper form in three separate Envelops. Initially only the Envelop (A) Pre-Qualification Documents) will be opened then the JICA approval will be obtained after Pre-Qualification and after then the Technical Proposal of qualified Consultants will be opened. At the end of the evaluation of Technical proposal and after receiving the approval of JICA, the client will open the Financial Proposals of the eligible Consultants for evaluation. Both the Technical and Financial proposals will be ranked as per the pre-defined evaluation criteria; Based on the combined score, [Technical Proposal + Financial Proposal] the Consultant scoring the Highest combined score will be invited for contract negotiations and finalization.

The Eligibility Requirements and Technical Bid of the Consultant which are not substantially responsive will be rejected. If necessary, the Client will seek clarification of the Eligibility Requirements or Technical Bid, but no change in the price or substance of the bid shall be sought, offered or permitted, except to get additional information to fully understand the proposals of the Consultant and to confirm that the requirements of the bidding documents are met.

Evaluation of Bids will be conducted using the procedure specified in the Guidelines for Procurement of Consultants under Japan International Cooperation Agency (JICA formerly JBIC) and is open to all Consultants/Firms from eligible source countries. JICA’s sample for Standard Bidding Document under Japanese ODA Loans for Consultancy Services- shall be used for bidding.

A pre-proposal conference will be held by the Municipal Commissioner, Varanasi at **11:30 HRS on 24.01.2018** to clarify any queries that prospective Consultants may have and the minutes of the meeting shall form a part of the Bid document through issuance of an addendum. All queries can be sent and emailed to the address at email-ID as below, on or before 20.01.2018, i.e. four days before the Clarification Meeting in the format as specified in tender document for Seeking Clarification.

Municipal Commissioner
Varanasi Nagar Nigam
Sigra, Varanasi-221010
Tel Fax No-: +91-542-222702
Email address: mcvns1@gmail.com

The Bid documents should be submitted in proper binder folder and duly numbered and signed by authorized person on each page.

- The Consultants should furnish the details of Eligible Experience as per the requirements of the Bid documents. The Consultant should furnish the required project specific information and evidence in support of its claim to qualify, as per formats provided in the Bid document. In case the Experience Certificate issued by the authorized representative of Client is in any language other than English, the Consultant shall also submit duly certified translation of such Experience Certificate from other languages where the project was executed.
- A Consultant including any JV member should not have rescinded any work in the last 2 years.
- Consultants should follow all the instructions of Bid documents and noncompliance of any of the above instructions will be considered as non-responsive and result for rejection.
- Envelope (A)-Pre-Qualification requirements will be opened in the office of Additional Municipal Commissioner VNN on the same day i.e. **09.02.2018 at 04:00 PM** in the presence of Consultant’s representatives who choose to attend. In the event of the specified date of the bid opening being declared a holiday for the Client, the proposals shall be received and opened at the same time and place on the next working day.
- Proposals delivered after the due date and time stated above will be declared “Late” and such late proposals shall be summarily rejected.
- The Client will not be responsible for any costs or expenses incurred by the Consultants in connection with preparation or delivery of proposals
- The Client reserves the right to accept any bid, or reject any or all proposals, without assigning any reason therefore and without thereby incurring any liability to the Consultants.
- Any Consultant/Consultant who has been blacklisted by any Government entity/Authority will not be eligible to participate in the Bidding process. The Consultant will have to give a declaration in the technical bid document that the Firm is not a Blacklisted Firm.
- The firm is required to provide professional services, and accurate data, at all times holding the Client’s interest’s paramount, strictly avoiding conflicts.
- A Pre-proposal Conference will be held on **24.01.2018 at 11:30 AM**. in the office of the undersigned to give prospective Consultants the opportunity to ask questions and get clarifications on the bid documents. The Consultants are requested to submit their queries, if any, in writing, to reach Client not later than four (4) days before this meeting. Consultants should refer to Section 2, Instruction to Consultants, for specific procedures to be followed in submitting queries, and other details about responses to queries and the pre-bid meeting.

<i>Last date & time for the sale of Bid document:</i>	08.02.2018, 12 Noon
<i>Pre-Proposal Conference:</i>	24.01.2018, 11:30 AM
<i>Last date & time for submission of the Bid/Proposal:</i>	09.02.2018, 03:00 PM
<i>Date of opening of bid (Envelope A):</i>	09.02.2018, 04:00 PM

A complete set of bidding documents may be purchased by interested Consultants on submission of a written application and with payment of non-refundable fee of **INR 20,000.00 + 12 % GST** as applicable for each single Bid, during normal working days and hours from the office of Store department of Varanasi Nagar Nigam (VNN) on or before **08.02.2018 (12Noon)**. The fee shall be payable in the form of cash/demand draft drawn in favour of Accounts Officer, Varanasi Nagar Nigam (VNN.). Alternatively, the Bid document can be downloaded from the VNN website www.nnvn.org but the cost of the document (down loaded) INR 20,000.00 + 12% GST in the form of a demand draft drawn in the favour of Accounts Officer, Varanasi Nagar Nigam, in VNN office has to be enclosed as part of the Pre-Qualification Document (Envelope A) otherwise bid will not be considered.

Eligible Firms may associate themselves to enhance their expertise to undertake the work. In case of such an association, the firm must explicitly indicate the nature of the association i.e. whether Joint Venture or a Consortium. For any further relevant queries, the respondent firm may contact the office of the Municipal Commissioner Varanasi Nagar Nigam, Sigra, Varanasi-221010. Tel. Fax No-:+91-542-2222702, Email address: mcvns1@gmail.com



(Dr. Nitin Bansal) IAS

Municipal Commissioner



Varanasi Nagar Nigam

Encl. / JICA-PMU/ 2017-18/

Date 08.01.2018

Copy to the following for information and necessary action:

1. The Executive Director (Projects), National Mission for Clean Ganga, Ministry of Water Resources, River Development & Ganga Rejuvenation, , National Stadium, India Gate, New Delhi – 110001.
2. Project Director, UP-SPMG, Government of Uttar Pradesh, 2, Lal Bahadur Shastri Marg, Lucknow.
3. The Chief Representative, JICA, 16th Floor, Hindustan Times House, Kasturba Gandhi Marg, New Delhi-110001.
4. Managing Director, UP Jal Nigam, Lucknow.
5. General Manager, UPJN-GPPU, Varanasi
6. General Manager, Jal Kal Vibhag, Bhelupur, Varanasi.
7. Team Leader, Institutional Development Program, JKV, Bhelupur, Varanasi.



Municipal Commissioner



REQUEST FOR PROPOSALS

Selection of Consultants for *“Developing Geographical Information System / Management Information System and related works for Varanasi”*

Client: Varanasi Nagar Nigam

Country: India

Project: Institutional Development Program under
Ganga Action Plan-II (Non-Sewerage Component)

Loan No.: ID-P164

Table of Contents

	Page Nos
Section 1. Letter of Invitation (LOI-1)	2-4
Section 2. Selection Procedure	5
Quality- and Cost-Based Selection (QCBS)	6-26
QCBS - Instructions to Consultants (ITC-1)	
QCBS - Data Sheet (DS-1)	27-32
Section 2.1 Pre-Qualification Requirements	33-34
Section 2.2 Pre-Qualification Documents -Prescribed Formats	35-40
Section 3. Technical Proposal - Standard Forms. (TF-1)	41-55
Section 4. Financial Proposal - Standard Forms (FF-1)	56-69
Section 5. Terms of Reference (TOR-1)	70-121
Section 6. Standard Forms of Contract (SFC)	
ANNEX I. Consultants’ Services Lump-Sum Contract (FC-1)	122-155
Section 7. Eligible Source Countries of Japanese ODA Loans (ESC-1)	156

Section 1. Letter of Invitation

Place : Varanasi
Dated :.....

To : [Name and Address of Consultant]
.....
.....
.....

Ref: Consulting Services for “Developing Geographical Information System / Management Information System and related works for Varanasi” as part of Institutional Development Program under JICA Assisted Ganga Action Plan-II, Varanasi.

Gentlemen:

1. The Government of India (hereinafter called “Borrower”) has received financing for JPY 11,184 million vide Loan Agreement no ID-P164 dated 31 March, 2005 from Japan International Cooperation Agency (JICA) (hereinafter called “loan”) through National Mission for Clean Ganga (NMCG), Ministry of Water Resources, River Development & Ganga Rejuvenation toward the cost of the Ganga Action Plan. Varanasi Nagar Nigam (VNN) through Municipal Commissioner, Varanasi Nagar Nigam, is the Implementing Agency for the Institutional Development Program (IDP) of this project. VNN intends to apply a portion of the proceeds of the loan towards payments under this contract.
2. Drawing your attention to the Notice Inviting Tender (NIT) published in the newspapers “DainikJagran” and “Times of India” regarding the Consulting Services for “Developing Geographical Information System / Management Information System and related works for Varanasi” as part of Institutional Development Program under JICA Assisted Ganga Action Plan-II, Varanasi. (hereafter called “the Project”), Varanasi Nagar Nigam invites Bids to provide the consulting and Professional services for the Project. More details on the services are provided in the “Terms of Reference.”
3. A firm will be selected under Quality and Cost Based Selection (QCBS) and procedures described in this Request for Proposals (RFP), in accordance with the policies of JICA detailed in the Guidelines.
4. The RFP includes the following documents:

Section 1 – Letter of Invitation
Section 2 - Instructions to Consultants (including Data Sheet)
Section 2.1 Pre-Qualification Requirements
Section 2.2 Pre-Qualification Requirements- Prescribed Response Formats

Section 3 - Technical Proposal - Sample Forms

Section 4 - Financial Proposal - Sample Forms

Section 5 - Terms of Reference

Section 6 - Sample Forms of Contract

Section 7 - List of Eligible Countries of Japanese ODA Loans

5. Please note that if a firm combines the functions of consultant with those of contractor and/or a manufacturer, the firm must include in its proposal all relevant information regarding such relationship, along with an undertaking to the effect that the firm agree to limit its role to that of consultant and to disqualify itself, its associates/affiliates and/or parent firm from work in any other capacity on this project other than that of consultant.

If, in connection with the performance of the consulting services, a firm intends to borrow, or hire temporarily, personnel from contractors and/or manufacturers, the firm must include in its proposal all relevant information about such personnel. In such a case, the firm will be acceptable only if those contractors and/or manufacturers disqualify themselves from work on this project other than that of consultant.

6. If any firm (or any joint venture partner or associate firm or Sub-Consultant or individual expert nominated in any submitted Technical Proposal for this project) has been previously engaged to prepare the definite Terms of Reference for this assignment, or any part thereof, that firm (and/or any joint venture partner or associate firm or Sub-Consultant or individual expert so engaged) shall be disqualified from participation in this assignment.
7. The Consultant is required to provide professional, objective, and impartial advice, at all times holding the Client’s interest’s paramount, strictly avoiding conflicts.
8. This document is not transferable.
9. It is JICA’s policy to require that the Consultant and the Client, as well as the Borrowers under contracts funded with Japanese ODA Loans and other Japanese ODA, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, JICA will reject the result of evaluation of proposals if it determines that the Consultant evaluated as the highest-ranked has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (a) Will recognize a Consultants ineligible, for a period determined by JICA, to be awarded a contract funded with Japanese ODA Loans if it at any time determines that the Consultant has engaged in corrupt or fraudulent practices in competing for or in executing, another contract funded with Japanese ODA Loans or other Japanese ODA; and
 - (b) Will recognize a consultant’s ineligible to be awarded a contract funded with Japanese ODA Loans if the Consultant or Sub-consultant, who has a direct contract with the Consultant, is debarred under the cross-debarment decisions by the Multilateral Development Banks. Such period of ineligibility shall not exceed three (3) years from (and including) the date on which the cross debarment is imposed.

“Cross debarment decisions by the Multilateral Development Banks” is a corporate sanction in accordance with the agreement among the African Development Bank Group, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group and the World Bank Group signed on 9 April, 2010 (as amended from time to time). JICA will recognize the World Bank Group’s debarment of which period exceeds one year, imposed after 19 July, 2010, the date on which the World Bank Group started operating cross debarment, as “cross debarment decisions by the Multilateral Development Banks.” The list of debarred firms and individuals is available at the electronic address specified in the Data Sheet.

JICA will recognize a Consultant as ineligible to be awarded a contract funded with Japanese ODA Loans if the Consultant is debarred by the World Bank Group for the period starting from the date of issuance of this Request for Proposals up to the signing of the contract, unless (i) such debarment period does not exceed one year, or (ii) three (3) years have passed since such debarment decision.

If it is revealed that the Consultant was ineligible to be awarded a contract according to above, JICA will, in principle, impose sanctions against the Consultant.

If it is revealed that any sub-consultant/ associate/ partner, who has a direct contract with the Consultant was debarred by the World Bank Group on the sub-contract date, JICA will in principle require the Borrower to have the Consultant cancel the sub-contract immediately, unless (i) such debarment period does not exceed one year, or (ii) three (3) years have passed since such debarment decision. If the Consultant refuses, JICA will require the Borrower to declare invalidity or cancellation of the contract and demand the refund of the relevant proceeds of the loan or any other remedies on the grounds of contractual violation.

Firms that are barred by any of the State Governments of Indian union, Government of India and JICA, on the date of issue of this document shall not be eligible and proposal of such firm if submitted shall be cancelled.



(Dr. Nitin Bansal)
Municipal Commissioner
Varanasi Nagar Nigam
Sagra, Varanasi

NOTE:

Though adequate care has been taken while preparing the NIT Document, the Consultant shall satisfy himself that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately.

Section 2.

Selection Procedure

Quality- and Cost-Based Selection (QCBS)

Section 2. QCBS - Instructions to Consultants

QCBS - Instructions to Consultants

Table of Clauses

A. General Provisions	8
1. Definitions	8
2. Introduction	9
3. Conflict of Interest.....	10
a. Impartiality	10
b. Conflict of Interest.....	10
4. Corrupt and Fraudulent Practices	11
5. Eligibility	12
B. Preparation of Proposals	13
6. Preparation of Proposals.....	13
7. Proposal Validity.....	13
a. Extension of Validity Period	13
b. Substitution of Key Experts at Validity Extension.....	14
c. Sub-Contracting	14
d. Delayed Award	14
8. Clarification and Amendments of RFP.....	14
a. Clarification of RFP.....	15
b. Amendment of RFP.....	15
9. Preparation of Proposals – Specific Considerations	15
10. Technical Proposal Format and Content	16
11. Financial Proposals Format and Content.....	18
a. Taxes.....	20
b. Currency of Proposal and Payment	20
C. Submission, Opening and Evaluation.....	20
12. Submission, Receipt, and Opening of Proposals	20
13. Substitution and Modifications.....	21
14. Proposal Evaluation.....	22
a. Evaluation of Technical Proposals	22

b. Public Opening of Financial Proposals.....	23
c. Evaluation of Financial Proposals	23
D. Negotiations and Award.....	24
15. Negotiations.....	24
a. Availability of Key Experts	24
b. Technical Negotiations	25
c. Financial Negotiations	25
16. Conclusion of the negotiations	25
17. Award of Contract	25
18. Publication.....	26
19. Confidentiality	26

Instructions to Consultants

A. General Provisions

1. Definitions

- (a) “Affiliate(s)” means an individual or an entity that directly or indirectly controls, is controlled by, or is under common control with the Consultant.
- (b) “Applicable Guidelines” means the Guidelines for the Employment of Consultants under Japanese ODA Loans, specified in the Data Sheet, governing the selection and Contract award process as set forth in this RFP.
- (c) “Applicable Law” means the laws and any other instruments having the force of law in the Client’s country, or in such other country as may be specified in the Data Sheet, as they may be issued and in force from time to time.
- (d) “Borrower” means the Government, Government agency or other entity that signs the Loan Agreement with JICA.
- (e) “Client” means the executing agency that signs the Contract for the Services with the selected Consultant.
- (f) “Consultant” means any entity or individual including a Joint Venture that may provide or provides the Services to the Client under the Contract.
- (g) “Contract” means a legally binding written agreement signed between the Client and the Consultant and includes all the attached documents listed in paragraph 1 of the Form of Contract.
- (h) “Data Sheet” means an integral part of the Instructions to Consultants (ITC) Section 2 that is used to reflect specific country and assignment conditions to supplement, but not over-write, the provisions of the ITC.
- (i) “day” means calendar day.
- (j) “Experts” means, collectively, Key Experts, Non-Key Experts, or any other professional personnel of the Consultant, Sub-consultant or Joint Venture member(s).
- (k) “Government” means the government of the Client’s country.
- (l) “ITC” (this Section 2 of the RFP) means the Instructions to Consultants that provide the eligible Consultants with all information needed to prepare their Proposals
- (m) “JICA” means Japan International Cooperation Agency.

- (n) “Joint Venture” means an association with or without a legal personality distinct from that of its members, of more than one Consultant where one member has the authority to conduct all businesses for and on behalf of any and all members of the JV, and where the members of the JV are jointly and severally liable to the Client for the performance of the Contract.
- (o) “Key Expert(s)” means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose Curricula Vitae (CV) is taken into account in the technical evaluation of the Consultant’s Proposal.
- (p) “LOI” (Section 1 of the RFP) means the Letter of Invitation being sent by the Client to the eligible Consultants.
- (q) “Non-Key Expert(s)” means an individual professional provided by the Consultant or its Sub-consultant and who is assigned to perform the Services or any part thereof under the Contract and whose CVs are not evaluated individually.
- (r) “ODA” means Official Development Assistance.
- (s) “Proposal” means the Technical Proposal or the Financial Proposal of the Consultant, or both.
- (t) “QCBS” means Quality- and Cost-Based Selection.
- (u) “RFP” means this Request for Proposals to be prepared by the Client for the selection of Consultants, based on the SRFP.
- (v) “Services” means the work to be performed by the Consultant pursuant to the Contract.
- (w) “SRFP” means the Standard Request for Proposals.
- (x) “Sub-consultant(s)” means an entity or an individual to whom/which the Consultant intends to subcontract any part of the Services while remaining responsible to the Client during the performance of the Contract.
- (y) “TOR” (Section 5 of the RFP) means the Terms of Reference that explain the objectives, scope of work, activities, and tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.

2. Introduction

- 2.1 The Borrower has received or has applied for an ODA Loan from JICA in the amount and with the signed date of the Loan Agreement specified in the Data Sheet toward the cost of the Project specified in the Data Sheet. The Borrower intends to apply a portion of the proceeds of the loan to eligible

payments under the Contract for which the RFP is issued. Disbursement of an ODA Loan by JICA will be subject, in all respects, to the terms and conditions of the Loan Agreement, including the disbursement procedures and the Applicable Guidelines. No party other than the Borrower shall derive any rights from the Loan Agreement or have any claim to loan proceeds. The above Loan Agreement will cover only a part of the Project cost. As for the remaining portion, the Borrower will take appropriate measures for finance.

- 2.2 The Client named in the Data Sheet will select a consulting firm/organization (the Consultant) from the eligible Consultants, in accordance with the QCBS method of selection.
- 2.3 The eligible Consultants are invited to submit a Technical Proposal and a Financial Proposal, for consulting services required for the assignment named in the Data Sheet. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Consultant.
- 2.4 The Consultants should familiarize themselves with the local conditions relevant to the Services and take them into account in preparing their Proposals, including attending a pre-proposal conference if one is specified in the Data Sheet. Attending the pre-proposal conference is optional and is at the Consultants’ expense.
- 2.5 The Client will timely provide at no cost to the Consultants the inputs, relevant project data, and reports required for the preparation of the Consultant’s Proposal as specified in the Data Sheet.

3. Conflict of Interest

a. Impartiality

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

b. Conflict of Interest

- 3.2 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. 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:

Conflicting Activities

- (a) Conflict between consulting activities and procurement of goods or non-consulting services: A Consultant that has been engaged to provide goods 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 or non-consulting services. Conversely, a Consultant 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 non-consulting services resulting from or directly related to the consulting services for such preparation or implementation.

Conflicting Assignments (b) Conflict among consulting assignments: Neither a Consultant nor any of its affiliates shall be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant.

Conflicting Relationship (c) Relationship with Borrower’s staff: A Consultant that has a close business relationship with the Borrower’s professional personnel 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 such Contract, shall be disqualified

One Bid per Consultant (d) Based on the “One Bid per Consultant” principle, which is to ensure fair competition, a Consultant, and any affiliate that directly or indirectly controls, is controlled by, or is under common control with that Consultant shall not be allowed to submit more than one proposal, either individually as a Consultant or as a member of a Joint Venture. A Consultant (including its affiliate), if acting in the capacity of a Sub-consultant in one proposal, may participate in other proposals, only in that capacity.

Others (e) Any other form of conflict of interest other than (a) through (d) of this ITC 3.2.

4. Corrupt and Fraudulent Practices

4.1 It is JICA’s policy to require that the Consultant and the Client, as well as the Borrowers under contracts funded with Japanese ODA Loans and other Japanese ODA, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, JICA;

(a) will reject the result of evaluation of proposals if it determines that the Consultant evaluated as the highest-ranked has engaged in corrupt or fraudulent practices in competing for the contract in question;

(b) will recognize a Consultant as ineligible, for a period determined by JICA, to be awarded a contract funded with Japanese ODA Loans if it at any time determines that the Consultant has engaged in corrupt or fraudulent practices in competing for, or in executing, another contract funded with

Japanese ODA Loans or other Japanese ODA; and

- (c) will recognize a Consultant as ineligible to be awarded a contract funded with Japanese ODA Loans if the Consultant or Sub-consultant, who has a direct contract with the Consultant, is debarred under the cross-debarment decisions by the Multilateral Development Banks. Such period of ineligibility shall not exceed three (3) years from (and including) the date on which the cross debarment is imposed.

“Cross debarment decisions by the Multilateral Development Banks” is a corporate sanction in accordance with the agreement among the African Development Bank Group, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group and the World Bank Group signed on 9 April, 2010 (as amended from time to time). JICA will recognize the World Bank Group’s debarment of which period exceeds one year, imposed after 19 July, 2010, the date on which the World Bank Group started operating cross debarment, as “cross debarment decisions by the Multilateral Development Banks.” The list of debarred firms and individuals is available at the electronic address specified in the Data Sheet.

JICA will recognize a Consultant as ineligible to be awarded a contract funded with Japanese ODA Loans if the Consultant is debarred by the World Bank Group for the period starting from the date of issuance of this Request for Proposals up to the signing of the contract, unless (i) such debarment period does not exceed one year, or (ii) three (3) years have passed since such debarment decision.

If it is revealed that the Consultant was ineligible to be awarded a contract according to above, JICA will, in principle, impose sanctions against the Consultant.

If it is revealed that the Sub-consultant, who has a direct contract with the Consultant, was debarred by the World Bank Group on the sub-contract date, JICA will in principle require the Borrower to have the Consultant cancel the sub-contract immediately, unless (i) such debarment period does not exceed one year, or (ii) three (3) years have passed since such debarment decision. If the Consultant refuses, JICA will require the Borrower to declare invalidity or cancellation of the contract and demand the refund of the relevant proceeds of the loan or any other remedies on the grounds of contractual violation.

5. Eligibility

- 5.1 An eligible Consultant shall be a firm incorporated and registered in any of the eligible source countries indicated in Section 7. In case an eligible Consultant is a Joint Venture,

- each Joint Venture member shall be incorporated and registered in any of the eligible source countries indicated in Section 7. In case an eligible Consultant forms a Joint Venture with other firms, each Joint Venture member shall be incorporated and registered in any of the eligible source countries indicated in Section 7.
- 5.2 A Consultant that has been determined to be ineligible by JICA in accordance with ITC 3.2 and ITC 4.1 above, shall not be eligible to be awarded a contract.
- 5.3 The Services that may be provided under the Contract and financed by JICA, shall have as their country of origin any of the eligible source countries indicated in Section 7.
- 5.4 Consultants shall provide such evidence of their continued eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- B. Preparation of Proposals**
6. **Preparation of Proposals**
- 6.1 In preparing the Proposal, the Consultant is expected to examine the RFP in detail. Material deficiencies in providing the information requested in the RFP may result in rejection of the Proposal.
- 6.2 The Consultant shall bear all costs associated with the preparation and submission of its Proposal and contract negotiation. The Client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Consultant.
- 6.3 The Proposal, as well as all related correspondence exchanged by the Consultant and the Client, shall be written in the language specified in the Data Sheet.
7. **Proposal Validity**
- 7.1 The Data Sheet indicates the period during which the Consultant’s Proposal must remain valid after the Proposal submission deadline.
- 7.2 During this period, the Consultant shall maintain its original Proposal without any change, including the availability of the Key Experts, the proposed rates and the total price.
- a. Extension of Validity Period**
- 7.3 The Client will make its best effort to complete negotiations within this period. However, should the need arise, the Client may request, in writing, all Consultants to extend the validity period of their Proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Key Experts named in the Proposal.

- 7.4 Consultants who do not agree have the right to refuse to extend the validity of their proposals in which case their Proposals will not be further evaluated.
- b. Substitution of Key Experts at Validity Extension**
- 7.5 If any of the Key Experts become unavailable for the extended validity period, the Consultant shall provide a written adequate justification and evidence satisfactory to the Client together with the substitution request. In such case, a replacement Key Expert shall have equal or better qualifications and experience than those of the originally proposed Key Expert. The technical evaluation score, however, will remain to be based on the evaluation of the CV of the original Key Expert.
- 7.6 If the Consultant fails to provide a replacement Key Expert with equal or better qualifications, or if the provided reasons for the replacement or justification are unacceptable to the Client, such Proposal will be rejected with JICA’s prior consultation.
- c. Sub-Contracting**
- 7.7 The Consultant shall not subcontract the whole of the Services.
- d. Delayed Award**
- 7.8 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial proposal validity, the amounts payable under the Contract shall be determined as follows:
- (a) In the case of fixed price contracts, the amounts payable under the Contract shall be the price of the Financial Proposal adjusted by the factor specified in the Data Sheet.
- (b) In the case of adjustable price contracts, to determine the amounts payable under the Contract, the fixed portion of the price of the Financial Proposal shall be adjusted by the factor specified in the Data Sheet.
- (c) In any case, evaluation shall be based on the price of the Financial Proposal without taking into consideration the applicable correction from those indicated above.

8. Clarification and Amendments of RFP

- a. Clarification of RFP**
- 8.1 Consultants may request a clarification of any of the RFP documents up to the number of days indicated in the Data Sheet before the proposal submission deadline date. Any request for clarification must be sent in writing, or by standard electronic means to the Client’s address indicated in the Data Sheet. The Client will respond in writing, or by standard electronic means and will send written copies of the response (including an explanation of the query but without identifying the source of inquiry) to all eligible Consultants. Should the Client deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure under ITC 8.2.
- b. Amendment of RFP**
- 8.2 The Client may amend the RFP by issuing an addendum in writing or by standard electronic means in sufficient time before the submission of Proposals. The addendum shall be sent to all eligible Consultants and will be binding on them. The Consultants shall acknowledge receipt of all amendments. To give Consultants reasonable time in which to take an amendment into account in their Proposals the Client may, if the amendment is substantial, extend the deadline for the submission of Proposals.
- 8.3 The Consultant may submit a modified Proposal or a modification to any part of it at any time prior to the proposal submission deadline. No modifications to the Technical or Financial Proposal shall be accepted after the deadline.
- 9. Preparation of Proposals – Specific Considerations**
- 9.1 While preparing the Proposal, the Consultant must give particular attention to the following:
- (i) For the purpose of submitting a proposal, a eligible Consultant may enhance its expertise for the assignment either by:
- a) associating with other firms as Sub-consultants, in which case the Consultant shall be solely liable under the Contract and the other firms shall be not liable for the Contract, or
- b) forming a Joint Venture with other firms which substantially perform the Services and/or have experience contributing to the enhancement of the expertise of the Joint Venture, in which case the Consultant shall execute a major portion of the assignment, and the Consultant and the members of the Joint Venture shall be jointly and severally liable under the Contract.

(ii) When associating with non-eligible firms in the form of a joint venture or a sub-consultancy, the eligible Consultant shall be a lead member.

9.2 In the event that the Consultant constitutes a Joint Venture, the Consultant shall submit (i) a copy of the Joint Venture Agreement with its Technical Proposal, and (ii) a power of attorney (executed by all members) that authorizes the designated lead or managing member of the Joint Venture to act for and on behalf of the Joint Venture and to legally bind such Joint Venture in any contractual or similar documentation. Any Joint Venture agreement and Joint Venture power of attorney shall be attached to TECH-1, Standard Forms (Section 3) and submitted as part of the Technical Proposal of such Consultant.

(i) The Joint Venture Agreement shall identify the lead member. All members in a Joint Venture shall sign the Proposal unless the lead member is nominated to do so in the power of attorney.

(ii) Consultants shall not propose alternative Key Experts. Only one CV shall be submitted for each Key Expert position. Failure to comply with this requirement will make the Proposal non-responsive.

10. **Technical Proposal Format and Content**

10.1 The Technical Proposal shall provide the information indicated in the following paragraphs from (i) to (vii) using the attached Standard Forms (Section 3). The following table summarizes the content and recommended number of pages. A page is considered to be one printed side of A4 or letter size paper.

Voluminous Technical Proposals substantially exceeding the number of pages indicated below may not be evaluated.

Experience of the firm	(i) about two (2) pages introducing the Consultant’s organization and general experience (Form TECH- 2A). (ii) about twenty (20) pages of relevant completed projects illustrating the Consultant’s relevant experience (Form TECH-2B). No promotional material should be included.
Comments on terms of reference	No limit, but to be concise and to the point (Form TECH-3A).

Comments on counterpart staff and facility requirements	About two (2) pages (Form TECH-3B).
General approach and methodology, work plan	About fifty (50) pages inclusive of charts and diagrams (Form TECH-4).
List of proposed Key Expert team and Summary of CV particulars	(Form TECH-5)
Key Experts’ CVs	About five (5) pages for each Key Expert’s CV (Form TECH-6)
Expert schedule	(Form TECH-7)
	(Form TECH-8)
Acknowledgement of Compliance with the Guidelines for Employment of Consultants	(Form TECH-9)

- (i) A brief description of the Consultants’ organization and an outline of recent experience of the Consultants and, in the case of Joint Venture, for each member, on assignments of a similar nature are required in Form TECH-2. For each assignment, the outline should indicate the names of Sub-consultants/ Experts who participated, duration of the assignment, contract amount, and Consultant’s involvement. Information should be provided only for those assignments for which the Consultant was legally contracted individually as corporate entity or, as a lead firm or one of members within a Joint Venture. Assignments completed by individual Experts working privately or through other consulting firms cannot be claimed as the experience of the Consultant, or that of the Joint Venture members, but can be claimed by the Experts themselves in their CVs. Consultants should be prepared to substantiate the claimed experience if so requested by the Client.

- (ii) Comments and suggestions on the Terms of Reference including workable suggestions that could improve the quality/ effectiveness of the assignment; and on requirements for counterpart staff and facilities including: administrative support, office space, local transportation, equipment, data, etc. to be provided by the Client (Form TECH-3). Comments and suggestions on the Terms of Reference and on requirements for counterpart staff and facilities will be evaluated as part of the Technical Proposal and applicable amounts will be included in the Financial Proposal.
 - (iii) A description of the approach, methodology and work plan for performing the assignment covering the following subjects: technical approach and methodology, staffing for training, work plan, and organization and Expert schedule. Guidance on the content of this section of the Technical Proposals is provided under Form TECH-4. The work plan should be consistent with the Work Schedule (Form TECH-8) which will show in the form of a bar chart the timing proposed for each activity.
 - (iv) The list of the proposed team by area of expertise, the position that would be assigned to each team member, their tasks and a summary of essential CV information (Form TECH-5).
 - (v) CVs of the Key Experts signed by the Key Experts themselves or by the authorized representative submitting the proposal (Form TECH-6). In case of CVs signed by the authorized representative, should the firm be ranked first, copies of the same CVs signed by the Key Experts must be submitted to the Client prior to commencement of contract negotiations.
 - (vi) Estimates (man-months) of the Experts needed to carry out the assignment (Form TECH-7). The man- months input should be indicated separately for home office and field activities.
 - (vii) The Acknowledgement of Compliance with the Guidelines for Employment of Consultants (Form TECH-9). The Consultant’s authorized representative shall sign and date this Form on behalf of the Consultant.
- 10.2 The Technical Proposal shall not include any financial information. A Technical Proposal containing material financial information shall be declared non-responsive.
11. **Financial Proposals Format and Content**
- 11.1 (i) The Financial Proposal shall be prepared using the Standard Forms provided in Section 4 of the RFP. The minimum number of man-months required to carry out the Services is indicated in the Data Sheet for information. It shall list all costs associated with the

assignment, including (a) remuneration for Key Experts and Non-Key Experts, (b) reimbursable expenses indicated in the Data Sheet.

- (ii) The Financial Proposal requires completion of four forms, Forms FIN-1 to FIN-3 and Form FIN-5, shown in Section 4.
- a. Form FIN-1 is the Financial Proposal Submission Form.
 - b. Form FIN-2 summarizes the proposed cost(s) by currency(ies). It shall list all costs associated with the assignment, including remuneration for Experts and reimbursable expenses indicated in the Data Sheet. The total amounts of remuneration and reimbursable expenses in Form FIN-2 shall be consistent with those amounts in Forms FIN-3 and FIN-5.
 - c. The amounts stated under provisional sums and for contingency in FIN-2 must be the exact amounts and in the same currency as specified in the Data Sheet for such cost. The exact amounts and the currency of provisional sums and contingency, and the applicable payment schedule will be determined during contract negotiations.
 - d. Form FIN-3 shows the remuneration.
 - e. Form FIN-5 shows details of reimbursable expenses.
 - f. All activities and items described in the Technical Proposal must be priced. For non- remuneration (e.g. reimbursable expenses) related omissions, any activities or items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items provided for in the Financial Proposal.
 - g. For remuneration related costs, for evaluation purposes only, if less than the minimum number of man-months specified in the Data Sheet is provided in the Technical Proposal, the relevant Financial Proposal will be adjusted to reflect the difference between the so proposed number of man-months and the number of the minimum man-months. Such an adjustment will be made for each of the international Experts and local Experts through adding the amount obtained as follows:
$$Aad = (Mmin - Mpro) \times RRh$$
 where: Aad: Amount adjusted
Mmin: Minimum number of man-months as specified in DS 11.1 (i)
Mpro: Number of man-months proposed
RRh: The highest remuneration rate per month in each category (international or local Experts) among all the Proposals

- a. **Taxes** 11.2 The Consultant and its Sub-consultants and Experts are responsible for meeting all tax liabilities arising out of the Contract unless otherwise stated in the Data Sheet. Information on taxes in the Client’s country is provided in the Data Sheet. Any local taxes will be excluded at financial evaluation, but they will be discussed at Contract negotiations, and applicable amounts will be included in the Contract.
- b. **Currency of Proposal and Payment** 11.3 Consultants may express the price of their services in Indian Rupees only.
- 11.4 Payments under the Contract shall be made in the currency or currencies in which the Financial Proposal of the selected Consultant is expressed.

C. Submission, Opening and Evaluation

12. **Submission, Receipt, and Opening of Proposals** 12.1 The Consultant shall submit a signed and complete Proposal comprising the documents and forms in accordance with Section 2.1, ITC 10 and 11 for Pre-Qualification, Technical and Financial Proposals. The submission can be done only by hand.
- 12.2 The original Proposal shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person who signed the proposal must initial such corrections. Submission letters for both Technical and Financial Proposals should be in the format of TECH-1 of Section 3 and FIN-1 of Section 4, respectively, including required attachments, if any. [See ITC 9.2 above.]
- 12.3 The Technical Proposal shall be marked “ORIGINAL” or “COPY” as appropriate. Copies of the Technical Proposal shall be prepared in the number indicated in the Data Sheet. All required copies of the Technical Proposal are to be made from the original. If there are discrepancies between the original and the copies of the Technical Proposal, the original governs.
- 12.4 An authorized representative of the Consultants shall initial all pages of Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been duly authorized to sign. The signed Financial Proposal shall be marked “ORIGINAL.”

- 12.5 The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked “TECHNICAL PROPOSAL.” Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked “FINANCIAL PROPOSAL” followed by the Loan number and the name of the assignment, and with a warning “DO NOT OPEN WITH THE TECHNICAL PROPOSAL.” The envelopes containing the Technical and Financial Proposals shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address, reference number and title of the Loan, and be clearly marked “DO NOT OPEN, EXCEPT IN PRESENCE OF THE OFFICIAL APPOINTED, BEFORE [insert the time and date of the submission deadline indicated in the Data Sheet]”. The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. This circumstance may be cause for Proposal rejection. If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive.
- 12.6. Proposals must be sent to the address/addresses indicated in the Data Sheet and received by the Client no later than the time and the date indicated in the Data Sheet, or any extension to this date in accordance with ITC 8.2. Any proposal received by the Client after the deadline for submission shall be returned unopened.
- 13. Substitution and Modifications**
- 13.1 The Consultants may substitute, or modify their Proposal after it has been submitted by sending a written notice, duly signed by an authorized representative. The corresponding substitution or modification of the Proposal must accompany the respective written notice. All notice must be:
- (a) prepared and submitted in accordance with ITC 12.1 through ITC 12.6, and in addition, the respective envelopes shall be clearly marked “SUBSTITUTION,” “MODIFICATION;” and
 - (b) received by the Client prior to the deadline prescribed for submission of Proposal, in accordance with ITC 12.6.
- 13.2 The Client shall open the Technical Proposals immediately after the deadline for their submission. The envelopes with the Financial Proposals shall remain sealed and securely stored.

- 13.3 First, envelopes marked “SUBSTITUTION” shall be opened. The envelopes containing the Substitution Technical Proposal and/or Substitution Financial Proposal shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Consultant unopened. Only the Substitution Technical Proposal, if any, shall be opened. Substitution Financial Proposal will remain unopened in accordance with ITC 13.2. No envelope shall be substituted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Technical Proposal opening.
- 13.4 Second, envelopes marked “MODIFICATION” shall be opened. No Technical Proposal and/or Financial Proposal shall be modified unless the corresponding modification notice contains a valid authorization to request the modification and is read out at the opening of Technical Proposal. Only the Technical Proposals, both Original as well as Modification, are to be opened and read out at the Technical Proposal opening. Financial Proposals, both Original as well as Modification, will remain unopened in accordance with ITC 13.2.
- 14. Proposal Evaluation**
- 14.1 Except for the written communications for clarification of the Proposals, from the time the Proposals are opened to the time the Contract is awarded, the Consultants should not contact the Client on any matter related to its Technical and Financial Proposal. Any effort by Consultants to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Consultants’ Proposal.
- The evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded and JICA issues its “concurrence.”
- a. Evaluation of Technical Proposals**
- 14.2 The evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the RFP in particular the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP, and particularly the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.
- 14.3 After the technical evaluation is completed, the Client will notify those Consultants whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP, and return their Financial Proposals unopened.

- b. Public Opening of Financial Proposals**
- 14.4 The Client shall simultaneously notify in writing Consultants that have secured the minimum qualifying mark, informing them of the technical scores obtained by their Technical Proposals, and indicating the date, time and location for opening the Financial Proposals. The expected date for the public opening of the Financial Proposals is indicated in the Data Sheet; the opening date should allow Consultants sufficient time to make arrangements for attending the opening. Consultants’ attendance at the opening of Financial Proposals is optional.
- 14.5. Financial Proposals shall be opened in the presence of the Consultants’ representatives who choose to attend. The name of the Consultants; and the technical scores of the Consultants shall be read aloud. The Financial Proposal of the Consultants who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copy of the record shall be sent to all Consultants and JICA.
- c. Evaluation of Financial Proposals**
- 14.6 The evaluation committee will review the detailed content of each Financial Proposal and the congruency of the Technical and Financial Proposal. Financial Proposals will be reviewed to ensure these are:
- (i) complete (i.e., whether Consultants have priced all items of the corresponding Technical Proposal); in case of material omissions of reimbursable items, the Client will price them by application of the highest unit cost of the omitted item in the Financial Proposals of the Consultant (or an unit cost reasonably estimated by the Client) and the quantity omitted, and add their cost to the offered price, and correct any arithmetical errors. When correcting computational errors, in case of discrepancy between (a) a partial amount and the total amount the partial amount shall prevail; (b) words and figures, the words shall prevail. The evaluated total price (ETP) for each Financial Proposal will be determined. The ETP excludes non-competitive components (i.e. contingencies, provisional sums and local indirect taxes). The ETP will be converted to a single currency using the selling rates of exchange, source and date indicated in the Data Sheet.

(ii) in compliance with the requirements set forth in the Data Sheet, each Financial Proposal must include provisional sums and contingencies in the amounts specified in the Data Sheet and the validity period of the Consultants’ Proposals must accord with the validity period indicated in the Data Sheet. Provision for a discount in any Financial Proposal is not permissible and the ETP for each Financial proposal will be determined without applying any discount.

14.7 The lowest evaluated Financial Proposal will receive the maximum score of 100 marks. The score for each other Financial Proposal is inversely proportional to its ETP and will be computed as follows:
 $S_f = 100 \times F_m / F$ where:
 S_f is the financial score of the Financial Proposal being evaluated,
 F_m is the ETP of the lowest priced Financial Proposal,
 F is the ETP of the Financial Proposal under consideration

14.8 Following completion of evaluation of Technical and Financial Proposals, final ranking of the Proposals will be determined. This will be done by normally applying a weight as specified in the Data Sheet respectively to the technical and financial score of each evaluated qualifying Technical and Financial Proposal and then computing the relevant combined total score for each Consultant. After such final ranking, the first-ranked Consultants will be invited for contract negotiations.

D. Negotiations and Award

15. Negotiations

15.1 The negotiations will be held at the date and address indicated in the Data Sheet with the Consultant’s representative(s) who must have written power of attorney to negotiate and sign a Contract on behalf of the Consultant.

15.2 The Client shall prepare minutes of negotiations that are signed by the Client and the Consultant’s authorized representative.

a. Availability of Key Experts

15.3 The invited Consultant shall confirm the availability of all Key Experts included in the Proposal as a pre-requisite to the negotiations, or, if applicable, a replacement in accordance with ITC 7.5. Failure to confirm the Key Experts’ availability may result in the rejection of the Consultant’s Proposal and the Client proceeding to negotiate the Contract with the next-ranked Consultant.

- 15.4 Notwithstanding the above, the substitution of Key Experts at the negotiations may be considered if due solely to circumstances outside the reasonable control of and not foreseeable by the Consultant, including but not limited to death or medical incapacity. In such case, the Consultant shall offer a substitute Key Expert to negotiate the Contract, who shall have equivalent or better qualifications and experience than the original candidate.
- b. Technical Negotiations**
- 15.5 The negotiations include discussions of the Terms of Reference (TOR), the proposed methodology, the Client’s inputs, the special conditions of the Contract, and finalizing the “Description of Services” part of the Contract. These discussions shall not substantially alter the original scope of services under the TOR or the terms of the contract, lest the quality of the final product, its price, or the relevance of the initial evaluation be affected.
- c. Financial Negotiations**
- 15.6 The financial negotiations will include a clarification of the Consultant’s tax liability in the Client’s country, and how it will be reflected in the Contract; and will reflect the agreed technical modifications in the cost of the services.
- 15.7 The financial negotiations will, as necessary, fine-tune duration of the Expert’s inputs and quantities of items of reimbursable expenses that may be increased or decreased from the relevant amounts shown or agreed otherwise in the Financial Proposal but without significant alterations. The unit rate of Expert remuneration and specific unit rates for reimbursable expenses will not be subject to negotiations.
- 16. Conclusion of the negotiations**
- 16.1 Negotiations will conclude with a review of the draft Contract. To complete negotiations the Client and the Consultant will initial the agreed Contract.
- 16.2 If negotiations fail, the Client may, subject to prior consultation with JICA, terminate the negotiations informing the Consultant of the reasons for doing so. The Client will then invite the next-ranked Consultant to negotiate a Contract. Once the Client commences negotiations with the next-ranked Consultant, the Client shall not reopen the earlier negotiations.
- 17. Award of Contract**
- 17.1 After completing negotiations, the Client shall award the Contract to the selected Consultant and notify the other Consultants who have submitted proposals that they were unsuccessful.
- 17.2 The Consultant is expected to commence the Services on the date and at the location specified in the Data Sheet.

- 17.3 Consultants who were not awarded the Contract may request a debriefing in writing or in a meeting from the executing agency after Contract award in respect of their Proposal.
- 18. Publication**
- 18.1 After a Contract is determined to be eligible for JICA’s financing, the following information may be made public by JICA:
- (i) the names of all Consultants who submitted Proposals,
 - (ii) the technical points assigned to each Consultant,
 - (iii) the offered prices of each Consultant,
 - (iv) the overall ranking of the Consultants,
 - (v) the name and address of the successful Consultant, and
 - (vi) the award date and amount of the Contract.
- 19. Confidentiality**
- 19.1 Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Consultants who submitted the Proposals or to other persons not officially concerned with the process, until the publication of the award of Contract. The use by any Consultant of confidential information related to the process may make it subject to JICA’s rules related to corrupt or fraudulent practices.

Data Sheet (DS)

Paragraph Reference	
1. (b)	The Standard Request for Proposals are those published in October 2012. Version 1.1 by JICA and guide for evaluation procedures for employment of consultants under Japanese ODA loans published in December 2009.
1 (c)	India
2.1	Amount of the Loan Agreement: Japanese yen (JPY) 11,184 million Signed date of the Loan Agreement: 31 st March, 2005 Name of Project: <u>JICA Assisted Ganga Action Plan II, Varanasi</u>
2.2	Name of the Client: Varanasi Municipal Corporation (Varanasi Nagar Nigam)
2.3	Name of the assignment: “ Developing Geographical Information System / Management Information System and related works for Varanasi ”
2.4	A pre-proposal conference will be held: Yes At 1130 hrs on 24.01.2018 at Municipal Commissioners’ Office, Varanasi Nagar Nigam, Sigra, Varanasi, 221010., Uttar Pradesh, India. The Client’s representative is: <u>Nodal Officer, JICA Projects, VNN</u> Address: Varanasi Nagar Nigam, Sigra, Varanasi, 221010 Telephone/ Fax : +91-542-2222702 E-mail: mcvns1@gmail.com
2.5	The Client will provide the following inputs, project data, reports, etc. to facilitate the preparation of the Proposals: Not Applicable. <u>The Client will be provided with the background study reports, data and maps both in manual as well as digital format to the extent these are available to the selected consultant after commencement of services.</u>
3.2	Not Applicable.
4.1(c)	A list of debarred firms and individuals is available at the World Bank’s website: www.worldbank.org/debarr
6.3	Proposals shall be submitted in the following language: English

7.1	Proposals must remain valid for 90 days after the submission deadline date, i.e. until: 9th May 2018 .
7.8(a)	The price of the Financial Proposal shall be adjusted by the following factor: Not Applicable .
7.8(b)	The fixed portion of the price of the Financial Proposal shall be adjusted by the following factor: Not Applicable
8.1	Clarifications may be requested by 20th January 2018 . The address for requesting clarifications is: <u>Municipal Commissioner, Varanasi Nagar Nigam, Address: Varanasi Nagar Nigam, Sigra, Varanasi, 221010, Uttar Pradesh, India.</u> Telephone/ Fax : +91-542-2222702 E-mail: mcvns1@gmail.com
11.1 (i)	Estimated man-months for Key Experts are: - Local Experts: 110 man-months (1) a per diem allowance in respect of Experts of the Consultant for every day in which the Experts shall be absent from their home office; (2) cost of necessary local air travel of Experts by the most appropriate means of transport and the most direct practicable route; (3) land transportation including vehicle rental; (4) cost of international or local communications such as the use of telephone and facsimile required for the purpose of the Services; (5) cost, rental and freight of any equipment required to be provided by the Consultants for the purposes of the Services; (6) cost of printing and dispatching of the reports to be produced for the Services; (7) miscellaneous administrative and support costs including office operations, support personnel and translation; (8) provisional sums; and (9) cost of such further items required for purposes of the Services not covered in the foregoing.

11.1 (ii) c	<p>Amount for provisional sums: - for local currency: Rs. 10 Lakhs (Rupees Ten Lakhs Only)</p> <p>Contingency amount: - for local currency: Rs. 25 Lakhs (Rupees Twenty-Five Lakhs Only)</p>
11.2	Not Applicable.
11.3	Not Applicable.
12.3	<p>Number of copies of the Technical Proposal: One (1) Original and Three (3) Copies. In addition, a soft copy of the Proposal (preferably in PDF format) shall be submitted in a CD-ROM.</p>
12.5	<p>Time and date of the Proposal submission deadline:</p> <p>- Time: 1500 hrs IST - Date: 09.02.2018.</p>
12.6	<p>Consultants must submit the original and all copies of the Technical Proposal, and the original Financial Proposal to the Client to the following address:</p> <p>Municipal Commissioner, Varanasi Nagar Nigam, Address: Varanasi Nagar Nigam, Sigra, Varanasi, 221010 Telephone/ Fax: +91-542-2222702 E-mail: mcvns1@gmail.com</p> <p>Proposals must be submitted no later than the following date and time: 15:00 hrs on 09.02.2018</p>
13.2	<p>Initially only the Envelop (A) Pre-Qualification Documents, will be opened then the JICA approval will be obtained after Pre-Qualification and after then the Technical Proposal of qualified bidders will be opened. At the end of the evaluation of Technical proposal and after receiving the approval of JICA, the eligible Consultants (those Scoring a minimum Technical Score of 70) will be invited for Public Opening of the Financial Proposals. The Financial Proposals will be separately evaluated and the firm scoring the Highest marks in the Combined Evaluation (Technical Score +Financial Score) will be invited for contract negotiations and finalization.</p> <p>Opening of Pre-Qualification & Technical Proposal at: Office of the Municipal Commissioner Varanasi Nagar Nigam Sigra , Varanasi-221010 U.P. INDIA Tel Fax No-:+91-542-2222702. Email address: mcvns1@gmail.com</p> <p>Opening of Pre-Qualification Date and Time: 09.02.2018 at 04.00 PM Opening of Technical Proposal-TBA</p>

14.2	<p>Criteria, sub-criteria, and point system for the evaluation are:</p> <p style="text-align: right;"><u>Points</u></p> <p>(i) Experience of the Consultants relevant to the assignment:</p> <p>a) Experience of international projects of comparable size, complexity and technical specialty 3 points</p> <p>b) Experience in developing countries under comparable conditions 5 points</p> <p>c) Experience in State and Local Government Projects 2 points</p> <p style="text-align: right;">Total points for criterion (i): 10 points</p> <p>(ii) Adequacy of the proposed methodology and work plan in responding to the Terms of Reference:</p> <p>a) Technical approach and methodology 25 points</p> <p>b) Work plan & Manning Schedule 10 points</p> <p style="text-align: right;">Total points for criterion (ii): 35 Points</p> <p>(iii) Key Experts’ qualifications and competence for the assignment:</p> <p>Project Execution Stage:</p> <p>a) Project Manager 8 points</p> <p>b) GIS Expert 6 Points</p> <p>c) Solution Architect 5 Points</p> <p>d) Software Development -Team Lead 5 points</p> <p>e) Database Administrator 4 points</p> <p>Post Commissioning, on Site Support:</p> <p>a) GIS Expert 3 Points</p> <p>b) Database Administrator 2 points</p> <p>c) Infrastructure Expert 2 points</p> <p style="text-align: right;">Total points for criterion (iii): 35 Points</p>
-------------	---

	<p>The number of points to be assigned to each of the above positions or disciplines shall be determined considering the following three sub-criteria and relevant percentage weights:</p> <p>1) General qualifications 30% 2) Adequacy for the assignment 60% 3) Familiarity with the language and the conditions of the Country 10% Total weight: 100%</p> <p>(iv) Suitability of the transfer of knowledge (training) program :</p> <p>a) Relevance of training program 2 Points b) Training approach and methodology 5 Points c) Qualifications of Key Experts and trainers 3 Points Total points for criterion (iv): 10 Points</p> <p>(v) Presentation on the Technical Proposal including case studies 10 points</p> <p>Total points for the Five criteria: 100</p> <p>The minimum technical score (St) required to pass is: 70 Points</p>
14.4	Expected date (month/year) for public opening of Financial Proposals: 28.02.2018 at Office of the Municipal Commissioner, Varanasi Nagar Nigam, Sigra, Varanasi.
14.6(i)	Not Applicable.
14.8	Quality-Cost Ratio: 80:20
15.1	Expected date and address for contract negotiations: 07.03.2018 at Office of the Municipal Commissioner, Varanasi.
17.1	<p>Performance Security:</p> <ul style="list-style-type: none"> • A Letter of Acceptance shall be issued in the first instance informing the Consultant of the decision of the Client to accept his Proposal and the Work Order shall be issued only after the work Contract Performance Guarantee in the prescribed form is received. • Within 15 days of the receipt of the Letter of Acceptance from the Client, the successful bidder shall furnish to the Client an irrevocable performance security in an amount 10% (Ten percent) of the Accepted Contract amount specified in the format Appendix –I to Proposal in accordance with the Conditions of the Contract, in addition to other deposits mentioned elsewhere in the Contract for his proper performance of Consulting Contract, (not withstanding and/or without prejudice to any other provisions in the Contract) This period can be further extended by Client up to a maximum period of 5 days

	<p>on written request of the Consultant stating the reason for delays in procuring the Guarantee to the satisfaction of Client.</p> <ul style="list-style-type: none"> ○ Performance Guarantee on the MIS/GIS Development Cost and IT Infrastructure Cost will be given within 15 days of issue of Letter of Acceptance for that particular milestone period ○ Performance Guarantee on post implementation Maintenance Cost and Managed Service Cost will be given within 15 days of effective date of these milestone period. <ul style="list-style-type: none"> ● In case of failure by the Consultant to furnish Performance Guarantee within the specified period Client shall without prejudice to any other right or remedy available in law, be at liberty to debar the Consultant to participate in the Consulting, if proposals are re-invited the Performance Securities shall be in the form of Bank Guarantees from a scheduled bank from the list of banks as defined by Reserve Bank of India as per the format provided in Sample Forms. The currency of Performance Securities shall be Indian Rupees (INR). ● Without limitation to the provisions of the preceding paragraph, whenever the Client determines a cumulative addition to the Contract Price as a result of a change in cost and/or legislation or as a result of a Variation amount amounting to more than 5% of the Accepted Contract Amount for that Section of the Consulting, the Consultant, at the written request of the Client, shall promptly increase the value of the Performance Security applicable to that Section of the Consulting by an equivalent amount. ● If the terms of a Performance Security specify its expiry date, and the Consultant has not become entitled to receive final contract completion Certificate the Consultant shall extend the validity of the Performance Security until the relevant Section of the Consulting has been completed and any defects remedied. ● Performance security shall be released to the Consultant after the issuance of Consultancy Contract completion certificate or 30 (thirty) days after the issuance of successful completion certificate of Vendors involved in the implementation of the project; whichever is Later.
<p>17.2</p>	<p>Expected date for commencement of consulting services: 28. 03. 2018 at Varanasi.</p>

Section 2.1 Pre-Qualification Requirements for the Proposal

A. General Eligibility Requirements

- a) The Firm should have been registered in India.
- b) The Consultant (all members in case of a consortium) should be an established Information Technology (IT) services company, and should have been in operation for a period of at least 10 years as on March 31, 2017. Copy of the Certificate of Incorporation issued by the Registrar of Companies and work orders with supporting completion certificate / testimonial establishing the operation to be submitted as support.
- c) The Consultant (lead Consultant in case of a consortium) must have an office in Varanasi, Uttar Pradesh or should furnish an undertaking that the same would be established within one month of signing the contract.
- d) The Consultant (all members of the consortium) must have valid ISO 9001:2015 quality certification and the lead Consultant (preferably) or the partner of the consortium must have been assessed and possess a valid certification for CMMi Level 3 or higher as on the date of submission of bid and the certificate should be valid for at least a period of one year from the date of submission of the bid.
- e) The Consultant (all members in case of a consortium) should have valid GST registration and should have filed up to date Service Tax/GST return. Copy of registration certificate and latest return to be submitted for documentation.
- f) The Consultant (both members in case of a consortium) should have filed up to date Income Tax return. Copy of PAN card and Income Tax return for last 3 years (Assessment year 2016-17, 2015-16, 2014-15) to be submitted for documentation.
- g) The Consultant (both members in case of a consortium) should have Registration with Provident Fund. Copy of valid PF registration to be submitted for documentation.
- h) Backlisting by any Department/ Agency/ PSU/ Undertaking or Company under the control of Government of Uttar Pradesh or any other State and or Central Government during the past five (5) years shall render a company ineligible to participate in the bidding process.

B. Financial Eligibility Requirements

- a) The Consultant (lead Consultant in case of a consortium) must have average annual turnover of Rs. 20 Crores from I.T. Services (IT Infrastructure procurement and commissioning, IT Application Customization, Integration with legacy systems, Deployment and Maintenance) in the last three financial years as on 31/03/2017 (Auditor's certificate to be submitted).
- b) The Consultant (both members in case of a consortium) must have positive Net Worth in the last three financial years as on 31/03/2017 (2014-15, 2015-16 & 2016-17).
- c) The Consultant (both members in case of a consortium) should be a profit-making company for last three financial years as on 31/03/2017.

C. Technical Eligibility Requirements

- a) The bidder (lead bidder in case of a consortium) must have prior experience of working on at least one Software Services Projects (MIS/ GIS) any Government Department /

Agency / PSU / Undertaking / Company of Government in India in the last five years of value at least Rs. 5 Crores. Bidder must provide as a supporting documentary proof in form of work order confirming year and area of activity, value of services to be delivered for the project, completion/ partial completion certificate from the client.

- b) The bidder (lead bidder in case of a consortium) should have experience of implementation of at-least one turnkey IT project (involving software development, implementation including hardware procurement and installation) any Government Department / Agency / PSU / Undertaking / Company of Government in India with a project cost each of Rs. 2.5 crores or above in the last five years. Bidder must provide as a supporting documentary proof in form of work order confirming year and area of activity, value of services to be delivered for the project, completion/ partial completion certificate from the client.
- c) The bidder (any one of the consortium partner) should have completed preparation of GIS based Asset Register and implementation of one Web GIS based Utility Asset Mapping Application for any Urban Local Body (ULB) in India with population more than 5 lakhs in last 3 years.

D. Consortium Conditions

Given that diverse skills and resources are required to implement the project, it is expected that a consortium of Companies may bid for the project as per the following conditions:

- a) However, number of members in a consortium shall be restricted to maximum 2 (two) organizations.
- b) One of the members of the consortium should act as the lead Consultant and be responsible to the Client for discharging project responsibilities.
- c) The bid should contain details of all the members of the consortium including their legal status and specify their roles and responsibilities in the project.
- d) The members of the consortium shall enter into an MOU/Agreement for the purpose of submitting the proposal and a copy of the same shall be submitted with the proposal, failing which bid will be summarily rejected.
- e) Lead Consultant will take total responsibility of project development, delivery & management. However, there should be an agreement on the responsibility sharing matrix between the Lead Consultant & the consortium partner. The responsibility Matrix should be included in the Technical Proposal along with other documents. It is expected that the Lead Consultant shall have a share of 51% or above in the overall responsibility for the project.
- f) Performance Bank guarantee for the project can be shared by both the parties as per the sharing ratio pattern in the consortium agreement.

Section 2.2: Pre-Qualification Documents - Prescribed Formats

Form I: Covering Letter (on Firm Letter head)

Date:

To

Municipal Commissioner
Varanasi Nagar Nigam
Sigra, Varanasi-221010 U.P. INDIA
Tel Fax No:- +91-542-2222702
Email: info@nnvns.org

Subject: Proposal for Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

Reference: Your NIT dated...

Dear Sir,

Having examined the Request for Proposals, I/we the undersigned, intend to submit our proposal in response to the NIT for Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi” under the Institutional Development Programme (IDP) of the JICA assisted Ganga Action Plan Project Varanasi. We attach the response as required in RFP, which constitutes our proposal.

Primary & Secondary Contacts

	Primary	Secondary
Name		
Title		
Name of the firm		
Address of the firm		
Phone		
Mobile		
Fax		
Email		

We confirm that the information contained in this response or any part thereof, including its exhibits and other supporting documents & instruments delivered or to be delivered to the Varanasi Nagar Nigam (VNN) is true, accurate, verifiable & complete. This response includes all the information necessary to ensure that the statements therein do not in whole or in part mislead the VNN.

We fully understand & agree to comply, that on verification, if any of the information provided here is found to be misleading, we are liable to be dismissed from the selection process or termination of the contract during the Project, if awarded to do so, for providing Consultancy Services for “Developing Geographical Information System / Management Information System and related works for Varanasi” under the Institutional Development Programme (IDP) of the JICA assisted Ganga Action Plan Project Varanasi. We agree to unconditional acceptance of all the terms & conditions set out in the RFP document.

It is hereby confirmed that I/We are entitled to act on behalf of our firm and are authorized to sign this document as well as such other documents, which may be required in this connection.

Attachments:

- a) Board/Governing Body resolution authorizing the Consultant to sign/execute the proposal as a bidding document on behalf of the respondent firms.

Dated this day of [Month], 2018

(Signature) in the capacity of Name & address of the firm with seal stamp of the Consultant

Witness signature

Witness name

Form II: General Details of the Firm

a) General Background of the Firm (500 words)

Details of the Firm	
Name of the Firm	
Nature of legal status in India	
Legal status reference details	
Nature of business in India & Abroad	
Date of Incorporation	
Date of Commencement of Business in India & Abroad	
Address of H/Q	
Address of Registered Office in India	
Other Relevant Information	
<p>Mandatory Supporting Documents:</p> <p>a) Certificate of incorporation from Registrar of Companies (ROC) or as applicable under any other relevant Act.</p> <p>b) Relevant sections of Memorandum of Association of the firm to indicate the nature of business</p> <p>c) ISO 9001:2015 Certification (The Certificate should be valid on the date of submission of the bids)</p> <p>d) CMMi Level 3 Certification (mandatory for Lead Consulting Firm/ Software Development Partner)</p>	

b) Financial Details of the Firm:

Financial Information			
	FY 2014-15	FY 2015-16	FY 2016-17
Revenue (in INR Crores)			
Profit Before Tax			
Revenue from the GIS, Software Development Business verticals			
Other Relevant Information			
Mandatory Supporting Documents: <ul style="list-style-type: none"> • Auditor Certified financial statements for the financial years ending March - 2015, 2016, 2017 • Financial Statements certified by the firm for the year ending March -2017. • Service tax return for the financial years 2014-15, 2015-16, 2016-17. • Copy of the PAN card and Income tax Returns for the Years 2014-15, 2015-16, 2016-17. • Certification by the firm auditors supporting the revenue break-up for GIS and Software Development related components • GST Registration Certificate. 			

Form III: Relevant Project Experience Details

(Only Consulting Services for GIS, MIS, Data Centre related)

Execution of Similar Projects	
General Information	
Name of the Project	
Client for which Project was executed	
Name & Contact details of the Client	
Current Status of the Project	
Name of the Associate / JV Partner	
Project Details	
Description of the Project (in short)	
Geographical Scope	
Project Outcomes	
Technologies Used	
Infrastructure Used	
Total Cost of the Project	
Total Duration of the Project (no. of months, start date, completion date)	
Total cost of the Services provided by the Consultant	
Mandatory Supporting Documents:	
<p>a) Testimonials from the client duly indicating the salient points like cost, period, and scope of the services and successful completion of the Project. If the Project is an ongoing project then comments on the present status of the project indicating above details.</p> <p>b) Please give the specific experience in executing GIS development, Software Development, Data Centre and Turn Key Projects in particular.</p>	

Form IV: Consortium Partner Details

(Only in case of Consortiums with Associates or Joint Venture Partners)

Details of the Consortium Partner	
Name of the Firm (Associate / Joint Venture)	
Nature of legal status in India	
Legal status reference details	
Nature of business in India & Abroad	
Date of Incorporation	
Date of Commencement of Business in India & abroad	
Address of H/Q	
Address of Registered Office in India	
Other Relevant Information	
Name of the Contact Person	
Partnership Details	
Type pf Partnership: Associate / Joint Venture	
Responsibilities for Each Consortium Partner	
Revenue Sharing arrangements	
Mandatory Supporting Documents:	
<p>a) Certificate of incorporation from Registrar of Companies (ROC) or as applicable under any other relevant Act.</p> <p>b) Relevant sections of Memorandum of Association of the firm to indicate the nature of business</p> <p>c) ISO 9001:2015 Certification (The Certificate should be valid on the date of submission of the bids)</p> <p>d) CMMI Level 3 Certification</p> <p>e) Responsibility Matrix</p> <p>f) Revenue Sharing Ratio</p> <p>g) Letter of Association / Joint Venture Agreement / Memorandum of Understanding</p>	

Section 3. Technical Proposal - Standard Forms

Table of Technical Forms

	Page No.
Form TECH-1: Technical Proposal Submission Form	42
Form TECH-2: Consultant’s Organization and Experience	
A - Consultant’s Organization	44
B - Consultant’s Experience	45
Form TECH-3: Comments and Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be Provided by the Client	
A - On the Terms of Reference	46
B - On Counterpart Staff and Facilities	47
Form TECH-4: Description of Approach, Methodology and Work Plan for Performing the Assignment	48
Form TECH-5: Team Composition, Task Assignments and Summary of CV Information	49
Form TECH-6: Curriculum Vitae (CV) for Proposed Key Experts	50
Form TECH-7: Expert Schedule	52
Form TECH-8: Work Schedule	53
Form TECH-9: Acknowledgement of Compliance with the Guidelines for Employment of Consultants	54

Form TECH-1: Technical Proposal Submission Form

[Location, Date]

To: [Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the consulting services for [Insert name of assignment] in accordance with your Request for Proposals dated [Insert Date] and our Proposal. [Select appropriate wording depending on the selection method stated in the RFP: “We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed in a separate envelope” or, if only a Technical Proposal is invited “We hereby are submitting our Proposal, which includes this Technical Proposal only in a sealed envelope.”].

[If the Consultant is a joint venture, insert the following: We are submitting our Proposal as 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 [insert: “of our letter of intent to form a joint venture” or, if a JV is already formed, “of the JV agreement”] signed by every participating member, 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 firms as Sub-consultants: [Insert a list with full name and address of each Sub-consultant.]

We hereby declare that:

- (a) All the information provided 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 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 7.1.
- (c) We have no conflict of interest in accordance with ITC 3.

- (d) We meet the eligibility requirements as stated in ITC 5, and we confirm our understanding of our obligation to abide by JICA’s policy in regard to corrupt and fraudulent practices as per ITC 4.

- (e) We undertake to negotiate a Contract on the basis of the proposed Key Experts. We accept that the substitution of Key Experts for reasons other than those stated in ITC 7.5 and ITC 15.4 may lead to the termination of Contract negotiations.

- (f) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.

We understand that the Client is not bound to accept any Proposal that the Client receives.

We remain,

Yours

sincerely,

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

Name and Title of Signatory: _____

Name of Consultant [*company’s name or JV’s name*]: _____

In the capacity of: _____

Address: _____

Contact information [*phone and e-mail*]: _____

[*For a joint venture, either all members shall sign or only the lead member, in which case the power of attorney to sign on behalf of all members shall be attached*]

Form TECH-2: Consultant’s Organization and Experience

A - Consultant’s Organization

[Provide here a brief (two pages) description of the organization and general experience of the Consultant and, if applicable, each joint venture member for this assignment.]

B - Consultant’s Experience

[Using the format below, provide information on each assignment for which your firm and each joint venture member for this assignment, was legally contracted either individually as a corporate entity or as a lead firm or one of members within a joint venture, for carrying out consulting services similar to the ones requested under this assignment. Use about 20 pages.]

Assignment name:	Approx. value of the contract (in Indian Rupees)
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total N ^o of man-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in Indian Rupees):
Start date (month/year): Completion date (month/year):	N ^o of professional man-months provided by the joint venture members or Sub-consultants:
Name of joint venture member or Sub-consultants, if any:	
Narrative description of Project:	
Description of actual services provided in the assignment:	

Firm’s Name:

Form TECH-3: Comments and Suggestions on the Terms of Reference and on Counterpart Staff and Facilities to be Provided by the Client

A - On the Terms of Reference

[Present and justify here any modifications or improvement to the Terms of Reference you are proposing to enhance performance in carrying out the assignment (such as deleting some activity you consider unnecessary, or adding others, or proposing a different phasing of the activities).]

B - On Counterpart Staff and Facilities

[Comment here on counterpart staff and facilities to be provided by the Client according to Clause 2.5 of the Data Sheet including: administrative support, office space, local transportation, equipment, data, background reports, etc., if any.]

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

[*Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (about 50 pages, inclusive of charts and diagrams) divided into the following three chapters:*

- a) *Technical Approach and Methodology,*
 - b) *Work Plan, and*
 - c) *Organization and Staffing,*
-
- a) *Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach. Staffing for training should also be explained, if so required in the TOR. Please do not repeat/copy the TOR in here.*
 - b) *Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.*
 - c) *Organization and Staffing. In this chapter, you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the Key Experts and Non-Key Experts, and proposed technical and administrative support staff. You shall also specify if you will be the lead firm in a joint venture or in an association with Sub-consultants. For joint ventures, you must attach a copy of the joint venture agreement or a letter of intention to form a Joint Venture, as specified in Form TECH-1.]*

Form TECH-5: Team Composition, Task Assignments and Summary of CV Information

Family Name, First Name	Firm Acronym	Area of Expertise	Position Assigned	Task Assigned	Key Expert or Non- Key Expert	Nationality	Employment Status with Firm (full- time, or other)	Education / Degree (Year / Institution)	No. of years of relevant project experience	CV signature (by expert/by other)

Form TECH-6: Curriculum Vitae (CV) for Proposed Key Experts

1. General

Position Title and No.	[e.g., K-1, TEAM LEADER] [Note: Only one candidate shall be nominated to each position.]
Name of Key Expert	[Insert full name]
Name of the Firm proposing the Key Expert	
Date of Birth	[day/month/year]
Nationality	
Country of Citizenship/Residence	

2. Education: [List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained]

3. Employment record relevant to the assignment: [Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included.]

Period	Employing organization and your title/position. Contact information for references*	Country	Summary of Activities performed relevant to the Assignment
[e.g., May 2005-present]	[e.g., Ministry of, advisor/consultant to... For references: Tel...../e-mail.....; Mr. Hbbbb, deputy minister]		

*Contact information for references is required only for assignments during the last 3 years.

4. Membership in Professional Associations and Publications:

5. Language Skills (indicate only languages in which you can work): _____

<p>Detailed Tasks Assigned on Consultant’s Team of Experts: [List major deliverables/tasks as in TECH- 5 in which the Expert will be involved]</p>	
<p>Reference to Prior work/ Assignments that Best Illustrates Capability to Handle the Assigned Tasks</p>	

6. Adequacy for the Assignment:

7. Certification:

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

- (i) this CV correctly describes my qualifications and my experience;
- (ii) In the absence of medical incapacity, I will undertake this assignment for the duration and in terms of the inputs specified for me in the Expert Schedule in Form TECH-7 provided team mobilization takes place within the validity of this proposal or any agreed extension thereof;
- (iii) I am committed to undertake the assignment within the validity of Proposal;
- (iv) I am not part of the team who wrote the terms of reference for this consulting services assignment;
- (v) I am, pursuant to Clauses 3 and 4 of the ITC, eligible for engagement.

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

Date: _____
Day/Month/Year

_____ [Signature of Key Expert or authorized representative of the firm]¹

Full name of authorized representative: _____

¹ This CV can be signed by an authorized representative of the Consultant provided that if the Consultant’s proposal is ranked first, a copy of the CV signed by the Key Expert and/or specialist must be submitted to the Client prior to the commencement of contract negotiations.

Form TECH-7: Expert Schedule¹

N ^o	Name of Expert /Position /Category(International or Local)	Professional Expert input (in the form of a bar chart) ²													Total man-month input		
		1	2	3	4	5	6	7	8	9	10	11	12	n	Home	Field ^{3,4}	Total
Key Experts																	
ex.	Mr. XYZ Project Manager (International)	[Home]															
		[Field]															
1																	
2																	
n																	
														Subtotal			
Non-Key Experts																	
1		[Home]															
		[Field]															
2																	
n																	
														Subtotal			
														Total			

- 1 For Key Experts, the input should be indicated individually for the same position as required under Clause 14.2 of the Data Sheet; for Non- Key Experts it should be indicated individually, or, if appropriate, by category (e.g. economists, financial analysts, etc.).
- 2 Months are counted from the start of the assignment. For each Expert indicate separately the input for home and fieldwork.
- 3 One (1) month equals twenty two (22) working days. One (1) working day shall be not less than eight (8) hours. National holidays and holidays are locally recognized days. [to be identified and confirmed at the contract negotiation]
- 4 Field work means work carried out at a place other than the Expert's home office; i.e. normal place of business. Full time input

Form TECH-8: Work Schedule

N°	Activity ¹	Months ²												
		1	2	3	4	5	6	7	8	9	10	11	12	n
1														
2														
3														
4														
5														
n														

- 1 Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.
- 2 Duration of activities shall be indicated in the form of a bar chart.

Form TECH-9: Acknowledgement of Compliance with the Guidelines for Employment of Consultants

A) I, [name and position of authorized signatory] being duly authorized by [name of Consultant/members of joint venture] (“JV”) (“Consultant”) to execute this Acknowledgement of Compliance with Guidelines for Employment of Consultants, hereby certify on behalf of the Consultant and myself that all information provided in the Technical and Financial Proposals (collectively “Proposals”) submitted by the Consultant for [Loan No. and name of the Project] (hereinafter called “the Project”) is true, correct and accurate to the best of the Consultant’s and my knowledge and belief. I further certify, on behalf of the Consultant, that:

- (i) the Proposals have been prepared and submitted in full compliance with the terms and conditions set forth in Guidelines for the Employment of Consultants under Japanese ODA Loans (hereinafter called the “Guidelines”); and
- (ii) the Consultant has not, directly or indirectly, taken any action which is or constitutes a corrupt, fraudulent, collusive or coercive act or practice in violation of the Guidelines and is not subject to any conflict of interest as stipulated in the relevant section of the Guidelines.

<If debarment for more than one year by the World Bank Group is NOT imposed, use the following sentence B).>

B) I certify that the Consultant has NOT been debarred by the World Bank Group for more than one year since the date of issuance of the Request for Proposals¹.

<If debarment for more than one year by the World Bank Group has been imposed BUT three (3) years have passed since the date of such debarment decision, use the following sentence B’).>

B’) I certify that the Consultant has been debarred by the World Bank Group for a period more than one year BUT that on the date of issuance of the Request for Proposals at least three (3) years had passed since the date of such debarment decision. Details of the debarment are as follows:

Name of the debarred firm	starting date of debarment	Ending date of debarment	Reason for debarment

C) I certify that the Consultant will not enter into a Sub-contract with an entity or individual which has been debarred by the World Bank Group for a period more than one year, unless on the date of the subcontract at least three (3) years have passed since the date of such debarment decision.

¹The starting date should be revised to "appointment", if a consultant is selected through the Single-Source Selection method; or to “commencement of the actual selection process”, if the Borrower adopt a method other than QCBS, QBS, or Single Source Selection.

- D) I certify that the Experts of the Consultant and either Sub-consultant having a direct contract with the Consultant or Expert nominated by the Consultant, who are assigned to this contract on time basis, will not be engaged in any other assignment which may have time conflict with the Contract.
- E) I certify, on behalf of the Consultant, that if selected to undertake services in connection with the Contract, the Consultant shall carry out such services in continuing compliance with the terms and conditions of the Guidelines.
- F) I further certify, on behalf of the Consultant, that if the Consultant is requested, directly or indirectly, to engage in any corrupt or fraudulent action under any applicable law, such as the payment of a rebate, at any time during a process of consultant selection, negotiations, execution or implementation of contract (including amendment thereof), the Consultant shall report all relevant facts regarding such request to the relevant section in JICA (details of which are specified below) in a timely manner.

JICA’s information desk on fraud and corruption (A report can be made to either of the offices identified below.)

(1) JICA Headquarters: Legal Affairs Division, General Affairs Department URL:

<https://www2.jica.go.jp/en/odainfo/index.php>

Tel: +81 (0)3 5226 8850

(2) JICA XX office

Tel:

The Consultant acknowledges and agrees that the reporting obligation stated above shall NOT in any way affect the Consultant’s responsibilities, obligations or rights, under relevant laws, regulations, contracts, guidelines or otherwise, to disclose or report such request or other information to any other person(s) or to take any other action, required to or allowed to, be taken by the Consultant. The Consultant further acknowledges and agrees that JICA is not involved in or responsible for the selection process in any way.

- G) If any of the statements made herein is subsequently proven to be untrue or incorrect based on facts subsequently determined, or if any of the warranties or covenants made herein is not complied with, the Consultant will accept, comply with, and not object to any remedies taken by the Employer and any sanctions imposed by or actions taken by JICA.

Authorized Signatory
[Insert name of signatory; title]

For and on behalf of the Consultant
Date: _____

Section 4. Financial Proposal - Standard Forms

Table of Financial Forms

	Page No.
Form FIN-1: Financial Proposal Submission Form.....	57
Form FIN-2: Summary of Costs.....	58
Form FIN-3: Part A- GIS Related Costs	59
Form FIN-3: Part B- MIS Related Costs.....	60
Form FIN-3: Part C- IT Infrastructure Related Cost	61
Form FIN-3: Part D- Post Implementation Maintenance Cost	62
Form FIN-3: Part E- Managed Services Cost	63
Form FIN-3: Part F- GIS Related Costs (Optional Items)	64
Form FIN-3: Part G- MIS Related Costs (Optional Items).....	65
Form FIN-4: Breakdown of Remuneration (Not Applicable)	66
Form FIN-5: Breakdown of Reimbursable Expenses (Not Applicable).....	67
Appendix: Instructions for Preparing Financial Proposal Forms FIN-1 to FIN-5	68

Form FIN-1: 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 name of assignment] in accordance with your Request for Proposal dated [insert Date] and our Technical Proposal. Our attached Financial Proposal is for the sum of [insert amount(s) in words and figures¹].

Our Financial Proposal shall be binding upon us 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 7.1 of the Data Sheet.

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

We remain,

Yours sincerely,

Authorized Signature [in full and initials]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

¹ Amounts must coincide with the ones indicated under Total in Form FIN-2. This amount is inclusive of the local indirect taxes, which shall be confirmed during negotiations, and included in the Contract price.

Form FIN-2: Summary of Costs

Competitive Components:

**Local Currency
(Indian Rupees)**

Part A: GIS Related Costs

Part B: MIS Related Costs

Part C: IT Infrastructure Costs

*Part D: Post Implementation
Maintenance Charges*

*Part E: Managed Services at
VNN Data Centre*

Sub-Total

Non-Competitive Components:

<i>Provisional Sums²</i>	10,00,000
-------------------------------------	-----------

<i>Contingencies^{2, 3}</i>	25,00,000
-------------------------------------	-----------

<i>Indirect Taxes Estimates⁴</i>	
---	--

Sub-Total

Total

- 1 Indicate the aggregate costs, which are exclusive of local indirect taxes, to be fixed by the Client in each currency for remuneration and reimbursable expenses. Such aggregate costs must coincide with the sum of the relevant sub- totals indicated in Form FIN-3 and Form FIN-5 provided with the Proposal.
- 2 The amounts provided for these items must correspond to the exact amount specified in the Data Sheet and these will be discussed during the contract negotiations.
- 3 In case that provisions on price adjustment are stated in the conditions of contract, contingencies for price escalation must be included in this item.
- 4 Indirect taxes to be discussed and finalized at the negotiations if the Contract is awarded.

Form FIN-3: Part A- GIS related Costs

(For the Existing Area of Varanasi Nagar Nigam only as indicated in Appendix-B)

Part A: GIS Related Costs					
Sl.	Milestone / Submission of Deliverables	Lumpsum Rate	Additional Cost	Taxes	Total Including Taxes
1.	Inception				
2.	Satellite Image Processing, GCP Survey and Geo-Referencing				
3.	GIS Mapping, Geo-Database of water and Waste Water Utility assets				
4.	DGPS Survey and Compilation of Geo-Referenced Consumer Database.				
5.	Property Enumeration and Submission of Geo-Referenced Property Database				
6.	Development, Testing and Commissioning of Web GIS for Water Utility Assets integrated with Consumer Billing				
7.	User Training				
8.	[any other- please mention]				
9.	[any other- Please mention]				
Total Cost for Part A					

Form FIN-3: Part B- MIS related Costs

Software Application Development Cost						
Sr.	Category	Name of the Module	Rate	Additional Cost	Taxes & Other Duties	Total Cost
1.	Integration of Existing Software Systems with MIS and GIS Data Base and development of New Software modules.	Property TAX Management System				
2.		Billing and Collection System				
3.		Content Management System Based Web Portal				
4.		Training				
5.		[any other- Please mention]				
Total Cost for Part B						

Form FIN-3: Part C- IT Infrastructure Related Costs

Creation of Data Centre for GIS / MIS Operations at VNN						
S N	Description of Product	Qty.	Unit Price With 3 years warranty (c)	Taxes (b)	Unit Price in Rs. c=a+b	Total Price
HARDWARE (Installed at Data Centre) as per Technical Bill of Material						
1	Blade Server Chassis					
2	Blade Server					
3	SAN Storage & Switch (40 TB)					
4	Operating System (Enterprise Edition)					
5	Operating System (Standard Edition)					
6	Antivirus CAL for Server					
7	RDBMS Software (Enterprise Edition)					
8	External Web Connector					
9	Layer-3 Managed 24-Port Gigabit Switch					
10	Layer-2 Managed 24-Port Gigabit Switch					
11	CaT-6 UTP Patch Panel					
12	CAT-6 Patch Cord 3/5Mtr Molded					
13	42U Floor Standing Server Rack with Accessories					
14	Fire & Smoke Detector with Temperature Controller					
15	CCTV Surveillance Camera					
16	Hot standby 10 KVA online UPS with 5 Hr backup on full rated load					
17	Desktop Computers for Call Centre					
18	UPS for Desktop Computers					
19	IVRS System					
20	[any other- Please mention]					
Total Cost for Part C						

Form FIN-3: Part D – Post Implementation Maintenance Cost

Services Provided During Post Implementation Phase					
Sl. No.	Services Provided During Post Implementation Phase	Annual Rate	Additional Cost	Taxes	Total Cost
1.	Operations and Maintenance Services for the 1 st year after “Go-Live”				
2.	Operations and Maintenance Services for the 2 nd year after “Go-Live”				
Total Cost for Part D					

Form FIN-3: Part E – Managed Services Cost

Part E: MANAGED SERVICES AT Varanasi Nagar Nigam Data Centre						
Sl. No.	Description of Product / Personnel	Qty	Unit Rate/ Month (in Rs.)	Total Price /Month (in Rs.)	Total Price /Annum (in Rs.)	Total Price (in Rs.) for 3 Years
IT Managed Services for Data Center and Help desk						
1	GIS Expert	1				
2	Database Administrator	1				
3	Infrastructure Expert	1				
Total Cost for Part E						

Form FIN-4: Breakdown of Remuneration

Not Applicable

Form FIN-5: Breakdown of Reimbursable Expenses

Foreign	Unit	Currency	Unit Cost	Qty	Cost

Not Applicable

Appendix: Instructions for Preparing Financial Proposal Forms FIN-1 to FIN-5

- 1** Forms FIN-1 to FIN-4 must be completed and submitted to the Client in hard and soft copies, strictly in accordance with the instructions.
- 2** It is the Consultant’s responsibility to ensure the correct Financial Proposal format is used for the selection method indicated in the Data Sheet.
- 3 Form FIN-1** Financial Proposal Submission Form shall be filled in following the instructions provided in the Form.
- 4 Form FIN-2** Summary of Costs. Form FIN-2 provides a summary of the elements of estimated costs for implementation of the proposed Consultant services.
- 5 Form FIN-3** Remuneration
 - (i) The purpose of Form FIN-3 is to identify the monthly billing rates for each Key Expert and Non-Key Expert to be fielded by the Consultant as part of its proposed team of Experts. Please note that, for purposes of computing remuneration payable to Experts, payments for periods of less than one month shall be calculated on an hourly basis for actual time spent in the Consultant’s home office and directly attributable to the Services (one hour being equivalent to 1/176th of a month) and on a calendar-day basis for time spent away from home office (one day being equivalent to 1/30th of a month).
 - (ii) The following details shall be shown for each Expert:
 - a. Expert’s name
 - b. Key or Non-Key Expert
 - c. International or Local Expert
 - d. Employment status
 - Regular full-time (FT) - employee of the Consultant or the Sub-consultant. [Refer to Form TECH-2, footnote 1 of Section 3].
 - Other source (OS) - an Expert being provided by another source which is not a Consultant or a Sub-consultant.
 - Independent Expert (IP) - independent, self-employed Expert.
 - e. Nominated position; same as that shown on Expert Schedule (Form TECH-7, Section 3).
 - f. Currency; currency or currencies in which payments are to be made to the Experts.
 - g. Home office rate; remuneration rate when the Expert is working in the Consultant’s home country office.

- h. Field rate; remuneration rate when the Expert is working outside the Expert’s home country.
- i. Months; number of months input to match that shown on the Expert Schedule (Form TECH-7, Section 3).

When QCBS is used, support documents relating to remuneration are not required, in general.

6 Form FIN-4 Breakdown of Remuneration

Form FIN-4 shall only be used when QBS is used and full details showing how the remuneration rate was determined must be provided. These include basic salary, social charges, overhead fee and other special loadings to the basic salary that may be applicable, and these shall be shown in complete detail on Form FIN-4.

The following provides guidance as to the meaning of these terms.

- (i) **The Basic Monthly Salary** is the actual base salary payable on a regular basis by the Consultant, or its Sub-consultant to its regular full-time employee based on the employee’s contract of employment with the firm. This is before any supplemental payments or any deductions are made to or from the salary. During contract negotiations, the Consultant will be required to provide certified copies of salary slips, contracts of employment or other relevant documents to be regarded as equivalent to the said documents to support salaries the Consultant shows in the Financial Proposal.
- (ii) **Social Charges** represent costs to the Consultant of specific employee benefits such as paid vacation, contributions to pension funds, insurance and similar costs directly attributable to the employee. These costs should be distinguished from the generalized overhead costs of the firm.
- (iii) **The Overhead Cost** represents the Consultant’s normal overhead expense at the home office that is attributable to its consulting activity. The Consultant and its joint venture member or its Sub-consultant should each show one overall average percentage figure to be applied for all of their own experts who are regular full-time employees. In the case of independent individual Experts contracted from outside the Consultant’s own regular full-time employees, a suitably reduced overhead may be shown as a percentage of their contracted cost.
- (iv) **The Fee**, or profit to be earned by the Consultant is computed as a percentage of the summation of the basic monthly salary, the social charges and the overhead cost.
- (v) **Other Allowances** provide for inclusion of any other payment the Consultant is obligated in accordance with the Consultant’s employment policies, to add to the Expert’s home office basic monthly salary when the Expert is working outside its home country. For such cases during contract negotiations the Consultant must provide a copy of the Expert’s employment conditions showing the Consultant’s obligation to make this payment. When this allowance is accepted by the Client, it is computed at a percentage of the Expert’s basic salary and is not subject to social charges, overhead cost or fee additions. The maximum allowance the Client will accept is limited to 20 percent of the Expert’s basic salary.

- (vi) **The Multiplier** shows the ratio between the home office rate per month and the basic monthly salary. These multipliers are subject to negotiation.
- (vii) **Support Documentation** in the form of salary slips, contract of employment or other relevant documents to be regarded as equivalent to the said documents to support basic salaries shown by the Consultant in the Financial Proposal and a copy of the Consultant’s (or Sub-Consultant’s) latest set of annual statement of income and expense will be required for review by the Client during contract negotiations. Annual statement should be a copy certified by an independent auditor.

7 Form FIN-5 Breakdown of Reimbursable Expenses

- (i) The purpose of Form FIN-5 is to identify all reimbursable expenses in foreign and local currencies considered by the Consultant necessary to carry out the assignment. The cost of training of the Client’s staff is identified, only if training is a major component of the assignment, specified as such in the TOR.
- (ii) All required reimbursable expense is an international or a local expense.
 - a. Type - whether the expense is an international or local expense.
 - b. Unit - type of unit (monthly, daily lump sum, etc.)
 - c. Currency - currency of expense
 - d. Per unit cost - unit rate for the item
 - e. Quantity - quantity of the item

(iii) Per Diems

- a. For International Experts, the weighted average per diems (i.e., one per diem rate for all locations) need to be computed (per diems are calculated on the basis of 30 days per calendar month). The per diem comprises room costs and subsistence allowance for meals and other similar expenses.
- b. For Local Experts, when the Experts are required to work away from the Consultant’s project office, the weighted average per diems (i.e., per diem rate for all locations) of the local Consultants calculated on the basis of 30 days per calendar month need to be shown.

(iv) International Travel

International travel costs will show the airfares needed by International Experts to travel from their home office, or regular place of work, to the field, by the most appropriate and the most direct practicable route. Air travel shall be by less than first class.

For International Experts spending twenty-four (24) consecutive months or more in the Client’s country, one extra round trip will be reimbursed for every twenty-four(24) months of assignment in the Client’s country. Such

International Experts will be entitled to such extra round trip only if upon their return to the Client’s country, such International Experts are scheduled to serve for the purposes of the Project for a further period of not less than six (6) consecutive months.

Air transport for dependents: the cost of transportation to and from the Client’s country of eligible dependents who shall be the spouse and not more than two (2) unmarried dependent children under eighteen (18) years of age of those of the International Experts assigned to resident duty in the Client’s country for the purpose of the Services for periods of six (6) consecutive months or longer, provided that the stay of such dependents in the Client’s country shall have been for not less than three (3) consecutive months duration. If the assignment period for resident staff of the International Experts will be thirty (30) months or more, one extra economy class air trip for their eligible dependents for every twenty-four (24)-month assignment will be reimbursed.

The number of round trips, the cost for each trip and destinations should be shown under “air travel”.

(v) Miscellaneous Travel Expenses

A separate item “Miscellaneous Travel Expenses” should be shown to cover a lump sum allowance per round trip for processing necessary travel documents (passport, visas, travel permits), airport taxes, transport to and from airports, inoculations, the cost of excess baggage up to twenty (20) kilograms per person, or the equivalent in cost of unaccompanied baggage or air freight for each International Expert and each eligible dependent, etc.

(vi) Miscellaneous Costs

Miscellaneous costs include, but are not limited to:

- a. The costs of international and local communication reasonably required by the Consultant for the purposes of the Services;
- b. The cost of printing, reproducing and shipping of the documents, reports, drawings, etc.;
- c. The cost of acquisition, shipment and handling of the equipment, instruments, materials and supplies required for the Services;
- d. Miscellaneous administrative and support costs.

(vii) Provisional Sums and Contingency

The amounts indicated as “provisional sums” (e.g. workshop, seminar amounts, etc.), which are reimbursable, and the contingency amount must be the exact amounts and in the same currency as specified in the Data Sheet for such cost.

Section 5. Terms of Reference

Abbreviations and Acronyms

CD	Compact Disc
CERT	Computer Emergency Response Team (of Government of India)
CMS	Content Management System
CPU	Central Processing Unit
DGPS	Diferential GPS
DR	Disaster Recovery
DSS	Decision Support System
DVD	Digital Video Disc
GB	Giga Bytes
GCP	Ground Control Point
GIS	Geographical Information System
GPPU	Ganga Pollution Prevention Unit
GPS	Global Positioing System
GUI	Graphical User Interface
HDD	Hard Disk Drive
HQ	Head Quarters
ICT	Information and Communication Technologies
ID	Identification
IDP	Institutional Development Program
IP	Internet Protocol
IPR	Intellectual Property Rights
IT	Information Technology
JKV	Jal Kal Vibhag (of Varanasi Nagar Nigam)

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

KB	Kilo Bytes
LCD	Liquid Crystal Display
LED	Light Emitting Diodes
MB	Mega Bytes
MIS	Management Information System
NMCG	National Mission for Clean Ganga (under Ministry of Water Resources, Government of India)
NOC	No Objection Certificate
NRCD	National River Conservation Directorate (under Ministry of Water Resources, Government of India)
OEM	Original Equipment Manufacturer
OS	Operating System
PG	Post Graduation
RFP	Request of Proposal
rpm	Resolutions per Minute
SLA	Service Level Agreement
SRS	System Requirement Specifications
TOR	Terms of Reference
UDD	Urban Development Department (of Uttar Pradesh)
ULB	Urban Local Body
UP	Uttar Pradesh
UPJN	Uttar Pradesh Jal Nigam
UPS	Uninterrupted Power Supply
USB	Universal Serial Bus
VNN	Varanasi Nagar Nigam (Varanasi Municipal Corporation)

Section 5. Terms of Reference

1. Background Information

The Government of India (GoI), through the National Mission for Clean Ganga (hereinafter referred to as NMCG) has received a loan from the Japan International Cooperation Agency (hereinafter referred to as JICA) to finance an Institutional Development Project (IDP or the “Project”) for Uttar Pradesh Jal Nigam (UPJN) and the Jal Kal Vibhag (JKV), a department under the Varanasi Municipal Corporation (VNN). The objective of the Project is sustainable management, operation and maintenance of current and future water supply and sewerage assets of both JKV-VNN and the UPJN Ganga Pollution Prevention Unit (GPPU) Varanasi, thereby improving the delivery of water supply and sewerage services to the people of Varanasi through organizational and management strengthening measures, training/ capacity development, and infrastructure enhancement.

One of the major component of the IDP is Asset Management Planning through: (i) GIS-enabled asset management planning and user connection mapping; and the (ii) development of operation and maintenance manuals for key water supply and sewerage assets of JKV, as well as for the sewerage treatment plants and related assets operated by UPJN GPPU. The project also aims to achieve soft and hard infrastructure enhancement and equipment through MIS and State Level GIS development, procurement of commercially available software, and procurement of hardware to operate the GIS/MIS on a sustainable manner.

2. Project Area & Institutions

2.1. Varanasi City

Varanasi, also known as Benares, or Kashi, is a city on the banks of the river Ganga in Uttar Pradesh. It is considered to be one of the holiest of the seven sacred cities (Sapta Puri) in Hinduism and Jainism, and played an important role in the development of Buddhism as well. It is considered one of the oldest continuously inhabited cities in the world and the oldest in India. Varanasi is one of the most important Pilgrim Centres of North India along the River Ganges. It derives its sanctity from the presence of Lord Vishwanath and the River Ganges and is considered the place the attain salvation from life and death. In the sense of its importance to the Hindu religion and culture, its regional influence extends to the entire country. Varanasi is part of a pilgrimage route that most Hindus believe should be taken once in life time to perform rites for their ancestors.

As per the information compiled from 2011 Indian Census, Varanasi district’s total Population is 3,676,841; Total Land Area is 1535 sq. km with an Urban Population consisting of 43.44% as against 22.3% of population in urban areas of the state. Out of the total Varanasi Urban Population (2011) the population is 1,597,051 with a ratio of male versus Female at 52.9%: 47.1%. Total Varanasi Urban Land Area is 163.80 sq. km with area of Varanasi City Proper of 83.05 sq km. The city has a Population density (city proper) of 11,227 persons / sq. km. as against the Varanasi District’s population density of 2395 persons per sq. km and state’s 829 person per sq. km. Number of residential dwellings is estimated to be 129,536 with 140,600 Number of households with an Average household size of 7.52. The Literacy rate is calculated to be 75.6% as against the state average of 67.7%.



2.2. Varanasi Municipal Corporation

Varanasi Nagar Nigam (VNN) is an urban local body established on 24th of January 1959 under the Act of the Uttar Pradesh Government or the Municipal Corporation Act of 1959 as a Nagar Mahapalika. In 1994, it was converted in to a Nagar Nigam under the Uttar Pradesh Government Act - 2. VNN, which has 90 wards under it, has within its jurisdiction some of the most densely populated areas in the world, providing basic services to rural and urban villages in its 83.05 sq. km. area.

2.3. Jal Kal Vibhag

One of the departments of VNN is Jal Kal Vibhag (JKV), formerly the Varanasi Jal Sansthan, which was merged with VMC in 2010. JKV's two-pronged mission is: (i) To avail proper supply of pure/ clean drinking water at appropriate pressure, appropriate place and in sufficient amount to the citizens; and (ii) To provide a proper sewerage arrangement to the citizens.

2.4. UP Jal Nigam Ganga Pollution Prevention Unit

UPJN’s Ganga Pollution Prevention Unit (UPJN GPPU) is responsible for carrying out the capital works like Sewerage Treatment Plant, Water Treatment Plant, Water Supply network, Sewerage network, pumping stations under Ganga Action Plan. The infrastructure created are then handed over to JKV for operations and maintenance.

3. Objective of the Project

The Objectives of this project is to develop and implement a Geographical Information System primarily to improve the efficiency of managing the water and waste water assets of JKV/VNN; to develop and Implement a robust Management Information System integrated with the GIS so that together this becomes a Decision Support System for the planning, implementing, managing the development and maintenance activities and in improving the quality of Service Delivery to citizens of Varanasi.

The Specific Objectives are:

- a. Development of GIS based Water & Waste Water Utility Asset registry system through mapping of the assets for water and wastewater utilities in the Varanasi City area from high resolution satellite imageries, survey of utility point assets using GPS/ DGPS and integration of secondary source maps on water and sewerage systems
- b. Preparation of geo-referenced Consumer database through GPS/ DGPS based water and wastewater consumers covering legal and illegal connections including their GIS integration.
- c. Development of Property Tax Database using geo-referenced High-Resolution Satellite image through DGPS survey, household survey
- d. Development of Web / Mobile based Billing & Collection MIS application with GIS integration
- e. Development of Web/ Mobile based MIS modules on the following:
 - Property Tax Management System
 - Content Management System

The system is intended to facilitate increased efficiency in:

- Visualization of the water/ wastewater infrastructure in map form for more efficient operation and maintenance of the utilities
- Consumer mapping/ indexing
- Visualization of key indicators in map form like bills outstanding, high value consumers, replacement requirements etc. based on simple query based reporting.

4. Scope of Work

4.1. GIS Development & Implementation

4.1.1. Conduct Detailed System Study and Analysis

The Consultant shall conduct a detailed study of the existing information management setup of the Water and Waste Water Management under the Varanasi Nagar Nigam (VNN)/ Jal Kal Vibag (JKV) to assess the availability of data and information requirements at different operational levels aiming at efficient management and operation of the Water & Waste Water Utility Assets. The Consultant shall prepare and

submit the System Requirement Specification (SRS) document including the following for approval:

- a. Assessment of existing systems/ data/ computing infrastructure at VNN/ JKV, Birth/ Death Registration offices
- b. Functional Requirement Specification
- c. Hardware & Networking Requirement Specification
- d. Integration Requirement Specifications (for integration with relevant state level e-Governance Software, if any)

4.1.2. Architectural Specification and System Design Specification

The Project envisages preparation detailed architectural specification and system design specification documents based on the approved System Requirement Specification (SRS) through utilization of software engineering tools and techniques such as UML, ER, DFD, and Process Flow Diagrams etc. to facilitate clear understanding of the system Architecture, System Components, Application Components, Application Functionality as well as the Processes, Data/ Database and Storage, software integration specifications with existing relevant e-Governance Systems. The selected Consultant shall prepare and submit the following Design Specifications documents for approval.

- a. System Architecture Specification for the proposed State Level Web GIS based Water Supply & Sewerage Asset Management Information System
- b. Hardware Design Specification (including decentralized connectivity with VNN/ JKV, HQ, Zonal Offices)
- c. Geo-database Design Specification (spatial/ non-spatial)
- d. Application Software Design Specification
- e. Design/ Templates/ Specifications of Field Data Collection Formats/ e-Forms/ Reporting Formats
- f. Software Integration Design Specifications (for integration with state level existing e-Governance software)
- g. User Acceptance Criteria (UAC)

4.1.3. Water and Waste Water Utility Asset Geo-database

The Consultants shall develop water & waste water utility asset geo-database as per the approved Design Specifications covering preparation of thematic mapping, shape/ style/ color/ symbol, feature-attribute data linking. Since, the proposed system involves GIS as well MIS application components, the Consultant shall develop the spatial Geo-database as well as the non-spatial database to be configured and deployed in the appropriate RDBMS as specified/ indicated under the Technical Specifications. The database should be secured and shall implement the appropriate data integrity and referential integrity rules as well as the geo-spatial data rules to ensure data integrity, data security, robustness and efficiency of the database. The database developed in the process must be fully compliant with the Database Management System / Spatial Database Management System as specified under the Technical Specification. The development of geo-database shall involve the following:

- a. Processing & Geo-referencing of High Resolution Satellite Image through Ground Control Point (GCP) survey
- b. Composition of Base Map

- c. Mapping of Water & Waste Water utility network and assets through:
- I. Collection / Collation & Compilation of records/ maps of existing water / sewerage utility assets
 - II. Digitization & mapping of existing water and waste water utility assets
 - III. Field Survey and ground truthing for verification of maps and data
 - IV. Field Survey & collection of attribute data of the utility assets
 - V. Generation of Attribute Database
 - VI. Valuation of the Water & Waste Water Utility Assets
 - VII. Preparation of web-enabled Geo-database for the Water & Waste Water Utility Assets in GIS environment including thematic mapping, shape, style. Color, symbol, feature-attribute linking
 - VIII. Development Water & Waste Water Utility Assets inventory maps and reports

4.1.4. Preparation of Consumer Database

The Consultant shall carryout preparation of Water & Waste Water Consumer Database for the area covered under the Varanasi Nagar Nigam (83 Sq. Km.). The indicative procedural steps involved in the process are as follows.

- a. Door to door Household Survey for Data Collection in approved survey format including collection of the GPS coordinates for each legal/ illegal connection.
- b. Preparation of consumer Geo-database and integration with the water & waste water Utility Geo-database

4.1.5. Preparation of Property Database

The Consultant shall carryout preparation of Property Database for the area covered under the Varanasi Nagar Nigam (83 Sq. Km). The indicative procedural steps involved in the process are as follows.

- a. Generation of ward wise base maps from geo-referenced satellite image with major topographic features and land marks and building foot prints
- b. Collection of Property details in the property data collection formats to be approved by Varanasi Nagar Nigam
- c. Preparation of Geo-database of properties

4.1.6. State level GIS based MIS Applications

The Consultant shall develop a state level GIS based MIS application as per the approved Application Design Specifications and the Technical Specifications as mentioned in this ToR. The Application Development process should follow Agile Software Development Methodology to facilitate continuous review of the application development process by the Technical Committee as well as to facilitate continuous development/ delivery of the application software. The Application development should follow Software Engineering approaches to produce reusable, efficient and well documented source code. The application development should cover the followings:

- a. Web GIS application Modules & Decision Support System (DSS)
- b. Mobile GIS application modules
- c. Grievance redressal module with GIS integration
- d. Web/ Mobile based Billing & Collection module with GIS integration

The State level GIS based MIS application should facilitate implementation of server-based working, integration of VNN and JKV data with the State level billing and collection modules; including online billing and payment management, citizen service center, payment at bank counter or other public/private agencies.

The system should include daily/monthly/quarterly/yearly review, reporting and monitoring of the demand and collection as per requirement in the approved formats, as required by the municipal accounting manual.

The System should facilitate reconciliation process of collected bills and its integration with financial management information system (FMIS) and GIS.

4.1.7. Development Water Utility Asset Database

- a. Formulate the asset management plan by preparing asset inventory groundwork and data collection. Work required would entail: (i) Collection of old records, maps of existing water and Waste Water utility assets and its digitization; (ii) Conduct of field survey to verify old records and maps; (iii) Collection of information about assets not available in the records; (v) Compilation and tabulation of assets; and (vi) Valuation of assets.
- b. Preparation of comprehensive asset base map through: (i) Digitization and linking of assets with updated GIS Map; (ii) Preparation of Water and Waste Water Asset Base Map; (iii) Preparation of digitized asset map (from the updated base map) in GIS-web platform to make available the Water and Waste Water Asset Maps on the VNN/ JKV websites.
- c. Preparation the Water and Waste Water Asset Inventory Report
- d. Carrying out Survey and Mapping of User Connections (legal/ illegal) using a pre-designed and approved format and to carryout data collection from the field with the help of VNN/ JKV.
- e. Decision support information module to facilitate VNN/ JKV to identify & regularize illegal connections to increase the revenue coverage collection and 24*7 ready user’s connections GIS map.

4.1.7.1 Indicative Procedural Steps for Development of Asset Database

The Consultant shall develop and implement their own approach and methodology to develop the Geo-database. However, an indicative list of procedural steps is described as follows for reference.

- a. Geo-referencing of the high-resolution satellite imagery (imagery shall be provided by VNN) based on DGPS ground control survey.
- b. Preparation of large scale base map of Varanasi city (in 1:2000 scale or higher) depicting all roads, natural drainages, existing land use, municipal wards, administrative jurisdictions of VNN/JKV establishments up to Section level etc. using the geo-referenced satellite imagery with necessary ground validation.
- c. GIS mapping of water supply and sewerage systems based on system maps/ diagrams provided by VNN/JKV from source to networks.
- d. Collection of old records, maps related to the existing water supply/ sewerage utility assets in the VNN
- e. Field survey and ground truthing for verification of the water supply/ sewerage records and maps

- f. Field survey and collection of data/ information on assets those are not available in the records
- g. Compilation and collation of the water supply and sewerage asset data
- h. Digitization and linking of Assets with updated GIS maps
- i. Preparation Water Supply & Sewerage Base Map
- j. Generation of asset codes
- k. Preparation of Asset Register and it’s validation through stakeholder meetings
- l. Finalization of Asset Register and Asset Maps
- m. Development of compatible Web Geo-database for web deployment on the GIS server

Estimated Extent of GIS Work involved in the Project:

Description	Area/ Length / Quantity	Remarks
Satellite Image Processing, GCP Survey, Base Map Preparation	120 Sq. Km.	Based on Existing city area of 83 sq. Km.
Water Supply Network	1500 km	
Sewerage Network	830 km	
Number of Households	2,10,000	
Number of Point Assets (water supply & Sanitation)	4500	

The Water and Waste Water Utility Asset shall comprise of all the assets included in the Water Utility Network. An indicative but non-limiting list of the assets to be incorporated in the Water and Waste Water Utility Assets database are described for reference as follows:

4.1.7.2 Water Supply Utility Assets

- a) All pipes indicating length, size, material, class or grade, depth, year of installation of each
- b) All valves indicating size, type, material, year of installation of each
- c) All pump houses indicating their locations
- d) All pumps indicating type, capacity or rating, manufacturer and year of installation
- e) All water treatment facilities or plants indicating the type of plant (slow sand or rapid gravity sand filters or package treatment plants etc.), total capacity of plant, type, number, size of individual units (like inlet channel, flash mixer, flocculator, sedimentation tank, chemical house and chemical dosing facilities, filters, disinfection facilities etc.), year of installation of each
- f) All storage facilities or reservoirs (including those at treatment plant site) indicating location, type (underground, over-ground or overhead etc.), shape (circular or rectangular etc.), size (diameter etc.) capacity, material of construction (RCC or steel etc.), year of installation, construction company of each
- g) Any other relevant asset

4.1.7.3 Waste Water Utility Assets

- a) All sewers indicating the length, size, material, class or grade, depth, year of

installation of each

- b) All manholes indicating location, type, shape, size, material, year of installation of each
- c) All pump houses indicating their locations
- d) All pumps indicating type, capacity or rating, manufacturer, year of installation of each
- e) All sewage treatment facilities or plants indicating the type of plant (ASP, package treatment plants etc.), total capacity of plant, type, number, size of individual units, year of installation of each
- f) Effluent discharge points
- g) Any other relevant asset

4.1.8. Water Utility Asset Database and Asset Register

The Water Utility Asset Geo-database shall comprise of the Administrative area jurisdictions, Geographic locations of the Water Supply/ Sewerage Assets with the location coordinates along with the attribute data of each of the assets organized in appropriately designed physical database for efficient retrieval of the geo-spatial data through the proposed Web GIS based application. The Geo-database shall comprise of the following basic data layers.

- Base Map
- Administrative Boundaries
- Asset Data layers
- Water Supply & Sewerage network

Water Utility and Waste Water Utility Asset Database Layers (indicative list of GIS layers) are given in the following table.

SI #	Layer Name	Layer Type	Attributes
1.	Ground Control Points	Point	<ul style="list-style-type: none"> • GCP ID • Ward ID • DGPS height • DGPS Lat • DGPS Long • Photo • Location description • GCP description
2.	High Resolution Image Control points	Point	<ul style="list-style-type: none"> • HRSI GCP ID • Ward ID • DGPS height • DGPS Lat • DGPS Long • Photo • GCP description

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
3.	Geo-referenced High-Resolution Satellite Image	Image	<ul style="list-style-type: none"> • Image Sensor • Date of Image • Path/Orbit • Row • ONA
4.	AOI	Poly	<ul style="list-style-type: none"> • AOI Code • AOI Name • AOI Area
5.	ULB Boundary	Poly	<ul style="list-style-type: none"> • ULB Code • ULB Name • Area • Population • Household • No of Wards • No of Household Water Connections • No of Household Sewerage connections • No of Properties
6.	Ward/ Tax Ward Boundary	Poly	<ul style="list-style-type: none"> • Ward Code • Ward no • Road Id • Area • Ward Population • No of Household Water Connections • No of Household Sewerage connections • No of Properties
7.	Roads/ Streets	Line	<ul style="list-style-type: none"> • Road ID • Road type • Road name • Length • Maintained by • Surface type • Locality • Carriage way width • ROW width • Foot path status • Median status • Drainage Type • Drainage floor • Type of street lighting
8.	Bridge / Flyover	Poly	<ul style="list-style-type: none"> • Bridge ID • Road Id

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
			<ul style="list-style-type: none"> • Ward ID • Locality • Bridge type • Name • Length • Width • Material • Year of commissioning
9.	Colony boundary	Poly	<ul style="list-style-type: none"> • Ward no • Colony ID • Colony name • Colony Area • Mohalla ID
10.	Mohalla boundary	Poly	<ul style="list-style-type: none"> • Ward no • Mohalla ID • Mohalla name • Mohalla Area
11.	Slum boundary	Poly	<ul style="list-style-type: none"> • Slum code • Ward ID • Road Id • Population • Ownership status • Population • Households • Surrounding • Location • Drainage status • Water supply status • Sewerage status • Flooding vulnerability • Street lighting • Education facility • Health care facility • Community facility • Night shelter
12.	Park/ Garden	Poly	<ul style="list-style-type: none"> • Park ID • Road ID • Ward ID • Park name • Locality • Park Type
13.	Natural Drains	Poly/ Line	<ul style="list-style-type: none"> • Drainage ID • Road Id • Drainage Name • Catchment area

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
14.	Land Marks	Points	<ul style="list-style-type: none"> • Land mark ID • Ward ID • Road ID • Land mark name • Locality • Type
15.	JKV Division Boundary	Poly	<ul style="list-style-type: none"> • Division Code • Division Name • Area • Population • No of Household Water Connections • No of Household Sewerage connections
16.	JKV Sub-Division Boundary		<ul style="list-style-type: none"> • Sub-Divn Code • Sub-Divn Name • Division code • Area • Population • No of Household Water Connections • No of Household Sewerage connections
17.	JKV Section Boundary		<ul style="list-style-type: none"> • Section Code • Section Name • Sub-division code • Division code • Area • Population • No of Household Water Connections • No of Household Sewerage connections
18.	Water Intake point	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • No of pumps • Capacity • Location • Year of commissioning
19.	Water treatment Plant (WTP)	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • No of pumps

Request for Proposal: Selection of Consultants for “Developing Geographical Information System /
Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
			<ul style="list-style-type: none"> • Capacity • Location • Details of installations & capacity • Year of commissioning
20.	Production Well	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Diameter • Lower diameter • Depth • Casing type • Casing depth • Year of installation
21.	Water reservoir	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Location • Type • Shape • Dimension • Capacity • Material • Stage height • Year of installation
22.	Water supply Pump House	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Location • Dimension • Type • Year of installation
23.	Water supply Pump	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Type • Capacity • Manufacturer • Year of installation
24.	Raw water Pipe Line	Line	<ul style="list-style-type: none"> • Asset code • Lat

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
			<ul style="list-style-type: none"> • Long • Road Id • Size • Material • Class • Grade • Depth • Year of installation
25.	Clear water pipe line	Line	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Size • Material • Class • Grade • Depth • Year of installation
26.	Water supply Operating Valve	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Type • Material • Year of installation
27.	Water supply Bulk Meter	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Type • Size • Make • Year of installation
28.	Sewerage Line	Line	<ul style="list-style-type: none"> • Asset code • Road Id • Length • Size • Material • Grade • Depth • Year of installation • Type • Status
29.	Sewerage Manhole	Point	<ul style="list-style-type: none"> • Asset code • Road Id • Category

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
			<ul style="list-style-type: none"> • Type • Size • Material • Depth • Cleaning frequency • Year of installation • Status
30.	Sewerage Pump	Point	<ul style="list-style-type: none"> • Asset code • Road Id • Lat • Long • Location • Type • Capacity • Flow rate • Category • Manufacturer • Year of installation
31.	Sewerage Pump House	Point	<ul style="list-style-type: none"> • Asset code • Road Id • Lat • Long • Location • Dimension • Type • Year of installation
32.	Sewerage Treatment Plant (STP)	Point	<ul style="list-style-type: none"> • Asset code • Lat • Long • Road Id • Type • Status • Capacity • Year of installation
33.	Sewerage Discharge point	Point	<ul style="list-style-type: none"> • Lat • Long • Road Id • Location • Name • Maximum Quantity • Water quality
34.	Surface Water Quality Monitoring Station	Point	<ul style="list-style-type: none"> • ID • Road Id • Ward • Locality • Latitude

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
			<ul style="list-style-type: none"> • Longitude • Date • Time • PH • BOD • COD • TSS • Turbidity • Sulphate • Chlorite • Nitrate • Hardness • Calcium • Arsenic
35.	Ground Water Quality Monitoring Station	Point	<ul style="list-style-type: none"> • ID • Road Id • Ward • Locality • Latitude • Longitude • Date • Time • PH • BOD • COD • TSS • Iron • Sulphate • Chlorite • Nitrate • Hardness • Calcium • Arsenic
36.	Air Quality Monitoring Station	Point	<ul style="list-style-type: none"> • ID • Road Id • Ward • Locality • Latitude • Longitude • Date • Time • PM2 (min/ max) • PM2.5 (min/ max) • PM10(min/ max) • SO2(min/ max) • NOx (min/ max)

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
			<ul style="list-style-type: none"> • NH₃ (min/ max) • O₃ (min/ max) • Co (min/ max) • Pb(min/ max)
37.	Surface Water Quality Monitoring Station	Point	<ul style="list-style-type: none"> • ID • Road Id • Ward • Locality • Latitude • Longitude • Date • Time • Soil type • Drainage status • Nutrient status • Permeability • PH
38.	Meteorological Station	Point	<ul style="list-style-type: none"> • ID • Road Id • Ward • Locality • Month • Rainfall • Temp • Relative Humidity (morning/ evening)
39.	Zone	Polygon	<ul style="list-style-type: none"> • ID • Area • Name
40.	Building Footprint	Poly	<ul style="list-style-type: none"> • Building code • Road ID • Ward ID • Construction type • Building Use
41.	Property	Poly	<ul style="list-style-type: none"> • Property ID • LU_Code • LU Description • Ward ID • Road ID • Locality • Building ID • Type • Ownership • Owner name • Type of occupancy • Stilt area

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

SI #	Layer Name	Layer Type	Attributes
			<ul style="list-style-type: none"> • Building area • Average Length • Average width • Floor wise area • Use details • Condition • Year of construction • Existing holding no • Annual Tax assessed • Arrear • Facilities – Lift, parking, fire, etc • Source of water • Sewerage details
42.	Civic Amenities	Point	<ul style="list-style-type: none"> • CA_ID • CA Type • Ward_ID • RD_ID • Locality • Capacity • Year of Commissioning
43.	Water ATM	Point	<ul style="list-style-type: none"> • W_ATM_ID • Road_ID • Ward_ID • Capacity (In Lt) • Year of Commissioning • Operator / Manufacturer
44.	Religious Structures	Point	<ul style="list-style-type: none"> • Rel_Str_ID • Rel_Str_Name • Road_ID • Ward_ID • Building_F_ID • Property_ID • Name of Main Deity • Yr. of Construction/Establishment
45.	Ponds/Kund	Poly	<ul style="list-style-type: none"> • Kund_ID • Road_ID • Ward_ID • Property_ID • Name_of_Kund • Kund_Type • Year_of_Constn/Establishment

The above thematic layers and attributes list are indicative and the Client may add additional layers and attributes and may add or delete some of the attributes as per the requirements of the project. Likewise the Consultant may add, delete or modify any layer as per the requirements of work in consultation and prior approval of the Client.

4.1.9. Water Utility Consumer Database

The water utility asset consumer database shall be prepared by the Consultant through collection/ collation/ compilation of the consumer data by carrying out door to door consumer survey and recording of the consumer details. An indicative scope of work covered under preparation of the consumer database is as follows.

- a) All Water supply and sewerage house connections with consumer locations within the area of operation of VNN / JKV shall be covered under the consumer database. Development of Water and Waste Water Consumer database shall involve the following:
 1. Design and preparation of Consumer Data Format and obtain approval from VNN
 2. Door to door Household Survey for Data Collection in approved survey format including collection of the GPS coordinates for each legal and illegal connection
- b) Preparation of consumer Geo-database and integration with the water & waste water Utility Geo-database

4.1.10. Preparation of Property Database

The property database shall be prepared by the Consultant through collection/ collation/ compilation of the consumer data through carrying out door to door consumer survey and recording of the consumer details. An indicative scope of work covered under preparation of the property database is as follows:

- a) Generation of ward wise base maps from geo-referenced satellite image with major topographic features and land marks and building foot prints
- b) Collection of Property details in formats approved by VNN
- c) Preparation of Geo-database of properties including geo-tagged photographs of the properties in a resolution not less than 12 megapixels.

VNN had recently commissioned the services of a separate agency for improving the Revenue of the ULB from property tax. As part of this project, the appointed consultant will be carrying out the sample door to door survey (for about 10% of the estimated households) of the properties. It is expected that the consultant will make use of the same to avoid duplication/repetition in the door to door survey. All the data collected, collated and provided for by the agency engaged by VNN will be duly integrated in the overall database.

An indicative survey format for carrying out the door to door survey for the purposes of collecting data for the property database is given in **Appendix-C**.

4.1.11. Development of State Level GIS Based MIS

The Project involves development of state-wide GIS based Water Supply & Sewerage Asset Management System, envisaged for state-wide implementation to facilitate efficient management of the Water and Waste Water Assets/ Network, Planning & Monitoring of the existing and proposed Water and Waste Water Utility Assets, Decision Support through map/ location based tracking of the installed Assets

integrated with the attribute details. The proposed system, at present, shall be integrated and operationalized with the Water and Waste Water Utility Asset Geodatabase developed for the Varanasi Nagar Nigam (VNN) and subsequently made capable of being rolled-out in the other selected ULBs of state of Uttar Pradesh.

4.1.12. Web GIS Application Modules & Decision Support System (DSS) on Water and Waste Water Utility Assets

The proposed Web GIS application shall be developed to be universally accessible from internet connected Desktop Computers and Mobile Devices. The GIS based components of the application software shall facilitate map based representation of the Water and Waste Water Utility assets and network superimposed on the base map and the administrative data layers. The Web GIS based application should facilitate the following functional modules.

Map View Module: The Map View functional component of the proposed Web GIS based Application should facilitate industry standard Map based Application Interface with well-organized and easy-to-use GIS application features.

- a. Window based separate panels for representation of the Thematic Map Layers and Map
- b. Table of Content (ToC) based organization of Map Layers with facilities for layer switching and re-organization
- c. GIS Toolbar with command options for Pan, Zoom, Scale, Measurement – Distance/ Area, Identify/ Information Window, Search etc.
- d. Query Builder Interface for generation and execution of attribute/ geo-spatial queries
- e. Integration with Web Map Services such as Google Map

The Map View module should facilitate display of the following data layers along with their corresponding attribute details as defined under the section *Water Utility and Waste Water Utility Asset Database Layers* along with appropriate legends.

- a. Base Map Layer
- b. ULB Administrative Boundary layers
- c. Water Supply & Sewerage Asset layer
- d. Water Supply & Sewerage Network

GIS based Asset Management Module: This GIS application Module shall facilitate monitoring of the Water Supply & Sewerage Assets. The indicative application functionality of this module is described as follows.

- a. Information Window to display the Asset Specific Information on mouse point-and-click action
- b. Map based query on the Asset attribute data such as the date of installation, product make etc. to facilitate Preventive Maintenance and Replacement of aging installations.
- c. Geo-spatial query enabling the query of spatial parameters such as distance, proximity, intersection, overlapping etc. to facilitate planning and Decision Support
- d. Generation of Map based Asset Register and Asset Statistics

4.1.13. GIS Based Decision Support

The GIS based Decision Support application component is intended to facilitate visual representation of the Base Map, Administrative Data Layers, Water Supply & Sewerage Assets, Water Supply & Sewerage Network. The module should provide necessary GIS tools and application features to facilitate quick and efficient Decision Support.

4.1.14. Mobile GIS Application Modules on Water and Waste Water Utility Assets

The Mobile GIS Application should be a responsive application to facilitate map viewing, field navigation as well execution of the essential map functions and retrieval of map information. The Mobile GIS application shall facilitate the Base Map, Administrative Data Layers, Map View and Search facility for Water Supply & Sewerage Assets, Water Supply & Sewerage Network. The module should provide necessary GIS tools and application features to facilitate quick retrieval of information on mobile device.

Map View Module: The Map View functional component of the Mobile GIS Application should facilitate viewing of the map layers with GIS based tools as follows

- Representation of the Thematic Map Layers on select Base Map layers
- Table of Content (ToC) based organization of Map Layers
- Base Map Layer
- ULB Administrative Boundary layers
- Water Supply & Sewerage Asset layer
- Water Supply & Sewerage Network
- Mobile application based GIS Toolbar with command options for Pan, Zoom, Scale, Measurement – Distance/ Area, Identify/ Information Window, Search etc.

The Map View module should facilitate display of the data layers along with their corresponding attribute details along with appropriate legends as defined under the section *Water Utility and Waste Water Utility Asset Database Layers*

4.1.15. Mobile GIS App on Asset Management Module

This Mobile GIS application Module shall facilitate visualization of the Water and Waste Water Utility Assets. The indicative application functionality of this module is described as follows:

- a) Information Window to display the Asset Specific Information on screen touch action on specified map features
- b) Map based query on the Asset attribute data such as the date of installation, product make etc. to facilitate Preventive Maintenance and Replacement of aging installations.
- c) Generation of Map based Asset Register and Asset Statistics

4.2. Billing and Collection System

The Billing & Collection module shall be a MIS based application module with appropriate Dash Board, Screen Interfaces, Data Forms, Analytics and reporting sub modules. Brief

description and indicative functionalities of the associated sub modules are as follows. This module will be integrated with GIS.

4.2.1. Master for billing and Collection

- a) System should allow mapping the billing and collection account for the following type of transactions.
 - I. Cash Transaction
 - II. Bank Transaction
- b) System should allow the user to create the flowing payment and receipt type in the application.
 - I. Cash Payment / Receipt
 - II. NEFT Payment/ Receipt
 - III. Challan Receipt
 - IV. Cheque Payment/ Receipt

4.2.2. Billing/ Invoice

- a) The proposed application should allow the user to generate the invoice based on the service availed by the citizen
- b) Once the bill is generated by the application system should send notification to the citizen with the following details.
 - 1. Citizen Name
 - 2. Property Code
 - 3. Tax Amount
 - 4. Due Date
- c) The system should generate unique invoice id for each and individual bill
- d) The System should allow the citizen to download the property tax bill from his/her ‘LOGIN’ also the hard copy will be send to the property owner as well
- e) There should be provision to define the last payment due date in each bill or invoice generated from the application
- f) System should have option to send the bill details to respective citizen via e-mail and SMS
- g) A GIS ID will eventually be added. The GIS ID will be a unique ID that will relate back to each customer address
- h) The ability to maintain multiple addresses and contact info for an account and Identify which address should receive the bill
- i) The ability to provide a secure environment to store the citizen database
- j) The ability to easily change the rate charged for each fee
- k) The ability to add notes to bills for the purpose of informing citizen
- l) The ability to include multiple service fee in one bill

4.2.3. Collection

- a) System should accept various Payment collection modes like
 - i. Internet banking
 - ii. Debit or Credit card
 - iii. Cash payment

- iv. Challan Mode
- v. Cheque Mode
- b) Collection should be linked with the invoice generated
- c) System should have advance collection feature for few of the government services
- d) System should have provision for matching the billing against the collection figure

4.2.4. Penalty & Rebate

- a. System should have provision to capture 3 date field to calculate the penalty and rebate
 - Bill generation date
 - Last due date
 - Advance Payment Date for Rebate The penalty should be calculated
- b. System should allow defining the rebate % and the penalty % as per the decision taken by service provider
- c. System should calculate the penalty amount against the property automatically as per the last due date and penalty interest %
- d. System should send notification to the property owner once the penalty is charged against the property.
- e. The Property owner can view the reason of penalty and the details of the penalty after ‘LOGIN’ to the application
- f. System should calculate the rebate based on the rule set made
- g. The parameter of rebate can be made as below
 - Advance payment of tax amount
 - Gender of Property Owner
 - Calculated Tax Amount
 - Senior Citizens
- h. Option whether the rebate will be claimed by the property owner during the payment of the tax amount or it will be adjusted in the next billing cycle should be configured in the system.

4.2.5. Refund & Waiver

- a) The application should allow the Client (VNN) to waive up the bill amount or the penalty amount as per the requirement of the client.
- b) The proposed application should allow the Client (VNN) an option to refund in any of following modes of payments:
 - Cash Mode
 - Internet Banking (Direct Benefit Transfer)
 - Challan payment
 - Cheque payment

4.2.6. Bank Reconciliation

- a) The proposed application should allow the user to reconcile the bank transaction with the book of accounts on a periodic basis.

- b) The bank reconciliation should be performed in 2 ways
 - Manual Reconciliation
 - Auto Reconciliation

4.2.7. Budget & Accounting

The proposed application should also have the following feature to manage the accounting and budget entry of the business.

- a) Creation of Journal Voucher
- b) Reverse Journal Voucher
- c) Matching of billing v/s Collection
- d) Generation of trail balance, Balance sheet and Profit and loss report from the system
- e) Budget code creation
- f) Budget category definition
- g) Budget entry
- h) Add, Edit and delete budget
- i) Budget utilization report

4.2.8. MIS Reports Features

The application shall provide a Billing & Collection monitoring module to track the billing and collection processes. The module should have the following minimum indicative functions with e following list of MIS reports to be generated from the proposed application.

- a) Demand, Billing and Collection Analytics
- b) Query Builder to facilitate on-demand query/ information generation
- c) Periodic (daily/ weekly/ monthly etc.) review reports
- d) Billing & Collection Status and Progress Monitoring
- e) Pending collection Report
- f) Bill against collection status
- g) Consolidated refund list
- h) Consolidated waiver of collection list
- i) Aging report
- j) Consolidated Penalty list

4.2.9. Integration Requirement

The proposed application should be integrated with multiple payment Gateways for online collection of Payments.

4.3. Property Tax Management System

This module shall facilitate Tax Assessment of the Properties within the ULB area. The proposed system shall facilitate e-Form interfaces for entry of the assessment data collected by the inspectors as well as self-declaration e-Forms to facilitate entry of the self-declared property assessment details by the property owner. The e-Forms shall be embedded with

appropriate help texts and validation routines for easier data input and to restrict entry of invalid data into the system.

4.3.1. Discloser of Property

- a) System should have provision for allowing the property owner to register them self in the application
- b) During registration user should provide his/ her unique identification number in the application.
- c) During registration system should ask to provide the present and communication address of the property owner along with the mobile no for sharing notification and billing amount with them.

4.3.2. Property Valuation

- a) System should allow defining the rule set for calculation of the property value
- b) Define the index of the property value based on predefined category and sub category
- c) Define all the attributes in the proposed application, which are required for the property valuation
- d) System should allow the user to define the attribute and assign value in the front end of the application.
- e) System should do auto property valuation based on the attributes defined against the property considering the property valuation rule set master
- f) System should have the option to edit and modify data according to the need as per the requirement
- g) Edit / Modification shall be done as per the administrative approval
- h) Privilege control of users
- i) Revaluation of property according to administrative needs.

4.3.3. Property Tax Assessment

- a) System should allow the user to configure the tax calculation parameter. The tax parameter should not be hardcoded in the application.
- b) The tax percentage should be configurable in nature
- c) After the property is evaluated by the application system should to assessment of property tax as per the rate defined by the state government/VNN.
- d) System should have provision to edit the calculated TAX amount manually with the approval of higher authority
- e) The property tax should have option for calculation of penalty if not paid before the due date.
- f) System should have provision to notify property owner on tax details.
- g) After tax is calculated on the property, a notification should be sent to property owner, stating the tax amount and due date for payment

4.3.4. Water/Sewerage Charges

The proposed module should also manage the demand generation of the water/ Sewerage charges/tax for the entire household available in ULB. The collection of the water tax will be handed through the billing and collection module described above.

4.3.5. MIS reports

The proposed application should generate the following reports as part of the property tax management modules.

- a) Consolidated property tax Bill generated
- b) Pending TAX collection report
- c) Consolidated Penalty report etc

4.4. Content Management System based Web Portal

The selected Consultant should study, assess and visualize the exact requirement prior to the design & development of the official Web Portal for both Varanasi Nagar Nigam, Jal Kal Vibhag or integrated portal for both. A “Content Management System” (CMS) is envisaged, allowing the administrators to dynamically update the individual content elements /sections /forms /formats /notices etc. that change regularly, without the constant need of a programmer/developer. The CMS should offer easy administration by VNN, simply requiring nominated and authorized Users to log-on to a secure area of this application and complete simple web forms and upload to the centrally controlled database, so that the changes are reflected throughout the application pages/sections, as applicable. The design & development of the CMS portal should be done with due approval from the authority. The Website should be developed and equipped with interactive & effective features like:

- a) It should have a dynamic Content Management System (CMS). CMS should be capable of catering multiple users with configurable user access rights. Workflow based lifecycle from content creation to review and approval, and finally publishing of the content, as per Access Control to Users and Groups.
- b) Website design should be responsive and optimized for mobile users. It should enable ease of configuration and changes to existing GUIs, and support the introduction of new screens in mobile.
- c) Focus should be primarily on making the mobile interface intuitive and interactive for better reach.
- d) Content should be bilingual i.e. Hindi & English. Default language should be Hindi.
- e) The website should be Bold, Confident & Active
- f) The website should also cater adequate functionalities so that the end user targeted to visit the site should be able to get and give all vital information whenever required.

The major functionalities include:

- A. **Mobile First:** It should be primarily on making the mobile interface intuitive and interactive. Any approved user can quickly and easily publish online without complicated software or programming. The administrators should dynamically update the individual content elements/sections/forms/formats/notices etc. that change regularly.
- B. **Scalable & Secure:** Website should be scalable and expected to increase capacity to handle greater amounts of load as well as to provide a secure mechanism to prevent from hacking.
- C. **Bandwidth Efficient:** Various bandwidth efficient techniques should be adopted in order to optimize the bandwidth usages. The optimized use of bandwidth so that the maximum amount of data can be transmitted with the fewest transmission errors.

- D. **Consistent brand and navigation:** Design templates should be provided for consistent brand and standard navigation across all Webpages
- E. **Workflow Management:** An integrated workflow process should be facilitated for better content management
- F. **Flexibility for content developers:** Should enable non-technical users to easily publish content
- G. **Database-driven:** Data should be changed once to be updated throughout the site
- H. **Shared resources:** CMS should centralize and share all content so that each user should access shared resources such as images, files, audio, video, modules, etc., when needed to achieve ultimate collaboration.
- I. **Approval systems :** Different levels of access should be given to different users, and the Content MS has mechanisms to ensure content is approved before going live
- J. **Archive capabilities** – Any changes should be tracked
- K. **Updates:** Allows alerts to be set to notify the editor when content should get reviewed, updated or removed. This should help prevent old data from being presented and misinforming users
- L. **Search Engine Optimization :** Should optimize the website so that search engine users should easily find information; Keyword research, keyword to page mapping, on-page optimization, meta data definition
 - i. Should be embedded in the website to improve the website's visibility in popular search engines via organic (natural) search results.
 - ii. The basic job search engines works in the website as follows:
 - a. Quickly search any content published with Article Manager.
 - b. Search for articles in all categories or only specific categories.
 - c. Advanced search allows search by date range and categories.
- M. **Browser Compatibility:** Website should be compatible with popular browsers and operating systems.
- N. **Social Media Integration:** Facebook & Twitter feed of the Department social media accounts if any should be visible in the homepage.
- O. A Content Management system with a backend workflow mechanism should be developed.
- P. A workflow should be created for content gathering, review, authorization and publishing.
- Q. All the images/graphic elements to be used in the website should be original/licensed and the Consultant can subscribe to relevant stock photography for the same
- R. Sectors should be depicted by relevant icons/images which the Consultant should create

4.5. IT Infrastructure

The Consultant shall provide the below mentioned Infrastructure for the Hosting of the Application in the Data Centre to be created at Varanasi Nagar Nigam Office:

4.5.1. Bill of Material

SL	Description	Qty
SERVER & STORAGE		
1	Blade Server Chassis	1
2	Blade Server (For Application Server)	2
3	Blade Server (For GIS Server)	1
4	Blade Server (For Database Server)	1
5	SAN Storage & Switch (40 TB)	2
SYSTEM SOFTWARE		
6	Operating System (Enterprise Edition)	2
7	Operating System (Standard Edition)	2
8	Antivirus CAL for Server	4
9	RDBMS Software (Enterprise Edition) with Geo-Spatial Data Support	2
10	External Web Connector	10
NETWORK & SECURITY		
11	Layer-3 Managed 24-Port Gigabit Switch	1
12	Layer-2 Managed 24-Port Gigabit Switch	1
13	CaT-6 UTP Patch Panel	100
14	CAT-6 Patch Cord 3/5Mtr Molded	100
15	42U Floor Standing Server Rack with Accessories	1
16	Fire & Smoke Detector with Temperature Controller	2
17	CCTV Surveillance Camera	4
18	Network Video Recorder with 4 TB HDD	1
Power Backup		
19	Hot standby 10 KVA online UPS with 5 Hr backup on full rated load	1
Call Centre Setup		
20	Desktop Computers	4
21	UPS	4

4.5.2. Technical Specification (for Key Components)

A. Blade Chassis

Feature	Specifications	Complied (Yes/No)	Reference Page No
Make :			
Part Code/Model:			
Blade Chassis	Should have support for minimum 14 no of blades in the enclosure, occupying a max of 10U rack height		
	Same enclosure should support Intel and Intel/AMD based blades		

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

	Should be configured with Hot Pluggable & Redundant Management Modules with onboard KVM functionality		
	Support simultaneous remote access for different servers in the enclosure.		
Interconnect	Should support simultaneous housing of Ethernet, FC, SAS interconnect fabrics offering Hot Pluggable features		
LAN/ Network	Redundant Converged Ethernet module with 14 x 10/20Gb Ethernet downlinks port. Each downlink port should supports up to 3 Network and 1 no of FCoE port with adjustable speeds from 100Mb to 20Gb in 100Mb increments. Support for 8 SFP+ external uplink ports configurable as either 10Gb Ethernet or 2/4/8Gb auto-negotiating Fibre Channel connections to external LAN or SAN switches and 4x40Gb or 8x10Gb Ethernet connected to external LAN switches. Minimum of 2 x 40Gig, 2x 10Gig and 4 x 8Gig ports need to be configured in each module. Minimum 2 x 20GB stacking port and NPIV, VLAN Tagging, IGMP Snooping, QoS, LDAP, RADIUS, TACACS+ compatible role based authentication, In tunneled VLAN mode, DOT1P, DSCP, Sflow, In mapped VLAN mode, Pass through and Link Aggregation should be supported in uplink ports. 1.2Tbps Line Rate Non-blocking and 128K L2 MAC address support should be provided. Stacking of multiple module with minimum 3 no of enclosures should be supported.		
Power Supply	The enclosure should be populated fully with power supplies of the highest capacity available with the Consultant. Power supplies should support N+N as well as N+1 redundancy configuration, where N is greater than 1. Should offer a single-phase power subsystem and should support three phase power sub system for future use.		
Blower modules	Chassis should be configured with hot swap and redundant variable speed rear access blowers/fan modules		
Interconnect Bays	Chassis should support 8 I/O bays for connecting module like SAN Switch, ethernet switch, SAS switch, InfiniBand switch etc.		
Warranty	3 years comprehensive warranty		
System Software	All required System software has to be from the same OEM itself.		

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

Remote Management	Must provide a remote management functionality to operate the server in both in-band and out-of-band. Must be part of the server without the need to install any additional hardware or software. Secure HTTP and scriptable CLI interfaces for ethernet module, SNMP v.1 and v.2, Port statistics via CLI, GUI and SNMP interfaces and network analysis, flow Monitoring.		
	Integrated blade management software from the OEM of blade and storage for management and monitoring of blade enclosure and its accessories like ethernet module and san module and proposed storage should be offered with the proposal. Management software should be provided for provisioning via REST API with UEFI secure boot mode, proactive email notifications, automated alert forwarding, customizable dashboard for display, management of the switch offered in the enclosure, management of offered storage, policy-driven provisioning of storage resources, creating storage volumes, storage event monitoring, alert monitoring, capacity checking and health checking, SAN zoning, integrated of virtualization management software like VMware Vcenter, Microsoft System Center.		
	Must have a real time Virtual KVM functionality and be able to perform a remote Power sequence. Must provide both Java & Java-free browsing options.		
	Must have the ability to map the remote media to the server and ability to transfer files from the user’s desktop/laptop folders to the remote server with only the network connectivity.		
	Must have the ability to capture the video sequence of the last failure and the boot sequence and also playback the video capture or equivalent technology.		
	Must have the ability for multiple administrators across remote locations to collaborate on the remote session in a server with multiple sessions even in server powered OFF mode.		

B. Blade Server (Application, GIS, & Database Server)

S. N.	Feature	Specifications	Complied (Yes/No)	Reference Page No
-------	---------	----------------	-------------------	-------------------

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

Make :				
Part Code/Model:				
	CPU	Two numbers of latest generation Intel Octa Core E5-2630 v3 processor operating at 2.4 GHz or better		
	CPU L3 CACHE Memory	20 MB L3 cache or better		
	Motherboard	Intel® C610 Series Chipset		
	Memory	64 GB RAM scalable to at least upto 512GB, using DDR4 RDIMM/LRDIMM memory modules. Should be capable of identifying and reporting whether genuene OEM memory is installed for system reliability.		
	Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode		
	Hard disk drive with carrier	2 x 300 GB hot plug SFF SAS drives. The drive should have intuitive icon based display along with caution indicator that gets activated automatically in order to aviod dataloss/downtime due to wrong drive removal.		
	Storage Controller	Integrated PCIe 3.0 based 12G SAS Raid Controller with RAID 0, 1		
	Networking features	Dual port 20Gbps converged network ethernet with suport for slicing of ports in line with blade enclosure ethernet module.		
	Interfaces	Minimum of 1 x internal USB 3.0 port and 1 x internal SDHC card slot		
	Bus Slots	Minimum of 2Nos of 3.0 PCIe x16 based mezzanine slots supporting Converged Ethernet, Ethernet, FC adapters, SAS and IB adaptors		
	Graphics	Integrated G200eh video controller		
	Industry Standard Compliance	ACPI 2.0, Microsoft® Logo certifications, USB 3.0 Support, IPMI 2.0, Secure Digital 2.0, TPM 1.2 Support, specific IEEE standards depending on Ethernet adapter card installed, Advanced Encryption Standard (AES), 3DES, SNMP, SSL 2.0, DMTF, SMASH CLP, Active Directory v1.0, PCIe 3.0, ASHRAE A3		

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

	Security	Power-on password, Administrator's password, Keyboard password (QuickLock), Out of band remote management Chipset with: SSL encryption, Secure Shell version 2, Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser, CLP and XML scripting interface, AES and RC4 encryption of video, External USB port enable/disable, Network server mode, Serial interface control, TPM (Trusted Platform Module) 1.2 option Advanced Encryption Standard (AES), Intel® Advanced Encryption Standard-New Instructions (AES-NI)		
	OS Support	Microsoft Windows Server, Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), Canonical Ubuntu, Oracle Solaris, Vmware, Citrix XenServer		
	Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.		
	Warranty	3 year 24x7 4Hour response comprehensive warranty		
		The Systems Management software should provide Role-based security		
		Software should support search for resource-specific information such as specific instances of resource names, serial numbers, WWNs, IP and MAC addresses to help manage infrastructure better		
		Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD.		

C. Desktop Computers

S. N.	Feature	Specifications (Minimum Required)	Complied (Yes/No)	Reference Page No
	Make :			
	Part Code/Model:			

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

	Desktop Computers	CPU 6th Gen -Intel Core i7 - 3.0G or higher” Chipset Intel, Memory Minimum 8 GB Hard Disk Drive 1000 GB - 6 Gb/s controller and 7200 rpm Monitor 18.5" – LED Minimum PS2 keyboard and mouse (wireless preferred) Ports 4 USB Ports (with at least 2 USB 3.0) Optical drive DVD Rom drive Network Gigabit Ethernet card with support for remote wake Up. Operating System Windows 10 Professional - 64 bit Warranty support 3 years onsite warranty by OEM		
--	-------------------	--	--	--

UPS for Desktop Computers

S. N.	Feature	Specifications	Complied (Yes/No)	Reference Page No
Make :				
Part Code/Model:				
	UPS	1000 VA 30 Minutes Backup 2 Years Warranty		

D. Layer-3 Core Switch

S. N.	Specifications	Complied (Yes/No)	Reference Page No
1.	19” rack mountable, 1 RU, IP base feature set and have a console port		
2.	24 Ethernet 10/100/1000 ports with 10Mtr RJ45 Cat6 Patch cord (Color : Yellow and Blue)		
3.	Network modules with two 10G SFP+, SFP module with 10Mtr OFC cable		
4.	Dual redundant power supplies		
5.	support 1000Base-SX, LX, LH, ZX and 100Base-FX		
6.	Support FlexStack stacking		
7.	Support 6K Default Unicast MAC Addresses		
8.	Support minimum 1K VLANs		
9.	Should be a fully functional Layer 3 switch with support for both IPv4 and IPv6 features		
10.	Forwarding rate of 65.5 mpps with two 10 GbE uplinks		
11.	160Gbps switching fabric		
12.	Flash Memory minimum 64 MB		
13.	DRAM Memory minimum 256 MB		

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

14.	Support Jumbo frames		
15.	IGMP Snooping for IPv4 and IPv6 MLD v1 and v2 snooping		
16.	Support OSPF, BGP, OSPFv3, HSRP		
17.	Support SNMP, RMON		
18.	Supports superior CLI(command line interface) for configuration of all features available on switch		
19.	Support RSTP, MSTP and PVRST+		
20.	Support IEEE 802.1p Class-of-Service (Cos)		
21.	Support IEEE 802.1X		
22.	Support IEEE 802.1D Spanning-Tree Protocol		
23.	Support IEEE 802.1w rapid reconfiguration of spanning tree		
24.	Support IEEE 802.1s multiple VLAN instances of spanning tree		
25.	Support IEEE 802.1Q VLAN encapsulation		
26.	Support IEEE 802.3ad		
27.	Support IEEE 802.3af		
28.	Support IEEE 802.1ae		
29.	Support IEEE 802.3at		
30.	Support IEEE 802.3x full duplex on 10BASE-T, 100BASE-TX, and 1000BASE-T ports		
31.	Support IEEE 802.3 10BASE-T specification, IEEE 802.3u 100BASE-TX specification, IEEE 802.3ab 1000BASE-T specification, IEEE 802.3z 1000BASE-X specification		
32.	TACACS+ and RADIUS authentication		
33.	Support Port security based on Mac address		
34.	Support Mac address notification		
35.	Support Dynamic VLAN assignment		
36.	Support Private VLAN Edge.		
37.	Support VLAN ACL, port-based ACL, IPv6 ACL.		
38.	Media Access Control Security (MACsec) hardware-based encryption		
39.	Supports Secure Shell(SSH) Protocol, Kerberos and simple network management protocol version 3 (SNMPv3)		
40.	Support Multilevel security on console access.		
41.	Support IGMP FILTERING		
42.	Should have 3 year extensive onsite warranty		

E. Layer-2 Access Switch

SL	DESCRIPTION	Complied (Yes/No)	Reference Page No
Make:			
Part Code/Model:			
1	Should have minimum 24 10/100/1000 Base-T ports		
2	Should have minimum wirespeed switching capacity.		
3	Should support IEEE 802.1Q VLAN encapsulation.		
4	Should support LACP		
5	Should support dynamic VLAN assignment		
6	Should support LLDP and LLDP-MED		

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

7	Should support IEEE 802.3az EEE		
8	Should support MSTP		
9	Shall have minimum 8K MAC Address support		
10	Should support IEEE 8.2.1p		
11	Should have at least 4 Queues to differentiate and prioritize different applications (Voice / Video / Data)		
12	Should Support for IGMP and MLD Snooping		
13	Should support port-based QoS		
14	Should support IEEE 802.1x to allow dynamic, port-based security, providing user authentication		
15	Should support MAC Address Based Security on per port basis.		
16	Should support Voice VLAN		
17	Should support IEEE 802.1x		
18	Should support Port-based & VLAN based ACL		
19	Should support STP BPDU port protection & STP Root Guard		
20	Should support RADIUS and TACACS+		
21	Should support RMON		
22	Should support Port Mirroring		
23	Should support IPv6 addressing, ICMPv6, TCP/UDP over IPv6, HTTP over IPv6, HTTPS over IPv6, SNMP over IPv6, Syslog over IPv6, IPv6 based QoS and ACL.		
24	Should support management using SNMP v3, SSHv2, SSLv3, Console access, easier software upgrade through network using TFTP etc. Configuration management through CLI, GUI based software utility and using web interface.		
25	Warranty: Shall have 3-years onsite replacement warranty		
26	OEM Make: Shall be listed in the “leaders” quadrant in Gartner reports of last three years for “Enterprise LAN”.		

F. 42U Server Rack Technical Specifications.

SL. No.	Description	Complied (Yes/No)	Reference Page No
Make:			
Part Code/Model:			
01	Features: Confirms to EIA 310 Standard. The mounting dimensions on the 19” panel mounts & the spacing & entry dimensions, useable heights etc. are maintained as per IEC – 297, EIA 310 DIN 41494		
02	Construction: - An Aluminum extruded frame structure design, i.e. Aluminum extruded depth support member, Aluminum extruded width support member joined with special locking keys to the aluminum extruded vertical member to form a robust frame structure to have a safe load carrying capacity of 650 kgs. This aluminum frame structure is chromate treated & later epoxy powder coated.		
03	Usable Space: Should have usable height: 1866.9mm, Width: 482.6mm, Depth: 879mm or more suitable for Blade Server.		
04	Lockable rear/front door fully perforated: Should have fabricated		

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

	the front door a single sheet which has hexagonal punching. Should give 85% opening for ventilation. Ventilation slots are provided all along the height to enable natural cooling in the rack.		
05	Removable side panels: To facilitate installation & servicing easily removable side panels based on slam latch concept. Functionality of removable side panels is combined with security of a lock. CNC vent. Slots provided on 1/3RD height.		
06	Top covers with CNC ventilation slots along the sides: Top cover is provided with CNC ventilation slots all along the sides. Top is provided with cable entry provision with gland plates & rubber grommets.		
07	19” panel mount at front & rear: 19” panel mount fabricated out of 14SWG steel & CNC punched to meet IEC 297 & DIN 41494 standards are provided at the front & rear. These panel mounts are adjustable all along the depth.		
08	Castor: For easy movement of the cabinet castor wheel should be provided with foot operated break.		
09	Cooling: Should have roof mounted fan housing unit with 4nos exhaust axial type fans of 90CFM capacity to take care of heat pockets.		
10	PDU: In the form of vertical rack mounted power distribution box with 12Nos 5/15Amp Socket.		
11	Shelves: 700mm heavy duty self should be provided to support equipment up to 75kg.		
12	Ventilation: The cabinets should be designed to draw cold air from the lower areas and exhaust hot air from the top by providing selective ventilation patterns on the front, rear side, top and bottom panels.		
13	Joint Free gasket: Joint free gasket used throughout the frame on top & back side for effective cooling & dust protection.		
14	Earthing kit: Copper earthing bars and braids should be provided for achieving electrical ground.		

G. 10 KVA ONLINE UPS

SL	Specifications	Complied (Yes/No)	Reference Page No
Make:			
Model:			
01	UPS Rating – 10 KVA single phase online double conversion Tech.		
02	The Inverter should be IGBT based		
03	Input : 230 VAC, ± 15%, Output: 230 VAC for 100% load		
04	Input Frequency-50Hz ± 5%		
05	Output Waveform-Sinewave		
06	Output Power Factor =0.8 lagging or better and overall minimum efficiency of UPS = 90%		
07	Crest Factor- 3:1		
08	Overload capacity - 110 %, 130% for 10 Minute		
09	Backup – Minimum 5 hours backup for connected load of router, switch & modem.		
10	VAH rating of the battery bank of the UPS should be 2340VAH or		

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

	higher.		
11	Battery Make - Exide/Amara Raja Battery Type- Sealed Maintenance free (SMF)		
12	Should have input isolation transformer.		
13	Display - LCD display for parameters like input supply voltage, current, frequency, output supply voltage, current, frequency.		
14	Protection-Battery over voltage, battery under voltage, input and output AC over voltage, output overload/short circuit, surge Prot.		
15	Relative humidity – 95%		
16	LED Display for status for input supply, battery, inverter.		
17	The UPS should have SNMP compatibility for monitoring by the NMS proposed by the Consultant in this RFP.		
18	Noise Level <50dB at 1meter		
19	OEM Make - Reputed Branded Companies with an ISO 9000, 14001 Certification and CE		
20	Should provide suitable Battery Rack & Interconnecting Cables along with battery.		

4.6. Training and Technology Transfer

The Consultant shall develop training & capacity building program in consultation with the VNN & JKV to facilitate training and capacity building of VNN & JKV staff members on operation and utilization and maintenance of the application as well as to facilitate smooth technology transfer of the developed software system and Geo-database. The training, capacity building and technology transfer shall include the following.

- a) Formulation of Training program, including preparation of training documents, training methodology, finalization of training schedule, finalization of list of training participants [in consultation with the VNN & JKV] and conducting training program on system operation, system utilization, decision support and system maintenance.
- b) Formulation of Technology Transfer methodology in consultation with the VNN & JKV to capacitate the select technical personnel from VNN & JKV for imparting intensive training on the technology used in development of the Water & Waste Water Utility Management System to enable them on system maintenance, Geo-database maintenance and to carryout system administrative functions.

4.7. Operation & Maintenance Support

The consultant shall facilitate on-site support and facility management on the developed system for a period of two (2) years from the deployment and commissioning of the system. The detailed plan of on-site maintenance support and the facility management program should be prepared by the consultant and shall be finalized and approved by the VNN & JKV before implementation. The indicative abstract of the on-site support and facility management are described in this TOR.

4.8. Key Personnel (Expertise Required)

Even though this project is based on a Lumpsum contract and payments are linked only to deliverables, the importance of having competent Qualified and Experienced professional for leading the team of professionals and managing the Technical works needs no emphasis.

It is envisaged that the following Key personnel are essential (not limited to) for executing this project apart from a number of technical support professionals. The Qualifications and Experience requirements of these personnel are mentioned in the table below.

Curriculum vitae of Key Personnel mentioned below are required to be submitted in the prescribed format (Form Tech-6, Technical Proposal Standard forms). These CVs will be evaluated as part of the Technical Proposal and will have weightage of marks as stipulated in the Data Sheet. The Consultants are expected to engage a number of other Technical Support personnel for carrying out the project assignment. CV of the Technical Support personnel are not required to be included in the Technical Proposal.

4.8.1. Project Manager

Qualification & Experience	MCA / MBA having more than 15 years of Project Management Experience. Professionals with Project Management Professional (PMP) and Six Sigma training/certification will be preferred.
Roles & Responsibilities	
<ul style="list-style-type: none"> - Provide end-to-end project management - Scope project requirements and prepare budget - Develop a detailed project plan and monitor progress - Collaborate with internal teams to design, develop and implement Information System projects - Deliver projects on time ensuring quality standards are met - Develop support documentation including risk logs and requirement specifications - Monitor and report on Project Progress - Communicate with the team and ensure all members are on board with delegated tasks - Highlight potential risks or malfunctions and act proactively to resolve issues - Seek opportunities for improvement and suggest new methods, solutions and innovations. 	

4.8.2. GIS Expert

Qualification & Experience	Graduate with PG Diploma in GIS & Remote Sensing from a reputed organization and having minimum 10 years’ experience for dealing with large scale GIS Projects, Analytics and Application Development.
Roles & Responsibilities	
<ul style="list-style-type: none"> - Coordinate with the Administrators/ City planners to prepare Spatial Information Requirement Specifications - Coordination with the GIS Database Manager to finalize the data requirement, support to the GIS Database Manager in designing the new database components wherever required - Compile data from different sources such as geo-database, map data available from secondary sources i.e topography, contour etc., Satellite Images, GPS/ DGPS coordinates, texts, photographs - Formulation of geo-spatial thematic representations - Geo-spatial Analysis using query builder tools, spatial analysis techniques for generation of analytical information through geographic relationship/ attribute data values - Preparation of Reports - GIS system management, maintenance, backup and restore 	

4.8.3. Solution Architect

Qualification & Experience	BE/B.Tech/MCA with 10 years of experience. Should have worked as Solutions Architect for at least two large scale IT projects, preferable for the Government Sector.
Roles & Responsibilities	
<ul style="list-style-type: none"> - Designing functional technology solutions - Overseeing development and implementation of programs - Providing technical leadership and support to software development teams - Understand Project needs to define system specifications - Plan and design the structure of a technology solution - Communicate system requirements to software development teams - Evaluate and select appropriate software or hardware and suggest integration methods - Oversee assigned programs (e.g. conduct code review) and provide guidance to team members - Assist with solving technical problems when they arise - Ensure the implementation of agreed architecture and infrastructure - Address technical concerns, ideas and suggestions - Monitor systems to ensure they meet both user needs and business goals. 	

4.8.4. Software Development – Team Lead

Qualification & Experience	MCA/MBA with 10 years of experience; Experience of having led at least three or more large scale software development projects is a must. Professionals with PMP certification will be preferred.
Roles & Responsibilities	
<ul style="list-style-type: none"> - Overall Responsibility to lead a team of Software Developers, Testing Professionals, Database Administrators and to deliver Software Applications as per client’s requirement. - Producing clean, efficient code based on specifications - Testing and deploying programs and systems - Fixing and improving existing software - Work with developers to design algorithms and flowcharts - Integrate software components and third-party programs - Troubleshoot, debug and upgrade existing software - Gather and evaluate user feedback - Recommend and execute improvements - Create technical documentation for reference and reporting 	

4.8.5. Database Administrators

Qualification & Experience	BE/B.Tech with 10 years of experience in designing and managing databases.
Roles & Responsibilities	
<ul style="list-style-type: none"> - Creating and managing assigned databases per defined standards and procedures. - Processing successful daily backups guaranteeing recoverability - Performing database refreshes using Export/Import, upgrades and applying patches. - Undertaking activities such as storage management, backup and recovery, and performance tuning - Responding to monitoring alerts and high severity problem tickets, applying analytical, problem solving and resolution skills in handling scenarios - Assisting senior and lead DBAs in constructing, and executing tests and implementation plans - Participates in disaster recovery planning and execution of real time scenarios - Develops database SQL, procedural language and operating system scripts used in day-to-day database management - Working with application teams in delivering optimal database solutions throughout the application development life cycle including production support - Performing research and evaluation of new database features and technology - Solving routine problems of limited scope and complexity, referring to established policies and practices for guidance. 	

4.9. Onsite Support (Managed Services)

The Consultant shall provide qualified and experienced software professionals in the following positions in specified numbers to facilitate the on-site support from the date of go-live of the application. Curriculum vitae of Key Personnel mentioned below are required to be submitted in the prescribed format (Form Tech-6, Technical Proposal Standard forms). These CVs will be evaluated as part of the Technical Proposal and will have weightage of marks as stipulated in the Data Sheet.

4.9.1. GIS Expert

Qualification & Experience	Graduate with PG Diploma in GIS & Remote Sensing from a reputed organization and having 5 years’ experience for dealing with GIS Analytics
Roles & Responsibilities	
<ul style="list-style-type: none"> - Coordinate with the Administrators/ City planners to prepare Spatial Information Requirement Specifications - Coordination with the GIS Database Manager to finalize the data requirement, support to the GIS Database Manager in designing the new database components wherever required 	

- Compile data from different sources such as geo-database, map data available from secondary sources i.e topography, contour etc., Satellite Images, GPS/DGPS coordinates, texts, photographs
- Formulation of geo-spatial thematic representations
- Geo-spatial Analysis using query builder tools, spatial analysis techniques for generation of analytical information through geographic relationship/attribute data values
- Preparation of Reports
- GIS system management, maintenance, backup and restore

4.9.2. Database Administrators

Qualification & Experience	BE/B.Tech with 5 years of experience
Roles & Responsibilities	
<ul style="list-style-type: none"> - Creating and managing assigned databases per defined standards and procedures. - Processing successful daily backups guaranteeing recoverability - Performing database refreshes using Export/Import, upgrades and applying patches. - Undertaking activities such as storage management, backup and recovery, and performance tuning - Responding to monitoring alerts and high severity problem tickets, applying analytical, problem solving and resolution skills in handling scenarios - Assisting senior and lead DBAs in constructing, and executing tests and implementation plans - Participates in disaster recovery planning and execution of real time scenarios - Develops database SQL, procedural language and operating system scripts used in day-to-day database management - Working with application teams in delivering optimal database solutions throughout the application development life cycle including production support - Performing research and evaluation of new database features and technology - Solving routine problems of limited scope and complexity, referring to established policies and practices for guidance. 	

4.9.3. Infrastructure Expert

Qualification & Experience	B.E./B.Tech + CCNA/CCNSP with 5 Yrs experience
Roles & Responsibilities	
<ul style="list-style-type: none"> - Maintain the exiting IT infrastructure - Assist in resolving network related issues - Assist in evaluating the plan & guidelines on the deployment of IT infrastructure 	

- Tracking implementation and delivery progress to include hardware procurement, network services, facilities management etc. as per ITIL standards.
- Validate IT infrastructure deployed against the bill of materials & deployment architecture.
- Ensure the ITIL standards compliance for IT Infrastructure.

4.10. Facility Management

The Consultant shall provide facility management by operationalization of the Water and Waste Water utility management system aligned with the functional requirement of the VNN & JKV. The consultant shall be responsible for update of the geo-database/ database, generation of scheduled reports, generation of reports/ results as specified by the VNN & JKV, generation and provisioning of relevant information as required by the VNN & JKV officials for planning, monitoring and decision support activities.

4.11. Institutional Support

Apart from the resource deployed / engaged at onsite, the Consultant will provide institutional support services for success of the project. The support services shall involve experienced and senior management level professional of the organization, in strategic decisions.

As and when required the senior leadership team of the Consultants need to be present in the high-level meetings at Varanasi & Delhi and facilitate in briefing the activities carried out within a particular period. They shall provide inputs to the team in executing the periodic task successfully. The Consultant shall record & monitor all engagements, meetings and other activities related to the project & the scheme. The same actionable points are to be put into the system for update by the concerned authorities enabling a performance review of the same.

5. Expected Time Schedule

The entire project shall be implemented in a period of 15 Months. The timeline for implementation of the individual project components will be governed by the following schedule. In the below mentioned schedule, T stands for Date of Signing of Contract, with Varanasi Nagar Nigam. Suggested Milestones and Deliverables are mentioned in the table below. Consultants are free to suggest minor changes. [which are not material change in nature].

5.1. Part A – Developing GIS for Water Supply and Sanitation Assets

Sl.	Milestone	Deliverables	Timeline
1.	Inception Report	<ul style="list-style-type: none"> - Detailed Project Plan for Implementation of the Project - Project Progress Report (every fortnightly) - Risk Management and Mitigation Plan - Manpower Deployment Plan - Site Survey Report (A site survey report) 	T + 4 Weeks

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

		detailing the current status of Varanasi Nagar Nigam Office and other Survey Location)	
2	Satellite Image Processing, and geo-Referencing through GCP Survey	<ul style="list-style-type: none"> - Processed Imagery - Report on GCP Survey 	T +8 weeks
3	GIS Mapping and submission of Geo-database of water and wastewater utility assets	<ul style="list-style-type: none"> - Soft copies of GIS Map Data - Soft and hard Copies of Database - Reports of Asset Surveys 	T+48 weeks
3	DGPS survey and submission of Geo-referenced consumer database	<ul style="list-style-type: none"> - DGPS Survey Results - Consumer Database - Reports on the Surveys 	T+ 52 weeks
4	Property enumeration and submission of Geo-Referenced Property database	<ul style="list-style-type: none"> - GIS Base maps used for surveys - Database of Properties - Report of Property Survey - GIS with linked Database - Digital Photos of the properties 	T+ 54 weeks
5	Testing and commissioning of Web GIS for Water Utility assets integrated with consumer billing	<ul style="list-style-type: none"> - Commissioned Web Portal with Web GIS Application Modules - Mobile GIS application Modules - User Manual - Report of Web GIS - Report on Consumer Billing - GIS based Asset Management Plan 	T+56 weeks
6	Completion of user training	<ul style="list-style-type: none"> - Training Manual - Training PPTs - Training Report - Evaluation Report 	T+ 60 weeks
		Total	60 weeks

5.2.Part B - Software Development, Implementation & Commissioning of the Data Centre

Sl#	Milestone	Deliverables	Timelines (T – from date of signing of contract)
Project Planning			
1	Inception Report	<ul style="list-style-type: none"> - Detailed Project Plan for Implementation of the Project - Project Progress Report (every fortnightly) - Risk Management and Mitigation Plan - Manpower Deployment Plan - Site Survey Report (A site survey report detailing the current status of Varanasi Nagar Nigam Office and other Survey Location) 	T + 4 Weeks
Study and Design			
2	System Study – study the legislation, business processes and organization design of VNN	A comprehensive System Study document	T + 14 Weeks
3	Detailed assessment of functional requirements and MIS requirements	Updated/ vetted FRS report including list of additional features that would result in further improvement in the overall application performance for consideration of the department	
4	Finalization/ Vetting of FRS	Detailed integration and interfacing model	
5	Preparation of System Requirement Specification report and Software Requirement Specification report	System Requirement Specification Report and Software Requirement Specification reports meeting all the Business, Functional and technical requirement of the Purchaser and incorporating all the functional specifications & standards	
		List of additional features proposed, if any	
6	Preparation of Solution Design documents	A detailed Design document including: Technical Architecture Document (Application, Network, and Security) High Level Design (including but not limited to) <ul style="list-style-type: none"> a) Application architecture documents b) ER diagrams and other data modeling documents c) Logical and physical database design d) Data dictionary and data definitions 	T + 16 Weeks

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

Sl#	Milestone	Deliverables	Timelines (T – from date of signing of contract)
		e) Application component design including component deployment views, control flows, etc. Low Level Design (including but not limited to): a) Application flows and logic including pseudo code b) GUI design (screen design, navigation, etc.) c) Database architecture, including defining data structure, data dictionary d) SLSS Application Test Plans and Test Cases	
7	IT infrastructure sizing	Final BoM with Technical specifications for the IT Hardware, Network and other IT Infrastructure Strategy for Data Centre and DR Site Hardware Deployment plan	T + 18 Weeks
8	Others	Data Migration Strategy and Methodology	T + 18
9	Procurement of IT infrastructure Data	Procurement and Delivery of Hardware in the office of Varanasi Nagar Nigam	T + 24 Weeks
10	Commissioning and operationalization of IT infrastructure at Data Centre and DR	Infrastructure Delivery Certificates and sign-off from Purchaser/Consignee Network Diagrams for Data Center and Networks Documentation of IP and Subnet Scheme, Routing Tables and ACL etc. deployed for Intranet. Documentation of all device configurations such as firewall, routers, servers etc. All policy documents; such as Security policy, Backup and recovery policy etc. Maintenance manuals for Data Center, Networks, server and other hardware. Any Other Relevant Documents.	T + 28 Weeks
Software Development			
11	Finalization of requirement	Final FRS, SRS, SRS and other requirements with all the Solution Design documents	T + 38 Weeks
12	Development of all modules of SLSS &	Software Licenses in case of third party product	
13	Site preparation at Phase I Client site	Infrastructure Delivery Certificates and sign-off from Purchaser/Consignee	
14	Operationalizing the IT infrastructure	Installation, Testing and Commissioning	
15	User Acceptance	Detailed Testing Plans and Test Cases Detailed User Operation Manual	

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

Sl#	Milestone	Deliverables	Timelines (T – from date of signing of contract)
16	User Training on SLSS	Detailed Training Plan, Training Manuals, Training Content, Training Examination Question Bank, etc.	
17	Roll-out	Report on amendments / enhancements / modifications made based on inputs of Phase I	
18	Go-Live	Pilot phase Acceptance from purchaser	
19	Capacity Building and Change Management	Detailed Change Management, Capacity Building and Communication Strategy Issue supporting documentation such as Training material, User Manuals, Maintenance Manuals, etc. Any Other Relevant Documents	
20	User Training on SLSS	Detailed User Operation Manual Detailed Training Plan, Training Manuals, Training Content, Training Examination Question Bank, etc.	T + 44 Weeks
21	3rd party Acceptance testing, audit and certification	Third Party Acceptance Testing Certificate by CERT IN Certified Agency	T + 49 Weeks
22	SLA and Performance	Detailed plan for monitoring of SLAs and performance of the overall system	T + 50 Weeks
23	Go-Live for complete SLSS	Go-Live Acceptance from Purchaser	T + 54 Weeks
24	Maintenance Support	Operation & Maintenance Support	Go Live + 2 Years.

In addition to the above-mentioned deliverables the Consultants are required to submit Regular Monthly reports [on the 10th day of every month] detailing the progress during the previous month, activities planned for the current month, problems faced if any, issues and concerns. Consultants are also required to submit deployment Schedule of Personnel, CPM/PERT chart for the Project Execution based on the best practices of Project Management.

All hardcopy deliverables will be submitted in three copies with a Softcopy in CD/DVD-ROM. Digital deliverables will be submitted in CD/DVD-ROM only.

6. Payment Terms

6.1. For Part A – GIS Survey and Database Billing

Sl#	Project Activity	Payment Milestone
1.	Inception Report	10 %
2.	Processing and Geo-Referencing through GCP Survey	10%
3.	GIS Mapping and submission of Geo-Database of water and waste water utility assets	10%
4.	DGPS Survey and Submission of Geo-Referenced Consumer Database	10%
5.	Property Enumeration and Submission of Geo-Referenced Property Database	10%
6.	GIS Mapping and Compilation of Spatial Database	15%
7.	GIS applications Development for Asset Management	15%
8.	Testing and Commissioning of Web enabled GIS for Water and Wastewater Utilities	10%
9.	User Training and Technology Transfer	10%
	Total	100%

6.2. For Part B- Application Development Services

Sl#	Project Activity	Payment Milestone
1	Inception Report	10%
2	Finalization/ Vetting of FRS	35%
3	Preparation of System Requirement Specification report and Software Requirement Specification report	
4	Preparation of Solution Design documents	
5	Development of all modules of SLSS & Testing	40%
6	User Acceptance and Testing	10%
7	User Training on SLSS	
8	Go-Live	5%
	Total	100%

6.3. For Part C – IT Infrastructure for GIS/MIS control Centre

Sl#	Project Activity	Payment Milestone
1	After Delivery of approved Hardware	70%
2	After Installation and Commissioning of Data Centre	20%
3	After Go Live and Hosting of the Application in the Data Centre	10%
	Total	100%

6.4. For Part D - Services Provided during Post Implementation Phase

Sl#	Project Activity	Payment Milestone
1	Operations and Maintenance Services for 2 years year after “Go-Live”	On Quarterly Basis

7. Role of IDP Consultants

VNN is assisted by a team of Institutional Development Program Consultants (IDP) in the Implementation of Institutional Development Program, whose services includes procurement services, project management, contract management, works supervision, Quality control and day to day interaction, correspondence and overall management, apart from other advisory and professional services.

The Consultant will fully cooperate with IDP Project and its Technical Experts during the course of execution of this contract and IDP will act as authorized representative of VNN. All instructions, advice, requirements on technical matters made by the IDP project Team will be considered as that of VNN, as for as execution of this contract is concerned.

8. Ownership, Migration and Transfer

- 8.1. It is to be noted that VNN is a Local Government entity under the Administrative Control of Uttar Pradesh Urban Development Department. All the computer hardware, software, licenses, internet domain names, hosting purchased out of this project funds belongs to VNN and should be purchased / registered/ licenses in the name of Municipal Commissioner, VNN even if the same is to be used / accessed by the personnel of the Consultant. Wherever it is technically not possible to do so, the same should be legally transferred to VNN at the time of handing over of the final deliverables.
- 8.2. The Intellectual Property Rights (IPR) of the software solution developed by the Consultant will rest with VNN. The Consultant will hand over the source code and its documentation thereof to VNN as part of the final deliverables, so as to enable VNN to use the same to modify / enhance / debug the software solution at a later date catering to the changing functional requirements.
- 8.3. The Software applications and servers may have to be transferred to the Uttar Pradesh State Data Centre eventually at a later date. The Consultants are expected to fully assist and cooperate with VNN and its Counterpart Government Agencies in orderly migration and transfer of the server, database and software application with no or least downtime as and when requested by VNN. Failure to do so will lead to legal action against the Consultants including blacklisting of the firm from undertaking all future government business activities in Uttar Pradesh and other states.

9. Obligations of the Client

The Client will facilitate smooth and speedy execution of this project by extending the following support to the selected Consultant:

- Provide all available previous study reports, Maps, Data, Tables, Sketches, Drawings both in available manual formats and in digital formats (to the extent available only)
- Available GIS data and maps in digital formats

Request for Proposal: Selection of Consultants for “Developing Geographical Information System /
Management Information System and related works for Varanasi”

- Coordination in setting up meetings, Workshops, Conference and Seminars required for executing the project.
- Instructing the concerned officers to be available for meetings and consultations.
- Periodical review of the Progress of the project and efforts in removing the bottle necks
- Information, Education and Communication (IEC) to the general public and Consumers to facilitate house hold survey for Asset mapping and Property enumeration.
- Coordination with the District Administration wherever required.

Appendix-C

Field Data Sheet Format for Property Survey																				
Ward No		Sector No		Circle No.		Parcel ID		Date of Survey												
Total No of Properties		Property ID		Respondent Name				Respondent Status												
Owner Name (as per Record available with Municipality):																				
Owner's Father/Husband Name:																				
Property Usage mark in the box):	<i>Residential</i>		Occupancy Status & Construction Type(✓ mark in the box):		<i>Self Occupied</i>		<i>RCC</i>	<i>ASB</i>	<i>OTH</i>	E-mail ID:										
	<i>Non- Residential</i>				<i>Rented</i>		<i>RCC</i>	<i>ASB</i>	<i>OTH</i>	Contact no										
	<i>Mix</i>				<i>Mix</i>		<i>RCC</i>	<i>ASB</i>	<i>OTH</i>											
Building Name			House No/ Flat No			Locality/ Colony Name				Road Name										
Electric Connection No. / Consumer ID (as per Electricity Bill):						Existing Holding Number:				Age of the Building:	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>						
Source of Water:	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	Sewerage Connection	<i>Y</i>	<i>N</i>	Rain Water Harvesting System	<i>Y</i>	<i>N</i>	Total No of Floors				Plot Area (in sq.feet):					
In case of Commercial / Industrial																				
Shop No			Floor No			Shop Area (in Sq. Feet):				Owner Name:										
Shop/Industry Name:								Contact No.:												
License Status	<i>YES</i>	<i>NO</i>	License No. (As per Document/Certificate)							License Validity (DD/MM/YY):										
In case of Multi-Storey Building -Commercial Complexes or Residential or Non Residential Multi-Storey Buildings																				
Apartment/ Building Name:			Total No. of Properties	Residential		Non-Residential		Total Built up Area (In Sq. Feet)			Residential		Non-Residential							
Total No. of Floors (Excluding Ground)	Lift Facility		<i>Y</i>	<i>N</i>	Power Backup	<i>Y</i>	<i>N</i>	Parking Facility	<i>Y</i>	<i>N</i>	Fire Fighting Facility	<i>Y</i>	<i>N</i>	Total Open Space Area (In Sq. Feet)						
Floor Wise Built-up Area with Usage: (Area must be in Sq. Feet)																				
S N o	Usage	Residential						Non-Residential						Any Other						
	Constn. Type	<i>RCC/RBC</i>		<i>ASB</i>		<i>Others</i>		<i>RCC/RBC</i>		<i>ASB</i>		<i>Others</i>		<i>RCC/RBC</i>		<i>ASB</i>		<i>Others</i>		
	Floor	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	<i>S</i>	<i>T</i>	
	1	Base-ment																		
	2	Ground																		
	3	1 st Floor																		
	4	2 nd Floor																		
	5	3 rd Floor																		
	6	4 th Floor																		
	7	5 th Floor																		

Signature of the Surveyor

Signature of Property Owner

Signature of the Project Coordinator

--	--	--

Section 6 : Standard Form of Contract

ANNEX I

Consultants’ Services : Lump-Sum Contract

SAMPLE FORM OF CONTRACT

Consultants’ Services

Lump-Sum

Contents

Preface	127
I. Form of Contract	129
II. General Conditions of Contract	132
1. General Provisions	132
1.1 Definitions	132
1.2 Law Governing Contract	133
1.3 Language	133
1.4 Notices	133
1.5 Location	133
1.6 Authority of Lead Partner	133
1.7 Authorized Representatives	134
1.8 Taxes and Duties	134
1.9 Fraud and Corruption	134
1.10 Relationship between the Parties	134
1.11 Headings	134
1.12 Eligibility	134
1.13 Sanctions	134
1.14 High Standard of Conduct	134
1.15 Monitoring by JICA	135
2. Commencement, Completion, Modification and Termination of Contract	135
2.1 Effectiveness of Contract	135
2.2 Termination of Contract for Failure to Become Effective	135
2.3 Commencement of Services	135
2.4 Expiration of Contract	135
2.5 Entire Agreement	135
2.6 Modifications or Variations	135
2.7 Force Majeure	136
2.8 Suspension	137
2.9 Termination	137
3. Obligations of the Consultant	139

3.1	General.....	139
3.2	Conflict of Interest	139
3.3	Confidentiality	140
3.4	Insurance to be Taken Out by the Consultant	140
3.5	Consultant’s Actions Requiring Client’s Prior Approval	140
3.6	Reporting	141
3.7	Documents Prepared by the Consultant to be the Property of the Client 141	
3.8	Accounting, Inspection and Auditing.....	141
3.9	Liability of the Consultant	142
3.10	Equipment, Vehicles and Materials Furnished by the Client.....	143
3.11	Equipment and Materials Provided by the Consultant.....	143
3.12	Specifications and Designs	143
4.	Consultant’s Personnel.....	144
4.1	General.....	144
4.2	Replacement of Personnel	144
4.3	Resident Project Manager	144
5.	Obligations of the Client.....	144
5.1	Assistance and Exemptions.....	144
5.2	Change in the Applicable Law Related to Taxes and Duties	145
5.3	Services and Facilities	145
5.4	Access to Land.....	145
5.5	Counterpart Personnel	145
5.6	Difference of Opinion	146
6.	Payments to the Consultant	146
6.1	Lump-Sum Payment.....	146
6.2	Contract Price.....	146
6.3	Currency of Payment	146
6.4	Payment for Additional Services	146
6.5	Terms and Conditions of Payment.....	146
6.6	Interest on Delayed Payments	147
7.	Good Faith	147
7.1	Good Faith	147

7.2	Operation of the Contract	147
8.	Settlement Of Disputes	147
8.1	Amicable Settlement	147
8.2	Dispute Resolution.....	147
III.	Special Conditions of Contract.....	148
IV.	Appendices	152
	Appendix A – Description of Services	152
	Appendix B – Reporting Requirements	152
	Appendix C – Personnel Schedule.....	152
	Appendix D – Cost Estimates in Foreign Currency	152
	Appendix E – Cost Estimates in Local Currency	152
	Appendix F – Summary of Cost Estimates.....	153
	Appendix G – Services, Facilities and Equipment to be Provided by the Client	153
	Appendix H – Form of Advance Payment Security	154

Preface

1. This Sample Contract for Consulting Services has been prepared by JICA for use by its borrowers and their implementing and executing agencies (referred to hereafter as Clients) when they hire a consulting firm (referred to hereinafter as the Consultant) to provide services paid on lump-sum basis. In such cases, the use of this contract is encouraged for contracts financed partly or wholly by JICA.
2. The Contract includes four parts: the Form of Contract, the General Conditions of Contract, the Special Conditions of Contract, and the Appendices. The Client using this Sample Contract should not alter the General Conditions. Any adjustment to meet project features should be made only in the Special Conditions.
3. Lump-sum contracts are normally used when definition of the tasks to be performed is clear and unambiguous, when the commercial risk taken by the Consultant are relatively low, and when therefore such Consultant are prepared to perform the assignment for an agreed predetermined lump-sum price. Such price is arrived at on the basis of inputs - including rates - provided by the Consultant. The Client agrees to pay the Consultant according to a schedule of payments linked to the delivery of certain outputs, for example reports. A major advantage of the lump-sum contract is the simplicity of its administration, the Client having only to be satisfied with the outputs without monitoring the staff inputs.

CONTRACT FOR CONSULTANTS’ SERVICES

Lump-Sum

between

[name of the Client]

and

[name of the Consultant]

Dated: _____

I. Form of Contract

LUMP-SUM

[All notes should be deleted in final text]

This CONTRACT (hereinafter called the “Contract”) is made the [day] day of the month of [month], [year], between, on the one hand, [name of Client] (hereinafter called the “Client”) and, on the other hand, [name of Consultant] (hereinafter called the “Consultant”).

[Note: *If the Consultant consist of more than one entity, the above should be partially amended to read as follows: “... (hereinafter called the “Client”) and, on the other hand, a Joint Venture consisting of the following entities, each of which will be jointly and severally liable to the Client for all the Consultant’s obligations under this Contract, namely, [name of Consultant] and [name of Consultant] (hereinafter called the “Consultant”).*]

WHEREAS

- (a) the Client has requested the Consultant to provide certain consulting services as defined in this Contract (hereinafter called the “Services”);
- (b) the Consultant, having represented to the Client that it has the required professional skills, and personnel and technical resources, has agreed to provide the Services on the terms and conditions set forth in this Contract;
- (c) by an Agreement dated [day, month, year] (hereinafter called the Loan Agreement) between the [name of borrower] (hereinafter called the Borrower) and Japan International Cooperation Agency (hereinafter called JICA), JICA has agreed to make a loan to the Borrower for the purpose of financing [name of the Project] (hereinafter called the Project);

NOW THEREFORE the parties hereto 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:
 - Appendix A: Description of Services
 - Appendix B: Reporting Requirements
 - Appendix C: Personnel Schedule
 - Appendix D: Cost Estimates in Foreign Currency
 - Appendix E: Cost Estimates in Local Currency
 - Appendix F: Summary of Cost Estimates
 - Appendix G: Services, Facilities and Equipment to be Provided by the Client
 - Appendix H: Form of Advance Payment Security

Appendix I: Acknowledgment of Compliance with Guidelines for the
Employment of Consultants under Japanese ODA Loan

2. The mutual rights and obligations of the Client and the Consultant shall be as set forth in the Contract, in particular:
 - (a) the Consultant shall carry out the Services in accordance with the provisions of the Contract;
 - (b) the Client shall make payments to the Consultant in accordance with the provisions of the Contract;
 - (c) Subject to subparagraph (d) hereunder, and notwithstanding any other provisions of this Contract, payments under this Contract shall not exceed [amount] in foreign currency, and [amount] in local currency. Except as otherwise agreed between the Client and the Consultant:
 - (i) Foreign currency payments to the Consultant hereunder will be made in [currency/currencies];
 - (ii) Local currency payments to the Consultant hereunder will be made in [currency].
 - (d) The maximum amount specified in subparagraph (c) above has been fixed on the understanding that the Client will make available free of charge to the Consultant the exemptions, assistance, services and facilities provided for under Clause 5 of the General Conditions of Contract and in Appendix G as required for the purposes of the Services. If any such exemptions, assistance, services and facilities are not supplied, the parties shall consult regarding what additional allowance (if any) should be made to the Consultant as a result thereof to cover necessary additional expenditures not envisaged in the cost estimates in Appendices D and E.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

For and on behalf of [*name of Client*]

[*Authorized Representative*]

For and on behalf of [*name of Consultant*]

[*Authorized Representative*]

[**Note:** *If the Consultant consists of more than one entity, all these entities should appear as signatories, e.g., in the following manner:*]

For and on behalf of the Consultant

[*name of Joint Venture Partner*]

[*Authorized Representative*]

[*name of Joint Venture Partner*]

[*Authorized Representative*]

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 Client’s Country, or in such other country as may be specified in the Special Conditions of Contract (SC), as they may be issued and in force from time to time.
- (b) “Client” means the agency with which the selected Consultant signs the Contract for the Services.
- (c) “Client’s Country” means the country of the borrower.
- (d) “Consultant” means any entity including a Joint Venture that will provide the Services to the Client under the Contract.
- (e) “Contract” means the Contract signed by the Parties and all the attached documents listed in its Clause 1, that is these General Conditions (GC), the Special Conditions by which the GC may be amended or supplemented (SC), and the Appendices.
- (f) “Contract Price” means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (g) “Day” means calendar day.
- (h) “Effective Date” means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1.
- (i) “Foreign Currency” means any currency other than the currency of the Client’s country.
- (j) “Government” means the Government of the Client’s country.
- (k) “Joint Venture” means a Consultant which comprises of two or more Partners each of which will be jointly and severally liable to the Client for all the Consultant’s obligations under the Contract.
- (l) “JICA” means Japan International Cooperation Agency.
- (m) “Local Currency” means the currency of the Client’s country.
- (n) “Partner” means any of the entities that make up the Joint Venture, and “Partners” means all these entities.

- (o) “Party” means the Client or the Consultant, as the case may be, and “Parties” means both of them.
 - (p) “Personnel” means qualified persons provided by the Consultant and assigned to perform the Services or any part thereof.
 - (q) “Services” means the work to be performed by the Consultant pursuant to this Contract, as described in Appendix A hereto.
 - (r) “Sub-Consultant” means any person or entity to whom/which the Consultant subcontracts any part of the Services and for whom/which the Consultant is fully responsible.
 - (s) “Third Party” means any person or entity other than the Government, the Client, the Consultant or a Sub-Consultant.
 - (t) “In writing” means communicated in written form with proof of receipt.
- 1.2 Law Governing 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 language specified in the SC, which shall be the binding, and controlling language for all matters relating to the meaning or interpretation of this Contract. Furthermore, all reports and correspondence required during implementation of the Services shall be in the language specified in the SC.
- 1.4 Notices**
- 1.4.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SC.
 - 1.4.2 A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.
- 1.5 Location** The Services shall be performed at such locations as are specified in Appendix A hereto and, where the location of a particular task is not so specified, at such locations, whether in the Client’s Country or elsewhere, as the Client may approve.
- 1.6 Authority of Lead Partner** In case the Consultant consists of a Joint Venture of more than one entity, the Partners hereby authorize the Lead Partner specified in the SC 1.6 to act on their behalf in exercising all the Consultant’s rights and obligations towards the Client under this Contract, including without limitation the receiving of instructions and payments from the Client.

- 1.7 Authorized 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 Consultant may be taken or executed by the officials specified in the SC.
- 1.8 Taxes and Duties** Unless otherwise specified in the SC, the Consultant, Sub-Consultants, and their Personnel shall pay such taxes, duties, fees, and other impositions as may be levied under the Applicable Law, the amount of which is deemed to have been included in the Contract Price.
- 1.9 Fraud and Corruption** JICA requires that the Consultant, as well as the Client, under contracts funded with Japanese ODA Loans and other Japanese ODA, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, JICA:
- (a) will reject the result of evaluation of proposals if it determines that the Consultant evaluated as the highest-ranked has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - (b) will recognize a consultant as ineligible, for period determined by JICA, to be awarded a contract funded with Japanese ODA Loans if it at any time determines that the consultant has engaged in corrupt or fraudulent practices in competing for, or in executing, another contract funded with Japanese ODA Loans or other Japanese ODA.
- 1.10 Relationship 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 Consultant. The Consultant, subject to this Contract, has 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.
- 1.11 Headings** The headings shall not limit, alter or affect the meaning of this Contract.
- 1.12 Eligibility** The Consultant represents and warrants that it is a legal entity of, or legally established in, an eligible source country specified in the SC and that the Services will be wholly and substantially supplied from an eligible source country specified in the SC.
- 1.13 Sanctions** The Consultant represents and warrants that it, and any Sub-Consultants, as well as any of the Personnel of the Consultant or Sub-Consultant, are not sanctioned by JICA.
- 1.14 High Standard of Conduct** The Client and JICA require the Consultant and its Personnel to maintain a high standard of conduct when carrying out their functions under this Contract. Accordingly, the Consultant and its Personnel are expected to recognize the contribution of others, regardless of their nationality, gender, religion, seniority or contractual status. The Client will take prompt action to address incidents involving conduct that does not live

up to these standards which may result in replacement of any individual expert, consultant, or contractual staff involved in such incidents pursuant to GC 4.2(b).

1.15 Monitoring by JICA

Without assuming the responsibilities of the Client or the Consultant, JICA may monitor the Services as necessary in order to satisfy itself that it is being carried out in accordance with appropriate standards and is based on acceptable data. As appropriate, JICA may take part in discussions between the Client and the Consultant. However, JICA shall not be liable in any way for the performance of the Services by reason of such monitoring or participation in discussions. Neither the Client nor the Consultant shall be released from any responsibility of this Contract by reason of JICA’s monitoring or participation in discussion.

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 Consultant instructing the Consultant 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 specified in the SC, the Consultant or the Client may, by not less than twenty one (21) 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 with respect hereto.

2.3 Commencement of Services

The Consultant shall begin carrying out the Services not later than the number of days after the Effective Date specified in the SC.

2.4 Expiration of Contract

Subject to sub-Clause GC 2.7.3(c) and unless terminated earlier pursuant to Clause GC 2.9 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.

2.5 Entire Agreement

This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

2.6 Modifications or Variations

(a) Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties and shall not be effective until the concurrence of JICA has been obtained. However, any change which does not constitute an important modification of the Contract and which does not affect the amounts payable under the Contract

concurring by JICA shall not require a new concurrence of JICA for effectuation. Pursuant to Clause GC 7.2 hereof, however, each Party shall give due consideration to any proposals for modification or variation made by the other Party.

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, is not foreseeable, is unavoidable, and which makes a Party’s performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in 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 action (except where such strikes, lockouts or other industrial action 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 both to take into account at the time of the conclusion of this Contract, and 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.
- 2.7.1 *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 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 all with the objective of carrying out the terms and conditions of this Contract.
- 2.7.3 *Measures to be Taken* (a) A Party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall take all reasonable measures to minimize the consequences of any event of Force Majeure.
- (b) A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any case not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give written notice of the restoration of normal conditions as soon as possible.
- (c) 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.

- (d) During the period of their inability to perform the Services as a result of an event of Force Majeure, the Consultant, upon instructions by the Client, shall either:
 - (i) demobilize, in which case the Consultant shall be reimbursed for costs they reasonably and necessarily incurred, and, if required by the Client, in reactivating the Services; or
 - (ii) continue with the Services to the extent possible, in which case the Consultant shall continue to be paid under the terms of this Contract and be reimbursed for additional costs reasonably and necessarily incurred.
- (e) In the case of disagreement between the Parties as to the existence or extent of Force Majeure, the matter shall be settled according to Clause GC 8.

2.8 Suspension

The Client may, by written notice to the Consultant, suspend in whole or part, the Services if an event shall have happened and be continuing, in which the Consultant fails to perform any of its obligations under this Contract, including the carrying out of the Services.

2.9 Termination

2.9.1 By the Client The Client may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (h) of this Clause GC 2.9.1. In such an occurrence the Client shall (except in the case of paragraph (h) below) give not less than thirty (30) days’ written notice of termination to the Consultant.

- (a) If the Consultant fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension pursuant to Clause GC 2.8 hereinabove, within thirty (30) days of receipt of such notice of suspension or within such further period as the Client may have subsequently approved in writing.
- (b) If the Consultant becomes (or, if the Consultant consists of more than one entity, if any of its Partners 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 Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.
- (d) If the Consultant submits to the Client a false statement which has a material effect on the rights, obligations or interests of the Client.

- (e) If the Consultant is held by the Client to have a conflict of interest in performance of the Contract, or any portion thereof.
- (f) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days.
- (g) If the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
- (h) If the Consultant, in the judgment of the Client has engaged in corrupt, fraudulent, collusive or coercive practices in competing for or in executing this Contract in such a case the Contract shall be terminated on the date Consultant is notified of such breach.

2.9.2 *By the Consultant*

The Consultant 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 (c) of this Clause GC 2.9.2:

- (a) If the Client fails to pay any money due to the Consultant pursuant to this Contract and not subject to dispute pursuant to Clause GC 8 hereof within forty-five (45) days after receiving written notice from the Consultant that such payment is overdue.
- (b) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days.
- (c) If the Client fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof.

2.9.3 *Payment upon Termination*

Upon termination of this Contract pursuant to Clauses GC 2.9.1 or GC 2.9.2, the Client shall make the following payments to the Consultant:

- (a) payment pursuant to Clause GC 6 for Services satisfactorily performed prior to the effective date of termination; and
- (b) except in the case of termination pursuant to paragraphs (a) through (e) and (h) of Clause GC 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 and their eligible dependents.

2.9.4 *Cessation of Rights and Obligations*

Upon termination of this Contract pursuant to Clause GC 2.9, or upon expiration of this Contract pursuant to Clause GC 2.4 hereof, all rights and obligations of the Parties hereunder shall cease, except (i) such rights and obligations as may have accrued on the date of termination or expiration, (ii) the obligation of confidentiality set forth in Clause GC 3.3

hereof, (iii) the Consultant’s obligation to permit inspection, copying and auditing of their accounts and records set forth in Clause GC 3.8 hereof, and (iv) any right which a Party may have under the Applicable Law.

2.9.5 *Cessation of Services* Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GC 2.9.1 or GC 2.9.2 hereof, the Consultant shall, immediately upon dispatch or receipt of such notice, 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 Consultant and equipment and materials furnished by the Client, the Consultant shall proceed as provided, respectively, by Clauses GC 3.7 or GC 3.10 hereof.

2.9.6 *Disputes about Events of Termination* If either Party disputes whether an event specified in paragraphs (a) through (f) of Clause GC 2.9.1 or in Clause GC 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 as provided in Clause GC 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 CONSULTANT

3.1 General

3.1.1 *Standard of Performance* The Consultant shall perform the Services and carry out their obligations hereunder in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Consultant 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 Consultant 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 Consultant and any Sub-Consultants, comply with the Applicable Law. The Client shall notify the Consultant in writing of relevant local customs, and the Consultant shall, after such notification, respect such customs.

3.2 Conflict of Interest

3.2.1 *Consultant Not to Benefit from Discounts* (a) The remuneration of the Consultant pursuant to Clause GC 6 hereof shall constitute the Consultant’s remuneration in connection with this Contract and, subject to Clause GC 3.2.2 hereof, the Consultant shall not accept for its own benefit any discount or similar payment in connection with activities pursuant to this Contract or in the

discharge of its obligations hereunder, and the Consultant shall use their best efforts to ensure that any Sub-Consultants, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

- (b) Furthermore, if the Consultant, as part of the Services, has the responsibility of advising the Client on the procurement of goods, works or services, the Consultant shall comply with the JICA’s *Procurement Guidelines* as amended from time to time, and shall at all times exercise such responsibility in the best interest of the Client. Any discounts obtained by the Consultant in the exercise of such procurement responsibility shall be for the benefit of the Client and shall be credited to the account of the Client.

3.2.2 *Consultant and Sub-Consultants Not to Engage in Certain Activities* The Consultant agrees that, during the term of this Contract and after its termination, the Consultant as well as any Sub-Consultant shall be disqualified from providing goods, works or services (other than consulting services) for any project resulting from the Services.

3.2.3 *Prohibition of Con-flicting Activities* The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultants and their Personnel not to engage, either directly or indirectly, in any personal, business or professional activities which would conflict with the activities assigned to them under this Contract.

3.3 Confidentiality Except with the prior written consent of the Client, neither the Consultant, the Sub-Consultant nor their Personnel shall not at any time communicate to any person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Personnel make public the re-recommendations formulated in the course of, or as a result of, the Services.

3.4 Insurance to be Taken Out by the Consultant The Consultant (a) shall take out and maintain, and shall cause any Sub-Consultants to take out and maintain, at their (or the Sub-Consultants’, as the case may be) own cost but on terms and conditions approved by the Client, insurance against the risks, and for the coverage, as shall be specified in the SC; and (b) at the Client’s request, shall provide evidence to the Client showing that such insurance has been taken out and maintained and that the current premiums have been paid.

3.5 Consultant’s Actions Requiring Client’s Prior Approval The Consultant shall obtain the Client’s prior approval in writing before taking any of the following actions:

(a) entering into a subcontract for the performance of any part of the Services,

(b) appointing such members of the Personnel not listed by name in Appendix C, and

- (c) any other action that may be specified in the SC.

3.6 Reporting

3.6.1 Reporting Obligations

- (a) The Consultant shall submit to the Client the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.
- (b) Final reports shall be delivered in CD ROM in addition to the hard copies specified in said Appendix.
- (c) The Consultant shall on a monthly basis, submit to the Client, in a format acceptable to the Client, a report stating personnel movements and inputs in the previous month compared to those specified in Appendix C. In the event the forecast of progress as anticipated in Appendix C is substantially changed due to variations pursuant to GC Clause 2.6, the Consultant may request the Client to revise the Payment Schedule specified in Appendices D & E, to reflect such change.

3.6.2 Serious Hindrances

The Consultant shall report to the Client and JICA promptly the occurrence of any event or condition which might delay or prevent completion of any significant part of the project in accordance with the schedules and to indicate what steps shall be taken to meet the situation. Where the Client receives such a report from the Consultant, the Client shall immediately forward a copy of it to JICA, together with its comments on the report and an outline of the steps the report proposes shall be taken.

3.7 Documents Prepared by the Consultant to be the Property of the Client

- (a) All plans, drawings, specifications, designs, reports, other documents and software submitted by the Consultant under this Contract shall become and remain the property of the Client, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Client, together with a detailed inventory thereof. The Client in its sole discretion may make such documents available to the public.
- (b) The Consultant may retain a copy of such documents and software, and use such software for their own use with prior written approval of the Client. If license agreements are necessary or appropriate between the Consultant and third parties for purposes of development of any such computer programs, the Consultant shall obtain the Client’s prior written approval to such agreements, and the Client shall be entitled at its discretion to require recovering the expenses related to the development of the program(s) concerned.

3.8 Accounting, Inspection and Auditing

The Consultant (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 changes and costs, and the

bases thereof, and (ii) shall periodically permit the Client or its designated representative, and up to five years 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, if so required by the Client as the case may be.

3.9 Liability of the Consultant

- (a) The Consultant shall be responsible for, and shall indemnify the Client, in respect of loss of or damage to equipment and materials furnished by the Client, or purchased by the Consultant in whole or in part with funds provided by the Client.
- (b) The Consultant undertakes full responsibility in respect of life, health, and accidents for the Personnel and for the dependents of any such Personnel.
- (c) Subject to Clause GC 5.4, the Consultant shall indemnify the Client from and against any and all claims, liabilities, obligations, losses, damages, penalties, actions, judgment, suits, proceedings, demands, costs, expenses and disbursements of whatsoever nature that may be imposed on, incurred by or asserted against the Client during or in connection in the Services by reason of: (i) infringement or alleged infringement by the Consultant of any patent or other protected right; or (ii) plagiarism or alleged plagiarism by the Consultant.
- (d) The Consultant shall ensure that all goods and services (including without limitation all computer hardware, software and systems) procured by the Consultant out of funds provided or reimbursed by the Client or used by the Consultant in the carrying out of the Services do not violate or infringe any industrial property or intellectual property right or claim of any third party.
- (e) Subject to Clause GC 5.4, the Consultant shall indemnify, protect and defend at their own expense the Client, and its agents and employees from and against any and all actions, claims, losses or damages arising out of Consultant’s failure to exercise the skill and care required under Clause GC 3.1.1 provided, however:
 - (i) that Consultant is notified of such actions, claims, losses or damages not later than the number of months after conclusion of the Services indicated in the SC;
 - (ii) that the ceiling on Consultant’s liability under Clause GC 3.1.1 shall be limited to the amount indicated in the SC, except that such ceiling shall not apply to actions, claims, losses or damages caused by Consultant’s gross negligence or reckless conduct;
 - (iii) that Consultant’s liability under Clause GC 3.1.1 shall be limited to actions, claims, losses or damages directly caused by such failure to exercise the said skill and care, and shall not include

liability for any actions, claims, losses or damages arising out of occurrences incidental or indirectly consequential to such failure.

- (f) In addition to any liability the Consultant may have under Clause GC 3.1.1, the Consultant shall, at its own cost and expense, upon request of Client, re-perform the Services in the event of Consultant’s failure to exercise the skill and care required under Clause GC 3.1.1.
- (g) Notwithstanding the provisions of paragraph (a) of this Clause GC 3.9, the Consultant shall have no liability whatsoever for actions, claims, losses or damages occasioned by: (i) Client’s overriding a decision or recommendation of the Consultant or requiring the Consultant to implement a decision or recommendation with which the Consultant does not agree; or (ii) the improper execution of Consultant’s instructions by agents, employees or independent contractors of the Client.

3.10 Equipment, Vehicles and Materials Furnished by the Client

Equipment, vehicles and materials made available to the Consultant-by the Client, or purchased by the Consultant wholly or partly 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 Consultant shall make available to the Client an inventory of such equipment, vehicles and materials and shall dispose of such equipment and materials in accordance with the Client’s instructions. While in possession of such equipment, vehicles and materials, the Consultant, 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.

3.11 Equipment and Materials Provided by the Consultant

Equipment or materials brought into the Client’s Country by the Consultant and the Personnel and used either for the Project or personal use shall remain the property of the Consultant or the Personnel concerned, as applicable.

3.12 Specifications and Designs

- (a) The Consultant shall prepare all specifications and designs that may be required under the Contract using the metric system and so as to embody the latest design criteria and the Consultant shall specify standards that are accepted and well known among industrial nations.
- (b) The Consultant shall ensure that the specifications and designs and all documentation relating to procurement of goods and services provided under the Services are prepared on an impartial basis so as to promote international competitive bidding.

4. CONSULTANT’S PERSONNEL

- 4.1 General** The Services shall be carried out by the Personnel specified in Appendix C for the respective periods of time indicated therein.
- 4.2 Replacement of Personnel**
- (a) In the event that any of the Personnel is found by the Client to be incompetent, guilty of misbehavior or incapable in discharging the assigned responsibilities, the Client may request the Consultant, at the expense of the Consultant, to forthwith provide a replacement with suitable qualifications and experience acceptable to the Client and the Consultant shall provide such replacement.
 - (b) Except as the Client may otherwise agree, no changes shall be made in the Personnel. If, for any reason beyond the reasonable control of the Consultant, it becomes necessary to replace any of the Personnel, the Consultant shall provide as a replacement a person of equivalent or better qualifications.
 - (c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.
- 4.3 Resident Project Manager** When the Services are carried out in the Client’s country, the Consultant shall, at all times, ensure that there is a Project Manager acceptable to the Client to supervise and coordinate the operations of the Personnel in the field and to be responsible for liaison between the Consultant and the Client.

5. OBLIGATIONS OF THE CLIENT

- 5.1 Assistance and Exemptions** Unless otherwise specified in the SC, the Client shall use its best efforts to ensure that the Government shall:
- (a) Provide the Consultant, Sub-Consultants and Personnel with work permits and such other documents as shall be necessary to enable the Consultant, Sub-Consultants or Personnel to perform the Services.
 - (b) Arrange for the Personnel and, if appropriate, their eligible dependents to be provided promptly with all necessary entry and exit visas, residence permits, exchange permits and any other documents required for their stay in the Client’s Country.
 - (c) Facilitate prompt clearance through customs of any property required for the Services and of the personal effects of the Personnel and their eligible dependents.
 - (d) Issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services.

- (e) Exempt the Consultant and the Personnel and any Sub-Consultants employed by the Consultant for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity according to the Applicable Law.
- (f) Grant to the Consultant, any Sub-Consultants and the Personnel of either of them the privilege, pursuant to the Applicable Law, of bringing into the Client’s Country reasonable amounts of foreign currency for the purposes of the Services or for the personal use of the Personnel and their dependents and of withdrawing any such amounts as may be earned therein by the Personnel in the execution of the Services.
- (g) Provide to the Consultant, Sub-Consultants and Personnel any such other assistance as may be specified in the SC.

5.2 Change in the Applicable Law Related to Taxes and Duties

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost incurred by the Consultant in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Consultant under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred to in Clauses GC 6.2 (a) or (b), as the case may be.

5.3 Services and Facilities

The Client shall make available free of charge to the Consultant the Services and Facilities listed under Appendix G.

5.4 Access to Land

The Client warrants that the Consultant shall have, free of charge, unimpeded access to all land in the Client’s Country in respect of which access is required for the performance of the Services. The Client will be responsible for any damage to such land or any property thereon resulting from such access and will indemnify the Consultant and each of the Personnel in respect of liability for any such damage, unless such damage is caused by the default or negligence of the Consultant or any Sub-Consultants or the Personnel of either of them.

5.5 Counterpart Personnel

- (a) The Client shall make available to the Consultant free of charge such professional and support counterpart personnel, to be nominated by the Client with the Consultant’s advice, if specified in Appendix G.
- (b) If counterpart personnel are not provided by the Client to the Consultant as and when specified in Appendix G, the Client and the Consultant 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 Consultant as a result thereof pursuant to Clause 6.1 of the GC.

- (c) Professional and support counterpart personnel, excluding Client’s liaison personnel, shall work under the exclusive direction of the Consultant. If any member of the counterpart personnel fails to perform adequately any work assigned to such member by the Consultant that is consistent with the position occupied by such member, the Consultant may request the replacement of such member, and the Client shall not unreasonably refuse to act upon such request.

5.6 Difference of Opinion

In the case of a difference of opinion between the Client and the Consultant on any important matters involving professional judgement that might affect the proper evaluation or execution of the project, the Client shall allow the Consultant to submit promptly to the Client a written report and, simultaneously, to submit a copy to JICA. The Client shall forward the report to JICA with its comments in time to allow JICA to study it and communicate with the Client before any irreversible steps are taken in the matter. In cases of urgency, the Consultant has the right to request the Client and/or JICA that the matter be discussed immediately between the Client and JICA.

6. PAYMENTS TO THE CONSULTANT

6.1 Lump-Sum Payment

The total payment due to the Consultant shall not exceed the Contract Price which is an all inclusive fixed lump-sum covering all costs required to carry out the Services described in Appendix A. Except as provided in Clause 5.2, the Contract Price may only be increased above the amounts stated in Clause 6.2 if the Parties have agreed to additional payments in accordance with Clause 2.6.

6.2 Contract Price

- (a) The price payable in foreign currency/currencies is set forth in the SC.
- (b) The price payable in local currency is set forth in the SC.

6.3 Currency of Payment

Foreign currency payments shall be made in the currency or currencies specified in the SC, and local currency payments shall be made in the currency of the Client’s country.

6.4 Payment for Additional Services

For the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.6, a breakdown of the lump-sum price is provided in Appendices D and E.

6.5 Terms and Conditions of Payment

Payments will be made to the account of the Consultant and according to the payment schedule stated in the SC. Unless otherwise stated in the SC, the first payment shall be made against the provision by the Consultant of an advance payment security for the same amount, and shall be valid for the period stated in the SC. Such security shall be in the form set forth in Appendix H hereto, or in such other form, as the Client shall have approved in writing. Any other payment shall be made after the conditions listed in the SC for such payment have been met, and the

Consultant has submitted an invoice to the Client specifying the amount due.

- 6.6 Interest on Delayed Payments** If the Client has delayed payments beyond fifteen (15) days after the due date stated in the Clause SC 6.5, interest shall be paid to the Consultant for each day of delay at the rate stated in the SC.

7. 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 of 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 Clause shall give rise to a dispute subject to arbitration in accordance with Clause GC 8 hereof.

8. SETTLEMENT OF DISPUTES

- 8.1 Amicable Settlement** If either Party objects to any action or inaction of the other Party, the objecting Party may file a written Notice of Dispute to the other Party providing in detail the basis of the dispute. The Party receiving the Notice of Dispute will consider it and respond in writing within 14 days after receipt. If that Party fails to respond within 14 days, or the dispute cannot be amicably settled within 14 days following the response of that Party, Clause GC 8.2 shall apply.
- 8.2 Dispute Resolution** Any dispute between the Parties as to matters arising pursuant to this Contract that cannot be settled amicably according to Clause GC 8.1 may be submitted by either Party for settlement in accordance with the provisions specified in the SC.

III. Special Conditions of Contract

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
1.1(a)	The words “in the Client’s Country” are amended to read “ India ”
1.3	The Contract has been executed in English . Reports and correspondence shall be in English .
1.4	<p>The addresses are:</p> <p>Client: <u>Varanasi Nagar Nigam, Sigra, Varanasi, UP</u></p> <p>Attention: <u>The Municipal Commissioner</u></p> <p>Facsimile: <u>Tel Fax No-:+91-542-2222702</u></p> <p>E-mail: <u>mcvns1@gmail.com</u></p> <p>Consultant: _____</p> <p>Attention: _____</p> <p>Facsimile: _____</p> <p>E-mail: _____</p>
{1.6}	<p>{The Lead Partner is [insert name of partner]}</p> <p>Note: If the Consultant consists of a Joint Venture of more than one entity, the name of the entity whose address is specified in Clause SC 1.4 should be inserted here. If the Consultant consists only of one entity, this Clause SC 1.6 should be deleted from the SC.</p>
1.7	<p>The Authorized Representatives are:</p> <p>For the Client: <u>The Nodal Officer, JICA Projects, VNN</u></p> <p>For the Consultant: _____</p>
1.8	Not Applicable.
1.12	The eligible source countries are: India
2.1	<p>The effectiveness conditions are the following:</p> <ul style="list-style-type: none"> • Approval of the Contract by JICA • Receipt by Client of advance payment security

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

2.2	The time period shall be One Month .
2.3	The date for the commencement of Services is 30 days .
2.4	The time period shall be Fifteen (15) Months .
3.4	The risks and the coverage shall be as follows: (a) professional liability insurance, with a minimum coverage equivalent to that of the Value of this contract . (b) employer’s liability and workers’ compensation insurance in respect of the Personnel of the Consultant and of any Sub-Consultants, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and (e) insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultant’s property used in the performance of the Services, and (iii) any documents prepared by the Consultant in the performance of the Services.
3.5 (c)	The other actions are: Not Applicable.
3.9 (e) (i)	The number of months shall be Three Months .
3.9 (e) (ii)	The ceiling on Consultant’s liability shall be limited to the equivalent of the value of the Contract .
4.3	Not Applicable .
5.1	Not Applicable .
6.2(a)	The amount in foreign currency or currencies is – Not applicable
6.2(b)	The amount in local currency is [<i>insert amount</i>].
6.3	The foreign currency [<i>currencies</i>] shall be the following: <i>Not Applicable</i> .
6.5	The accounts are: for local currency: [<i>insert account</i>] Payments shall be made according to schedule mentioned in para 6 (Payment Terms) of the Terms of Reference .
6.6	The interest rate is three (3) percentage points above the Discount Rate of the Reserve Bank of India applicable for that period .

<p>8.2</p>	<p>Disputes shall be settled by arbitration in accordance with the following provisions:</p> <ol style="list-style-type: none">1. <u>Selection of Arbitrators.</u> Each dispute submitted by a Party to arbitration shall be heard by a sole arbitrator or an arbitration panel composed of three arbitrators, in accordance with the following provisions:<ol style="list-style-type: none">(a) Where the Parties agree that the dispute concerns a technical matter, they may agree to appoint a sole arbitrator or, failing agreement on the identity of such sole arbitrator within thirty (30) days after receipt by the other Party of the proposal of a name for such an appointment by the Party who initiated the proceedings, either Party may apply to Director General, Institution of Engineers (India),8, Gokhale Marg, Kolkata, for a list of not fewer than five (5) nominees and on receipt of such list, the Parties shall alternately strike names therefrom, and the last remaining nominee on the list shall be the sole arbitrator for the matter in dispute. If the last remaining nominee has not been determined in this manner within sixty (60) days of the date of the list, Director General, Institution of Engineers (India), 8, Gokhale Marg, Kolkata shall appoint, upon the request of either Party and from such list or otherwise, a sole arbitrator for the matter in dispute.(b) Where the Parties do not agree that the dispute concerns a technical matter, the Client and the Consultant shall each appoint one (1) arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the arbitrators named by the Parties do not succeed in appointing a third arbitrator within thirty (30) days after the latter of the two (2) arbitrators named by the Parties has been appointed, the third arbitrator shall, at the request of either Party, be appointed by ‘The Secretary, Indian Council of Arbitration, Federation House, Tansen Marg, New Delhi-110001.’(c) If, in a dispute subject to paragraph (b) above, one Party fails to appoint its arbitrator within thirty (30) days after the other Party has appointed its arbitrator, the Party which has named an arbitrator may apply to the, ‘The Secretary, Indian Council of Arbitration, Federation House, Tansen Marg, New Delhi-110001’ to appoint a sole arbitrator for the matter in dispute, and the arbitrator appointed pursuant to such application shall be the sole arbitrator for that dispute.2. <u>Rules of Procedure.</u> Except as otherwise stated herein, arbitration proceedings shall be conducted in accordance with the rules of procedure for arbitration of the Arbitration and Conciliation Act
------------	---

Request for Proposal: Selection of Consultants for “Developing Geographical Information System / Management Information System and related works for Varanasi”

	<p>1996, as in force on the date of this Contract.</p> <p>3. <u>Substitute Arbitrators</u>. If for any reason an arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.</p> <p>4. <u>Nationality and Qualifications of Arbitrators</u>. The sole arbitrator or the third arbitrator appointed pursuant to paragraphs 1(a) through 1(c) above shall be an internationally recognized legal or technical expert with extensive experience in relation to the matter in dispute.</p> <p>5. <u>Miscellaneous</u>. In any arbitration proceeding hereunder:</p> <ul style="list-style-type: none">(a) proceedings shall, unless otherwise agreed by the Parties, be held in Varanasi, India.(b) the English language shall be the official language for all purposes; and(c) the decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.
--	--

IV. Appendices

Appendix A – Description of Services

Note: Give detailed descriptions of the Services to be provided, various tasks, place of performance for various tasks, and deliverables to be provided to the Client.

Appendix B – Reporting Requirements

Note: List frequency, and contents of reports. If no reports are to be submitted, state here “Not applicable.”

Appendix C – Personnel Schedule

Appendix D – Cost Estimates in Foreign Currency

Note: List here the elements of cost used to arrive at the breakdown of the lump-sum price - foreign currency portion:

1. Monthly rates for Personnel.
2. Reimbursable expenses.

This appendix will exclusively be used for determining remuneration for additional services.

Appendix E – Cost Estimates in Local Currency

Note: List here the elements of cost used to arrive at the breakdown of the lump-sum price - local currency portion:

1. Monthly rates for Personnel.
2. Reimbursable expenditures.

This appendix will exclusively be used for determining remuneration for additional services.

Appendix F – Summary of Cost Estimates

Appendix G – Services, Facilities and Equipment to be Provided by the Client

Appendix H – Form of Advance Payment Security

Note: See Clause GC 6.5 and Clause SC 6.5. The Client should insert here an acceptable form of an advance payment security. An example is set forth below.

Appendix I – Acknowledgment of Compliance with Guidelines for the Employment of Consultants under Japanese ODA Loan

Note: Form FIN-6 in Section 4 is used for this Appendix.

Appendix H – Form of Advance Payment Security Bank Guarantee for Advance Payment

_____ [Bank’s Name and Address of Issuing Branch or Office]

Beneficiary: _____ [Name and Address of Client]

Date: _____

ADVANCE PAYMENT GUARANTEE No.: _____

We have been informed that [name of Consulting Firm] (hereinafter called “the Consultants”) has entered into Contract No. [reference number of the contract] dated with you, for the provision of [brief description of Services] (hereinafter called “the Contract”).

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of [amount in figures] ([amount in words]) is to be made against an advance payment guarantee.

At the request of the Consultants, we [name of Bank] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [amount in figures] ([amount in words])¹ upon receipt by us of your first demand in writing accompanied by a written statement stating that the Consultants are in breach of their obligation under the Contract because the Consultants have used the advance payment for purposes other than toward providing the Services under the Contract.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Consultants on their account number _____ at [name and address of Bank].

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Consultants as indicated in copies of your certified statements to such effect which shall be presented to us by the Consultant. This guarantee shall expire, at the latest, upon our receipt of the certified payment certificate issued by you indicating that the Consultants have made full repayment of the amount of the advance payment, or on the

¹ The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Client.

Request for Proposal: Selection of Consultants for “Developing Geographical Information System /
Management Information System and related works for Varanasi”

___ day of [month] [year]² whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

[signature(s)]

Note: *All italicized text is to assist in preparing this form and shall be deleted from the final product.*

² Insert the expected expiration date. In the event of an extension of the time for completion of the Contract, the Client would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Client might consider adding the following text to the form, at the end of the penultimate paragraph: “The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Client’s written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.”

Section 7. List of Eligible Source Countries of Japanese ODA Loans