



**Punjab Saaf Pani Company**



**EXPRESSION OF INTEREST  
HIRING OF  
SERVICES FOR MIS-GIS SURVEY**

## EXPRESSION OF INTEREST

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### PROJECT BRIEF

1. Government of Punjab (GoPb) is committed to ensure the provision of safe drinking water and improved sanitation facilities to all including rural population of the province. The rural population is faced with the challenges of contaminated drinking water and poor access to safe drinking water supplies. This has an adverse impact on women and particularly on children as they are part of vulnerable segment of society.
2. Punjab is the second largest province of Pakistan after Baluchistan with 205,344 km<sup>2</sup> (79,284 sq mi) area. Punjab consists of five city districts, 36 districts, 144 Tehsils, 3,464 union councils and 25,914 villages. Punjab being the most populous province of Pakistan inhabiting 98 million people which makes 56% of total population of Pakistan. Of the 98 million people living in the province, 38% (37 million) live in urban and 62% (61 million) in rural areas. As per gender ratio, 48% are female and 52% are male.
3. The Government of Punjab has made substantial efforts to improve water and sanitation in the province in the last many years, yet a huge gap exists in provision of safe drinking water. According to a survey conducted in 2012-2013 by Pakistan Social Living Measurement (PSLM), 100% population of Punjab gets unsafe drinking. This includes 13% tap water, 38% hand pump, 43% motor pump, 2% Dug Well and 4% other sources. Access to tap water is very low in rural areas i.e., 13% as compared to 43% in urban areas of Punjab. Though the water supply coverage through the new system of water sources has improved, yet the quality of safe drinking water remains questionable. The major sources are hand pumps and turbine system that are supplying contaminated or brackish water. The piped water is also prone to different types of contamination due to rusted, worn out or leaky pipe system.

### TERMS OF REFERENCE

#### 1. The Company

Government of the Punjab is committed to devising solutions to provide safe drinking water through the implementation of sustainable mechanism. The objective is strongly focused on the underserved areas i.e. rural, semi-urban rural and peri-urban areas that have saline and/or contaminated sources. The Employer is a public sector company, incorporated under Section 42 of the Companies Ordinance 1984, wholly owned by the Government of Punjab. The Company has the mandate to plan, design, execute and manage projects for provision of safe drinking water in the underserved areas i.e. rural, semi-rural, peri-urban areas of the province. The Saaf Pani Project is being rolled out through the Employer.

#### The Project

The Employer intends to develop projects for supply of safe drinking water to the underserved rural and peri-urban population, using localized and customized solutions, with regard to sources and supply options. The option would be determined by the quality of existing water sources,

availability of infrastructure, population densities and level of community participation. In Phase 1, the areas which are worst affected in terms of contamination level, water borne diseases, poverty and non-availability of water supply system will be taken up for intervention on priority basis.

Safe drinking water is defined to be with microbial, chemical and physical characteristics that meet WHO guidelines or national standards. Access to drinking water means that the source is less than 1 kilometer away from its place of use and that it is possible to reliably obtain at least four (4) liters safe drinking water per member of a household per day (WHO).

PSPC intends to hire the services of a consultancy firm with experience in performing the following tasks:

### **TASK 1 GIS MODULE**

- (1) Development of Map Module with Navigation Tools. Map will consist of following layers
  - (a) Administrative boundaries
    - (i) Province
    - (ii) District
    - (iii) Tehsil
    - (iv) Union Council
    - (v) Mauza
    - (vi) Saaf Pani Regions
  - (b) Land-use and Land cover
  - (c) Digital Elevation Model
  - (d) Pipe Lines
  - (e) Commodity
  - (f) Infrastructure Facility
  - (g) Projects (Short List)
  - (h) Population Density and Distribution
- (2) Identifier and Query Module
  - (a) Query based on attributes
  - (b) Query based on spatial location
- (3) Analysis
  - (a) Heat Map
  - (b) Water Quality Maps
  - (c) Slope Map, Aspect Map, Contours generation
  - (d) Flow Map, Flow Direction Map, Catchment Area
  - (e) Statistical Information (Tabular)
- (4) Long list and Short list Information

### **TASK 2 GIS ENABLED PROJECT MANAGEMENT MODULE**

- (1) Development of Project Management Module
  - (a) Activity Listing
  - (b) Gantt chart
  - (c) Pert view
- (2) Integration with GIS Module
- (3) Project Progress as graduated color and symbol map

### **TASK 3 GIS ENABLED MANAGEMENT INFORMATION SYSTEM (MIS)**

- (1) Administration Module
  - (a) Add, Delete and Update Assets Information (Attribute and Spatial)
  - (b) Add User and Access Rights
- (2) Android Application Development for extracting ground information
- (3) Android Application Development for Assets condition reporting
- (4) Integration of Android Application with MIS System
- (5) Integration of MIS system with GIS Module
- (6) Reporting Module

#### **TASK 4 GIS ENABLED COMMUNITY MANAGEMENT SYSTEM**

- (1) Development of Complaint Management System
  - (a) Development of Public Access Module
  - (b) Work Flow Integration
- (2) Integration with GIS Module
- (3) Complaints Heat Map and Statistical Analysis and Reporting Module
- (4) Development of Android Application for Community Satisfaction Survey
- (5) Integration of Community Satisfaction Survey with GIS Module
- (6) Survey Heat Map and Statistical Analysis and Reporting Module

#### **TASK 5 GIS ENABLED SCADA MONITORING SYSTEM**

- (1) Integration of GIS Module with SCADA System
- (2) Heat Map and Reporting Module

#### **OTHER TASK 6**

- (1) Development of Dashboard for single platform and key indicator monitoring
- (2) Prepare SOP and Manual for its Operations & Maintenance and train PSPC staff
- (3) Host all the Data and system and provide support for its maintenance and backstopping of 3 years initially

The interested parties having expertise and relevant experience in the above mentioned tasks are required to submit their documents to assess and evaluate the qualification of the firms. The shortlisting of the firms shall be based on the following criteria:

- a) Company Profile;
- b) NTN Registration Certificate;
- c) SECP Registration Certificate;
- d) Office establishment in Lahore;
- e) 3 years, audited financial statement;
- f) Experience of working with government organizations (and not be in any litigation/ black listing);

**65% is Pass Mark for Issuance of EOI – This will be QCBS with 80/20**

<b>SR. NO.</b>	<b>CRETERIA</b>	<b>REQUIREMENT</b>	<b>MARKS</b>
1	Registration	Register Firm with PEC as Consultant	100
2	Experience	i) Relevant 2 GIS mapping project design and Implementation in Public Sector of atleast Rs 100 M	200
		ii) 2 related projects of MIS system development and Management in Public sector of Rs 200 M	100
		2 related survey projects in last 5 years	100

3	Staff	Dedicated Technical Team for GIS and MIS development with Firm 2 PhD. GIS with 10 years' experience 2 MIS /GIS Masters with 10 years	200
4	Lab Facility	Lab facility with dedicated GIS Mapping & Monitoring of staff of 50 staff	100
5	Finance	Financial Turn Over of minimum Rs 250 Million Per Annum in last 2 years	200

**Application Form 1: Letter of Application**

## Letter of Application

*[Letterhead paper of the Applicant, or partner responsible for a joint venture, including full postal address, telephone no., fax no., telex no., cable and e-mail address]*

Date:.....

To: .....

*[ Name and Address of the Employer]*

Sirs,

1. Being duly authorized to represent and act on behalf of..... (hereinafter “the Applicant”), and having reviewed and fully understood all the prequalification information provided, the undersigned hereby apply to be prequalified as a CONSULTANT for the following Consultancy in the following district as per TOR

2. Attached to this letter are copies of original documents defining<sup>1</sup>:

(a) The Applicant's legal status;

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<sup>1</sup>

*For applications by joint ventures, all the information requested in the prequalification documents is to be provided for the joint venture, if it already exists, and for each party to the joint venture separately. The lead partner should be clearly identified. Each partner in the joint venture shall sign the letter.*

- (b) The Principal place of business; and
- (c) The place of incorporation (for applicants who are corporations); or
- (d) The place of registration and the nationality of the owners (for applicants who are partnerships or individually-owned firms).

3. The Employer and its authorized representatives are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves or the authorized representative to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.
4. Your Agency and its authorized representatives may contact the following persons for further information<sup>2</sup>, if needed.

<b>General and Managerial Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

<b>Personnel Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

<b>Technical Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

<b>Financial Inquiries</b>	
Contact 1	Telephone 1
Contact 2	Telephone 2

5. This application is made with the full understanding that:

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<sup>2</sup>

*Application by joint ventures should provide information on a separate sheet information for each party to the application.*

- (a) Bids by prequalified applicants will be subject to verification of all information submitted for prequalification at the time of bidding;
- (b) Your Agency reserves the right to:
  - (i) Amend the scope and value of any contract under this project; in such event bids will only be called from prequalified bidders who meet the revised requirements; and
  - (ii) Reject or accept any application, cancel the prequalification process, and reject applications; and
- (c) Your Agency shall not be liable for any such actions and shall be under no obligation to inform the Applicant of the grounds for actions at 5(b) hereabove.
- (d) Your Agency shall not be liable for consequence of, and shall be under no obligation to inform the applicant of the grounds for, actions taken under para 5(b) hereabove.

**Applicants who are not joint ventures should delete para 6&7 and initial the deletions.**

- 6. Appended to this application, we give details of the participation of each party, including capital contribution and profit/loss agreements, to the joint venture or association. We also specify the financial commitment in terms of the percentage of the value of the (each) contract, and the responsibilities for execution of the (each) contract.
- 7. We confirm that in the event that we bid, that bid as well as any resulting contract will be.
  - (a) Signed so as to legally bind all partners, jointly and severally; and
  - (b) Submitted with a Joint Venture agreement providing the joint and several liability of all partners in the event the contract is awarded to us.
- 8. The undersigned declare that the statements made and the information provided in the duly completed application are complete, true, and correct in every detail.

Signed	Signed
Name	Name
For and on behalf of  (Name of Applicant or lead partner of a joint venture)	For and on behalf of  (Name and signature of other partners of the joint venture)

## General Information

All individual firms and each partner of a joint venture applying for prequalification are requested to complete the information in this form. Nationality information is also to be provided for foreign owners or applicants who are forming part of the Joint Ventures as required under the PEC Bye-Laws as a Partnership/Joint Venture.

Where the Applicant proposes to use named sub consultants for critical components of the works, or for work contents in excess of 10 percent of the value of the whole works, the following information should also be supplied for the specialist sub consultant(s).

1.	Name of Firm	
2.	Head Office Address	
3.	Telephone	Contact Person: Name: Title:
4.	Fax	Telex
5.	Place of Incorporation/Registration	Year of incorporation/registration

Nationality of Owners		
Name		Nationality
1.		
2.		
3.		
4.		
5.		



# General Experience Record

Name of Applicant or partner of a joint venture

*All individual firms and all partners of a joint venture are requested to complete the information in this form. The information supplied should be the annual turnover of the Applicant (or each member of a joint venture), in terms of the amounts billed to clients for each year for work in progress or completed over the past five years.*

*Use a separate sheet for each partner of a joint venture.*

<b>Annual Average Turnover (Last Five Years)</b>		
<b>Year</b>	<b>Turnover (in actual currency)</b>	<b>Equivalent Rupees in Millions.</b>
1.		
2.		
3.		
4.		
5.		

## Joint Venture Summary

<b>Names of all Partners of a Joint Venture</b>
1. Lead Partner
2. Partner
3. Partner
4. Partner
5. Partner
6. Partner

## Particular Experience Record

*Name of Applicant or partner of a joint venture*

To prequalify, the Applicant shall be required to pass the specified requirements applicable to this form, as set out in the : Instructions to Applicants”.

On a separate page, using the format of Application Form 6, each applicant or partner of a Joint Venture is required to list all contracts of a value equivalent to Pak Rs300 million, of a similar nature and complexity to the contract for which the Applicant wishes to qualify, undertaken during the last five years<sup>1</sup>. The information is to be summarized, using Application Form 6, for each contract completed or under execution by the Applicant or by each partner of a Joint Venture.

Where the Applicant proposes to use named subconsultant(s) for critical components of the works, or for work contents in excess of 10 percent of the value of the whole works, the information in the aforementioned forms should also be supplied for each specialist subconsultant.

Where applications are being invited for a number of contracts, suitable wording should be introduced, to allow applicants to apply for individual contracts or groups of contracts (slice and package contracts).

Application Form 5: Contracts of Similar Nature and Complexity

## Details of Contracts of Similar Nature and Complexity

*Name of Applicant or partner of a joint venture*

Use a separate sheet for each contract.

1.	Name of Contract
	Country
2.	Name of Employer
3.	Employer Address .....
4.	Nature of works and special features relevant to the contract for which the Applicant wishes to prequalify ..... .....
5.	Contract Role (Tick One)  (a) Sole Consultant    (b) Sub- Consultant    (c) Partner in a Joint Venture
6.	Value of the total contract (in specified currencies) at completion, or at date of award for current contract  Currency.....                      Currency.....                      Currency.....
7.	Equivalent in Pak/Rs.
8.	Date of Award
9.	Date of Completion
10.	Contract Duration (Years and Months)  ____ Years                      _____ Months
11.	Specified Requirements <sup>1</sup> .....

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*Insert any specific criteria required for particular operations, such as annual volume of earthmoving, underground excavation, or placing concrete etc.*

Application Form 6: Summary Sheet: Current Contract Commitments/ Works in Progress

## Summary Sheet: Current Contract Commitments/Works in Progress

Name of Applicant or partner of a joint venture

*Applicants and each partner to an application should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which substantial Completion Certificate has yet to be issued.*

<b>Name of Contract</b>	<b>Value of Outstanding work (Equivalent Pak Rs. Millions)</b>	<b>Estimated Completion Date</b>
1.		
2.		
3.		
4.		
5.		
6.		

# Personnel Capabilities

Name of Applicant

*For specific positions essential to contract implementation, Applicants should provide the names of at least two candidates qualified to meet the specified requirements stated for each position. The data on their experience should be supplied on separate sheets using one Form for each candidate (Application Form A-8).*

1.	Title of Position
	Name of Prime Candidate
2.	Title of Position
	Name of Prime Candidate
3.	Title of Position
	Name of Prime Candidate
4.	Title of Position
	Name of Prime Candidate

# Candidate Summary

Name of Applicant

Position		Candidate [Tick appropriate one] <input type="checkbox"/> Prime
Candidate information	1. Name of Candidate	2. Date of Birth
	3. Professional Qualification	
Present employment	4. Name of employer	
	Address of employer	
	Telephone	Contact (manager/personnel officer)
	Fax	Telex
	Job title of candidate	Years with present employer

*Summarize professional experience over the last 20 years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the Project.*

Month/ Dates/Years		Company / Project / Position / Relevant technical and management experience
From	To	

# Firm Capabilities

## FORMAT OF SHORT CV OF PRINCIPAL STAFF

1. Name :
2. Profession/Expertise :
3. Date of Birth :
4. Years with the Firm :
5. Nature of experience in this firm and others :
6. Membership of Professional Societies :
7. Education :
8. Other Training
9. Knowledge of Languages :
10. Key Qualifications (Maximum  $\frac{3}{4}$  of a page)







## PUNJAB SAAF PANI COMPANY

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