



Government of Pakistan
PAKISTAN TELECOMMUNICATION AUTHORITY
www.pta.gov.pk

INVITATION TO BID

Hiring of Services of Company/Firm for Development of Web based GIS Portal for Population Coverage, planning & Quality of Service

Pakistan Telecommunication Authority (PTA), a Regulatory body established as per Telecom Re-Organization Act 1996 invites sealed bids from companies/firms, registered with Income Tax and Sales Tax Departments and who are on Active Taxpayers List of the Federal Board of Revenue and are registered with Pakistan Software Export Board (PSEB) for Development of Web based GIS Portal for Population Coverage, planning & Quality of Service of PTA and shall provide maintenance & support services for the period of one (1) year on published terms and conditions.

Bidding documents, containing detailed terms and conditions, etc. are available at the office of undersigned. Price of the bidding documents is Rs. 500/- (non-refundable pay order in favour of PTA). Bidding documents can also be downloaded from PTA Website www.pta.gov.pk free of cost.

The bids, prepared in accordance with the instructions in the bidding documents, must reach at Director (ICT), PTA Headquarters, F-5/1, Islamabad, Pakistan on or before **8th November, 2021** at 11:00 am. Technical bids will be opened the same day at 11:30 am. This advertisement is also available on PPRA website at www.ppra.org.pk.

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Pakistan Telecommunication Authority

BIDDING DOCUMENTS

**Hiring of Services of Company/Firm for
Development of Web based Geographic Information
System (GIS) Portal for Population Coverage,
Planning & Quality of Service**

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SECTION1: BIDDING DOCUMENTS

1.1 Pakistan Telecommunication Authority (PTA) invites proposals from companies/firms having legal presence in Pakistan for Development of Web based Geographic Information System (GIS) Portal for Population Coverage, planning and Quality of Service for PTA including installation, configuration, customization, data migration, training, maintenance and support (“Services”). The bidder should have expertise in developing similar solutions. The bidder should have completed at least one (1) Assignment successfully similar in nature.

1.2 Sealed bids are invited as per the mentioned Description of Services and Terms of Reference (ToR) as per the eligibility criteria, evaluation criteria and the forms identified in the Annexures in this bid documents.

1.3 Terms and Conditions

- a. Bidding documents duly completed in all respect will be received on or before 8th November, 2021 up to 11:00 AM. The submission and evaluation of bids will be carried out under the **“Single Stage Two Envelop Procedure”** as per rule 36(b) of PPRA Rules 2004.
- b. Technical bids will be opened by Technical Evaluation Committee, at PTA HQs on the same day at 11:30 AM, in presence of bidder’s representative, who may choose to attend.
- c. Bid will comprise of single sealed package containing two separately sealed envelopes. One envelop will contain the **“Technical Proposal”** and the second envelop will contain the **“Financial Proposal”**. Technically qualified bidders will be informed the date, time and venue for the opening of financial bids. Financial bids of technically disqualified bidders will be returned un-opened.
- d. The bid found to be the most advantageous bid shall be accepted.
- e. Technical Proposal shall contain the details as per the requirements & evaluation criteria mentioned in this BIDDING DOCUMENTS.

- f. Financial proposal shall be provided on the prescribed form containing the details as per requirements mentioned in this BIDDING DOCUMENTS and also the evaluation criteria.
- g. The Proposals should reach in PTA Headquarters Islamabad by 11:00 AM (Pakistan Standard Time) on 8th November, 2021.
- h. PTA will undertake the procurement and bidding process in accordance with the Public Procurement Regulatory Authority Ordinance 2004, all Rules and Regulations made there under. Relevant legislation in this regard is available at (www.ppra.org.pk).
- i. An authorized representative of prospective bidder shall initial all pages of the proposal and sign in full on the last page of proposal, clearly mentioning the full name of the representative. The **authority letter** in favour of such signatory will be attached with the bidding documents.
- j. Bids should be addressed to Director (ICT) Pakistan Telecommunication Authority (PTA), Headquarters F-5/1, Islamabad.
- k. Annex-A, Annex-B, Annex-C, Annex-D, Annex-E, Annex-F, Annex-G and Annex-H are integral part of technical and financial proposals, which may be read/filled carefully, signed and stamped by the bidders.
- l. The bidder should quote its price clearly in the financial proposal in both figures and words without any ambiguity.

SECTION2: INFORMATION FOR BIDDER

2.1 Bid Security & Performance Guarantee

- a. Bid Security in the shape of pay order/bank draft in favour of Pakistan Telecommunication Authority, Islamabad amounting to Rs. 250,000/- (two hundred fifty thousand only) should be attached with the Technical Proposal (Cheques will not be accepted).
- b. TECHNICAL BID not accompanied with the required Bid Security will be rejected without any right of appeal.
- c. Bid security of unsuccessful bidders will be returned after award of contract to successful bidder. Bid Security of successful bidder will be Performance Guarantee.
- d. Performance Guarantee will be limited to 10% of the total contract amount/value. Bid Security of the successful bidder will be retained and considered/ adjusted against Performance Guarantee. Remaining amount of Performance Guarantee will be submitted by the successful bidder/ contractor in shape of pay order/ demand draft in favour of PTA before signing of the agreement. The Performance Guarantee will be released after the expiry of the maintenance and support services period subject to completion of the Agreement and issuance of satisfactory performance certificate by of PTA.

2.2 Prices

- a. The bidder should quote its rates clearly in Pak Rupees in the Financial Proposal in both figures and words as per format attached at Annex-E without any ambiguity.
- b. The rates quoted shall remain valid for 120 days from the date of opening of Technical Proposal.
- c. Bid amount shall be inclusive of all applicable taxes.

2.3 Disqualifications

Proposals will be liable to be rejected if any deviation is found from the instructions as laid down in the bid document i.e. if;

- a. Technical bid is submitted without the required bid security
- b. Bids are received after specified date and time
- c. GST and NTN certificates are not attached (Bidder must be in Active Tax Payer List of FBR for both income and sales tax or any provincial revenue authority for sales tax)
- d. Valid Pakistan Software Export Board (PSEB) registration certificate is not attached
- e. Valid incorporation certificate from (SECP)/ Registrar of Firms certificate is not attached.
- f. Bidder Office is not located at Islamabad/Rawalpindi
- g. Requirements are not properly adhered to or different from those given in this document
- h. Related experience is less than five (05) years
- i. Completion certificate of minimum One (01) similar successful Assignment is not provided
- j. Non-submission of affidavit on non-judicial Stamp Paper to the effect that the Company has never been black listed by any Government/Semi Government/Autonomous body.

2.4 Integral Parts

- a. Term of Reference **(Annex-A)**
- b. The successful bidder shall be asked to execute the Service Level Agreement / Contract as per **(Annex - B)**
- c. The successful bidder shall be asked to execute the Non-Disclosure Agreement as per **(Annex - C)**
- d. All bidders have to produce all relevant and supporting documents required in the Technical Evaluation Criteria **(Annex - D)**
- e. All bidders have to submit the financial bid as per **(Annex-E)**
- f. Detail of Assignments **(Annex-F)**

- g. Company Information (**Annex-G**)
- h. Personnel Summary (**Annex-H**)

Note: All bidders have to produce all relevant and supporting documents required in the Technical Evaluation. Moreover, no bidder shall be allowed to alter or modify his bid after the bids have been opened. However PTA may seek and accept clarifications to the bid that do not change the substance of the bid. Any request for clarification in the bid, made by PTA shall invariably be in writing. The response to such request shall also be in writing.

2.5 PTA's Rights

PTA may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. PTA shall, upon request, communicate to any bidder who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.

2.6 Penalty

- a. If the bidder fails to complete the Assignment within the given timeline as per Sr. 7 of the ToRs at Annex-A and agreement, Penalty of 0.5% of the total contract value (total bid amount) per week (minimum four or more days will be considered as one week) will be charged up to maximum of 10% of the agreement/contract value (equivalent to 10% Performance Guarantee). Thereafter, work order will be cancelled, the agreement will be terminated and in addition to penalty the Performance Guarantee will be forfeited.
- b. In case of non-satisfactory maintenance and support services by the bidder during the contract term and as determined by the PTA, the Penalty at rate of 0.1 percent per day of the contract value will be applicable on the bidder until the performance is improved up to the satisfaction of PTA.
- c. In case of failure to perform as per PTA requirements during the maintenance and support services period, PTA reserves the right to cancel the contract and forfeit Performance Guarantee in favour of PTA and pending payments related to Maintenance & Support Services will not be released.

2.7 Warranty / Maintenance & Support Services

- a. The bidder will warrant that the developed solution under the contract is the copyrighted to PTA and all incorporated tools/technology/platform is licensed. The warranty shall remain valid for a period of one (01) year after the successful deployment of the application. PTA shall promptly notify the bidder in writing of any claims/issues arising during the warranty period and the successful bidder/ contractor shall provide immediate services as solution in reasonable time without any cost effect to PTA. All functional/structural requirements, new enhancement, bugs/issues shall be addressed by the bidder during the contract period.
- b. The bidder, for technical assistance at the highest level shall provide high-level support/technical assistance on 24 ×7×365 basis (remotely & onsite).

2.8 Provisional Acceptance and Final Acceptance Certificates

- a. After successful and complete development, installation, configuration, testing, data migration, deployment and commissioning of Application/Solution as per the given requirements, the successful bidder/ contractor will notify PTA when the successful bidder/ contractor considers that the required work is complete. Upon such notification from contractor, the PTA will arrange Provisional Acceptance Testing (PAT) within 20 working days and issue Provisional Acceptance Certificate (PAC) in favor of contractor subject to satisfactory completion of work as per requirement of agreement as certified by Director ICT.
- b. Alternatively, the PTA authorized officer will notify the contractor that the work is not fully complete and contractor will rectify the discrepancies within next 10 working days and will submit request to PTA for issuance of PAC. The Supervisory Committee of PTA will then re-arrange PAT within five (05) working days and issue PAC in favour of contractor subject to satisfactory completion or otherwise contractor will rectify the highlighted issues as per para 2.8(b).

- c. The entire process of PAC shall be completed within 40 working day, otherwise the work done by the contractor will be considered delayed and accordingly the penalty clause (2.6) will be invoked.
- d. The Final Acceptance Certificate (FAC) shall be referred to determine the Assignment completion during the given timeframe, FAC will be issued by the Supervisory Committee of PTA within 40 working days after issuance of PAC and subject to successful FAT and security audit whereas discrepancies highlighted by PTA during execution of FAT will be resolved/fixed proactively by the bidder.

2.9 Security Audit of Application

Before deployment of the final & tested version of application, the contractor shall hire services of the reputed third party in consultation with PTA to carry out the penetration testing, source code review and security audit of the developed application to identify the vulnerabilities. The third party shall certify that there are no known vulnerability and issues in the application, all security preventive measures are ensured against any un-authorized access / hacking. FAC will be issued after successful security audit of the application.

2.10 Terms of Payment

- a. Development & deployment cost as per serial 1 of the quoted financial bid (Annex-E) shall be made on submission of invoices by the contractor after Issuance of Final Acceptance Certificate by PTA. Payment shall be made subject to issuance of satisfactory acceptance/completion certificate by PTA.
- b. Payment against M&S services will be made after expiry of warranty period and submission of invoice by the contractor subject to satisfactory performance and after issuance of FAC by PTA.
- c. All the payments shall be made through cross cheque in the Pak Rupees.
- d. Payment will be made after deduction of applicable taxes i.e. Income Tax at source as per applicable laws of Pakistan .
- e. Payment to the contractor shall be linked with active taxpayer status. If the contractor is not in ATL, no payment shall be made until the bidder

appears on ATL of FBR. In this regard, reference is made to Regulation 2 of Eligible Bidders (Tax Compliance) Regulations, 2015 of PPRA.

- f. Penalty, if any will also be deducted at time of payment.
- g. No advance payment will be made against the assignment.

2.11 Pre-proposal Bidders' Queries

The bidder requiring any clarification(s) regarding queries related to bidding documents may notify to Director (ICT) in writing. The concerned officer will respond to any request for clarification, which are received well before (minimum 03 working days or more) the deadline for the submission of bids. PTA responses to queries will be published at PTA's Official website (<https://www.pta.gov.pk>) for the information to all prospective bidders (if not already clarified in the bidding documents or deemed necessary for the bidder). PTA reserves the right to request additional information and/or clarifications from any or all bidders to this bidding documents as per Rule 23 (3) of PP Rules, 2004. A pre bid query session will be arranged and notification of the pre-bid meeting will be published on PTA web-site.

SECTION3: PREPARATION/SUBMISSION OF PROPOSALS

Participating Bidder shall submit documentary proof in support of meeting eligibility criteria mentioned at Section 3. In the first stage of evaluation, a Proposal shall be rejected if it is found deficient of “Eligibility for Responsiveness of the Proposal in line with relevant directions given in this BIDDING DOCUMENTS”. Only responsive proposals shall be further taken up for evaluation.

3.1 Eligibility Criteria and Mandatory Requirements:

- a. Registration with PSEB and SECP/Registrar of Firms
- b. GST & NTN Registration and Active tax payer of FBR for Income & Sales Tax or Provincial Revenue Authority for Sales Tax
- c. Minimum five (5) years of relevant experience
- d. Minimum 01 x Similar assignment (duly supported by the completion certificate]
- e. Office at Islamabad/Rawalpindi
- f. Bidder has never been black listed from any government/Autonomous organization and will submit an affidavit to this effect on non-judicial stamp paper.
- g. The Bidder must not have any linkage with Israel or India regarding ownership, sponsoring and financing. (Bidders shall submit an affidavit on non-judicial stamp paper with this respect)
- h. Company Information as per Annex-G
- i. Personnel Summary as per Annex-H

- Note:**
- i.* Bidder must submit documentary proof against all eligibility criteria.
 - ii.* Any bidder, deficient of the Mandatory Requirements will not be eligible to participate further in the technical/financial evaluation.

3.2 Technical Proposals

- a. In preparing the Technical Proposal, bidders are expected to examine the documents constituting this BIDDING DOCUMENTS in detail. Material

deficiencies in providing the information requested may result in rejection of a proposal.

- b. Evaluation of the technical proposal will start first and at this stage the financial proposal shall remain unopened.
- c. The Technical Proposal shall not include any financial information regarding bid amount. Otherwise, such bids will be rejected.
- d. All applicants that meet the eligibility criteria shall be asked to present before the Technical Evaluation Committee constituted by PTA, clearly demonstrating their experience and capacity to perform the assignment. Bidder shall also focus and cover all the evaluation aspects of evaluation criteria as mentioned at Part-B of Annex-D.
- e. The Technical Proposal shall also provide the following information:
 - i. A brief description of the organization and an outline of recent experience on similar Assignments.
 - ii. A description of the methodology & work plan for performing the Assignment.
 - iii. The list of the team members to carry out this Assignment supported by bar chart diagrams showing the activities to be performed by each professional team member, while keeping in mind the timelines as defined in the Terms of Reference.

3.3 Financial Proposals

- a. The Financial Proposal shall indicate the cost of the Assignment as per the format provided in Annex-E inclusive of all applicable taxes / charges for the time being in force.
- b. The proposal must remain valid for a period of 120 days after the date of opening of bids.

- c. Any changes/ revision in sales tax by Government of Pakistan shall be adjusted/ accepted by both the parties as per the applicable law and payment will be made to the contractor accordingly.

3.4 Bidder Eligibility & Technical Evaluation

There will be two step technical evaluations as under:

- a. Initial screening of the bid will be done as per the criteria at Sr. 3.1 above.
- b. Detailed technical evaluation will be done for the bidder who qualifies the initial screening process. The bidder shall present/demonstrate their solution(s) to PTA. The technical evaluation committee will evaluate the proposal on the basis of technical evaluation parameters. Ratings for the technical evaluation will be done as per Part (B) and (C) of Annex-D.

Bidders will be required to secure 70% qualifying marks in technical evaluation and those bidders will be eligible for further participation in the process of financial evaluation.

SECTION4: PROPOSAL EVALUATION

Any effort by the bidder to influence PTA during the proposal submission, proposal evaluation, and proposal comparison or contract award decisions may result in the rejection of the proposal without any right to appeal.

4.1 Evaluation of Technical Proposals

The technical evaluation committee, appointed by PTA, will evaluate the proposals on the basis of evaluation criteria as specified at Annex-D. Each responsive proposal will be given a technical score. A proposal shall be rejected at this stage if it does not correspond to important aspects of the Terms of Reference (Annex-A) and/or if it fails to achieve the minimum technical qualifying marks i.e. 70%.

4.2 Evaluation of Financial Proposals

- a. After the announcement of technical evaluation report, PTA shall notify those bidders whose proposals did not meet the minimum qualifying marks (70%) or were considered non-responsive to the BIDDING DOCUMENTS and Terms of Reference(Annex-A), indicating that their Financial Proposals will be returned unopened .
- b. PTA shall simultaneously notify the bidders who have secured the minimum qualifying marks, indicating the date and time fixed for opening the Financial Proposals. The opening date shall be informed in advance. The notification may be sent by courier / electronic mail/ facsimile. The Financial Proposals shall be opened in the presence of the technically qualified bidder's representatives who may choose to attend. The name of the bidder, the evaluation scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The evaluation committee will determine whether the Financial Proposals are complete and correct.
- c. The contract will be awarded to the technically qualified bidder who has quoted the lowest total financial bid (i.e. most advantageous bid).
- d. If two or more bidders have quoted the same financial proposals, then the contract will be awarded to the one who has scored highest in technical evaluation.

Hiring of Services of Company/Firm for Development of Web based GIS Portal for Population Coverage, planning & Quality of Service

Terms of Reference

1. Background

Pakistan Telecom Authority (PTA) intends to procure a Web based geographic information system (GIS) based application/system for overlaying the population data (at UC, Tehsil, District and Provincial levels)) along with Base transceiver system (BTS) data and cellular sectors along with coverage data layers (containing 2G/3G/4G and/or 5G(when available) for the purpose of including but not limited to coverage vs population estimation, complaint resolution, and visibility of cellular infrastructure- population density, Licenses Quality of Service Key Performance Indicators (QoS KPIs) etc. The system should be capable of performing required analysis for Pakistan, Azad Jammu and Kashmir (AJ&K) and Gilgit Baltistan (GB) at the administrative levels as stated above.

2. Purpose

This ‘Terms of Reference’ document analyzes web-based GIS solution with key software/application requirements wherein the audience will be the different divisions/directorates of Pakistan Telecommunication Authority (PTA) including but not limited to Licensing, Enforcement, Commercial Affairs, Consumer Protection and Cyber Vigilance Divisions.

Moreover, the system shall have an additional high-level dashboard summarizing the overall coverage statistics in terms of population in a customized area being served by a specific service provider etc.

3. General Description

3.1 PTA requires population density estimation to be covered from a resolution of 30 square meters to 100 square meters using any available sources including open sources of the data (Resolution can be further increased up to 500-1000 square meters if deemed appropriate due to cost or any other factor). Selected bidder will be responsible for enablement to integrate newer/fresher data into the existing database/data sets as per the timelines mutually agreed with PTA.

3.2 The application will be customized with provision of open source/satellite imagery on above stated resolution based base maps for visualization of different layers of datasets including but not limited to Population, BTS, Sectors/cells, Coverage and complaints in administrative or customized boundaries (polygons) etc.

3.3 Open Source application platforms can be used for development of system.

3.4 System should be compatible with multiple file formats including but not limited to csv, shp, tab, xml, kml, kmz and other global GIS standard formats in addition to the widely used MS office file formats etc.

3.5 The system should have capability to integrate with multiple database to reflect desired results on the dashboard and easy to use (GUI based) layer selection for visualization of required information along with and Business Intelligence related data analytics and insights such as including but not limited to the need of coverage/infrastructure in an automatically selected area, highlighting the no. of complaints from an specific area as well, moreover, any further integration shall be as per the requirement of PTA from time to time.

4 Required System features

4.1 Web based geographic information system (GIS) based application/system for overlaying the population data (at UC, Tehsil, District and Provincial levels)) along with Base transceiver system (BTS) data and cellular sectors along with coverage data layers (containing 2G/3G/4G and/or 5G(when available) for the purpose of including but not limited to coverage vs population estimation, complaint resolution, and visibility of cellular infrastructure- population density,

Licenses Quality of Service Key Performance Indicators (QoS KPIs) etc. The system should be capable of performing required analysis for Pakistan, Azad Jammu and Kashmir (AJ&K) and Gilgit Baltistan (GB) at the administrative levels as stated above.

4.2 Resolution from 30 square meters to 100 square meters using any available sources including open sources or paid sources of the data (Resolution can be further increased up to 500-1000 square meters if deemed appropriate due to cost or any other factor) for Pakistan, AJ&K and GB.

4.3 Site level layered display, separate as well as combined view of all or few selected layers. (Operator and Technology wise along with other data layers as stated at 1. above)

4.4 Must have the capabilities of simultaneously analyzing CMOs coverage with population and other data layers as stated at 1. above.

4.5 GIS View

- ✓ Improved detailed GIS view up to village/ town level.
- ✓ Capable of displaying relevant details.
- ✓ Capable of pinpointing desired location through name, coordinates and/or any other GIS reference.
- ✓ Must support terrain profiling in terms of elevations and infrastructure, or standard terrain models being used in Telecommunication can also be used.
- ✓ Must be compatible with widely used datum of GIS including WGS (84) and/or other datums.
- ✓ Must support population customized profiling and demarcations.
- ✓ Must support important locations such as hospitals, universities, mosques, markets and point of interests (POIs).

4.6 Capable of displaying/exporting relevant information according to specific boundaries. (Village/Town/City/Tehsil/District/Province/Nationwide) into any desired format including but not limited to MS Office formats, PDFs etc.

4.7 The system should provide a common access to network data, maps and statistics of radio coverage through a single web interface for any groups of users.

- 4.8 The system should be fully automatic, with the ability to simply add new data sources / multiple dataset and sophisticated filtering "on-the-fly" coverage layers (2G, 3G, 4G and 5G when available) with provided, signal strengths and color coding/legends.
- ✓ Displaying technology wise coverage on GIS map for all operators.
 - ✓ Coverage percentage calculation (According to geographical area (Sq meters/Sq kilometers) and population vectors).
- 4.9 Sectors Display of Sites (Operator wise) based on the relevant parameters.
- 4.10 Dashboard shall contain following basic information
- ✓ Site Count (2G/3G/4G)
 - ✓ Capable of displaying/exporting relevant dashboard information according (Village/Town/City/Tehsil/District/Province/Nationwide)
 - ✓ Site information like shared site/guest/host/height etc.
- 4.11 The system must have capability to handle nationwide data of Coverage predictions and BTS information for all five (5x) operators simultaneously along with other data sets as stated above.
- 4.12 Interactive dashboard with variety of ways to dissect data along with an executive dashboard for high level overview.
- 4.13 The system should have Drill down capability without overcrowding main dashboard (By simply clicking on one entity the drill-down shall enable to visualize the relevant/desired information).
- 4.14 The system shall be capable to extract information in statistical and graphical manners.
- 4.15 The system should be capable to be manually updated as and when required in terms of data sources and other items/modules.
- 4.16 The system should be able to draw and extract required data/information in customized polygon(s)

5. Terms of Reference

Following are the mandatory requirements in conjunction with the above:

- a. The supplier/contractor will provide the complete source code of the application/system with at least 1-year support for enabling PTA to customization/enhancement as per requirements.
- b. The supplier will be responsible to incorporate provided dataset in the application for visualization on maps and shall be responsible for provisioning satellite imagery through any source including open source(s) during the contract period.
- c. The selected bidder will provide the basic analytical tools for analytics, insights using BI.
- d. The supplier will be responsible for provision of API interfaces to publish the required content on PTA web-site on the specific reporting formats.
- e. The supplier will be responsible for integration of provided application with existing or new applications.
- f. The supplier must provide warranty maintenance for 1 year from the date of delivery/final approval, as well as post-warranty service as per terms and conditions of the contract.
- g. The supplier will be responsible to transfer technology to PTA on termination of Contract.

6. Timeline of the Assignment

Assignment will be completed in all respect within 95 working days after signing of the contract.

Milestone	Time Period
Day of signing the contract	T-day
Planning and System Analysis	T+ 5 days
System Mapping and Design	T + 10 days
System mock-up & story board presentation to Authority for acceptance	T + 20 days
Application Development / Customization	T + 40 days

Application Testing	T+ 45 days
Data Preparing and loading/ Data Migration	T + 50 days
Post Roll Out Acceptance (PAT/PAC)	T+ 70 days
User & Developer Training	T + 75 days
Final Acceptance Testing / Certificate (FAT/FAC)	T + 95 days

7. Assignment Management Plan

Bidder must provide a detailed implementation plan of the Assignment along with the time line. Bidder shall also provide the details of the task and responsibilities assigned to its employee's not in generic terms but in specific to the Assignment. Bidders are required to give the details of the training schedule along with the names and experiences of the trainers.

8. Team Assigned to Assignment

8.1 Bidder must provide the resumes of the following staff assigned to the Assignment:

- a. Assignment Manager
- b. Lead IT Architect
- c. Development Team lead
- d. Business Analyst Lead
- e. Testing Team lead
- f. Database Analyst

8.2 The number of persons and their roles in the Assignment should be provided along with the resumes of the above mentioned.

9. Training Capabilities

9.1 Bidders shall provide details regarding the capabilities of their trainers. Bidders with the trainers having experience in providing training to at least

50 users in the Assignment of similar nature will be given high preference.
Bidder shall also provide the comprehensive training plan.

9.2 Details of training experience in the Assignments of similar nature and size

9.3 Assigned staff expertise in the following:

- a. Deployment
- b. Configuration
- c. Operation
- d. Troubleshooting
- e. Maintenance
- f. Trainers Certification

10. STANDARD IMPLEMENTATION & DEVELOPMENT

10.1 The scope of activities for the Standard Implementation and Development as specified in Annexure A and Annexure B of this document:

10.1.1 Planning and System Analysis

- (a) Contractor will document the plan of the Assignment.
- (b) System analysis of the business processes will be undertaken.
- (c) Copies of all relevant documents will be provided by the Client to the developer
- (d) Contractor will perform analysis of the deliverables mentioned at "Annexure A" of this Agreement.

10.1.2 System Mapping and Design

- (a) Contractor will map current business and this would become the basis for the design of setups in application.
- (b) Contractor will identify the interfaces among modules and map business requirements. Future business requirement document is part of the agreement.

10.1.3 System mock-up & story board presentation to Authority for acceptance

- (a) This involves enabling the system from setup documents compiled during earlier phases and control the business process being implemented in the new solution.
- (b) Contractor will enter up to 10-15 records to help the Client's End Users understand the input of records in each module specified in Annexure A.
- (c) Contractor will create responsibilities and users' profiles.
- (d) A presentation on mock-up / story board will be presented to PTA Authority for formal acceptance

10.1.4 Application Testing

Contractor will do application testing to check the Business Process flow in the modules and update the Assignment plan to reflect changes and audit the Assignment Problem Report.

10.1.5 Application Development / Customization

Contractor will carry out CRP session to present and get acceptance of developed solution offered to client as follows:

Session 1: After necessary system testing based on test data provided by Client; Contractor will present the solution to Client's key team to have a feel of the application. During this session, users' queries if any will be resolved and necessary input will be taken for making required changes within Standard module framework.

Contractor will incorporate all standard changes identified by users in the system.

Session 2: After making necessary changes in the system and collection of User Acceptance Test Cases; Contractor will conduct second session and present incorporated changes to proceed further.

10.1.6 Data Migration

Bidder will be responsible for complete migration of existing e-files and documents and any other data available in existing systems.

10.1.7 Go Live Phase

Contractor will:

- 10.1.7.1 Upload/migrate the data provided in excel format or from existing /other systems.
- 10.1.7.2 Implement a backup, recovery, and fault tolerance strategy.
- 10.1.7.3 Configure the production system once the freeze point for Software patches and integration tests is determined.
- 10.1.7.4 Prepare end user training materials.
- 10.1.7.5 Make sure Assignment Documentation reflects the system as built.
- 10.1.7.6 Achieve a consensus on the go live decision.

10.2. Contractor has attached as detailed Assignment Plan. The plan includes the Planning, System Study for Operational Analysis, development of the final Design and deployment of the modules specified in the TOR.

10.3. Post Rollout Acceptance

- 10.3.1 Following rollout in different phases mentioned in Assignment Plan, Client shall, operate to confirm the results of their operations through the implemented applications. This will determine whether:
 - a. The implementation conforms to the Specifications and details available in to be Process Model for the Solution.
- 10.3.2 Client shall with Contractor's assistance, during the above parallel run phase verify the necessary operational steps against each module as described and determined in documents specified in clause 6.3.1(a).
- 10.3.3 The Provisional Acceptance Testing (PAT) will be based on requirements & deliverables as mentioned in the ToR. Client will on completion of PAT will issue Provisional Acceptance Certificate (PAC) to the Contractor before going to Final Acceptance.

10.3.4 Notice of Acceptance

If the Software satisfies the Provisional Acceptance Test as mentioned the Client shall operate the solution to confirm the results of their Services through the implemented application. Client will promptly confirm such satisfaction of the Acceptance Tests to Contractor in writing and will issue a Final Acceptance Certificate (FAC) satisfactory acceptance.

Agreement for Hiring of Services for Development of Web based Geographic Information System (GIS) Portal, for Population Coverage, planning and Quality of Service for PTA

This Service Agreement (the “Agreement”) is made and entered into at **Islamabad** on this _____ day of _____ 2021

By and between

The Pakistan Telecommunication Authority, a statutory regulatory authority established under Pakistan Telecommunication (Re-Organization) Act, 1996, having its Head Quarter at F-5/1, Islamabad through Director ICT (hereinafter referred to as the “CLIENT” which expression shall where the context admits, include its administrators and assigns) of the One Part:

AND

The (insert name of company) a company incorporated under the laws ofhaving its registered office at-----through its authorized representative Mr..... bearing CNIC ----- (herein after referred to as the “Contractor” which expression shall where the context so allows include his/its successors-in-interest, executors, administrators, heirs and permitted assigns) of the Other Part;

(The Party of the One Part and Party of the Other Part shall hereinafter be collectively referred to as ‘Parties’ and individually as ‘Party’ as the context of this Agreement requires).

WHEREAS, the Client desires to acquire the services of the Contractor for Development of Web based GIS Portal for Population Coverage, planning and Quality of Service for PTA including three (01) year maintenance and support services, (hereinafter to be referred as “the Services”) as per terms and conditions of this Agreement and documents or Annexures attached herewith.

WHEREAS, The Contractor represents that it being engaged in the business of providing the Services, has the requisite expertise and resources to provide top quality Services to the Client in accordance with highest industry standards and satisfaction of the Client and undertakes that the Services shall be provided only through the staff who have the requisite expertise and experience in this regard.

NOW THEREFORE, in consideration of the foregoing and the mutual covenants and promises hereinafter set forth and for other good and valuable consideration the adequacy of which is hereby acknowledged by the parties and the mutual benefits to be derived there from, the representations and warranties, covenants, conditions and promises contained herein below and intending to be legally bound, the parties hereto agree as follows:

1. DEFINITIONS

1.1 In this Agreement, except otherwise provided, the following words, expressions and/or phrases shall have the meanings as defined herein below. Words importing the singular only include the plural and vice versa where the context so requires.

- a. **Agreement:** means the present Agreement signed between the Contractor and the Client with all terms and conditions of this agreement along with all Agreement Documents. This Agreement and its attached annexure(s) constitute the exhaustive description of obligations of the Parties.
- b. **Agreement Price:** means the price that has been quoted by the Contractor.
- c. **Agreement Documents:** includes but is not limited to bid documents, annexure(s), Schedule(s) form of contract, clarifications and responses to the Contractor, Technical Proposal & its clarifications, Financial Proposal & its clarifications, Request for Proposal, Terms of Reference or any instruction or communication regarding the subject matter either through hard copies/forms or in electronic form/means or any amendment hereto.
- d. **Accessibility:** In human-computer interaction, accessibility refers to the accessibility of a computer system to all people, regardless of disability type or severity of impairment. The term "accessibility" is most often used in reference to specialized hardware or software, or a combination of both, designed to enable use of a computer by a person with a disability or impairment.
- e. **Code verification:** is the process of checking that a software system meets specifications and that it fulfils its intended purpose. It may also be referred as software quality control.
- f. **Day:** means calendar day of the Gregorian calendar.
- g. **Effective date:** means the date of Signing of the Agreement.
- h. **Force Majeure:** means without limitation, Acts of God, Government restrictions, war and hostilities, invasion, act of foreign enemies, rebellion, revolution, riot, industrial disputes, commotion, natural disasters and other similar risks that are beyond the control of Parties.
- i. **Modularity:** is the degree to which a system's components may be separated and recombined. Modularity refers to the extent to which software may be divided into smaller modules. Software modularity indicates that the numbers of application modules are capable of serving a specified business domain.
- j. **Month:** means calendar month of the Gregorian calendar.
- k. **Scalability:** is the capability of a system to handle and perform under an increased or expanding workload. A system that scales well will be able to maintain or even

increase its level of performance or efficiency when tested by larger operational demands.

- l. **Security:** In computer program designed to enhance software security. The defense of computers / Application and database server against any kind of intrusion and unauthorized use of resources.
- m. **Services:** means the work, activities or described under the scope of work including deliverables attached as Annex-A to this document.
- n. **Specifications:** means the specifications for the Product as directed by Client including deliverables, together with any additional specifications or modifications to the specifications that may be agreed to in writing by the parties during the term of this Agreement.
- o. **Penetration Testing** is practice of testing a computer system, network or Web application to find vulnerabilities that an attacker could exploit. The Contractor will mention the tool used for penetration testing in submitted proposal; Contractor may also share the name in case of third party verification like VeriSign.
- p. **User interface design (UI):** is the design of user interfaces for software with the focus on maximizing usability and the user experience.
- q. **Methodology:** is splitting of software development work into distinct phases or stages containing activities with the intent of better planning and management. The methodology includes the pre-definition of specific deliverables and artefacts that are created and completed by Contractor to develop or maintain an application.
- r. **Migration of Existing data:** Migrating all the existing data available in different formats or any other existing database to the new system.
- s. **Software license:** is a legally binding agreement that specifies the terms of use for an application and defines the rights of the software producer and of the end-user. Software must be legally licensed before it may be installed.
- t. **Time of Completion:** means the time schedule within which Completion and Execution of the Services is desired by the Client.
- u. **Acceptance Testing:** means the testing or checking of the delivered solution as per scope of the Assignment. This testing shall be conducted based on the given TOR (Annex-A), and shall results in the relevant milestone as mentioned in this Agreement, if declared successful by Director ICT.
- v. **Clientss Authorized Representative:** means the Director ICT of Client, or any person formally authorized by the Client.
- w. **Laws of Pakistan:** means the Federal, Provincial and Local laws of Pakistan, and all orders, rules, regulations, statutory regulatory orders, executive orders, decrees, judicial decisions, notifications, or other similar directives made pursuant thereto,

issued by any executive, legislative, judicial, or administrative entity, as any of them may be amended from time to time by the Government of Pakistan.

- x. **Loss:** means any or all loss, damage, liability, payment obligation and all related expenses (including reasonable legal fees) and expenses for remedial action/measures.
- y. **Pakistan:** means the Islamic Republic of Pakistan.

1.2 INTERPRETATION

Except where the context requires otherwise, this Agreement will be interpreted as follows:

- a. The headings, whether of articles or other parts of the Contract, are for ease of reference only and do not affect the interpretation or construction thereof.
- b. Words in the singular include the plural and vice versa, and words importing any gender include every gender.
- c. A reference to an Article number is a reference to its sub-articles.
- d. Where the context so requires, reference to a person shall be construed as including references to an individual, firm, company, corporation, unincorporated body of persons or any State or agency thereof.
- e. Where any act, matter or thing is required by this Contract to be performed or carried out on a certain day and that day is not a Business Day then that act, matter or thing shall be carried out or performed on the following Business Day; and
- f. References to statutes or statutory provisions include references to any orders, or regulations made there under and references to any statute, provision, order or regulation include references to that statute, provision order or regulation as amended, modified, re-enacted or replaced from time to time whether before or after the date thereof.

No rule of construction applies to the disadvantages of Client for preparing this Agreement in whole or in part.

2. SCOPE OF WORK

2.1 The Contractor shall perform/provide the Services according to the Client's functional specifications and related information (the "deliverables") and maintenance, training for the process of the Modules attached hereto as Annex- A.

3. TERM

3.1 Upon signing of this Agreement the Contractor shall be obligated to commence the work within ----- days and complete the agreed assignment in all respect within ninety five (95) working days..

Milestone	Time Period
Day of signing the contract	T-day
Planning and System Analysis	T+ 5 days
System Mapping and Design	T + 10 days
System mock-up & story board presentation to Authority for acceptance	T + 20 days
Application Development / Customization	T + 40 days
Application Testing	T+ 45 days
Data Preparing and loading/ Data Migration	T + 50 days
Post Roll Out Acceptance (PAT/PAC)	T+ 70 days
User & Developer Training	T + 75 days
Final Acceptance Testing / Certificate (FAT/FAC)	T + 95 days

3.2 However, in case of any unavoidable/unforeseen delay (i.e. Force Majeure) incurred either by the Contractor or the Client, necessary timeline extension would be agreed mutually between both parties, however it has to be communicated to each other at least. During the occurrence of the Force Majeure as per clause 18 of this Agreement.

4. TRAINING

4.1 Contractor shall provide Client's employees with the initial training services necessary with respect to the use of Software as may reasonably be requested by Client from time to time at no additional cost to the Client. Contractor shall deliver a detailed user's manual for administrators on days and times the parties agree to in writing. All training that Contractor is required to provide hereunder shall be performed at such locations and at such times as are mutually agreed to by the parties hereto. Upon the expiration of the Training Period (if any) and following Client's request, Contractor will provide any support services necessary to insure Client's continued use of the Software.

5. SUPPORT AND MAINTENANCE

5.1 Contractor will provide support and maintenance services, to the Clients for the period of one (01) year on Client's request from time to time. However, in critical situation, the Contractor will provide immediate support within one hour of the reported complaint(s).

6. PAYMENT

6.1 The Client shall pay the Contractor Rs. _____ (in words). This amount shall include all of the Contractor's expenses, costs and profits including but not limited to tax(s), fees, levies, dues, obligation etc..

6.2 Schedule of Payment

The schedule of payment is specified below.

Module wise payment.

Activity	Payment Schedule
Successfully deployment and GO LIVE after issuance of Final Acceptance Certificate after satisfactory acceptance as per the Annex-A	Development & deployment cost as per serial 1 of the quoted financial bid (Annex-E) will be paid to bidder issuance of final acceptance certificate by the Client.
M&S Period Payments Expiry of Warranty Period	Amount of Maintenance and Support cost as per the quoted financial bid (serial 2 of Annex-E) will be released on expiry of the M&S period.
Release of Performance Guarantee	Performance Guarantee (i.e. 10% of the contract price) will be released after expiry of the Agreement. However, applicable penalty/payment (if any) will be adjusted at the time of final payment.

6.3 Payment Conditions

Payment shall be made on submission of invoices by the Contractor to the Client.

Each payment shall be made subject to issuance of acceptance/clearance certificate as per verifying procedure mentioned at above sub-clause 7.2 by the Client.

7.4 All payments paid to the Contractor as per above clauses shall be inclusive of all taxes, levies, duties, and any other deduction related thereto etc.

All payments to be made by the Client to the Contractor shall be subject to such deductions and withholding as are required by prevailing laws which shall be to the account of the Contractor.

7. UNDERTAKING

- 7.1 The Contractor shall submit an undertaking duly notarized within three (03) days of the effective date of this Agreement, assuring that in the event of failure to comply with TOR/Annexure-A and failure to produce quality work at any time of this Agreement period, the Client shall have the right to forfeit the contract price in addition to any other remedies available under the law to claim liquidated damages equal to contract value or specific performance of the Agreement etc.

8. ASSIGNMENT ADMINISTRATION

- 8.1 Coordinator: The client designates Assignment Manager PTA HQs as Client's Coordinator; the Coordinator will be responsible for the coordination of activities essential under this Agreement, for acceptance and approval of the deliverables by the Contractor and approving invoices for the payments.
- 8.2 The Contractor shall promptly replace any of the employee(s) working on the Assignment if deemed unsatisfactory by the Client.
- 8.3 For payment of the invoices, approval/verification of the coordinator shall be necessary and no payment shall be made in the absence of such approval/verification.

9. CONFIDENTIALITY OF CLIENT INFORMATION

- 9.1 The Contractor shall not, during the term of this Agreement and after its expiry, disclose any proprietary or confidential information related to the Services, this Agreement or the Client's business or operations without the prior written consent of the Client. The breach of this clause will enable the Client to take legal action against the Contractor as per applicable laws of the country.
- 9.2 Contractor shall ensure that no application/ system shall be affected during the audit due to usage of penetration tools.
- 9.3 Both parties shall sign Non-Disclosure Agreement (NDA) to ensure the confidentiality of information exchanged in result of this Agreement.

10. CONVEYANCE OF RIGHTS OWNERSHIP (TRAINNG MANUAL)

- 10.1 Any software, report, drawing or other material, graphic, etc. or otherwise, prepared by the Contractor for the Client under this Agreement shall belong to and remain the property of the Client. The Client shall have the right to register it under Trade Marks and Copyright Laws, if so needed, without first obtaining consent of the Contractor. Complete source code, graphical source files, DB architecture, user/administrator manuals, required add-ons, related software's, components, will be provided by the Contractor at the end of 3 years of maintenance and support service under this Agreement.
- 10.2 The Contractor will transfer, grant, convey, assign, and relinquish exclusively any and all rights, titles, and interest in both the tangible and the intangible property constituting the development of software, application or any product under this Agreement in perpetuity to the Client which may include but limited to the following.
- 10.3 Title to and possession of the updates, codes, application, or whatsoever related and documentation that constitute all copies of the software, updates, backups, application, its component parts, and all documentation relating thereto, possessed or controlled by the Contractor.
- 10.4 All right, title, and interest of products, software, creations, discoveries, improvements, ideas, codes, know-how and all other intellectual property under the Agreement

11. PROHIBITED ACTIVITIES

11.1 The Contractor agrees that, during the term of this Agreement and after its termination, the Contractor and any entity affiliated with the Contractor shall not provide any information which he may have obtained as a result of the Assignment as the same may be harmful to the Client. In case of disclosure of any sensitive information, the party involved will be liable to pay damages to the Client or the Client reserves the right to take legal action as per applicable Laws of the country, as the case may be, and the said Contractor shall be disqualified for any consultancy/agreement/contract in future.

12. ASSIGNMENT

12.1 The Contractor shall not assign this agreement or any portion of it without the Client's prior written consent. The Client's GIS application is exclusive right of the Client and shall not be used for any other Client.

13. LAW GOVERNING THE AGREEMENT AND LANGUAGE

13.1 This Agreement shall be governed by and under the laws of Pakistan and the Language of the Agreement will be English.

14. DISPUTE RESOLUTION

a. If any dispute of any kind whatsoever shall arise between the Client and the Contractor in connection with any opinion or recommendation on any matter arising out of this Agreement, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the completion of the this Agreement (whether during the progress of implementation or after its achieving completion and whether before or after the termination, abandonment or breach of the Agreement) the Parties shall seek to resolve any such dispute or difference through mutual consultation however, in case of failure, through Referral to Procurement Committee-? (PC-?) of the Client In case parties fails to resolve the dispute within fifteen days same shall be referred to the Client's Authority through ----- . In case of failure at this stage, the dispute shall be referred to Arbitration under the provision of Arbitration Act, 1940 and the rules issued there-under, at Islamabad, Pakistan.

15. PENALTY CLAUSES

a. If the Contractor fails to complete the Assignment within the given timeline as per this Agreement, Penalty of 0.5% per week (minimum four days will be considered as one week) of the total contract value will be charged up to maximum of 10% of the contract value (equivalent to 10% Performance Guarantee). Thereafter, work order will be cancelled, the agreement will be terminated and in addition to penalty the Performance Guarantee will be forfeited.

b. In case of non-satisfactory Services by the Contractor during the term of this Agreement and as determined by the Client, the Penalty at rate of 0.1 percent per

day of the contract value will be applicable on the Contractor until the performance is improved up to the satisfaction of the Client.

16. TERMINATION OF AGREEMENT:

16.1 Subject to Force Majeure, failure of the Contractor to complete the Assignment within given time, beyond the time of completion of Assignment shall be deemed a total failure on the part of the Contractor and the Client may terminate this Agreement without any liability or responsibility, provided, however, the Contractor will return any or all amounts paid by the Client up to date of termination without any deduction. Further, Performance Guarantee deposited by the Contractor shall also be forfeited in favor of Client.

16.2 Any and all remedies of the Client for defective or delayed performance or non-performance of obligations by the Contractor shall be exclusive of other remedies for such default and the exercise by the Client of any one remedy shall not constitute a waiver by the Client of any other remedy available to the Client under this Agreement.

17. FORCE MAJEURE

17.1 Neither Party shall be held responsible for any loss or damage or failure to perform all or any of its obligations hereunder resulting from a Force Majeure event.

For the purpose of this Agreement a “Force Majeure Event” shall mean any cause(s) which render(s) a Party wholly or partly unable to perform its obligations under this Agreement and which are neither reasonably within the control of such Party nor the result of the fault or negligence of such Party, and which occur despite all reasonable attempts to avoid, mitigate or remedy, and shall include acts of God, war, riots, civil insurrections, cyclones, hurricanes, floods, fires, explosions, earthquakes, lightning, storms, chemical contamination, epidemics or plagues, acts or campaigns of terrorism or sabotage, blockades or acts of Governmental Authority after the date of this Agreement.

The Party initially affected by a Force Majeure shall promptly but not later than seven (07) days following the Force Majeure event notify the other Party of the estimated extent and duration of its inability to perform or delay in performing its obligations (“**Force Majeure Notification**”). Failure to notify within the aforesaid period shall disentitle the Party suffering the Force Majeure from being excused for non-performance for the period for which the delay in notification persists.

Upon cessation of the effects of the Force Majeure the Party initially affected by a Force Majeure shall promptly notify the other of such cessation.

18. PROHIBITED ACTIVITIES

18.1 The Contractor agrees that, during the term of this Agreement and after its termination, the Contractor and any entity affiliated with the Contractor shall not provide any information which he may have obtained as a result of the Assignment as the same may be harmful to the Client. In case of disclosure of any sensitive information, the party involved will be liable to pay damages to the Client or the Client reserves the right to take legal action as per applicable Laws of the country, as the case may be, and the said Contractor shall be disqualified for any consultancy/agreement/contract in future.

19. DOCUMENTS

19.1 The following documents form an integral part of this Agreement and constitute the full understanding, rights and obligation of Parties. The contravention of any of the provision of any document shall be deemed and construed as violation of this Agreement.

- a. The Agreement
- b. Its attached annexure and appendixes,
- c. Terms of Reference

20. CONFLICT OF INTEREST

20.1 Except as otherwise expressly provided herein, neither Party nor any of its employee, or agent or its subcontractors or bidders shall have personal interest which may constitute conflict of interests, including but not limited to give or receive from any employee, or agent of the other party any gift, entertainment or other favor of significant value, or any commission, fee or rebate in lieu of this Agreement. The Contractor shall promptly notify the Client of any violation of this clause and any consideration received as a result of such violation. In the event of any violation of this clause, including any violation occurring prior to the date of this Agreement, resulting directly or indirectly in Client's issuance of orders to the Contractor, the Client may at its sole option terminate this Agreement and notwithstanding any other provision of this Agreement, pay the Contractor only that amount earned prior to the date of termination. Any designated representative for the Client may audit any and all records of the Contractor for the purpose of confirming compliance with this clause.

21. MAINTENANCE & SUPPORT SERVICES

21.1 Maintenance and support will be followed where faults are divided into following categories.

- a. **Critical:** Means any fault /bug, application problem which can prospectively result or has resulted in business halt / business at stake or the application crashed. Response time for this kind of issue would not be more than 2 hours during working days that is Monday to Friday (9 am to 6 pm). If any critical fault occurs after office hours, then response time will not be more than 2 Hour on next working day. However, time required to resolution of the issues will vary depending upon the nature of the issue.
- b. **Major:** Means any fault /bug in the application by which "Application is up and running but one or more than one modules are not operational, or not in the normal working condition"; business is running but with some major issues. Response time for this kind of issue would not be more than 3 hours during working days that is Monday to Friday (9 am to 6 pm). If any major

fault occurs after office hours, then response time will not be more than 3 Hours on next working day. However, time required to resolution of the issues will vary depending upon the nature of the issue.

- c. **Minor:** Means the application is running but not giving an optimal performance, or with some operational issues such as connection leakage issues, it lies under minor issues which don't affect the overall system functionality. Response time for this kind of issue would not be more than 24 working hours. Time required to resolution of the issues will vary depending upon the nature of the issue.

21.2 **Complaint Lodging Procedure**

The Client will file a complaint through Contractor's Complaints resolution system and the Contractor shall respond as mentioned above:

- a. First Level Support: Means the initial interface to Client, in case of any problem that can be in the form of telephonic call or in written available format such as E-mail or Contractors Ticketing System etc.
- b. Second Level Support: Means the escalation of the problem to the right concerned technical engineer who shall coordinate and analyse the nature of problem reported and shall categories fault to classification with the Client for the rectification of the fault. This support may or may not include on site visit to the PTA premises.
- c. Third Level Support: Means the on-site visit of the technical engineer at the PTA premises for the rectification of any problem or fault reported by PTA.

21.3 **Application Support**

Contractor shall be providing maintenance and support for application for the duration explicitly mentioned in the Scope of Maintenance and Support.

- 21.4 The time period for (01) year of Maintenance & Support services shall be started on the date of issuance of Final Acceptance Certificate (FAC).

21.5 **Scope of Maintenance & Support**

Scope of Maintenance and Support are limited to the following activities:

- i. Bug fixing of the Application
 - a. If any bug is reported in the developed functionalities of the application, Client must inform the Contractor about the bug through a formal communication channel.
 - b. Contractor will analyse the bug and give a reasonable time frame to fix this bug.
 - c. After the bug is fixed and tested at the Contractor site, it will be patched to the production server.
- ii. Maintenance of performance of application
 - a. The performance of the application will be maintained during the Maintenance & Support period.
 - b. Enhancement / change & elimination of functionality shall be requested in this period.

22. Taxes and Duties

22.1 Except as otherwise specifically provided in this Agreement, Contactor shall bear and pay all taxes, duties, levies and charges assessed on Contractor by any Public Sector Entity in connection with the Scope of Services to be rendered by Contractor pursuant to this Agreement.

22.2 Notwithstanding the foregoing, either Party shall be responsible for their own corporate, personal or any other taxes (including, without limitation, super tax, surcharges, etc.) or those of any other employees, servants, agents of Contractor whether on their income, assets, business, turnover, or any other basis; and

22.3 Client shall make all applicable lawful deductions and withholdings from amounts due to Contractor from time to time and furnish to Contractor a copy of the treasury challans of such deductions and withholdings. If Contractor is eligible for any tax exemptions allowable under the Laws of Pakistan, those shall be obtained directly by Contractor from the concerned authorities/agencies.

23. SOFTWARE DOCUMENTATION AND SOURCE CODES

Developer shall provide two (02) complete sets of documentation with a soft copy of documentation for software including technical, maintenance, UI files, DB structure and Source Codes. Developer shall also provide two (02) complete sets of documentation for each updated version of software. There shall be no additional charge for this documentation or the updates. Software documentation shall be comprehensive, well-structured and indexed for easy reference. Developer will provide the source code of software including all graphics, scripts and related files to the Client on DVD.

24. RELATIONSHIP OF PARTIES.

This Agreement shall not be interpreted or construed to create an employer-employee relationship, an appointment to the service of the Client or even a promise to be so appointed, an association, joint venture, partnership or special agency between the parties or to impose any partnership obligation or liability upon either party. The Contractor shall have no right, power, or authority to enter into any agreement or undertaking for, to act on behalf of, to act or be and agent or representative of, or to otherwise bind, the Client except when so expressly authorized by Client.

25. INDEMNIFICATION

25.1 The Contractor shall be liable for and shall indemnify, defend and hold harmless , members, , employees of the Client from and against all claims, damages, liabilities, losses, and expenss, whether direct or indirect, or personal injury or death to persons or damage to property arising out of (i) any negligence or intentional act or omission by the Contractor or its employees, personnel, agents or other authorized representatives in connection with the Agreement or any other agreement with the Client, (ii) arising out of or in connection with the performance of its obligations under this Agreement or any other agreement, if any, with the Client; or iii) arising out of the breach by the Contractor of any Intellectual Property Rights of third parties.

25.2 The Contractor shall further indemnify and hold harmless the Client in respect of any loss or damage caused to it on account of any representation made by the Contractor

proving incorrect, in particular on account of any requisite permission not having been obtained or for breach of any warranty or otherwise.

26. MISCELLANEOUS

26.1 Any failure and/or delay by a Party to exercise or enforce any rights conferred under this Agreement shall not be deemed to be a waiver of any such right nor operate so as to bar the exercise or enforcement thereof at any time or times thereafter.

Any waiver must be given in writing and signed by the Party waiving its rights. Any waiver of a Party’s rights, powers or remedies under the Agreement must be in writing and must be dated and signed by an authorised representative of the Party granting such waiver and must specify the right and the extent to which it is being waived.

29 The provisions of this Agreement and the rights and obligations hereunder shall be governed by and construed in accordance with the prevailing laws of Pakistan.

27. The invalidity or unenforceability of any provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

28. All addition amendments and variations to this agreement shall be binding only if in writing and signed by the Parties or their duly authorized representatives.

29. This Agreement is intended by the parties as the final expression of their Agreement and is intended also as a complete and exclusives statement of the terms of their Agreement with respect to their relationship and all related matters.

IN WITNESS WHEREOF, the parties hereto set their hands the day, month and year first above written.

FOR THE CLIENT

Signed by _____

Official seal

Witness 1

FOR THE CONTRACTOR

Signed by _____

Official seal

Witness 2

NON-DISCLOSURE AGREEMENT

THIS NON-DISCLOSURE AGREEMENT (“NDA”) is made and entered into at **Islamabad, Pakistan** on the __ day of -----2021

BY AND BETWEEN

Pakistan Telecommunication Authority, a statutory regulatory authority established under Pakistan Telecommunication (Re-Organization) Act, 1996, having its Head Quarter at F-5/1, Islamabad through Director ICT (hereinafter called as the “**CLIENT**” which expression shall where the context admits, include its administrator and assigns) of the One Part:

AND

(insert name of Client) a Client incorporated under the laws of having its registered office at-----through its authorized representative Mr..... CNIC (herein after called as “**Contractor**”) which expression shall where the context so allows include his/its successors-in-interest, executors, administrators, heirs and permitted assigns) of the **Other Part**;

(The Party of the One Part and Party of the Other Part shall hereinafter be collectively referred to as ‘Parties’ and individually as ‘Party’ as the context of this NDA requires).

WHEREAS

1. The parties have entered into Agreement dated, (the “Agreement”) whereby, the Client may have to disclose certain non public and proprietary information in result of execution and subsequent operation of the Agreement to the Contractor,
2. The Parties are desirous to set the terms and conditions hereunder and sign this NDA.

NOW, THEREFORE THIS NDA WITNESSETH, for good and valuable consideration, it is hereby agreed between the parties as under:

1. **Definition of Confidentiality.** In addition to the **Confidentiality clause** used in the Agreement, "Confidential Information" refers to any information which has commercial value and is either (i) technical information, including patent, copyright, trade secret and other proprietary information, techniques, sketches, drawings, models, inventions, know-how, processes, apparatus, equipment, algorithms, software programs, software source documents, and formulae related to the current, future and proposed products and functions of the Client, or (ii) non-technical information relating to Client's functions, responsibilities, operations including, without limitation, plans and strategies, finances, financial and accounting data and information, suppliers, stakeholders, purchasing data, strategical plans and any other information which is proprietary and confidential to Client.

2. **Nondisclosure and Non-use Obligations.** Subject to confidentiality clause under the Agreement, the Contractor will maintain in confidence and will not disclose, disseminate or use any Confidential Information belonging to Client, whether or not in written form. Contractor agrees that Contractor shall treat all Confidential Information of Client with at least the same degree of care as Contractor accords its own Confidential Information. Contractor further represents that Contractor exercises at least reasonable care to protect its own Confidential Information. the Contractor agrees that Contractor shall disclose Confidential Information only to those of its employees who need to know such information and certifies that such employees have previously signed a copy of this NDA.

3. **Survival.** This NDA shall govern all communications between the Parties. Contractor understands that its obligations under Paragraph 2 ("Nondisclosure and Non-use Obligations") shall survive for two years after the termination or expiry of the Agreement. Upon termination of any relationship between the Parties, Contractor will promptly deliver to Client, without retaining any copies, all documents and other materials furnished to Contractor by Client.

4. **Governing Law.** This NDA shall be governed in all respects in accordance with the laws of Pakistan.

5. **Injunctive Relief.** A breach of any of the promises or agreements contained herein will result in irreparable and continuing damage to Client for which there will be no adequate remedy at law, and Client shall be entitled to injunctive relief and/or a decree for specific performance and such other relief as may be proper (including monetary damages if appropriate).

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the dates written below.

For and on Behalf of Client	For and on behalf of Contractor
Signed by_____	Signed by_____
Seal-----	Seal_____
Witness_____	Witness_____

Technical Evaluation Criteria

Part A) Mandatory Requirement			
1	Service provider has to produce tax details (GST and NTN certificate, Active Tax payer list on FBR for both income tax & sales tax/ Provincial Revenue Authority for sales tax)		
2	Registrations Certificates (e.g. SECP/Registrar of firms)		
3	Valid registration with PSEB		
4	Minimum five years of relevant experience		
	Minimum 1 x similar nature assignment (duly supported by the completion certificate)		
5	Presence at Islamabad/Rawalpindi		
6	An affidavit on non-judicial paper that bidder is neither blacklisted nor involved in any illegal activity		
7	The Bidder must not have any linkage with Israel or India regarding ownership, sponsoring and financing. (Bidders shall submit an affidavit on non-judicial stamp paper with this respect)		
8	Bidder Information (Details to be provided as per Annex-G)		
9	Personnel Summary as per <u>Annex-H</u>		
Part B) Technical Capabilities of Bidder			
S#	Attributes	Max. Score	Criteria
1	Team Expertise (Details to be provided as per Annex-H) (Minimum five years of software development experience, having degree in IT/Computer Sciences and should have hands-on experience of working on similar Assignments) (2 marks/person)	10	Two (2) points will be awarded for each team member having required expertise and experience on working of similar Assignments
2	Details of successfully completed Assignments of similar nature (detail to be provided as per Annex-F) (documentary proof be provided i.e. copy of work order / agreements & completion certificates client references etc.) (3 marks/Assignment)	15	Three (3) points will be awarded for each successfully completed Assignment
Part C) Functional Evaluation through presentation by the bidder			
1	Modularity & Scalability (5,5)	10	To be awarded as per given explanation at Page 41 of the BIDDING DOCUMENTS.
2	Security, Penetration Testing & Code Verification (4,3,3)	10	
3	Concept for User Interface Design / User Experience	5	
4	Methodology	5	
5	Methodology for Migration of Existing Data	10	
6	Backend Administration Module	10	
7	Accessibility	5	
8	Licensed Technology Platform	5	

9	Transition Plan /Technology Transfer Mechanism	15	The bidder will provide detailed transition plan for enabling PTA employees after end of M&S period
Sub Total		100	
Minimum technical qualifying marks are 70%			

Note: All Supporting documents to be provided with technical proposal.

Brief explanation of Clauses of “Part (C) Functional Evaluation” of Technical Evaluation Criteria is pasted below for the quick understanding & easy reference for the Bidder.

1. **Modularity** is the degree to which a system's components may be separated and recombined. Modularity refers to the extent to which software may be divided into smaller modules. Software modularity indicates that the numbers of application modules are capable of serving a specified business domain. **Scalability** is the capability of a system to handle a growing amount of work, or its potential to be enlarged to accommodate that growth.
2. **Security** in computer program designed to enhance software security. The defence of computers against intrusion and unauthorized use of resources is security. **Penetration** essentially provides all the security tools as a software package. The bidder will mention the tool used for penetration testing in submitted proposal; bidder may also share the name in case of third party verification like VeriSign. **Code verification** is the process of checking that a software system meets specifications and that it fulfils its intended purpose.
3. **User interface design (UI)** is the design of user interfaces for software with the focus on maximizing usability and the user experience.
4. **Methodology** is splitting of software development work into distinct phases or stages containing activities with the intent of better planning and management. The methodology includes the pre-definition of specific deliverables and artefacts that are created and completed by a Assignment team to develop or maintain an application.
5. **Migration of Existing data.** Migrating all the existing data available in different formats in excel or any other existing database to the new system.
6. **Backend Administration Module** is the capability of application administrator to administer user profiles, roles, organizational structure, delegations, designation, search files/documents, change ownerships, transfer desk, dashboards, managers’ view, dynamic reporting, user activity log and all the other related activities which requires to be managed by the application administrator.
7. **Accessibility:** Refers to the accessibility of a computer system to all people, regardless of disability type or severity of impairment. The term "accessibility" is most often used in reference to specialized hardware or software, or a combination of both, designed to enable use of a computer by a person with a disability or impairment.
8. **Licensed Technology Platform** is a legally binding agreement that specifies the terms of use for an application and defines the rights of the software producer and of the end-user. Software must be legally licensed before it may be installed/configures. All technology/products to be used for development must be licensed. Open Source technology shall not be accepted.
9. **Transition Plan:** The bidder along with submission of technical proposal should submit the detail transition plan of technology transfer and M&S to PTA

- 10. Presentation.** The bidder will demonstrate the proposed solution and will highlight all the important aspects that how the solution will adequately meet the needs of PTA.

Financial Bid Format

The financial bid shall be submitted on separate letter head (s) of Bidder for the financial proposal mentioning the total amount as per following format and text content.

We, M/s _____ bid an amount of Rs. _____ (in figures), _____ (in words) for the provisioning of services for “Development of Web based GIS Portal for Population Coverage, planning and Quality of Service for PTA” published at PTA and PPRA websites and/or in the daily _____ dated _____.

The detail of Financial Bid is mentioned below.

(in PKR)

Sr. #	Items	Quoted Price without Sales Tax	Rate and Amount of Sales Tax	Quoted Price inclusive of Sales Tax
1.	DEVELOPMENT AND DEPLOYMENT COST: Proprietary Software Solution for PTA including licensed technology platform, penetration testing, source code certification, third party software audit, historical data migration, training cost, software licenses/renewals etc.			
2.	Maintenance & Support Services for one (1) Year			
	Total Bid Amount			

We undertake to abide by the rules/ regulations /decision made by the Authority regarding award of Assignment.

We also confirm to abide by the conditions/clauses given in Agreement Document, in case PTA considers us to award the Assignment.

On behalf of

Details of Successfully Completed Assignment of Similar Nature

Name of the Company

Note: Bidder shall use a separate sheet for each Assignment.

1	Name of the Assignment (Documentary Proof i.e. work order/ agreement etc to be attached)
2	Name of Client Organization & Address
3	Name & Designation of Authorized Representative of Client
4	Specify the period of maintenance and support services
5	Date of Assignment Award
6	Date of Assignment Completion
7	Brief Detail of Assignment and Technology Platform:

Note: All Supporting documents (work order/ contracts and completion certificates) to be provided with technical proposal.

COMPANY INFORMATION

- a. Name of Company: _____
- b. Date of Establishment of Business: _____
- c. Address: _____
- d. Telephone No: _____ Fax No. _____
- e. Name & Designation of Authorized Representative: _____

S#	Description	Detail
1.	Owner Name & Organizational Structure	
2.	No. of offices in Pakistan/abroad	Pakistan:
		Abroad:
3.	No. of total employees	Pakistan:
		Abroad:
4.	Audited Annual Accounts	
5.	Yearly business turnover	
6.	Other businesses of the company	
7.	Nature of registration (sole proprietor, partnership, (pvt) Ltd.)	
8.	No. of litigation cases	

PERSONNEL DETAILS

<p>Name & Designation of Employee</p>
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Note: Bidder shall use a separate sheet for each team member.

General Information	1. CNIC No	2. Date of Birth
	3. Professional Qualification / Certifications	
	4. Contact No	
	5. Total Experience (years)	
	6. Experience (years) with Present Employer	

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience of successfully completed Assignment of similar nature.

DD/MM/YY		Company/ Assignment/Role/Specify Expertise
From	To	