POWER INFORMATION TECHNOLOGY COMPANY (PITC)

REQUEST FOR PROPOSAL
No: PITC G-224(118)04-2025

DEVELOPMENT AND MAINTENANCE OF METER DATA MANAGEMENT (MDM) SOFTWARE

Note: Bidders are requested to examine RFP document carefully, including instructions, forms, terms, specifications etc. Failure to furnish all information required in RFP or submission of proposal not substantially responsive in every respect would result in the rejection.

Director General (ISDS)
Building No.3, Lower Ground, Aiwan-e-Iqbal Complex, Edgerton, Road, Lahore.
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1. INVITATION FOR PRPOSAL

1.1. Invitation to RFP

PITC is seeking proposals from the prospective qualified bidders, having experience in similar software design, development, deployment and implementation, in PHP, JAVA, .Net, Python or other appropriate front/backend technologies for smart meters integration with PITC's Billing, GIS system, ERP, CCMS, outage management system, and energy control and losses systems and to manage smart meters through unified interface for parameterization, commands execution and visualization of meter statistics through BI analytics.

1.2. PPRA Rules

This tender for procurement will be processed strictly under public procurement rules, 2004 that may be obtained from Ahttp://www.ppra.org.pk. In this document, unless otherwise mentioned to the contrary, 'Rule' means Rule under PPRA procurement rules, 2004.

1.3. Mode of Advertisement(s)

As per Rule 12(*1*) and 12(*2*), this Tender is being placed in the newspapers having wide circulation and online at PPRA's http://www.ppra.org.pk and PITC's official websites http://www.pitc.com.pk.

1.4. Type of Open Competitive Bidding

As per rule 36(b), Single Stage - Two Envelop Bidding procedure shall be followed.

1.5. Bidding Document

The bidding document containing detailed terms and conditions, method of procurement, procedure for submission of bids, bid security, bid validity, opening of bid, evaluation criteria, clarification/rejection of bids, performance guarantee etc. can be downloaded from the PITC official website http://www.pitc.com.pk.

1.6. Bidding Process Schedule

Brief schedule of bidding process is as under:

| Sr.	Summary	Description
1.	Recipient	DG (ISDS), Building # 3, Lower Ground, Aiwan-e-Iqbal Complex, Edgerton Road, Lahore.
2.	Venue	Conference Room O/o Chief Executive Officer (CEO) PITC, Building No.03 Aiwan-e-Iqbal , Lahore
3.	Pre-Bid conference	24-04-2025 at 11:00 AM
4.	Closing Date & Time of Bids (Technical & Financial)	15-05-2025 at 11:00 AM
5.	Public Opening Date & Time of Technical Bids	Technical shall be opened on 15-05-2025 at 11:30 AM
6.	Public Opening Date & Time of Financial Bids	Technically qualified firms will be called for financial opening. Date and time will be communicated well before time
7.	Bid Money	2% of the total value of quoted cost
8.	Cost of Tender Document	Rs. 5,000/-

2. INTRODUCTION

2.1. Statement of Purpose

The MDM software is required to retrieve data from multiple Headend(s)/MDCs/Interfaces/Drivers, process command as well expose the master and transaction data to business warehouse for reporting and data analytics and communicate with Billing, GIS system, ERP, CCMS, outage management system, and energy control and losses in use at PITC for data sharing. Similarly, MDM software shall allow two-way communication between multiple Headend(s)/MDCs/Interfaces/Drivers for consumer, grid and transformer level AMR meters. In addition to the core such as extracting data from multiple MDCs, calculating bill-determinants, validation estimation and editing, and data storage and management, PITC is interested in exploring whether solution could provide value added functionality such as revenue protection, advanced customer data presentation via a portal, outage management etc.

The current smart metering system in Pakistan was deployed as part of the PDP program funded by USAID. The enterprise application landscape comprises of Headend/MDC/Interface/Driver systems for retrieving data generated from smart meters and subsequently storing it into a database. During the this phase, PESCO (Peshawar Electric Supply Company) and MEPCO (Multan Electric Power Company) were selected for the implementation of billable smart meters. Another domain of smart meters installation included substations to record the load at incoming and outgoing nodes of the grid stations. Moreover, USAID in SEP project has implemented APMS (asset performance management system) i.e. transformer monitoring system through smart meters and remotely operated relay to extend not only the life cycle of critical assets but also to ensure sustainable supply of the electricity without interruption by avoiding unscheduled breakdowns. In the SEP project, consumer level AMR meters from multiple vendors are also deployed whom data is to be integrated directly with PITC's current billing solution.

To avoid 'vendor lock' situation, standard AMI specifications as universal data integration layer (UDIL) are developed and published on PITC official website www.pitc.com.pk. The meter manufactures have updated their MDC's (meter data collection systems) according to UDIL specifications for the integration of two way communication between meters and MDCs through target smart meters data integration solution (MDM) for subsequent seamless integration with PITC's billing solution as per following
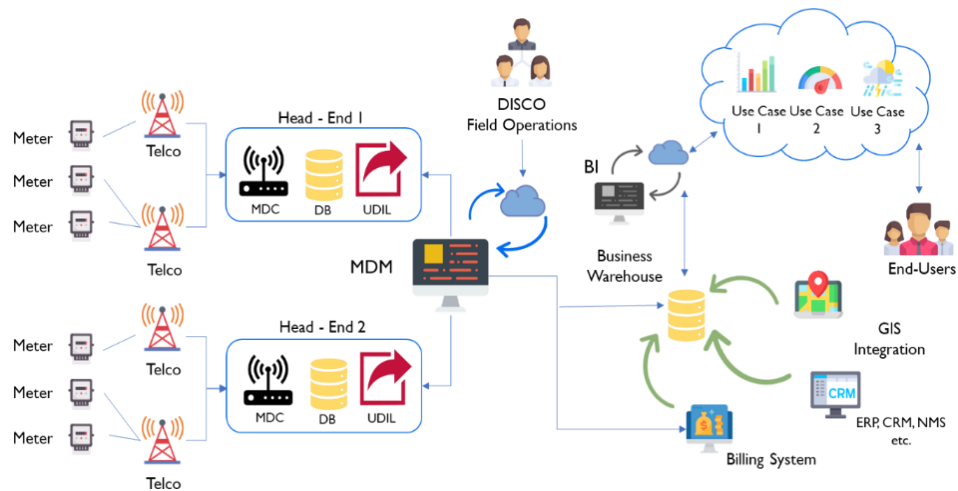
architecture:

2.2. About PITC

WAPDA Computer Center (WCC) was established in 1968 and was entrusted to automate electricity consumer's billing. The millstone set was met through in-house development. For data processing, WCC established 27 regional and circle level data processing centers in all area electricity boards. Since its establishment, WCC supported implementation of IT solutions. While restructuring the Pakistan Power Sector, PEPCO was created as a management company, owned by Government of Pakistan, vested with responsibility to steer, manage and oversee the corporatization/ commercialization of WAPDA power

wing. The revamping of power sector resulted in formation of nine distribution companies (DISCOs), one transmission company (NTDC) and four generation companies (GENCOs). The 27 regional and circle level data processing centers were administratively attached with respective DISCOs. Remaining IT related functions remained under centralized arrangements of DG (Information Systems) under management of PEPCO/WAPDA until 2007. In 2007, the WCC (HQ) was exclusively transferred to PEPCO.

To achieve the objective of creating autonomous commercial entities through the adoption of prudent business practices enhanced efficiency levels, cost reduction and profit orientation, the need to use new technologies, plan and upgrade the existing ICT/IS of all the corporatized entities, Ministry of Energy Power Division in 2010 approved the establishment of Power Information Technology Company. The Major Objective and functions of PITC are as under:

2.2.1. PITC Objectives

The objectives of PITC are:

- To deal in the business of software support for power management (distribution, transmission and generation) international businesses, internet service providers, remote services and / or Information Technology enabled services including billing, Human Resource management, Financial management, engineering applications, software development and support services.

- To develop and maintain expertise in not just technology but also an understanding of electricity Generation, Transmission and Distribution processes so that the solutions delivered are effective and responsive to the business needs. Provide professional inputs on strategic decisions without bias.

- Provide a fair, competitive and challenging environment to all IT users so that PEPCO and all Distribution companies (DISCO's) to benefit from the best offerings available in the marketplace.

- To recommend ways and means to improve systems, with a view to simplify documentation and procedures, remove anomalies for the introduction of comprehensive computerization and developing databases.

- To carry-out and accomplish the job of inter-linking various organizations, departments and agencies through automation.

2.2.2. PITC Functions

The key functions of PITC are as under:

- To provide IT enabled services including customer care & billing, HR & Financial software

- Management, technical vetting, Losses and receivable information (MIS reports).

- To provide internet/intranet, web mail and web hosting.

- To carry-out and accomplish the job of inter-linking various organizations, departments and agencies through automation.

- To provide support to DISCO's in planning, construction operation and maintenance of their computer installations.

- To provide IT HR support to all the entities of PEPCO (DISCO's/NTDC) as and when required.

- To provide and arrange for imparting training related to software, hardware operational techniques, data centers management and network management.

- To develop capability and expertise in software development.

3. PROJECT SCOPE OF WORK

3.1. Overview

The Power Information Technology Company (PITC) is seeking proposals from the qualified bidders that have experience in similar software design, development, deployment and implementation, using PHP, JAVA, .Net, Python or appropriate front/backend technologies for integration of smart meters data with PITC's Billing, GIS, ERP, CCMS, outage management, and energy control and losses systems and to manage smart meters through unified interface for parameterization, commands execution and visualization of meter statistics through BI analytics. The target smart meters data integration solution as under:

3.2. Smart Meters Data Management (MDM) Solution

3.3. Smart Meters Data Management (MDM) Solution General Overview

The Smart Meters Data Management (MDM) solution with capabilities for the treatment, certification and export of measures that allows:

- Validate all measures taken to ensure their accuracy

- Estimate possible missing measures to eliminate voids and ensure the integrity of the load curve

- Export the data to other corporate systems in the appropriate format

All modules of Smart Meters Data Management (MDM) solution should be fully configurable and adaptable to the needs of end users. Moreover, all functionalities within Smart Meters Data Management (MDM) solution may be performed either manually or automatically, thus minimizing the need for user intervention.

3.4. Smart Meters Data Management (MDM) Solution Functional Overview

The Smart Meters Data Management (MDM) solution will have dashboards to summarize most important information with aim to show the user a quick view of the system status and the relevant information. The system will be able to export data to any external system through web services, open API's, Formatted Text Files

The system's data persistence will handle the stored information, with capacity to work easily with any new standard protocol in order to exchange information. All data taken regarding metering points will be stored in a centralized database. It will have a flexible, high performance, secure platform for running diverse workloads on relational database

The system will also store within the inventory the main elements of the electrical infrastructure and models represented in the system, different measurement data with option to create groups and aggregations, the actors involved in the system and master tables with configurable data truly in compliance with UDIL standard specifications published on PITC website.

This Smart Meters Data Management (MDM) solution will also provide an automated execution of common workflow processes such as data **Validation, Estimation or Edition (VEE) Process.** The system will have all mechanisms required to ensure the thresholds of the measurements (values validation), to fill gaps in its profile (hourly, quarter hourly, daily load profiles, etc.). The main modules of Smart Meters Data Management (MDM) solution that will be used to manage and certify measurements are:

- **Validations:** It is a business rule that certificates the validity of a given measurement according to preconfigured criteria. Each metering point will have a validation template associated to it. The system will offer the user the possibility to configure the available validations in the system or generate new ones.

- **Estimations:** Estimation processes associated to each metering point will be launch when there is a "GAP" when the optimal measures are collected. Once these processes are finished, the system will ensure load profiles are completed. They will be marked in the system as new "Estimated" source within the ranking.

- **Edition / Calculation:** Through these methods, the system will calculate measures in terms of other existing measures in the system (other load profiles or periods). The user will be able to define how to run these calculations (by aggregation or disaggregation) and items affected by them. Other possibility the user will have, is to enter manually the value of a certain period into the system.

3.4.1.1. Smart Meter Data Management (MDM) Technical Features

The Smart Meters Data Management (MDM) solution:

- will be scalable to cover multiple meter vendors MDCs

- will support clustering technology in database.

- will support virtualization

- will be based on modular architecture

- will include fail-over/disaster recovery instance

- will include gateway to support multiple MDC databases

- will support gateway communication on UDIL, Files, APIs

- will include gateway to support for load balancing (auto master switch)

- will support application and database structure 'On Premise'

- will support encrypted data storage for business warehouse 'On Premise'

- must have data performance standard to support min 15-minute data retrieval of Meter Profiles or an interval defined by the end user.

- must have data performance standard to support min 1-minute data retrieval of Grid Profiles or an interval defined by the end user.

- shall support incremental data storage from MDCs

- shall support incremental data storage in Business warehouse

- shall support integration with other systems (Billing, ERP, CCMS etc.) on the enterprise application landscape.

3.4.1.2. Smart Meter Data Management (MDM) Operational Features

The Smart Meters Data Management (MDM) solution:

- shall have a graphical user interface. Power-CMI Application must exist as a browser-based (Internet Explorer 11 or later, Chrome, or Firefox) application that operates on a hosted server.

- must support ETL Function (extract, transform, load) in common system through gateway

- shall comply with prevailing industry standard hardware, operating systems, databases, and user interfaces.

- must support all methods of communication with MDC's such as extraction from MDCs/Head-ends via tables/view or through APIs using UDIL.

- must adhere to 'Universal Data Integration Layer: UDIL' document as published by PITC at www.pitc.com.pk. The document defines a common data format required by meter vendors to add as an additional layer over their MDC data structure to facilitate communication between MDCs and Power-CMI application.

- must be capable of pulling data from MDCs as per customized interval set by the end user.

- shall be scalable, and the provider must be able to describe the methods that support scalability and associated costs.

- must retain all meter reading data for a minimum of 36 months with provisions to support additional data storage if required and allows periodic backups.

- shall support the import of data from a head-end system irrespective of mode of communication that takes place between meters and their corresponding head- end system such as RF, PLC, and GPRS or via hand-held unit etc.

- shall provide access control to assign role-based privilege management as per prevalent commercial procedure or as required by the end user. This control shall be available with the System Administrator.

- must import and support GPS type data to identify and display locations of accounts geographically.

- shall provide the ability to process time-stamped meter reading taken from all MDCs/meters and verify the percentage of reads received from meters. This data must then be exposed to various configurable VEE parameters set, such as tolerance level parameters to assure the accuracy of the data.

- must support creation of multiple client instances and be independent of number of users/meters.

- shall provide energy consolidation and accounting features.

- must have live display of events and alarms as reported by the smart meters through respective MDCs and shall maintain history of events and their resolutions.

- must offer electronic filing of actions taken for individual AMR meter/customer account shall be maintained.

- must show a live window of smart meters not communicating with the system shall be displayed at user level and the history shall be maintained with the corrective action.

- must maintain a complete version history and audit trail for all data collected from meters and other devices.

- shall be capable of logging and audit all application and database accesses throughout the system, capturing usernames, timestamp, success / failure of transactions, source IP addresses, and transaction descriptions as appropriate.

- shall provide web access for remote users of PITC/DISCOs with the access level defined in the security policy.

- shall be able to identify and report potential meter failures or tampering - identify and report missing reads, identify and report inconsistent constants, automatically generate request for meter investigation and send to the appropriate system.

- must display the status of individual meter like active, mute, disconnected etc.

- must offer all standards download functionality be made available to perform downloading of data to PC in ASCII format or PC Application e.g. Microsoft EXCEL, Microsoft WORD for analysis and graphical report/presentation.

- shall be able to define the security and privacy of information, add and remove users in the system, change the security profile of users, etc., to control security profiles of users at various levels of authorized officers.

- shall have the capability to allow users to configure and generate reports on its own without customization of the source code.

- shall offer processing of the above functions is to be based on access control provided to PITC/DISCO i.e. user created with roles and rights management. User activity log should be maintained in the system for audit trail purpose.

3.4.1.3. Smart Meter Data Management (MDM) Security Features

The Smart Meters Data Management (MDM) will have following security features.

- Creation of Roles
- Creation of Users and assignment of Roles.

- Creation of Groups for DISCO environment.

- Critical Processes to be executed based on additional PIN code.

- Authentication of packet for each of the MDC based on password (time bounded).

- It will support at least 1000 concurrent user sessions.

- Use of secure communication protocol & time-bounded key for contacting MDCs via APIs.

3.4.1.4. Smart Meter Data Management (MDM) Interoperability Features

The Smart Meters Data Management (MDM) application:

- should provide a customizable file layout structure to interface with the PITC's Billing Systems for integrating meter reading data and customer information. MDM Application must be able to export data to Microsoft Excel, Adobe PDF, Common Separated Value (CSV) and Text file formats.

- must have a customer information data import facility (Master File data).

- must have the ability to alert appropriate personnel of certain triggered alarms arising from meter.

- must have email notification of alerts.

- must have text message notification of alerts.

- provider shall demonstrate the complete functional billing interface with the DISCO billing system(s).

- provider shall transfer the existing AMR data bases seamlessly to the Meter Data Management (MDM) data base ensure utility operation without any disruption.

3.5. Smart Meter Data Management (MDM) Solution Modules

The Smart Meters Data Management (MDM) module will comprise of the following four modules.

1. TMI (Transformer Metering Integration) Module
2. CMI (Consumer Metering Integration) Module
3. GMI (Grid Metering Integration) Module
4. Smart-BI (Business Intelligence) Module

3.5.1. TMI (Transformer Metering Integration) Module

The TMI, will deal with power/distribution transformer level asset management. The all-in-one TMI solution will combine smart energy metering unit with two-way communication to capture real time data with remote disconnect and re-connect capabilities. The TMI shall be able to handle two way communication between smart meters installed in transformer monitoring system (TMS) using UDIL standard. Typical TMS system will monitor (power quality as signals harmonics/frequency, circuit breaker operations, assets monitoring for overloading/heating, oil temperature monitoring, energy metering etc.

The TMI is intended to benefit DISCOs in improving reliability and quality of power to its consumers. The key functionalities of TMI does include but not limited to following:

- Improve visibility of high/low voltage power network and help DISCOs to deliver high quality electricity to consumers. The TMI should provide the utilities with real time information about voltage, power factor, current and unbalance load from LV network and based on this information, DISCO can take specific measures to solve problems as they occur.

- Decrease outage duration, if one transformer collapses, it is normally replaced within 12 to 48 hours depending on the geographic area and type of customers. However, the system should enable DISCO staff to recognize transformer or incoming/outgoing HV/LV feeder outages and send an outage signal to the control center. With the information provided by the system DISCO

should be able to recognize an overloaded transformer and prevent it from collapsing.

- Utilize useful information from this system and make informed decisions about distribution network planning such as critical points in the network that need to be extended or upgraded. As an example, TMI should be able to identify if transformers are working more than 80% of their rated capacity, providing DISCO with a clear view of which part of the network need extension or load relieving.

- Energy accounting, end of the month DISCO should be able to compare total energy delivered from PTs/DTs with total energy billed to the customers who are mapped to that particular transformer. It will enable them establish Transmission and Distribution (T&D) losses at PTs/DTs and help them locate and mitigate losses due to system imperfection or theft of electricity.

3.5.1.1. TMI Functional and Operational Features

The minimum functional features of the TMI are listed below.

- The TMS and its headend system are universal data integration layer (UDIL) compliant. The latest copy of the UDIL may be downloaded from http://pitc.com.pk.

- The TMI will send disconnection/reconnection command from the UDIL compliant headend system remotely as and when required. In case of disconnection initiated by the headend system, the TMI shall not reconnect until it is directed for a reconnection command from the respective DISCO user.

- The TMS will send the latest status of the breaker/switch to TMI through its respective headend system after every operation and as-and-when required by the headend system.

- The TMS will accept disconnect & reconnect commands, on demand data requests and other parameters updates from TMI through headend system by exposing required APIs.

- The TMS remains powered up as long as there exists a reference voltage on any of its phases and the device operation will be independent of breaker state and remains alive. The

- The TMS is equipped with minimum one battery along with super capacitor; the battery is of lithium thionyl chloride having minimum cumulative capacity of 2000 mwh. A Super capacitor for Real-Time Clock RTC is used to maintain date & time and keeps the modem energized even after power outage in order to report the outage event to headend which is then passed on to the Power-TMI. The backup duration is enough to ensure that event is reported to the headend and Power-TMI.

- The TMS has internal disconnection due to pre-set load limiting (overload) or exceeding thermal threshold and communicates the instantaneous and critical data with the latest status of the breaker contacts to Power-TMI through the headend system.
  - The TMI will support the remote operation (Opening and Reset/Closing)

- Automatic tripping is triggered (if enabled) under following conditions and all these parameters and their threshold levels will be user programmable through Power-TMI.
  - Over Voltage
  - Under Voltage
  - Phase Over Current
  - Over Loading
  - Short Circuit
  - Leakage Current

- The TMS is capable of recording and reporting to Power-TMI following minimum events at predefined programmable intervals or as they occur:
  - Overload Condition
  - Voltage Unbalance

- Current Unbalance
- Over Voltage
- Under Voltage
- Phase Over Current
- High Apparent Power
- High Leakage Current
- Remote Switch ON
- Remote Switch OFF
- Local Automatic Switch ON
- Local Automatic Switch OFF

- The TMI will support Load Shedding schedule and its implementation at predefine and programmable schedule.

- Manual scrolling buttons on the smart metering unit are provided for onsite monitoring of basic parameters after breaking the TMS enclosure seals. None of these parameters are changeable or modified. These parameters shall only be updated either through the optical port or local communication (RS 485) port or USB port or from TMI through headend system.

- The TMS is equipped with a non-volatile memory to save information like serial number, energy profile, load profile, event, alarms, number of MCCB operations etc.

- The smart meter in TMS has a unique Serial Number stored in its memory, which can be manually displayed or transmitted to the headend system on demand from TMI.

- Load management/load shading, for PTs/DTs with high T&D losses, DISCOs should be able to remotely disconnect transformers for specific duration to reduce losses through TMI.

- Access to real time information for asset management, preventive maintenance and energy accounting and computation of losses.

3.5.2. CMI (Consumer Metering Integration) Module

The CMI is the module within SMI solution where smart meters are installed at the consumer premises and CMI in addition to remote meter reading, does perform field operations e.g. MCO, DCO, RCO, TDCO etc. These operations are to be performed by the concerned competent authority in workflow based automated process.

3.5.2.1. CMI Functional and Operational Features

The minimum functional features on which CMI will be based are listed below.

- will support ETL Function (extract, transform, load) in common system through gateway

- will support Tariff Structures including, but not limited to, net-metering, time of use (ToU), conventional slab based etc.

- will support collection of Billing data from MDCs (Register Reads & Interval Data)

- will support collection of Billing data from Meters via MDCs (Register Reads & Interval Data)

- will support collection of Non-Billing data from MDCs (Grid Profiles)

- will support collection of Non-Billing data from Meters via MDCs (Grid Profiles)

- will support receipt/validation of Event & Alarms from meters via MDC

- will support provisioning & validation of Meter Installation / Removal / Replacement / Reconfigured

- provision of reports to end users for all necessary functions

- solution will conduct Validation Estimation Editing and calculates bill-determinants.

- provision to display data by hierarchy for end users and command processing

- provision of dashboard for quantitative analysis of Grid and Meter data profiles

- will support extraction of reports in multiple formats (excel, csv, pdf, tab etc.)

- will support integration with billing system for sharing of billing determinants

- will support relay operation for Disconnecting/Reconnection through commands via MDC.

- will support storage of GIS coordinates of smart meters

- will provide meter inventory record vendor wise and installation status wise

- will provide provision of customized business intelligence window for end users

- will provide window for critical events and alarm received from meters

- must support single and multiple register meter information; (Import/Export), TOU and peak and off-peak registers.

- must provide bill-determinants for both import and export to support Net- metering, TOU and for Peak & Off-Peak metering.

- shall provide a web-based interface to DISCO users as per prevalent commercial procedure enabling them to carry out regular business functions such as but not limited to minimum two-level security checks:

   o Maintain hierarchy of meters (admin and network both)

   o Process changes in the hierarchy such as transfer of consumers

   o Process Service (New) Connection Order with installation of meter (SCO)

   o Meter Change Order (MCO)

   o Meter Disconnection Order (DCO)

   o Meter Reconnection Order (RCO)

   o Change of attributes in the meter such as sanctioned load etc. (COA)

   o Other functions as described in the prevalent commercial procedure or as required by PITC/DISCOs during system configuration.

- web-based interface must also be capable of managing the metering functions (read & write) as described in UDIL specifications document. Some basic functionalities are as follow:

   o Relay operation - disconnect/reconnect meter.

   o Time synchronization of meter with head-end.

   o Relay operation on basis of sanctioned load.

   o Creating group of Customers/meters for Load Management actions

   o Transmittal of Load Management/shedding schedule for individual or group of customers defined above.

   o Time of use changes.

   o Register configuration for Import & Export (Net-metering), Peak & Off Peak etc.

   o IP/Port update

   o Meter Load Profile sampling interval update etc.

   o MDI interval setting.

- must have billing interface as required by PITC's existing billing system.

- shall support scheduled/unscheduled load control functions for individual and batch of multiple

meters of multiple manufacturers (Bulk Load Management actions).

- shall support remote disconnect/reconnect of consumers having whole current meters.
- shall support remote programmable load limit for individual tariff. It could for individual or a batch of meters
- shall support remote programmable retry interval for trip actions for whole current meters.
- shall support remote programmable number of retries for overload tripping (whole current) meters.
- should be able to maintain an audit trail of all changes made for individual customer meter.
- shall be able to detect theft displaying possible CT tempering and developing and displaying the phase diagram/polar chart etc. with highest alert level.

3.5.3. GMI (Grid Metering Integration) Module

The GMI will deal with the grid level AMR meters installed as incoming and outgoing meters. The primary objective of these AMR meters is real time load monitoring so that NPCC (national power control center) may take decisions on increasing or decreasing the demand in the national grid. Moreover, GMI solution offers scheduled and unscheduled off feeders' statistics for accounting purpose and for direct monitoring of DISCOs CEOs.

3.5.3.1. GMI Functional and Operational Features

The GMI application:

- shall be capable to interface with all types of meters, i.e. CT/PT meters, CT meters, 3 phase whole current meters, and single phase whole current meters.
- shall be multi-vendor compliant and shall be strictly compliant with UDIL specifications as published by PITC as www.pitc.com.pk.
- shall only allow authorized users to perform any action and the levels of security shall be user defined.
- shall support batch import of devices into the system for creation of devices.
- shall support scheduled and unscheduled on demand meter reads for billing, TOU data, interval data, power quality, event log, alarms, etc. Critical alarms, as determined by the user, shall be dispatched immediately when received from the devices via SMS and popup on the operator's console. Scheduled reads shall be configurable for the required frequency, number of tries, sleep time between tries and reading mode.
- shall support scheduled and unscheduled time synchronization of the AMR devices.
- shall support remote programming, configuration, and customer reference/account information of devices.
- shall provide web access for remote users of DISCOs with the access level defined in the security policy.
- shall be able to identify and report potential meter failures or tampering (Identify and report missing reads, Identify and report "stopped" meters, Identify and report "slow" equipment, Identify and report inconsistent constants, Receive signals for tampering or meter removal, Automatically generate request for meter investigation and send to the appropriate system).
- should be able to maintain an audit trail of all changes made.
- Shall offer a web based multi-functional capability complete end to end, out of the box solution for End User Reporting Interface with capability of gathering and processing all types of AMR meter data received and stored by the MDC from the database.
- offered end user reporting interface should be internet ready and allow web- enabled access to users from anywhere preferably over the VPN.

- shall offer standards download functionality shall be made available to perform downloading of data to PC in ASCII format or PC Application e.g. Microsoft EXCEL, Microsoft WORD for analysis and graphical report/presentation.

- shall able to define the security and privacy of information, add and remove users in the system, change the security profile of users, etc., to control security profiles of users at various levels of authorized officers

- shall support the followings features:

    a) Programmable data retrieval interval at meter level for;
        - Instantaneous Data
        - Monthly Billing Data
        - Current Energy Data
        - Load Profiles
        - Clock Synchronization
        - GSM Signal Strength
    b) Wakeup Options for on demand read.
        - Wake up by SMS
        - Or any other vendor proposed mechanism

- shall program two different load thresholds against different time slots (peak/off peak) to activate disconnection/reconnection automatically by the meter and time between disconnection and reconnection shall also be programmable.

- shall offer provision to DISCOs user to enable and disable the feature (Remote disconnect/ reconnect for both scenarios) locally by meter software and remotely through head end system.

3.6. Smart-BI (Business Intelligence) Module

This feature in Smart Meters Data Management (MDM) will take inputs from all the above-mentioned modules and present the key performance indicators i.e. consumption etc. to be defined with end users:

3.6.1. Smart-BI Dashboards

In Smart Meters Data Management (MDM), management of various levels will use the dashboards. The following Power-SMI dashboards are required at minimum; however, final dashboards will be finalized with the input of the end users:

- PDCG (grid monitoring dashboard for every DISCO)

- PDCF (feeder monitoring dashboard for every DISCO)

- PDCE (executive dashboard for every DISCO)

- PDCV (variance monitoring dashboard for every DISCO)

- PDCVS (variance summary monitoring dashboard for every DISCO)

- PDCS (summary dashboard for every DISCO)

- NPCC load monitoring dashboard

- NPCC load shedding summary dashboard

- NPCC MDC statistics dashboard

- NPCC admin panel

- PDC admin panel

- NPCC load allocation application

- MDC front-end web application, etc.

3.6.2. Smart-BI Reports

The Smart Meters Data Management (MDM) must provide the following minimum reports; however, actual reports will be finalized by the end user:

- Customer Billing record as per prevalent commercial procedure
- CP – 10 Meter Reading List (General Consumers)
- CP – 11 Meter Reading Record
- CP – 13 Consumer Statistics
- CP – 15 Temporary Disconnection Order List
- CP – 17 Disconnection Orders
- CP – 17A Register of Permanently Disconnection Defaulters
- CP – 19 Reconnection Orders
- CP – 34 Meter Reading List (MDI Consumers)
- CP – 61 Permanent Disconnected Defaulters
- CP – xx List of MCOs
- CP – xx List of New Connections
- Readings with Exceptions
- Analysis to show the total number of Readings that resulted into exceptions.
- Analysis to show the number of meters that were sending measurement data and then stopped sending for some reason. (mute meters)
- Analysis to show a summary of new devices that never send any measurements since the time of their installation.
- Meters not in contact (Mute) - Meters that could not be contacted since last N days.
- Meter change orders processed during the current billing month.
- Other Reports as identified during the System Integration & Configuration process.
- Activity Distribution - Analysis to show how the device activities are distributed as a percentage of total. Activities are records of communication related to meter such as meter profile fetching etc.
- Activity Analysis - Analysis to show a list of the top 100 service points with the highest number of activities in the selected month.
- Critical Alarms / Tamper Events- Tamper events are the types of meter events defined in the system to indicate that a meter installed in the field has been tampered. Analysis to show the count of tamper meter events based on the event categories defined in the system.
- Meter Status - Meters can be turned ON or OFF based on whether customer needs power supply or not (seasonal or temporary disconnection).
- Installs and Removals -Analysis to show the total number of meters that are installed and removed in the previous n months.
- Estimation Summary - Analysis to show the distribution of estimated and user-edited measurement quantity per estimated and user-edited measurement count per month.
- Usage/Consumption Distribution - Analysis to show the measured usage quantity distribution by various dimension attributes.
- Usage/Consumption Trend - Analysis to show the trend in normal usage quantities for the previous N months.
- Estimated Usage Trend - Analysis to show the trend of estimated measurement quantities for the

previous N months

- TOU-Mapped Usage -Analysis to show the TOU-mapped estimated measurement quantities for the previous N months.

- Usage/ Consumption by Day - Analysis displays the usage values for the selected month on daily basis.

- Month Usage/ Consumption Trend - Analysis compares the usage data trend over number of months (default 3 months selectable) period.

- Usage/ Consumption by Hour -Analysis displays the usage values on an hourly basis. The data is displayed for the selected day(s).

- Usage Summary by TOU Period - Analysis to show a n-month usage trend by TOU period.

- Top N Analysis - Highest Usage - Analysis to show the top service points with the highest usage consumption in selected month.

- Top N Analysis - Lowest Usage - Analysis to show a list of service points with lowest consumption for the selected month

- Top Service Points Without Usage Transactions - Analysis lists the top 100 records with highest unreported usage quantity in the selected month.
  - Load-Usage Analysis
  - Consumer wise maximum demand
  - List of consumers having maximum demand greater than sanctioned load
  - List of consumers having maximum demand greater than sanctioned load for last consecutive n-months

- Exception Types - Analysis to show how the VEE exceptions are distributed across each exception type in the selected month.

- The AMI System shall support customization of the reports that are listed below, and the reports shall be supported on both a scheduled interval and an unscheduled interval as defined by the user.

- Loss calculation report over user definable period (feeder to transformer to consumers).

- Maximum demand report over a user-defined range on a single device as well as on a set of devices.

- KWH report over a user defined range on a single device as well as on a set of devices.

- Average PF report on a single device as well as on a set of devices.

- Report for critical alarms and events over a user defined range.

- Daily data collection and performance reports (successful devices, non-successful devices, missing values, and time to read all devices).

- Report of meters exceeding a pre-defined maximum demand.

- Report of meters having a total consumption that is lower or higher than a user defined percentage over the prior total consumption read.

- Report of synchronized and non-synchronized meters.

- Report for service continuity, voltage interruptions, and outages.

- Energy theft detection report

- Power Outage Management

- Load Profile

- Energy Consumption Events

- Reverse Polarity

- Power Quality Monitoring/Under & Over Voltage

- Phase Disconnection

- Reverse Energy

- NPCC Power Allocation, etc.

- should have the capability to allow users to configure and generate reports on its own without customization of the source code.

- shall support customization of the reports that are listed below and the reports shall be supported on both a scheduled interval and an unscheduled interval as defined by the user.

    a) Loss calculation report over user definable period (feeder to transformer to consumers).

    b) Maximum demand report over a user defined range on a single device as well as on a set of devices.

    c) KWH report over a user defined range on a single device as well as on a set of devices.

    d) Average PF report on a single device as well as on a set of devices.

    e) Report for critical alarms and events over a user defined range.

    f) Daily data collection and performance reports (successful devices, non-successful devices, missing values, and time to read all devices).

    g) Report of meters exceeding a pre-defined maximum demand.

    h) Report of meters having a total consumption that is lower or higher than a user defined percentage over the prior total consumption read.

    i) Report of synchronized and non-synchronized meters.

- Report for service continuity, voltage interruptions, and outages.

4. GENERAL AND SPECIAL CONDITIONS

This RFP is not a contract offer. Receipt of a proposal neither commits PITC to award a contract to any Bidder, nor limits our rights to negotiate in our best interest. PITC reserves the right to contract with a Bidder for reasons other than price. Failure to address any section or answer any question(s) in this RFP may subject the proposal to disqualification. PITC also reserves the right to request additional information that is necessary and pertinent to the project or to assure that bidder is adequate competence to perform according to the bid specifications are met.

The products/services which are not specifically requested in the RFP but which are necessary to provide the functional capabilities proposed by the Bidder shall be included in the proposal response.

4.1. Source of Funds

The source is PITC Fund.

4.2. Tender Document Fee

The bidding documents can be downloaded from www.pitc.com.pk; however, cost of tender document is PKR 5,000/- (nonrefundable) that may be deposited in cash by bidders at the O/o Finance Director PITC, 401 WAPDA House, Lahore. The bidders will present the original receipt of tender document fee, deposited, along with sealed technical and financial bids.

4.3. Eligibility of Bidders/Bids/Services

The eligibility of bidders or services will be evaluated in line with following clauses:

4.3.1. Bidders:

This Invitation for RFP is open to all qualified bidders having experience in similar software design, development, deployment and implementation, using PHP, JAVA, .Net, Python or other appropriate front/backend technologies for POWER SMI implementation and testing at PITC, WAPDA House, Lahore who:

- have registered/incorporated company/firm in Pakistan with relevant software development business experience of at least two (2) years on closing date of advertisement.
- is registered with Tax Authorities as per prevailing latest tax rules (Only those validly registered with sales tax and income tax departments can participate);
- has valid registration of General Sales Tax (GST) & National Tax Number (NTN);
- bidder must have at-least one successful related software development and implementation in its credit (completion certificate issued by client is required as a documentary proof) in public private sector organizations of similar size within Pakistan.
- bidder must have at least 8-10 functional, technical expertise and qualified experts to handle the task efficiently. As part of the bid a list of functional and technical staff along with their qualification must be supplied by the bidder.
- bidder should explain if any fault logging procedure/mechanism is already in place. The firm must be able to define a guaranteed response time after a complaint is lodged.
- has not been blacklisted or under a declaration of ineligibility for corrupt and fraudulent practices by any provincial or federal government department, agency, organization or autonomous body or private sector organization anywhere in Pakistan (submission of undertaking on legal stamp paper, as per 'Annexure-A' is mandatory),
- has office(s) in Lahore
- **Note:** verifiable documentary proof for all above requirements is a mandatory requirement, non-compliance will lead to disqualification

4.3.2. **Bids:**

Any bid not received as per the terms and conditions laid down in this document is liable to be ignored. No offer shall be considered if:

- received without earnest money
- received after the date and time fixed for its receipt
- bid is unsigned
- offer is ambiguous
- offer is conditional i.e. advance payment, or currency fluctuations etc.
- offer is received by a telegram
- offer is received with shorter price validity and longer delivery period than asked in this document

4.3.3. **Services:**

All services to be supplied under the contract shall conform to the policies of Government of Pakistan in vogue. All expenditures made under the contract shall be limited to such goods and services. For purposes of this clause, the term "Services" includes related ancillary services such as transportation, insurance, installation, after sale service/support and trainings etc.

4.4. Corruption and Fraud

- The Government of Pakistan defines Corrupt and Fraudulent Practices as "corrupt and fraudulent practices" which includes the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official or the supplier or contractor in the procurement process or in contract execution to the detriment of the procuring agencies; or misrepresentation of facts in order to influence a procurement process or the execution of a contract, collusive practices among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the procuring agencies of the benefits of free and open competition and any request for, or solicitation of anything of value by any public official in the course of the exercise of his duty".
- Indulgence in corrupt and fraudulent practices is liable to result in rejection of bids, cancellation of contracts, debarring and blacklisting of the bidder, for a stated or indefinite period of time.

4.5. Cost of Bidding

The Bidder shall bear all the costs associated with the preparation and submission of its bid, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

4.6. Joint Venture /Consortium

Joint venture / consortium is eligible for this tender.

4.7. General Instruction to Bidders

- A firm fixed price type of contract is anticipated to be awarded.
- Bidders shall provide proposals directly in their own name to PITC.
- Proposals shall concisely address the 'Scope of Work' as they are presented. Proposals not meeting the Scope of Work specifications may be rejected.
- Bidders shall submit proposals in response to this solicitation in English with all prices stated in Pak Rupees (PKR).
- Bidders may submit modifications to their proposals at any time before the solicitation closing date and time. The contract will be awarded to a Pakistani firm, all payments will be made in Pak Rupees (PKR).

- Bidders shall attend pre-bid conference to be held on <mark>24-04-2025 at 11:00 AM</mark> at conference room of Aiwan-e-Iqbal, PITC Lahore. Bidders shall be represented by not more than three people.

- The team structure assigned to the project by Bidder must be approved by ~~PITC.~~ The PM, technical and other core team members must be on-site for project implementation period.

- If any team member assigned to the project leaves before the project finishes, bidder will provide proof of his termination to PITC and his equivalent skill set replacement will be provided with written approval to PITC within one week from the date of original resource's departure. In case of any delay in achieving any milestone or deliverable due to change in bidder's team structure, liquidated damages will be imposed as per liquidated damages clauses.

4.8. Special Instruction to Bidders

1.1.1. Clarification(s) on Bidding Document

The potential bidders requiring clarification(s) on bidding document may notify PITC at the address indicated in the Invitation for Bids or by email dgisds@pitc.com.pk. The PITC shall respond in writing through email to any request for clarification(s) not later than seven (7) days prior to the deadline for the submission of bids prescribed in the Invitation for Bids. The responses of PITC (including an explanation of the query but without identifying the source of inquiry) shall be uploaded on the company's website: www.pitc.com.pk.

4.8.1. Amendment(s) on Bidding Document

- At any time prior to deadline for submission of bids, PITC, for any reason, whether at its own initiative or in response to a clarification(s) requested by a prospective bidder, may modify bidding document by amendment(s). The amendments incorporated will be published/notified on company's website: www.pitc.com.pk and same shall be binding to all bidders.

- In order to allow the prospective bidders reasonable time to take into account the amendment(s) in preparing their bids, PITC, at its discretion, may extend deadline for the submission of bids.

4.9. Bidding Procedure

1.1.1. Governing Rules

The bidding procedure shall be governed by PPRA rules 2004, issued and amended time to time by the Public Procurement Regulatory Authority (PPRA). The bidding procedure is also governed by PPRA rule 36 'Procedures of Open Competitive Bidding' sub-rule (b) 'Single stage - Two Envelop procedure'. Bidders are advised to refer to the section-A.

4.9.1. Bidding Procedure

The bidding procedure prescribed in the Invitation for Bids is explained herein below:

<mark>Single Stage: Two Envelope Procedure</mark>

- The bid shall comprise a single package containing two separate sealed envelopes. Each envelope shall contain separately the Financial Bid and the Technical Bid;

- The envelopes shall be marked as "FINANCIAL BID" and "TECHNICAL BID" in bold and legible letters to avoid confusion;

- TECHNICAL bids will be opened at the O/o Chief Executive Officer, 406 WAPDA House, Lahore in the presence of the bidders or their authorized representatives, who may choose to be present.

- The PITC shall first establish the "Bidder's Eligibility" and then evaluate technical conforming compliance of the offered item's technical specifications with the demanded ones and other terms & conditions, without reference to the price and reject any bid which shall not conform to the specified requirements;

- During the evaluation no amendments in the technical bid shall be permitted, however, if required, any clarification(s) which shall not constitute any material deviation of bid, may be asked. The

request for clarification and response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted,

- TECHINCAL evaluation results will be communicated to technically qualified and disqualified bidders along with date and time of opening of financial bids to the qualified bidders. The financial bids of disqualified bidders shall be returned sealed and unopened.

- FINANCIAL bids of technically qualified bidders will be opened at the O/o Chief Executive Officer, 406 WAPDA House, Lahore in the presence of the bidders or their authorized representatives, who may choose to be present; and

- The bid found to be the lowest evaluated & responsive shall be accepted. In case, two bidders submit equal financial bid, the bidder with more experience shall be awarded contract.

4.10. Preparation of Bids

To facilitate the analysis of the responses to this RFP, Bidders are required to prepare their responses in accordance with the instructions outlined in this section and elsewhere in this RFP.

1.1.1. Sealing and Marking

- The envelopes shall be marked as "FINANCIAL BID" and "TECHNICAL BID" in bold and legible letters to avoid confusion. Similarly, Bidder shall seal the bid/ bids in separate envelopes.

- The envelopes shall then be sealed in an outer envelope.

- The inner and outer envelopes shall: (a) be addressed to PITC at the address, and (b) Bid Reference No. given, and a statement: 'DO NOT OPEN BEFORE' the time and the date specified, in the Invitation for Bids for opening of Bids.

- The inner envelopes shall also indicate the name and address of the bidder to enable the bid to be returned unopened in case it is received 'late'.

- If the outer as well as inner envelope is not sealed and marked as required, PITC, shall assume no responsibility for the bid's misplacement or premature opening.

- The bids must be delivered by hand or by courier so as to reach on the date and time prefixed in the Invitation for Bids at:

Director General (ISDS), PITC

Lower Ground, Building # 3, Aiwan-e-Iqbal, Complex Edgerton Road, Lahore

Tel: 042-99202162, 042-99202211

- Bids submitted through telegraph, telex, fax or email shall not be entertained.

4.10.1.1. Submission Deadline

- Bids must be submitted by the bidder and received by the PITC on/or before 15-05-2025 at 11:00 AM.

- Bids received later than the time and date specified will stand summarily rejected.

- PITC may, in its discretion, may extend prescribed deadline for submission of bids by amending bidding documents in which case all rights & obligations of PITC and bidders previously subject to deadline shall thereafter be subject to deadline as extended.

4.10.2. Submission Deadline

Any bid received by PITC after the deadline for submission of bids prescribed by PITC pursuant to sub-section 4.10.2 shall be rejected and returned unopened to the bidder.

4.10.3. **Withdrawal of Bids**

- Bidder may withdraw its bid after bid's submission and prior to the deadline/closing time & date prescribed for submission of bids.

- No bid may be withdrawn in the period between deadline for submission of bids and the expiration of the period of bid validity. Withdrawal of a bid during this period may result in forfeiture of the bid Security submitted by the bidder.

4.10.4. **Documents Comprising of Bids**

- Bid security of an amount not less than 2% of the total value of tender issued by a scheduled bank of Pakistan only (or as applicable if specified in the special condition above). The bid money is to be attached with financial bid.

- Certificate that the services offered are in accordance with the tender specifications amended to-date.

- List of any deviations or reservations from the bid specifications.

- Technical data as required in the specification and literature in English giving out salient feature of the quoted items/services.

- Deposit receipt of tender fee in original.

- Ownership of all data, materials and documentation originated and prepared for this RFP solicitation by any proposer/bidder shall belong exclusively to PITC

PITC agrees that all submissions shall be held as confidential, shall not be disclosed outside of PITC, and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this Bidder as a result of-or in connection with-the submission of this data, PITC shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit PITC's right to use information contained in a proposal if it is obtained from another source without restriction.

4.10.5. **Bid Security**

- The bidder shall furnish, as part of its bid, a bid security @ 2% of the total quoted bid value in PKR, in the shape of pay order/demand draft/call deposit in the name of Chief Executive Officer, PITC, 405 WAPDA House, Lahore. Unsuccessful bidder's bid security shall be discharged or returned soon after the announcement of successful bids.

- The bid security (in the shape of pay order/demand draft/ call deposit) shall be enclosed with in the 'Financial Bid' sealed envelope.

- The successful bidder's bid security shall be discharged upon signing of contract and furnishing of performance/bank guarantee upon confirmation of performance/bank guarantee by DG (ISDS) with the Bank of the successful bidder.

- The bid Security may be forfeited: (a) if a Bidder withdraws its bid during the period of bid validity; or (b) In the case of a successful bidder, if the bidder fails to sign the contract or fails to provide a performance security (if any).

4.10.6. **Late Bids**

Bidder will be responsible for ensuring that his bid is submitted in accordance with the instructions stated herein. Any bid submitted after the deadline prescribed for submission of the bids will not be considered even if it becomes late as a result of circumstances beyond the bidder's control.

4.10.7. **Rights Reserved by PITC**

- PITC may, in its sole, unfettered discretion, reject any or all proposals without assigning any reason and without thereby incurring any liability to a prospective bidder or to any other person.

- PITC may, in its sole, unfettered discretion, withdraw, annul, suspend or cancel the RFP or the bidding process without thereby incurring any liability to a prospective bidder or to any other person.

- PITC under the terms of this RFP, may, in its sole, unfettered discretion, reject any or all proposals without thereby incurring any liability to a prospective bidder or to any other person if it determines that, whether due to any reason, the interests of PITC are compromised or adversely affected.

- PITC reserves right to modify bidding documents at any time prior to the deadline for submission of bids, on the request of the prospective bidders for any clarification or at its own initiative, for any reason. This amendment shall constitute part of the biding documents. In order to afford the prospective bidders a reasonable time to take amendments into account in preparing its bid, PITC may at its discretion extend the deadline.

- If at any future point of time, it is found that the bidder had made a statement, which is factually incorrect, PITC reserves the right to debar the bidder from bidding prospectively for a period to be decided by PITC and take any other action as may be deemed necessary.

- PITC reserves the right to accept or reject offers as per PPRA rules. The offer received incomplete or not in accordance with terms and conditions/ specifications as laid down in the RFP document will not be entertained. Bid offered is likely to be ignored if;

  o It is unsigned.

  o It is received after the time and date fixed for its receipt.

  o Offer is ambiguous or conditional.

- Further, PITC shall have the right to cancel or amend tender process at any time without assigning any reason, prior to finalization of the bidding process. Without thereby incurring any liability to the affected bidder or bidders. Reasons for cancellation will be determined by PITC at its sole discretion. However, any amendment would be communicated to prospective bidders well in time.

- The decision of PITC in all matters will be final and binding on all bidders participating in this bid.

4.11. Bid Prices

- The bidder shall quote unit prices and total price (inclusive of all taxes and duties where applicable) as per price schedule, prescribed in this bidding document, of services, he proposes to supply under contract on FOR basis at PITC, Lahore. If there is no mention of taxes, offered/quoted price shall be considered as inclusive of all prevailing taxes/duties. The bidder shall be responsible to raise invoice separately for all new taxes, if any, levied by Government until completion of the contract.

- The benefit of exemption from or reduction in the taxes and duties shall be passed on to PITC.

- While making a price quote, trend/inflation in the rate of services in the market should be kept in mind. No request for increase in price due to market fluctuation in the cost of goods and services shall be entertained.

- Form prescribed for quoting of prices, should be typed and printed on the bidder's letterhead. Any alteration/correction must be initialed.

- The bidder should quote prices of services according to the technical specifications as provided in this bidding document. The solution offered deviating from technical specifications of services, shall straightway be rejected.

4.12. Bid Currency

Prices shall be quoted in Pak Rupees (PKR).

4.13. Supporting Documents

The bidder shall provide the leaflets/brochures/catalogs of quoted products/services where applicable with the bid.

4.14. Bid Validity

- Bids shall remain valid for 90 days after the date of opening of technical/financial bids prescribed by PITC. A bid having validity for a shorter period shall be rejected by PITC as non-responsive.

- PITC shall be under an obligation to process and evaluate the bid within the stipulated bid validity period. However, under exceptional circumstances and for reason to be recorded in writing, if an extension is considered necessary, all those who have submitted their bids shall be asked to extend their respective bid validity period. Such extension shall be for not more than the period equal to the period of the original bid validity.

- Bidders who; (a) agree to PITC request for extension of bid validity period shall not be permitted to change the substance of their bids; and (b) do not agree to an extension of the bid validity period shall be allowed to withdraw their bids without forfeiture of their bid securities.

4.15. Bids Opening and Evaluation

4.15.1. Open and Evaluation of Technical/Finance Bids

- 'Technical Bids' received, shall be opened by PITC publicly in the presence of bidders or their representatives who may choose to be present on 15-05-2025 at 11:30 AM. No Bid shall be rejected at opening, except for late bids, which shall be returned unopened to the bidders. The PITC shall open one Financial Bid at a time and read out aloud its contents which may include name of the bidder, items bided for and unit prices and total amount of the bid (if applicable). PITC may choose to announce any other details which it deems appropriate if not in conflict with the Public Procurement Rules-2004, specifically Rule 28 (Opening of Bids).

- All Bidders in attendance shall sign an attendance sheet.

- Prior to the detailed evaluation, PITC shall determine substantial responsiveness of Technical bid to the bidding documents. For the purpose of this clause, substantially responsive bid is one, which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions, such as those concerning Applicable Laws, delivery schedule, taxes & duties etc. shall be deemed to be a material deviation for technical bids and bid security for financial bids. PITC's determination of a bid's responsiveness will be based on contents of the bid itself.

- Technical Bids shall then be evaluated conforming compliance of the offered item's technical specifications with the demanded ones.

- The Financial Bids of technically qualified (i.e. compliant to technical specifications and other terms & conditions) bidders shall be evaluated.

- In 'Financial Bids' the arithmetical errors shall be rectified on the following basis:

- If there is a discrepancy between unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected.

- If bidder does not accept the correction of the errors, its bid shall be rejected, and its bid security may be forfeited.

- If there is a discrepancy between words and figures, the amount in words shall prevail.

4.15.2. Inspection

Inspection/Acceptance certificate shall be issued by Project Director or his authorized representative after the completion of each phase of project as per agreed upon project plan.

4.15.3. Bids Rejection

- PITC may reject any or all bids at any time prior to acceptance of a bid under Public Procurement Rules (PPR) 2004. PITC may upon request communicate to any bidder who submitted a bid, the grounds for its rejection of any or all bids, but is not required to justify those grounds.

- Conditional or incomplete bid/bids shall be rejected.

- Bid/bids received with over-writing, cutting and doubtful figures shall be rejected.

- PITC incurs no liability, solely by virtue of its invoking Rule 33.1 of PPR 2004, towards bidders who have submitted bids.

- Notice of the rejection of any or all bids shall be given promptly to the concerned Bidders that submitted bids.

4.15.4. Re-Bidding

- If PITC rejected all bids, it may call for a re-bidding.

- PITC before invitation for re-bidding shall assess reasons for rejection & may revise specifications, evaluation criteria or any other condition for bidders, as it may deem necessary.

4.15.5. Announcement of Evaluation Report

Announcement of Evaluation Report will be as per PPR 2004.

4.15.6. Contacting Procurement Agency

- No Bidder shall contact PITC on any matter relating to its bid, from the time of bid opening to the time of announcement of Evaluation Report. If a Bidder wishes to bring additional information to the notice of PITC, it should do so in writing.

- Any effort by a bidder to influence PITC in its decisions on bid evaluation, bid comparison, or contract award may result in the rejection of bid. Canvassing by any bidder at any stage of the bid evaluation is strictly prohibited. Any infringement shall lead to disqualification.

4.15.7. Failure and Termination

- If bidder fails to deliver the services in accordance with the agreed upon timelines, PITC shall be entitled at its option either;

- To recover from bidder liquidated damages levied at the rate of two percent (2%) per month or a fraction thereof, subject to a maximum of ten percent (10%) of the Contract Price, except;

  o Where un-delivered service/deliverable hold up the use of other Services/deliverables,

  o Liquidated damages shall be levied on the total value of the Contract.

  o The recovery of undisputed liquidated damages mentioned above can be affected from any payment due to bidder from any unit of PITC/DISCOs/GENCOs/NTDC/WAPDA,

- To purchase services from elsewhere without notice to bidder at bidder's risk and cost, however the costs cannot exceed the unbilled Agreement price, the services not delivered, without cancelling the contract in respect of the consignment not yet due for delivery.

- To cancel the contract at bidder's risk and cost, as per terms of this agreement;

- In the event of action being taken under (b) or (c) above, bidder shall be liable for any loss which the PITC may suffer up to the unbilled amount of Agreement price, but shall not be entitled to any gain on repurchase made against the supply order.

- If during the course of execution of contract, bidder is black-listed by any company or unit of DISCOs/GENCOs/NTDC/WAPDA/PITC, PITC may proceed with all or any of the actions detailed below:

- To allow the contract to run its course until completion in accordance with the terms and conditions of Contract.

- to stop further services with or without financial repercussions;

- to cancel the contract with or without reservation or rights

- While determining liquidated damages:

  - the purchaser shall not consider inter alia any of the following circumstances, a cause under "FORCE MAJEURE" and shall not allow any relaxation in the liquidated damages on the account of:

    A. Delay on the part of bidder in the arrangement of requirements under its scope.

    B. Defect or failure occurring to any module/deliverable installed at bidder's works during the currency of the contract.

- At any time during the term of this Agreement, a Party may immediately terminate this Agreement with 7 days' notice if the other Party:

  - Voluntarily files a petition under bankruptcy or insolvency law,

  - Has been the subject of an involuntarily filed petition under bankruptcy or insolvency law, unless such petition is dismissed within thirty (30) days;

    A. Has an order entered against it either appointing a receiver or trustee for, or issuing a levy or attachment against a substantial portion of its assets and this order is not vacated, set aside or stayed within thirty (30) days from date of entry;

4.15.8. Forfeiture of Security/Guarantee (Performance Bond)

- The PITC will have the right to forfeit the security Bond/Guarantee (performance bond)

  - If the bidder:

    A. fails to supply the goods/services within the time specified;

    B. Commits any breach of contract;

- For other reasons specified in the award letter by PITC for forfeiting the security deposit.

  - If the forfeiture of the security deposit does not compensate for losses suffered due to non-delivery or breach of contract for any other reasons, PITC will have right to forfeit other security deposits or to recover the same from any other security deposit made in favor of any other unit of DISCOs/GENCOs/NTDC/PITC etc. or from any money due to the Contractor from any unit of WAPDA/PITC/DISCOs/GENCOs/NTDC etc.

4.16. Force Majeure

In the event of any condition or contingency, existing or future, which is beyond the reasonable control and without the fault or negligence of either party, which prevents or delays, or materially increases the cost of, the performance under this Agreement, each party shall be entitled to an appropriate and reasonable extension of time for performance after the mutual agreement on the force majeure condition. Events of Force Majeure shall include, but are not limited to, Acts of God, fire, floods, labor disputes, civil disobedience, strikes, and interference by military or civil authorities. If an event of the occurrence of Force Majeure, the party whose performance is affected shall take reasonable measures to mitigate and minimize the effect of such event and to continue with the performance of its obligations under this Agreement. Any party asserting Force Majeure as an excuse to performance shall have the burden of proving proximate cause, that reasonable steps were taken to minimize the delay and damages caused by events when known, and that the other party was timely notified of the likelihood or actual occurrence which is claimed as grounds for a defense under this clause. In the event that a party successfully asserts

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Force Majeure the project timeline shall be extended to the extent of such delay as is caused by the Force Majeure event, and the parties shall not be held liable for such delay.

4.17. Disputes

4.17.1. Resolution of Disputes

In case of any dispute, concerning the interpretation and/or application of this contract shall be settled through arbitration. The CEO, PITC or his nominee shall act as sole arbitrator. The decisions taken and/or award made by the sole arbitrator shall be final and binding on the parties.

4.18. Additional Information for Bidders

PITC reserves the right to:

- Amend, modify, cancel this RFP or not award any contract;

- Modify or add requirements contained in this RFP at any time after the issuance of this RFP for compliance by all providers;
- Utilize any and all ideas submitted in the RFP proposals received;

- Request providers to clarify their RFP proposals;
- Purchase most cost-effective proposal and not necessarily the lowest-priced proposal.

5. SCHEDULE OF SUPPLIES AND PAYMENT

5.1. Schedule of Supplies

The schedule of supplies for POWER AMI Implementation and Testing for PITC is as under:

Schedule Description	Date/Time or Deadline
RFP Published on PITC website	15-04-2025
Pre-Bid Conference	24-04-2025 at 11:00 AM
Deadline for submitting questions by 2:00 p.m.	25-04-2025
Responses to submitted questions due by 3:00 pm	28-04-2025
Public opening of technical bids	15-05-2025 at 11:30 AM
If applicable, scheduled presentations	To be notified
Public opening of financial bids	To be notified
Selection of potentially acceptable bidders	To be notified
Notification of RFP award and Approval and announcement of bidder selection(s)	To be notified

5.2. Development and Source Code Delivery

The vendor shall provide PITC complete source code (w/o code obfuscation or hardware/network constraints) on duplicate media whereas all testing and staging environment will be at PITC premises. The PITC nominated developers will be engaged with the contracting firm during the course of development and testing. The hardware and network software resources shall be provided by PITC. Vendor will provide network architecture for the deployment of Power-SMI solution.

5.3. Terms of Payment

A tentative project schedule and payment plan is as follow:

i) Implementation cost will be made after the acceptance of deliverables as per following Schedule:

Project Phase	Deliverable / Phase Output	Duration	Payment Terms
A.	Smart Meters Data Management (MDM) (CMI Module)Solution • Working model of Smart Meters Data Management (MDM) with integration services • Source Code delivery of Complete Solution with operational/development manuals • Key User (Developer) Training with material (Soft Copy) • Role Based End User Training with material (Soft Copy) • Data migration • Technical documentation including end-Use cases, Activity, Sequence, State Machine, Component, Interaction Diagrams, installation and configuration instructions	3 Months	30%
B.	Smart Meters Data Management (MDM) [GMI & TMI Module] Solution • Working model of Smart Meters Data Management [GMI] with integration services • Source Code delivery of Complete Solution with operational/development manuals • Key User (Developer) Training with material (Soft Copy) • Role Based End User Training with material (Soft Copy) • Data migration • Technical documentation including Use cases, Activity, Sequence, State Machine, Component, Interaction Diagrams, installation and configuration instructions	3 Months	30%

C.	Smart Meters Data Management (MDM) [Smart-BI Module] Solution • Working model of Smart Meters Data Management (MDM) [Smart-BI] with integration services • Source Code delivery of Complete Solution with operational/development manuals • Key User (Developer) Training with material (Soft Copy) • Role Based End User Training with material (Soft Copy) • Data migration • Technical documentation including Use cases, Activity, Sequence, State Machine, Component, Interaction Diagrams, installation and configuration instructions	3 Month	30%
D.	One-year development support and maintenance after deployment for all modules in Smart Meters Data Management (MDM) solution to be paid quarterly.	1 Year	10%

5.4. Charges and Payments

- The amount payable for the supply of the Services will be as detailed above. General Sales Tax, if applicable on this supply of services, will be payable by the PITC, at the rate applicable at the time of invoice.

- The successful bidder shall invoice PITC for Services supplied in accordance with the Payment terms as above and on completion of each phase (for which a phase completion certificate will be issued by PITC). Payment will become due 30 days following receipt of the invoice.

- Subject to any agreed variations or change requests, price specified in the Contract is the total charge to the PITC.

- If any tax exemptions, reductions, allowances or privileges may be available to the contractor or PITC in Pakistan, PITC shall use its best efforts to enable the supplier and itself to benefit from any such tax savings to the maximum allowable extent.

- In case federal or provincial government or any other competent authority levies any new/additional taxes, charges, surcharges, fees, duties, etc. or withdraws any exemptions that directly or indirectly affect the quoted/contracted price, the same shall be added to the overall quoted price accordingly to be paid by PITC to the successful bidder.

- After completion/acceptance of phases, successful bidder will invoice which will be due for payment within 30 days of the date of filing the payment application on production of following documents:

  - Bill in triplicate for the claim due, pre-audited by CEO, PITC or authorized representative.
  - Phase completion/acceptance certificate issued by CEO, PITC or authorized representative.
  - Confirmation of CEO, PITC or authorized representative about acceptance of Performance Bond in case of the first claim and acceptance of renewal of Performance Bond if it is expired at any stage till the completion of project.
  - The successful bidder in its invoices shall also give an undertaking that in case of omission of any deductible amount, PITC's claim at any later stage (through pre-audit or post audit) shall be acceptable to you.
  - While raising invoice for the service delivered, successful bidder shall vividly mention account number as well as the name of the bank and branch enabling Office of Finance Director to release payment thereof accordingly.
  - Nonpayment   certificate

6. PROPOSAL FORMAT

6.1. General

The proposal shall be used to determine Bidder's capability of rendering the services to be provided. Failure to fully comply with instructions in this RFP may eliminate Bidder's proposal from further evaluation as determined at the sole discretion of PITC. PITC reserves right to evaluate the contents of proposals submitted in response to this RFP and to select a successful Bidder, or none at all.

PITC reserves the right to waive any requirements of this RFP when it determines that waiving a requirement is in the best interest of PITC. The proposal is to include contact information, including principle contacts and officers, main and local business addresses, tax identification number, telephone and fax numbers and email addresses. The Bidder must sign proposals. An unsigned proposal may be rejected.

6.2. Proposal Format

All proposals should be typewritten on "8 ½ x 11" paper – 12 pt. minimum type; have consecutively numbered pages; including any exhibits, charts, or other attachments. The Proposals shall be organized into the following major sections:

6.2.1. Format

The cover letter shall contain the following information: Title of this RFP

- Name and Mailing Address of Company (include physical location)

- Name of Contact Person, telephone phone number, fax number and email address

- A statement that the submitting contractor will perform the services and adhere to the requirements described in this RFP, including any addenda (*reference the addenda by date and/or number)*

- Summarize Bidder's history and other completed projects related to software development.

6.2.2. Executive Summary

The Executive Summary shall provide an overview of the project and indicate the project's complexity and the Bidder's ability to resolve inherent project problems. This section should also include a brief narrative highlighting your company's background, experience, and qualifications for performing the requested services. Narrative should clearly demonstrate bidder's ability to provide services required in this RFP.

6.2.3. Company Background and History

- Describe experience of firm in general providing consulting/professional services.

- Describe relevant services (related software development) carried out in the last three (3) years which illustrate company's experience as it relates to this RFP.

6.2.4. Evidence of Responsibility

Bidders shall submit, with their Bids, all necessary evidence showing their financial resources; experience in the type of work being required by PITC; organization available for performance of work, and any other required evidence of qualifications to perform. PITC shall consider such evidence before making its award decision. Failure to submit adequate evidence of Contractor's responsibility to perform may result in rejection of the Bid.

6.2.5. Project Approach/Management

Please include the following information in the section:

- Provide a brief description of how the bidder proposes to successfully manage this project and meet the goals and objectives of this RFP. Describe your Initial Work Plan and schedule, including a detailed timeline and milestones.

- Include a brief summary of how the project team will be structured, a description of the role, qualifications and experience of each team member and designated project manager/lead assigned to this project, including location within the company's organizational framework and length of service.

6.2.6. Project Understanding

Based on the available information, supplemental research, field observations, and experience with similar projects, provide a narrative describing your understanding of services requested in this RFP, your general strategies and any major challenges to achieving PITC's stated goals.

6.2.7. Project Plan

- Develop a project plan with dates and milestones to be used throughout the project Provide a detailed discussion of your company's approach to the successful implementation of this project. Include thorough discussions of methodologies you believe are essential to accomplishing this project. Include a proposed work schedule to accomplish all of the required tasks within desired timeline.

- Identify team members who would be assigned to each task.

6.2.8. Cost Proposal

- PITC is seeking a fixed price proposal to deliver the services described in this RFP. Clearly define all costs associated with the services defined in your proposal. Provide a total cost proposal for all products and services, detailed pricing for proposed solution; include separate costs for software components, support costs and professional services, if applicable.

- The cost proposal must set forth all costs associated with the proposed scope of work for the RFP. The Bidder must acknowledge that all costs, including travel required to meet RFP requirements are included. Any purchase contract signed will be a fixed price contract and no other costs will be allowed for performance of bidder's proposed solution. A proposal for price of purchase should be submitted with a purchase contract, if required.

- Bidder shall describe methodology for resolving billing issues. The bidder will be responsible for identifying and correcting all errors in a reasonable timeframe. For billing errors identified by PITC, bidder will provide adjustment of charges within two billing cycles of notification.

6.2.9. References

Include references of similar scope and size customers in Pakistan. This reference list shall include the following information:

- Organization Name

- Customer Contact – name, title and contact information Address Date of work performed

- Brief description of work performed

7. EVALUATION CRITERIA AND SELECTION PROCEDURE

7.1. Evaluation Committee

Evaluation of the proposals will be performed by a committee established for that purpose and will be based on the criteria set forth below. The contract resulting from this RFP will be awarded to the Bidder whose proposal is most advantageous to PITC, considering price and technical factors set forth herein. PITC evaluation committee will make the final determination about acceptability of proposals.

7.2. Evaluation Process

- The committee will review submitted proposals to determine if bidder's proposal adheres to the format and instructions of the RFP, conform to the goals, objectives and requirements of the RFP.

- As part of this evaluation, the Committee may hold discussions with all qualified bidders. Discussions may be conducted via teleconference or may take the form of questions to be answered by the bidders and conducted by e-mail, at the discretion of PITC. During the evaluation process, evaluation committee may request technical assistance from any source.

- Following the completion of the evaluation of all bidders' proposals, including any discussions, the committee will rank each qualified bidder's proposal based on technical evaluation criteria.

- The Evaluation Committee may reject in whole or in part any and all proposals, waive minor irregularities, and conduct discussions with all responsible bidders in any manner deemed necessary to serve the best interests of PITC.

- Bidders may be asked to make an oral presentation to the Evaluation Committee. The purpose of the oral presentation is to provide an opportunity for the Bidder to clarify its proposal submission and substantiate proposal representation. Oral presentation is a part of the technical evaluation. If it is determined to be in the best interest of PITC, PITC may invite bidders to make final revisions to their technical and/or financial proposals through submission of a Best and Final Offer.

- The evaluation committee will recommend bidders whose overall proposal provides the most advantageous offer to PITC considering both price and technical factors set forth in this RFP.

7.3. Evaluation Criteria

7.3.1. Bidder's Evaluation

Bidder as a part of his bid shall provide the following depending upon applicability:

- Company profile
- NTN Certificate
- GST Certificate
- On Active Tax Payers List of FBR
- Registration/Incorporation/Business Certificate and number of business years in Pakistan.
- Minimum two (2) years' experience in similar software development along with list of clients to whom the bidder has done or been doing business in last 2 years along with their Names, Addresses and Phone Numbers.
- A list showing the location of head office along with those of branch offices.

- A list of technical expertise and qualified maintenance engineers/staff to successfully design, configure, deploy POWER-SMI and Testing.

- Bid Validity period of 90 days.

- Affidavit to the effect that not blacklisted and rendered ineligible for corrupt and fraudulent practices by any Government (Federal, Provincial or Local) or a public-sector organization/Division/Ministry (Annexure-A).

- A warranty certificate describing the guaranteed response time after a hardware failure when the complaint is logged within the warranty period. The maximum expected down time should also be defined and must not be more than 48 hours (two days). In case machine remains down beyond that duration, the bidder must have the demonstrated capability to replace faulty equipment.

7.3.2. Bid's Technical Evaluation

The Evaluation committee will evaluate the RFP proposals using the criteria below. The committee shall determine which proposals have the basic requirements of the RFP and shall have the authority to determine whether any deviation from the requirements of the RFP is substantial in nature. The committee may reject in whole or in part any and all proposals and waive minor irregularities. Total maximum score is 100 points.

Sr.	Description	Points
Mandatory Factors		
A	Registration/Incorporation/Business Certificate and two years of relevant business years in Pakistan	Mandatory
	Valid Income Tax Registration	Mandatory
	Valid General Sales Tax Registration (Active with FBR)	Mandatory
	Affidavit to the effect that bidder is not blacklisted and rendered ineligible for corrupt and fraudulent practices by any Government (Federal, Provincial or Local) or a public-sector organization/Division/ Ministry (Annexure-A)	Mandatory
	Compliance to technical specifications of tendered services	Mandatory
	Compliance to schedule of supplies	Mandatory
	Warranty certificate	Mandatory
Bidder		
B	Type of Company Public Limited = 10 marks Pvt. Limited = 5 marks Partnership = 3 marks Proprietary = 2 marks	10
	Age of company (1 mark per year)	5
Implementation Plan & Methodology		
C	Comprehensive implementation methodology, plan and approach to the scope of work as in RFP designed to minimize disruption of business activities and to ensure business continuity	15
Qualification and Implementation Experience		

D	Past experience and performance on comparable projects, references, experience and capabilities of Bidder; *Similar software development = 10 points each project* ** Max 20 points, JV Experience will be considered*	20
E	Proposer's project personnel: level of technical qualifications and experience of implementing Power SMI solution in similar role. • Submit list and CVs of 8-10 people who will work at PITC dedicatedly till the completion of project • Provide certificate of availability and CVs in prescribed format • Relevant certifications will be treated as an added advantage *Project Manager with appropriate relevant experience = 9 Points* *Team Member with relevant experience = 3 points*	40
F	Proposer's experience in training end users *Each Project = 2.5 Points*	10
	Total:	100

7.3.3. Bid's Financial Evaluation

The bid technically responsive (securing 70%> score) and financially lowest will be declared successful.

ANNEXURE-A: AFFIDAVITE OF LEGITIMATE BIDDER

<u>Undertaking</u>

We, [**Name and Address of Bidder**], do hereby declare on solemn affirmation that:

I.   We have not been black listed from any Government Department/Agency

II. We have not been involved in litigation with any client during the last 3 years

III. We acknowledge that we have read, understood and accepted the Tender Document along with all terms and conditions specified above in the tender document

IV. We understand that PITC shall have right, at his exclusive discretion, to require, in writing, further information or clarification of the Tender, from any or all the Bidder(s)

V.   We understand that PITC shall have right, at his exclusive discretion, to increase/decrease the quantity of any or all item(s), accept/reject any or all tender(s), cancel/annul the Tendering process at any time prior to award of Contract, without assigning any reason or any obligation to inform the Bidders of the grounds for the PITC action, and without thereby incurring any liability to the Bidder and the decision of the PITC shall be final

VI. We certify that prices quoted to PITC against Tender Lot Annex-B and Items are not more than the prices charged from any other Purchasing Agencies in the country and in case of any discrepancy, the bidder hereby undertakes to refund the prices charged in excess

Dated＿＿＿＿＿＿＿＿＿＿day of 2025

BIDDER:

Signature＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

CNIC # ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

Designation＿＿＿＿＿＿＿＿＿＿＿＿＿

Address ＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿

WITNESSES:

Signature＿＿＿＿＿＿＿＿＿＿＿＿	Signature＿＿＿＿＿＿＿＿＿＿＿
CNIC#＿＿＿＿＿＿＿＿＿＿＿＿＿	CNIC # ＿＿＿＿＿＿＿＿＿＿＿
Name＿＿＿＿＿＿＿＿＿＿＿＿＿	Name＿＿＿＿＿＿＿＿＿＿＿＿
Designation ＿＿＿＿＿＿＿＿＿＿	Designation＿＿＿＿＿＿＿＿＿
Address＿＿＿＿＿＿＿＿＿＿＿＿	Address＿＿＿＿＿＿＿＿＿＿＿

<div align="center">**ANNEXURE-B: BID FORMS**</div>

Bid-Form: 1 – Letter of Intention

Bid Ref No. {Add Tender No}   **Letter of Intention**

{Add Date of Technical Bid Opening}

Name of the Contract: *{Add name}*

To: *[Chief Executive Officer, PITC, 406 WAPDA House, Lahore.]*

Dear Sir,

Having examined the bidding documents, including Addenda Nos. [insert numbers & Date of individual Addendum], the receipt of which is hereby acknowledged, we, the undersigned, offer to supply and deliver the Goods under the above-named Contract in full conformity with the said bidding documents and at the rates/unit prices described in the price schedule provided in Financial Bid or such other sums as may be determined in accordance with the terms and conditions of the Contract. The above amounts are in accordance with the Price Schedules attached herewith and are made part of this bid.

We undertake, if our Financial Bid is accepted, to deliver the Goods in accordance with the delivery schedule specified in the schedule of requirements.

If our Financial Bid is accepted, we undertake to provide a performance security/guarantee in the form, in the amounts, and within the times specified in the bidding documents.

We agree to abide by this bid, for the Bid Validity Period specified in the bidding documents and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

Until the formal final Contract is prepared and executed between us, this bid, together with your written acceptance of the bid and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any Financial Bid you may receive. We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in Pakistan.

We confirm that we comply with the eligibility requirements of the bidding documents and have duly provided bid security @ 2% of the total bid value, in the shape of pay order/demand draft/call deposit in the name of **Chief Executive Officer, PITC, Lahore** with our Financial Bid.

Dated this [insert:number] day of [insert:month], [insert:year].

Signed:

In the capacity of [insert: title or position]

Duly authorized to sign this bid for and on behalf of [insert: name of Bidder]

Bid-Form: 2 – Evidence of Eligibility

Name of the Firm

Bid Ref No. {Add Tender No}

{Add Date of Technical Bid Opening}

Documentary Evidence for Determining Eligibility of the Bidders & Evaluation of bids

Required Documentation (To Be Filled by the Procuring Agency)	**Checklist** (To be initialed by the Bidder against each document**)**	**Relevant Page** Number in the Bid (To be filled by the Bidder)	**Supporting Documents** (To be filled by the Bidder with name of the documents that are submitted to meet the requirement)
*Column:1	***Column:2**	***Column:3**	***Column:4**
NTN Certificate			
GST Certificate			
On Active Tax Payers List of FBR			
Registration/Incorporation/Business Certificate			
Complete Company profile			
Operational Office in Rawalpindi / Islamabad			
Firm's past performance			
Affidavit to the effect that the respective bidder is not blacklisted and rendered ineligible for corrupt and fraudulent practices by any Government (Federal, Provincial or Local) or a public sector organization.			
Letter of authorization/partnership from Original Manufacturer's			
Bid Validity period of 90 days			
Compliance with Schedule of Requirements			
Submission of required amount of bid security with Financial Bid			

*   Bidders should only initial against those requirements that they are attaching with the form. In case they do not have any document to attach the corresponding cell in column 2 should be left blank. Bidders are also required to mention the exact page number of relevant document placed in the Bid. Bidders are advised to attach all Supporting documents with this form in the order of the requirement as mentioned in column 1.

Bid-Form: 3 – Firms Past Performance

Name of the Firm

Bid Ref No. {Add Tender No}

{Add Date of Technical Bid Opening}

Assessment Period: (**Minimum Two Years** as per Evaluation Criteria)

Name of the Purchaser/ Institution	Letter of Intent	Description of Project	Value of Project	Date of Completion	Purchaser's Certificate

Bid-Form: 5 – Performance Guarantee

Performance Guarantee

To: [**Chief Executive Officer, PITC, 402 WAPDA House, Lahore**]

Whereas *[Name of Supplier]* (hereinafter called "the Supplier") has undertaken, in pursuance of Contract No. *[number]* dated *[date]* to supply *[description of goods]* (hereinafter called "the Contract").

And whereas it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a scheduled bank <u>for the sum of 5%</u> <u>of the total Contract amount</u> as a Security for compliance with the Supplier's performance obligations in accordance with the Contract.

And whereas we have agreed to give the Supplier a Guarantee:

Therefore we hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of *[Amount of the Guarantee in Words and Figures]* and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[Amount of Guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of ____, 2025.

Signature and Seal of the
Guarantors/Bank Address
Date

Bid-Form: 6 – Financial Schedule

The bidders should submit their cost proposals using the templates included below. Proposals are required to be submitted based on the following basis:

Note: *Bidders are requested to provide the cost estimates for its proposed application & database licenses in-line with their recommended hardware sizing for this project given in the respective technical proposals,*

1: Software Price Schedule

#	Modules	3rd Party Licenses One Time cost, if any (a)	Cost of Design, Development and Implementation Services (including first year maintenance) (b)	Annual Support for Subsequent Each rd year (c)	
				3 Party License renewal (c1)	Support (c2)
1.	Meter Data Management Software (MDM)				
TOTAL (a+b):					

Notes:

- ✓ Bid money must be calculated based on estimated quantities as mentioned in financial schedule (Bid Form 6)
- ✓ Assumption: Initially third party license, if applicable, are valid for one year.
- ✓ Implementation cost (b) will also be included
    - o Cost of Implementation services including one-year maintenance from the date of completion of project.
    - o Principal solution support/license renewal cost of implementation period (if proposed implementation project plan exceeds one year)
    - o Principal solution support renewal cost of warranty period.
- ✓ For evaluation purpose, bidder shall provide sufficient detail and supporting information to allow a complete analysis of cost. Bidder MUST include a breakdown of line items that they believe are realistic and reasonable for the work in accordance with technical requirements outlined. The Bidder shall clearly identify indirect rates (including fringe rates), the base to which each indirect rate is applied.
- ✓ Prices to be quoted in Pak Rupees.
- ✓ Add pricing notes separately where applicable.
- ✓ Rates shall be quoted, inclusive of all but showing separately, cost of inspection, services, transportation, taxes, import duties if any and other levies.
- ✓ In case of discrepancy between unit price and total, the unit price shall prevail. Similarly,
- ✓ subtotals shall prevail over totals.
- ✓ Price for each Application/Module should be provided separately