

# CALL for Proposals by IRSP

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## **Term of References**

Mandate: **Updating and upgrading of Technical Standards & Specifications for Drinking Water Supply Schemes in Rural Areas**

Timeframe: June – November 2014

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## **A) Background**

The technical standards which are applied by the Public Health and Engineering Department (PHED) in the KP-Government for planning and monitoring its projects on drinking water supply schemes (DWSS) in rural areas and to arrange its technical services to the beneficiary groups date back to 1970. They seem no longer appropriate to serve as guidelines in the PHED and to ensure higher standard services which are appropriate to

- remediate technical deficiencies in old DWSS concerning infiltration of water and leakages,
- ensure cost-efficient mechanism and management systems for equal distribution of drinking water, or
- Adapt the technical skills of the PHED and its partners to the new requirements of modern drinking water supply schemes.

The old standards also didn't consider ecological requirements and the impact of increasing pollution on the wear and tear on the drinking water quality.

Since last decades legislation on civil works has also known various changes by updated laws and regulations which need to be translated into updated technical standards and instructions.

Finally it should be mentioned that latest regulations or laws on protection against natural hazards, such as floods and earthquakes which also have to be considered while determining on the technical standards of DWSS.

The availability of more accurate technical standards is also required in order to

- get uniform technical proposals in case of public tendering of civil works in water supply schemes,
- ensure qualified supervision of civil works during the construction phase,
- improve repairing and repair standards of civil works and equipment,
- respond to claims on damages for insufficient services and performances within public contracts
- reduce the use of inappropriate, forbidden or fake materials,
- arrive at cost-efficient technical solutions,
- ensure cost-efficient financial proposals.

While collaborating in various projects in recent years Swiss Agency for Development and Cooperation (SDC), the WSP-SA, UNICEF and PHED have recognized the importance of improved standards and agreed with PHED to initiate a study on this topic which shall provide a “Manual on Technical Standards in DWSS in rural areas”. To this purpose the PHED installed a “Technical Advisory Committee” of which SDC, WSP and UNICEF are advisory members.

## **B) Task**

The Public Health Engineering Department (PHED) of the Government of Khyber Pakhtunkhwa intends to update the existing standard specifications for drinking water supply schemes in rural areas. The envisaged improvements refer to all issues of efficient construction and provision of sustainable materials and equipment and utilities works, efficient administration by PHED and participatory management of DWSS respectively adapted administrative procedures.

To this purpose the PHED seeks qualified consultancy services who will update the old Technical Specifications in line with changed institutional context, the lessons learned in drinking water supply schemes and the last changes in the overall context as mentioned above.

While updating and upgrading the Technical Specifications the Consultant may distinguish between the following thematic fields. The final design will be subject to consultations with the “Technical Committee” of the PHED:

1. Development of water resource (tube and dug wells, natural springs, infiltration galleries, cut off walls etc.)
2. Installation of drinking water distribution systems (gravity or pressure based, pipe & valve systems, pressure measuring & controlling, flow control systems & devices etc.)
3. Civil works
4. Energy sources: conventional energy (Diesel, gas) as compared to alternative energy (solar, wind)
5. Drinking water management systems in rural areas and adapted technical support systems on measuring water consumption and losses, on controlling of water quality and reclamation, on billing and cost-recovery, on accounting and auditing.

Although part of any DWSS this task will not consider any issue or topic of Sanitation and Health.

## **C) Activities and Services required**

### **Lot 1: Drinking Water Supply Schemes**

For accomplishing the task mentioned above the following activities are deemed necessary:

- a) Collection and review of the existing specifications of PHED (analytical phase)
- b) Presentation of the findings of the analytical phase to the “Technical Committee”

- c) Drafting of revised “Standards on Technical Specifications” and linked “Technical Memos” for consultations in the “Technical Committee” of PHED
- d) Presentation of the Draft in a 1<sup>st</sup> consultative Workshop
- e) Presentation the final/refined draft in a 2<sup>nd</sup> Workshop

„Technical Memos “must be consistent with the Technical Specifications and may refer to (indicative enumeration for consultation with the “Technical Committee” and eventual revision after the analytical phase)

1. Drilling and development of tube wells
2. Development of Water sources (Spring, Infiltration Gallery, Dug Well)
3. Solarisation of tube wells
4. Water quality monitoring and parameters.
5. Water treatment and disinfection.
6. Pipe Network Design.
7. Estimation and Costing.

There is no fund for the following tasks which are therefore, at present in pipe line, however, the consultant can also offer bid for the same which is to be entertained later-on subject to provision of funds/budget.

#### **Annexure-A**

1. Design and construction of sewerage system
2. Design and construction of Toilets.
3. Water, Sanitation and Hygiene.
4. Wash in emergencies.

#### **Lot 2: Sanitation & Health**

Interested consulting companies and consortium are invited to submit a separate technical and financial proposal (not compulsory) which shall deal with the same thematic issues and result in separate “Guidelines on Technical Standards in Sanitation & Health in rural areas”.

The interested institutions may propose a similar methodology and thematic fields in line with the structure on DWSS.

Interested institutions may also suggest an appropriate time schedule, an appropriate expert team and modalities of implementation.

Due to missing funds, IRSP will not commit awarding a contract in due time.

#### **D) Expected Deliveries:**

- Preliminary Draft “Guidelines on Technical Standards on Drinking Water Supply schemes in rural areas”, 4 weeks before the termination of the consultancy

- Final Draft “Guidelines on Technical Standards on Drinking Water Supply schemes in rural areas”, at latest 2 weeks after termination of the consultancy

## **E) Guidelines for preparing the technical and financial proposals to this CALL**

### **1) Methodology**

Interested consulting companies and consortium are request to comment on the following methodology:

- **Collection and review of the existing specification**  
In an initial analytical phase the consultant is expected to collect and review all relevant records that are available within the PHED and other departments and assess the technical gaps and shortcomings. To this purpose they may also contact other institutions, such as the C&W, Pakistan Council for Research in Water Resources, PCSIR, and Universities and consult professional expertise from companies and projects of the past.
- **Presentation of the findings of the analytical phase to the “Technical Committee”**  
The consultant firm instruct the members of the Technical Committee on its findings for their comments and observations
- **Drafting of revised “Standards on Technical Specifications” and linked “Technical Memos” for consultations in the “Technical Committee” of PHED**  
The consultant firm shall prepare detailed specification within the scope defined by and in light of the recommendations of the Technical Committee. The specifications shall confirm well-recognized international standards and also take into account the local conditions in terms of practicability, capacity and affordability of the department.
- **Presentation to the Technical Committee**  
The draft specifications shall be presented to the Technical Committee in a meeting for their feedback and comments. The standard specifications water supply shall be read out sentence by sentence from start to end and shall be vetted by the technical committee. Based on the feedback/correction by the Technical Committee, the same shall be incorporated in the draft and the draft shall be circulated among the relevant stakeholders.

### **2) Meetings & Consultative Workshops**

IRSP is responsible to arrange necessary consultative meetings and consultative workshops

Direct recipient of the assignment is PHED Government of Khyber Pakhtunkhwa, who will finalize these specifications for implementation of water supply schemes.

Indirect recipients are the development partners providing budgetary and technical support to government of the Khyber Pakhtunkhwa and who may choose to use these standard specifications for implementing their WASH related interventions.

### **3) Dissemination and training**

Upon approval of the final draft and by the PHED-authorities, IRSP will precede providing 500 copies for distribution to

- F) The FATA-Technical Departments involved in DWSS, such as PHED, Directorate of Local Governance & Rural Development, Directorate of Social Services etc.
- G) Indirect beneficiaries such as NGOs are who have specialized on DWSS, training institutions and other authorities and donors.

IRSP in collaboration with PHED will establish a training plan for its own staff and ensure Master trainers.

### **4) Time schedule**

The period of implementation the above mentioned task and activities is fixed from June – November 2014.

Interested parties of this call are asked to submit detailed implementation schedules which indicate what will be done when, with whom and where during the implementation period

### **5) Reporting**

The consultant firm will report on a monthly basis on the progress of the mandate to IRSP.

### **6) Schedule of Remuneration of the Consulting services**

The Consulting services will be honored as follows:

Criteria	% of Contract Value
Upon signature of the contract	40
Upon submission of the Preliminary Draft	50
Upon submission and approval of the Final Draft by IRSP	10

### **7) Security**

IRSP, SDC or PHED will not resume any responsibility concerning public security and the protection of the Consultant team, but may provide information and advisory services on logistical issues.

### **8) Required Expertise & Team**

Interested consulting companies shall submit appropriate evidence and references which are able to demonstrate their professional capacities and capabilities. Individual experts are only acceptable in a consortium.

Facing the diversity of thematic issues on DWSS and the comparatively short implementation period of approx. 4 months, IRSP requests an appropriate team of experts

whose personal skills and capabilities are demonstrated in corresponding Curriculum Vitae and references.

The following basic requirements must be fulfilled by the submitting institution to be considered in this CALL:

- 1) Certificate of Registration as a professional consulting company and/or civil society organization
- 2) Certificates on payment of taxes & duties in 2011 - 2013
- 3) Minimum 10 years of experience in working in the field of DWSS (also by the key experts)
- 4) The company and/or experts can provide evidence having done equivalent tasks with equivalent deliveries in the past 5 years
- 5) Companies and/or experts are well familiar with the international standards on environment protection, disaster risk reduction and protection against natural hazards and linked technical specifications in DWSS,
- 6) Companies and/or experts are well familiar with the institutional context in FATA and collaborated in water-linked projects during the past 10 years.
- 7) Companies and/or experts are well familiar with the technical institutions in Pakistan which deal with technical standards and specifications on DWSS and can provide evidence having collaborated on them in the past 8 years