



Government of Pakistan
Pakistan Telecommunication Authority
Headquarters, F-5/1, Islamabad, Pakistan
<http://www.pta.gov.pk>

Request for Proposal (RFP) for Development of Integrated Billing System (IBS) for PTA

Pakistan Telecommunication Authority (PTA) is the Regulator of the Telecom Sector and was established under Pakistan Telecommunication (Re-organization) Act, 1996 to regulate the establishment, operation and maintenance of telecommunication systems, and the provision of telecom services in Pakistan. PTA invites proposal from the interested companies (consultant firms) registered with income tax and sales tax department, for the development of Integrated Billing System of PTA. Quality and Cost based selection will be used.

Request for proposals (RFP) documents, (containing TOR, evaluation criteria, deadline and place of the submission of RFP) is available for the interested bidders at the office of Project Manager (IBS), Pakistan Telecommunication Authority, Headquarters Sector F-5/1, Islamabad. RFP can also be downloaded from PTA website www.pta.gov.pk free of cost.

The Proposal, prepared in accordance with the instructions in the RFP document, must reach at the following address within 15 days of publication of advertisement. The Technical proposals will be opened the next working day at **11:00 AM**. This advertisement is also available on PPRA website at www.ppra.org.pk.

Project Manger (IBS)
Phone: 051-9216004,
Email: naveedurrehman@pta.gov.pk

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Pakistan Telecommunication Authority

Request for Proposal

For

INTEGRATED BILLING SYSTEM



Pakistan Telecommunication Authority
Headquarters, 4th Floor
Sector F-5/1
Islamabad, Pakistan

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SECTION 1. REQUEST FOR PROPOSAL

- 1.1 Pakistan Telecommunication Authority (PTA), a regulatory authority for the telecommunication sector in Pakistan was established as a body corporate under Section 3 of the Pakistan Telecommunication (Re-Organization) Act, 1996. It regulates the establishment, operation and maintenance of telecommunication systems and the provision of telecommunication services in Pakistan. PTA is responsible to collect dues from the operators providing telecom service under license issued by PTA.
- 1.2 PTA intends to award a contract for “ASSESSING, PREPARING, DEPLOYING AND MAINTAINING AN INTEGRATED BILLING SYSTEM”. PTA is seeking software development services of a professional company/firm (“Developer”) to develop an integrated billing system to provide a next-generation replacement to its current billing systems and manual billing processes that will provide core tracking and workflow functionalities and automation as well as to integrate closely with the accounting system Oracle Financial. Two stage - two envelope bidding procedure will be followed as per PPRA Rule 36 (d). Bidder should submit legible letters as per PPRA Rule 22(1) which is reproduced as follows: “The bids shall be submitted in a sealed package or packages in such manner that the contents are fully enclosed and cannot be known until duly opened”
- 1.3 Other details related to submission are:
- Technical Proposal shall contain the details as per the requirements & evaluation criteria mentioned in this RFP.
 - Financial proposal shall contain the details as per requirements mentioned in this RFP and also the evaluation criteria.
 - The Proposals should reach PTA Headquarters Islamabad as mentioned in the advertisement.
 - Technical Proposals will be opened as mentioned in the advertisement at PTA HQs, F-5/1, Islamabad in the presence of the Bidder’s representative who may like to attend. Refer section 3.2 for further details.
 - Technically qualified companies will be informed to attend the financial bid opening. The financial bids of technically disqualified bidder will be returned un-opened.
 - PTA shall follow the Public Procurement Regulatory Authority Ordinance, 2002, and all Rules and Regulations made there under. Relevant legislation in this regard is available at (www.ppra.org.pk).
- 1.4 Details for Bidders submitting response to RFP:

Name of Procuring Agency	Pakistan Telecommunication Authority
Last date and time for Bid Submission	As mentioned in the advertisement
Technical Bid Opening Date & Time	As mentioned in the advertisement
Bid Opening Place	PTA HQs, F-5/1 Islamabad, Pakistan
Contact Person	Project Manager (IBS)
Phone:	+92 (51) 9216004
Fax:	+92 (51) 9214039
Cell:	+92 333 5233 915
Email:	naveedurrehman@pta.gov.pk

- 1.5 Complete mailing address for submission:
- Project Manager (IBS),
Pakistan Telecommunication Authority PTA HQs,
F-5/1, Islamabad Pakistan
Email: naveedurrehman@pta.gov.pk

SECTION2. INFORMATION FOR BIDDERS

2.1 EARNEST MONEY

- a. Earnest money in the shape of pay order/ bank draft in favor of Pakistan Telecommunication Authority, Islamabad amounting to 2% of the total bid amount should only be attached with Financial Proposal (Cheques will not be accepted).
- b. Financial bid not accompanied with earnest money with pay order/bank draft will be rejected.
- c. Reference sub section "f" of section 3.1 "Preparation of Proposal", Certificate regarding attachment of earnest money with financial proposal, shall be submitted with Technical proposal. Amount of earnest money shall NOT be mentioned in the certificate.
- d. Earnest money of successful Bidder will be retained for the period of project awarded, whereas earnest money of unsuccessful Bidders will be returned within 60 days after financial bid opening.
- e. In case of revision of Technical proposal, revised earnest money in sealed envelope shall be submitted as per supplementary financial proposal.

2.2 PRICES

- a. The Financial Proposal shall give the total lump-sum cost of the project in PKR in both figures and words as per the format attached at Annex-IV and inclusive of all applicable taxes / charges applicable for the time being in force.
- b. The proposal must remain valid for a period of 120 days from the date of opening of Initial Technical Proposal or Revised Technical Proposal if applicable.

2.3 DISQUALIFICATIONS

Offers are liable to be rejected if there is any deviation from the instructions as laid down in the RFP. For details, refer section 3.1 "Eligibility criteria"

2.4 INTEGRAL PARTS

- a. The successful Bidder shall be asked to execute the Service Level Agreement/ Contract as per (Annex-I)
- b. The successful Bidder shall be asked to execute the Non-Disclosure Agreement as per (Annex-II)
- c. All Bidders have to produce all relevant document desired in the Technical Evaluation Criteria (Annex-III)
- d. All Bidders have to submit the financial bid as per (Annex-IV)
- e. Detail of projects of Billing System (Annex-V)
- f. Company Information (Annex-VI)
- g. Personnel Summary (Annex-VII)

2.5 AFFIDAVIT

Affidavit on judicial paper to the effect that the company/ firm has not been black listed by any government/ semi government/ autonomous body shall be attached with the Technical proposal.

2.6 PTA'S RIGHT

PTA reserves the right to accept or reject any proposal without assigning any reason or as per PPRA rules.

SECTION 3. PREPARATION OF PROPOSAL

The Bidders are requested to submit their proposals in English. Participating Bidder shall submit documentary proof with Technical Proposal in support of meeting eligibility criteria mentioned at 3.1. In the first stage of evaluation, a Proposal shall be rejected if it is found deficient as per eligibility criteria.

3.1 ELIGIBILITY CRITERIA

- a. Registration with FBR (GST and Income Tax) & provision of GST and NTN certificates
- b. Consultant company/firm is in Active Tax Payers List of FBR.
- c. Minimum Five (5) years of relevant experience
- d. Registrations Certificates (e.g. SECP/ Registrar of firms)
- e. PSEB Certificate/Registration
- f. Provision of information as per Annexure III, IV, V, VI and VII.
- g. An undertaking on judicial paper that consultant is neither blacklisted nor involved in any illegal activity
- h. Certificate, regarding attachment of earnest money with financial proposal, shall be submitted with Technical proposal. Amount of earnest money shall NOT be mentioned in the certificate.

3.2 TECHNICAL PROPOSAL

- a. In preparing the Technical Proposal, Bidders are expected to examine the documents constituting this RFP in detail. Material deficiencies in providing the information requested may result in rejection of a proposal.
- b. Initially, only the envelope marked “TECHNICAL PROPOSAL” shall be opened. The envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of the procuring agency without being opened.
- c. The technical proposal shall be discussed with the bidders with reference to the procuring agency’s technical requirements;
- d. Those bidders willing to meet the requirements of the procuring agency shall be allowed to revise their technical proposals and supplementary financial proposal following discussions;
- e. Bidders not willing to conform their technical proposal to the revised requirements of the procuring agency shall be allowed to withdraw their respective bids without forfeiture of their earnest money;
- f. After agreement between the procuring agency and the bidders on the technical requirements, bidders who are willing to conform to the revised technical specifications and whose bids have not already been rejected shall submit a revised technical proposal and supplementary financial proposal, according to the technical requirement.
- g. The revised technical proposal along with the original financial proposal and supplementary financial proposal shall be opened at a date, time and venue announced in advance by the procuring agency.
- h. The Technical proposal shall not include any financial information other than a certificate that earnest money pay order is attached.
- i. The Technical Proposal shall provide the following information:
 - ii. A brief description of the organization and an outline of recent experience on similar projects as per Annexure V and VI.
 - ii. A description of the methodology & work plan for performing the project.
 - iii. The list of the team members to carry out this project showing the activities to be performed by each professional team member in this project, while keeping in mind the timelines given at Terms of Reference and detail of employees as per Annexure VII.

3.3 FINANCIAL PROPOSAL

- a. The Financial Proposal shall give the total lump-sum cost of the project in PKR in both figures and words as per the format attached at Annex-IV and inclusive of all applicable taxes / charges applicable for the time being in force.
- b. The proposal must remain valid for a period of 120 days from the date of opening of Initial Technical Proposal or Revised Technical Proposal if applicable.

SECTION 4: PROPOSAL EVALUATION

Any effort by the Bidder to influence PTA during the proposal submission, proposal evaluation, and proposal comparison or contract award decision may result in the rejection of the related proposal without any appeal or hearing.

4.1 EVALUATION CRITERIA

- a. Technical proposal will have 80% weight age whereas financial proposals will have 20% weight age. Contract will be awarded to the Bidder after technical and financial proposals evaluation. The Bidder obtaining highest marks combining both Technical and financial proposals will be awarded the contract.

- b. Evaluation criteria of Technical and Financial proposals are as under:

Technical score

80% of the marks obtained as per Annex-III

Financial score

20% of the marks obtained as follows:

$20 \times \text{Amount quoted by the lowest Bidder} / \text{amount quoted by Bidder whose financial score is to be calculated}$

- c. If two or more Bidders obtain equal marks in aggregate in Technical & Financial proposals, then the contract will be awarded to the one having lowest financial bid.

4.2 EVALUATION OF TECHNICAL PROPOSALS

The technical evaluation committee, appointed by PTA, evaluates the proposals on the basis of technical evaluation criteria as specified at Annex-III. Each responsive proposal will be given a technical score. A proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical qualifying marks (70%). Ref Section 3.2 for further details.

4.3 EVALUATION OF FINANCIAL PROPOSALS

- a. After the evaluation of quality (Technical Proposal Evaluation) is completed, PTA shall notify those Bidders whose proposals did not meet the minimum qualifying marks (70%) or were considered non responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will be returned unopened.
- b. PTA shall simultaneously notify the Bidders that have secured the minimum qualifying marks, indicating the date and time set for opening the Financial Proposals. The opening date shall be informed in advance. The notification may be sent by courier letter and electronic mail. The financial proposals shall be opened in the presence of the Bidders' representatives who choose to attend. The name of the Bidder, the quality 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 Proposal is complete and correct. Ref Section 3.2 and 3.3 for further details.

SECTION 5. TERMS OF REFERENCE

Hiring of Consultant Company/Firm for Development of Integrated Billing System

a) Introduction

Pakistan Telecommunication Authority (PTA), a regulatory authority for the telecommunication sector in Pakistan was established as a body corporate under Section 3 of the Pakistan Telecommunication (Re-Organization) Act, 1996. It regulates the establishment, operation and maintenance of telecommunication systems and the provision of telecommunication services in Pakistan. PTA is responsible to collect fees from the operators providing telecom service under license issued by PTA.

b) Objective

PTA is seeking software development services of a professional company/firm (“Developer/Consultant Firm”) to develop an integrated billing system to provide a next-generation replacement to its current billing systems and manual billing processes that will provide core tracking and workflow functionalities and automation as well as to integrate closely with the PTA's Accounting System i.e. Oracle Financial and for workflow automation of each of division mentioned in this RFP.

c) Background

PTA's Functions includes:

- i. Licensing Division of PTA is responsible for issuance of various kind of licenses including, Cellular Mobile Operators (CMOs), Long Distance International Operators (LDIs), Wireless Local Loop (WLL) Fixed Local Loop (FLL), Telecom Infrastructure Provider, Value Added Services, Telecom Tower Provider (TTP) etc. Some of these licensees, where allocation of huge spectrum is involved, are auctioned whereas, the rest are issued in routine.
- ii. Finance Division of PTA is responsible for issuance of demand notes for different types of fees/contributions as per the license terms and conditions including Initial License Fee (ILF), Initial Spectrum Fee (ISF), Annual License Fee (ALF), Universal Service Fund Contribution (USF), Research & Development (R & D) Fund contribution, Late Payment Additional Fee (LPAF), Penalties, Annual Spectrum Administrative Fee (ASAF), Annual Radio Frequency Spectrum Fee (ARFSF) etc.
- iii. RBS Department of PTA issues wireless licenses of various categories ranging from (1) Private Land Mobile Networks that include Private Radio Network Services, Trunking Services, Paging Services, (2) Aeronautical Services that include Aircraft Mobile Station licensing and Ground to air communication networks licensing, (3) Maritime Services, that include coastal station networks licensing and SOLAS Ship licensing, (4) Fixed Wireless Services that include Point to Point Wireless and Telemetry networks and (5) Inmarsat, permissions etc. RBS directorate awards the license after the spot allocation by FAB. It then issues the invoices/demand notes against the Spectrum charges, on yearly basis in order to validate the use of assigned frequency for the following years. On the end of term, the licensees are eligible to renew wireless licenses, if they require. The office processes the cancellation of licenses on breach of Terms and Conditions or due to Non-payment of annual dues etc.
- iv. Services Division of PTA is responsible for allocating numbers to PTA's licensees as per their license category (e.g. Geographic number are issued to FLL and WLL Operators and Cellular operators, and non Geographic numbers like SPC, NDC etc are allocated to licensees only and some non geographic numbers like UAN/Toll free numbers are allocated to non-

licensees as well. Services Division also issues demand notes on allocation and renewal of mentioned numbers on yearly basis.

- v. Commercial Affairs division of PTA is responsible for ensuring fair competition in the telecom market. Commercial Affairs issue monthly demand notes to Long Distance & International (LDI) operators and recover Access Promotion Contribution for Universal Service Fund (APC for USF) from time to time.
- vi. All the above-referred divisions including Licensing, Finance, Services and Commercial Affairs issue demand notes and recover payments from operators, government organizations and other general consumers.

d) Scope of Work

In the light of objectives defined above, a comprehensive database management solution of international quality is required to be developed. The Developer will provide complete turn-key solution in English Language for the PTA.

Vendor will be expected to provide comprehensive integrated billing system to address the work specifications outlined in this RFP. The requirements listed below may not be all inclusive of the work needed to accomplish the respective tasks. It is expected that the vendors will have sufficient qualifications and experience to provide complete services without having each individual task identified herein. The work involved under the terms of the contract with the successful Bidder shall be full and complete execution of an integrated billing system including the items as mentioned in deliverables at (f), and as described further throughout the RFP.

e) Requirements Outline

i. Admin Side

- a. Admin(s) of the database will be PTA Officer(s) having full access to the system through secure logins, authorized to perform the following tasks: Data input, Data Modification and Data Reporting.
- b. Admin(s) will also be given full data reporting authorization for all telecom operators' liabilities including segregation of sub-judice and non-subjudice amount and their status in tabular, graphs, charts etc form.
- c. Log of the Admin(s) who adds or modifies data will be maintained
- d. Admin(s) of each division will define the formulae for calculation of Principal/LPAF/penalties as per regulations in place etc.
- e. Administrator of concerned division would be able to generate Demand Note/ reminder manually.

ii. User Side

- a. Users of the system are employees of divisions, who are not admin. These users will be given with access for entry of the record having provision of attaching a Word/Excel/PDF document; however, any edition will be done by authorized officers of division.
- b. User will be able to issue demand notes as well and book payment in the system when received.
- c. Flexible reporting in the form of Tables, graphs and charts to be made available which will also be downloadable in Word/Excel/PDF.

iii. Consumer Side

- a. Consumers would be able to file their application for new resource and track their application.

- b. System should provide user-friendly interface for working and saving data, however data once submitted to PTA may not be edited unless desired by Administrator.
- c. Data consistency and error checks shall be put into place to monitor the data entered. Data other than the defined template will not be accepted. Any discrepancy, unusual trend shall be reported to Admin(s) immediately.

iv. Data migration

- a. System should provide interfaces to migrate the legacy data which is present in excel format or any other indigenous system.
- b. System should also provide interfaces for administrator for correction of migrated data.

v. Features

- a. System should be integrated with other system especially Oracle financial System and internal communication module for transferring the data in desired format.
- b. System should be implemented on SSL and only authenticated users will be allowed to access the system as per their defined rights and privileges.

vi. License

Licenses required (e.g. Application/Database Servers) for proposed solution will be communicated by the Bidder according to design/ architecture of Solution Product. Licenses should be decided / communicated after having consultation with technical team of PTA. Proposed Licenses should be quoted in the financial bid as an optional cost.

f) Deliverables

The Vendor is required to submit following deliverables:

- i. Detailed specification document, database design document, project plan and complete solution with the source files.
- ii. Database Solution: Software along with source code of the database solution complete in all aspects as required by PTA. The requirements are as follows:
 - a. A module for Licensing Division containing information of License including but not limited to Name of licensee/ applicant/ Ex-licensee, License/ Application type, license number, license issuance date, licensed region, service type, licensee/ applicant details: postal address, phone numbers, email, licensee/ applicant contact person details: name, designation, CNIC, postal address, phone numbers, email, directors details: names, designations, CNICs, postal addresses, phone numbers, emails, license expiry date, license commencement due date, license commencement status, license status, If license status is terminated then termination date to be inserted and details of scarce resources assigned.
 - b. A module for Finance Division containing information regarding billing, receipts, receivables e.t.c.
 - c. A module for RBS containing information regarding licensees record of RBS Fixed and Mobile licensees w.r.t (issuance, expiry, Board of directors details, assigned frequency spot, Bandwidth, timeliness, FAB BTS/Microwave approvals/rejection e.t.c)
 - d. A module for CA Division containing information regarding billing, receipts, receivables, Traffic e.t.c
 - e. A module for Numbering containing information regarding licensee's record of geographic and non geographic numbering resource and billing of such allocated numbering resource (Number issuance, renewal, cancellation, category e.t.c)
- iii. To migrate the historic data, currently available in MS Excel format or from existing database.

- iv. The software solution must be highly secure and resilient to any hack attempts and virus attacks.
- v. Highly user friendly search mechanism will be developed for easy access to information.
- vi. All the modules will be providing multiple Access controls for different users and Divisions of the Authority.
- vii. Any other module, requirement, functionalities and enhancements can be added at any stage during development phase before final acceptance of the project.
- viii. User may be given an option for auto transmission of Demand notes to concerned licensee/party through email and intimation regarding Demand note through SMS to the Licensee's or party's provided mobile number.
- ix. Auto uploading of Demand note on to the portal file (electronic document management system)
- x. Web based License Application Portal: A comprehensive portal to apply online for licensing and numbering recourses.
- xi. Database Management System: The database management system will allow the database administrator(s) to modify and maintain the database contents, structure, user profiles and security controls from an Admin Panel.
- xii. Training of PTA Officers/officials and User Manual for Administrators will be provided.
- xiii. Vendor will ensure complete transfer of technology to PTA.
- xiv. Vendor will provide two (2) years maintenance and support services and in critical situation, the Developer will provide immediate support within one hour of the reported complaint(s).
- xv. Detail of security standards and user access policies to be provided.
- xvi. Detail of the Technology Platform to be used and related certificates and licenses etc.

xvii. Reporting Requirements:

a) Licensing Division

i. License detail including but not limited to the following report generation formats:

- a. List of All Licensees with All Detail
- b. Type Wise
- c. Region Wise
- d. Service Wise
- e. Issuance Date Wise
- f. List of All Valid Licenses
- g. List of All Expired Licenses
- h. List of All Terminated Licenses
- i. List of All Commenced Licenses
- j. List of All Non Commenced Licenses
- k. List of All Directors of All/ Selective Licensees

Note: These all reporting shall have the option of selective Dates, e.g. List of All Expired Licenses from 01-10-2000 to 31-12-2000.

- ii. Track of changes in particulars of licensees
- iii. License Expiry and Commencement Expiry Alert
- iv. Generation of letters to Applicant/ Licensees on a prescribed format
- v. Generation of License on a prescribed License Format
- vi. List of Licensees for Pak & AJK/GB

b) Finance Department

- i. License wise and head wise outstanding dues information regarding principal and LPAF, subjudice and nonsubjudice, aging report (principal & LPAF), segregation of Pak, MoIT & AJKGB dues, RP's filed, status column.

- ii. License wise, year wise and party wise report of Annual Gross Revenue and details of deductions allowed in the demand notes.
- iii. Automated and customized issuance of Reminders/ Demand note to licensees for submission of Annual Audited Accounts and payment (Principal + LPAF wherever applicable) of ALF, USF and R & D Contributions.
- iv. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment of installments of ILF and ISF, ARFSF and ASAF.

c) **RBS Department**

- i. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment RBS dues
- ii. Frequency details, bandwidth, timelines, BTS/MW links charges
- iii. Payment acknowledgement
- iv. Cancellation Letter
- v. Total Nos of licensee organization (year wise/ category wise)
- vi. List of licensee in the order of frequencies
- vii. Renewal status
- viii. Specified time duration reports (issuance, renewal & cancellation)
- ix. Spectrum/ withdrawal of spectrum
- x. Report of Board of Directors/ search option from name/CNIC of the director
- xi. Customized reports to be generated through interactive GUI query form and all the configurable attributes to be included in the query form

d) **CA Department**

- i. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment APC for USF Contribution with serial number
- ii. Daily Dues position (Principal Dues paid, LPAF paid e.t.c)
- iii. Record of Total Traffic Minutes Report including segregation of Fixed-line and Mobile.
- iv. APC Rate History Report
- v. Subjudice and Non subjudice dues

e) **Numbering Department**

- i. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment Numbering dues with serial number
- ii. Geographic/non geographic number details
- iii. Payment acknowledgement
- iv. Cancellation Letter
- v. Total Nos of licensee organization (year wise/ category wise)
- vi. List of licensee/ number holders
- vii. Renewal status
- viii. Specified time duration reports (issuance, renewal & cancellation)
- ix. Report of Board of Directors/ search option from name/CNIC of the director/ owner of number
- x. Customized reports to be generated through interactive GUI query form and all the configurable attributes to be included in the query form.

f) **Common Requirements:**

- i. Ability to trace an amount through cheque number
- ii. Ability to trace a cheque number through amount.
- iii. Each party should be given unique identification number
- iv. Mapping of the amount received against the demand notes issued.
- v. Automatic calculation of LPAF as per procedure/regulations.

- vi. Generation of alerts for cases to be initiated for SCN, hearing, determination and license termination.
- vii. Consolidated and separate license wise and party wise demand notes issued (after incorporating adjustments for under/over billing and showing year wise Demand note)
- viii. Consolidated and separate license wise and party wise bank receipt report for any given period after incorporating adjustments for excess payments and dishonored cheques and which shows recovery against current year dues and prior year dues.
- ix. Ability to create and update notes regarding status of dues.
- x. Ability to generate aging report showing principal and LPAF.
- xi. License wise chronological Demand note and payment history of parties and receivable status.
- xii. To generate dynamic, flexible and user-defined reports in the form of lists, graphs, tables, charts, calculations etc.
- xiii. Generate alerts to issue reminders for deficiencies and any pending dues/fees of the licenses.
- xiv. To analyze the stored data for unusual trends, accuracy, consistency and to point out the same, if any.
- xv. To develop a user friendly interface for data entry, analysis and retrieval of reports from the software solution.
- xvi. The billing system should keep year /month wise record of the rates used for the purpose of calculating dues.
- xvii. Defaulters List.

g) Standard Implementation & Development of Customized Modules

1. The scope of activities for the Standard Implementation and Development of Customized Modules, as specified in Annexure A of the agreement is:

1.1 Planning and System Analysis

- (a) Consultant Firm will document (Annexure B) the plan of the project.
- (b) System analysis of the business processes will be undertaken.
- (c) Copies of all relevant documents will be provided by PTA to the developer
- (d) Consultant Firm will perform analysis of the deliverables mentioned at "f" above. Moreover, Consultant Firm will perform integration points among Customized development modules.

1.2 System Mapping and Design

- (a) Consultant Firm team will map current business processes into the IBS in FUTURE PROCESS MODEL (See Annexure B) and this would become the basis for the design of setups in IBS modules.
- (b) Consultant Firm will identify the interfaces among modules and map business requirements to IBS applications function points. Future business requirement document is part of the agreement as Annexure B.

1.3 System Setup

- (a) This involves enabling the system from setup documents compiled during earlier phases and control the business process being implemented in the IBS modules.
- (b) Consultant Firm team will enter up to 10-15 records to help the PTA End Users understand the input of records in each module specified in Annexure A.
- (c) Consultant Firm will create responsibilities and users' profiles.

1.4 Application Testing

Consultant Firm will do application testing to check the Business Process flow in the modules and update the project plan to reflect changes and audit the Project Problem Report.

1.5 Conference Room Pilots (CRP)

Consultant Firm will carry out CRP session to present and get acceptance of future IBS offered to client as follows:

Session 1: After necessary system testing based on test data provided by PTA; Consultant Firm will present the solution to PTA 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.

Consultant 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; Consultant Firm will conduct second and final acceptance testing session to freeze the solution and proceed with Production System design.

1.6 Seed Data preparation and loading

PTA will provide the basic data for different Modules in required format provided by Consultant Firm (System Consulting Team). Consultant Firm will upload the data.

1.7 Go Live Phase

Consultant Firm will:

- 1.7.1 Upload/migrate the data.
- 1.7.2 Implement a backup, recovery, and fault tolerance strategy.
- 1.7.3 Configure the production system once the freeze point for Software patches and integration tests is determined.
- 1.7.4 Prepare end user training materials.
- 1.7.5 Make sure project Documentation reflects the system as built.
- 1.7.6 Achieve a consensus on the go live decision.

2. Team Composition:

Consultant Firm's team will be finalized in consultation with PTA and will be make part of the agreement here.

In addition to Consultant Firm's Team the following team members are to be provided by PTA for the project:

- | | | |
|-----|------------------------|-------------------------------|
| (a) | Project Manager | 01 |
| (b) | Team Leader | 01 (for each functional area) |
| (c) | Application Users | 02 per module |
| (d) | Database Administrator | 01 |

3. Consultant has attached as detailed Project Plan as Annexure E. The plan includes the Planning, System Study for Operational Analysis, development of the final Design and Transition of the modules specified in Annexure A.

4. Post Roll Out Acceptance

4.1 Following roll out of Customized modules in different phases mentioned in Project Plan (Annexure E), PTA shall, operate the IBS for a period of one month during which a monthly report will be produced to confirm the results of their operations through the implemented applications. This will determine whether:

- a. The implementation conforms to the Specifications of **Annexure A** and details available in To Be Process Model for ERP Solution (Annexure B) and Document (Annexure C) for Customized applications.

4.2 PTA shall with Consultant Firm'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 4.1(a).

4.3 The Acceptance Testing will be based on One Monthly report. PTA will ensure completion of this activity.

4.4 Notice of Acceptance

If the Software satisfies the Acceptance Tests PTA will promptly confirm such satisfaction of the Acceptance Tests to Consultant Firm in writing and will issue a Final Acceptance Certificate (FAC).

5. System Ownership:

After production / cutover the System ownership will be transferred to PTA. Source code of customized modules developed by Consultant Firm will be handed over and will become property of PTA after successful completion. In case of termination of contract or incase of Consultant Firm goes out of business during the time of implementation or support period the source code and database design will be handed over to PTA and will become property of PTA.

h) Timeline of the Project (6 months/ 24 weeks)

Milestone	Time Period
Day of signing the contract	T-day
Planning and System Analysis	T1 =T+3 weeks
System Mapping and Design	T2= T1 + 2 weeks
System Setup	T3= T2 + 2 weeks
Application Testing	T4= T3+ 2 week
Conference Room Pilots (CRP)	T5= T4+2 weeks
Data Preparing and loading	T6= T5 + 2 week
Go Live Phase	T7= T6+ 4weeks
Post Roll Out Acceptance	T8= T7+6 weeks
Notice of Acceptance	T9=T8+1 week

i) Terms and Conditions of Payment

Activity	Payment Schedule
First: Upon signing of the Agreement	5% of the contract price to be paid to the vendor upon signing of the Agreement
Second: After Go Live Phase by Consultant	25% of the contract price to be paid to the vendor after GO Live Phase by the Consultant and seen by PTA that application is accessible
Third: After issuance of Final Acceptance Certificate (FAC) by PTA	50% contract price to be paid on Final Deployment and Acceptance of Final Version. The payment will be released subject to satisfactory acceptance by the PTA
Forth: One year support service after FAC	10% of the contract price
Fifth and Final: End of Support Services	10% on Completion of support services

**AGREEMENT FOR DEVELOPMENT AND IMPLEMENTATION OF INTEGRATED
BILLING SYSTEM**

Between

&

Pakistan Telecommunication Authority

Attachments:

Annexure A: Scope of Work (Ref RFP)

Annexure B: Future Process Model (To be documented by Developer)

Annexure C: Trainings

Annexure D: Payment Plan

Annexure E: Project Plan (To be documented by the Developer)

AGREEMENT FOR DEVELOPMENT AND IMPLEMENTATION OF INTEGRATED BILLING SYSTEM

This Agreement is made and entered into at **Islamabad** on this ____ day of ____

By and between

Pakistan Telecommunication Authority having its Headquarters at F/5, Islamabad (hereinafter referred to as the “Client”) of the One Part

AND

M/s _____ having its principal business office at _____ hereinafter referred to as "Consultant" which shall, where the context so permits mean and include its successors-in-interest 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 may require).

WHEREAS, the Client desires to acquire the services of Consultant for Development of Integrated Billing System (“the Services”) including two years maintenance and support services, as per terms and conditions of this Contract and Contract Documents attached herewith.

WHEREAS, The Consultant 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:

ARTICLE 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.

“**Agreement**” means the present Agreement signed between the Consultant and the Client with all terms and conditions of the agreement along with all Contract Documents. This Contract and its attached annexure(s) constitute the exhaustive description of obligations of the Parties.

“**Agreement price**” means the price that has been quoted by the Consultant.

“**Agreement documents**” includes but is not limited to bid documents, annexure(s), Schedule(s) form of contract, clarifications and responses to the consultant, Technical Proposal & its clarifications, Financial Proposal & its clarifications, Request for Proposal, Terms of Reference, Performance Bond or any instruction or communication regarding the subject matter either through hard copies/forms or in electronic form/means or any amendment hereto.

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.

Code verification is the process of checking that a software system meets specifications and that it fulfills its intended purpose. It may also be referred as software quality control.

Content management system (CMS) is a computer application that supports the creation and modification of digital content. It is often used to support multiple users working in a collaborative environment.

“Day” means calendar day of the Gregorian calendar.

“Effective date” means the date of Signing of the Contract.

“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.

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.

“Month” means calendar month of the Gregorian calendar.

“Performance bond” means an irrevocable bank guarantee issued by a scheduled bank in favor of Client and acceptable to Client.

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.

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.

“Services” means the work, activities or described under the scope of work including deliverables attached as Annex-A to this Agreement.

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.

Penetration Testing is practice of testing a computer system, network or Web application to find vulnerabilities that an attacker could exploit. . The vendor will mention the tool used for penetration testing in submitted proposal; vendor may also share the name in case of third party verification like VeriSign.

User interface design (UI) is the design of user interfaces for software with the focus on maximizing usability and the user experience.

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 artifacts that are created and completed by a project team to develop or maintain an application.

Integration with existing system. Its need to assess our existing system and data to determine the most effective method(s) to either integrate them with any available software like Internal Communication module or Oracle Financial or convert them to formats that can be imported into Oracle Financial databases.

Migration of Existing data. Migrating all the existing data available in different formats in excel or any other existing database to the new system.

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.

Time of Completion means the time schedule within which Completion and Execution of the Services is desired by Client.

1.2 Interpretation

Except where the context requires otherwise, this Contract 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.

ARTICLE 2- SCOPE OF WORK

2.1 Consultant shall design, develop, and implement integrated billing system software applications (the "Software") according to the Client functional specifications and related information (the "deliverables") and maintenance, training for the process of the Modules attached hereto as Annex-A.

ARTICLE 3- TERM

3.1 The Agreement shall be completed within Six (06) months as detailed below:

Milestone	Time Period
Day of signing the contract	T-day
Planning and System Analysis	T1 =T+3 weeks
System Mapping and Design	T2= T1 + 2 weeks
System Setup	T3= T2 + 2 weeks
Application Testing	T4= T3+ 2 week
Conference Room Pilots (CRP)	T5= T4+2 weeks
Data Preparing and loading	T6= T5 + 2 week
Go Live Phase	T7= T6+ 4weeks
Post Roll Out Acceptance	T8= T7+6 weeks
Notice of Acceptance	T9=T8+1 week

3.2 However, in case of any unavoidable/unforeseen delay (i.e. Force Majeure) incurred either by the Bidder or the client, necessary timeline extension would be agreed mutually between both parties, however it has to be communicated to each other at least 15 days of expiry of the contract.

ARTICLE 4- TRAINING

4.1 Consultant 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. Consultant shall deliver a detailed user's manual for administrators on days and times the parties agree to in writing. All training that Consultant 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, Consultant will provide any support services necessary to insure Client's continued use of the Software.

ARTICLE 5- SUPPORT AND MAINTENANCE

5.1 Consultant will provide support and maintenance services, to the Clients for the period of two (02) years on Client's request from time to time. However, in critical situation, the Consultant will provide immediate support within one hour of the reported complaint(s).

ARTICLE 6- STANDARD IMPLEMENTATION & DEVELOPMENT OF CUSTOMIZED MODULES

6.1 The scope of activities for the Standard Implementation and Development of Customized Modules, as specified in Annexure A and Annexure B for IBS and Annexure C for Customized Solution, is

6.1.1 Planning and System Analysis

- (a) Consultant Firm will document (Annexure B) the plan of the project.
- (b) System analysis of the business processes will be undertaken.
- (c) Copies of all relevant documents will be provided by PTA to the developer
- (d) Consultant Firm will perform analysis of the deliverables mentioned at "I" above. Moreover, Consultant Firm will perform integration points among Customized development modules.

6.1.2 System Mapping and Design

- (a) Consultant Firm team will map current business processes into the IBS in FUTURE PROCESS MODEL (See Annexure B) and this would become the basis for the design of setups in IBS modules.
- (b) Consultant Firm will identify the interfaces among modules and map business requirements to IBS applications function points. Future business requirement document is part of the agreement as Annexure B.

6.1.3 System Setup

- (a) This involves enabling the system from setup documents compiled during earlier phases and control the business process being implemented in the IBS modules.
- (b) Consultant Firm team will enter up to 10-15 records to help the PTA End Users understand the input of records in each module specified in Annexure A.
- (c) Consultant Firm will create responsibilities and users' profiles.

6.1.4 Application Testing

Consultant Firm will do application testing to check the Business Process flow in the modules and update the project plan to reflect changes and audit the Project Problem Report.

6.1.5 Conference Room Pilots (CRP)

Consultant Firm will carry out CRP session to present and get acceptance of future IBS offered to client as follows:

Session 1: After necessary system testing based on test data provided by PTA; Consultant Firm will present the solution to PTA 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.

Consultant 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; Consultant Firm will conduct second and final acceptance testing session to freeze the solution and proceed with Production System design.

6.1.6 Seed Data preparation and loading

PTA will provide the basic data for different Modules in required format provided by Consultant Firm (System Consulting Team). Consultant Firm will upload the data.

6.1.7 Go Live Phase

Consultant Firm will:

- 6.1.7.1 Upload/migrate the data.
- 6.1.7.2 Implement a backup, recovery, and fault tolerance strategy.
- 6.1.7.3 Configure the production system once the freeze point for Software patches and integration tests is determined.
- 6.1.7.4 Prepare end user training materials.
- 6.1.7.5 Make sure project Documentation reflects the system as built.
- 6.1.7.6 Achieve a consensus on the go live decision.

6.2. Team Composition:

Consultant Firm's team will be finalized in consultation with PTA and will be make part of the agreement here.

In addition to Consultant Firm's Team the following team members are to be provided by PTA for the project:

- | | | |
|----|------------------------|-------------------------------|
| a. | Project Manager | 01 |
| b. | Team Leader | 01 (for each functional area) |
| c. | Application Users | 02 per module |
| d. | Database Administrator | 01 |

6.3. Consultant has attached as detailed Project Plan as Annexure E. The plan includes the Planning, System Study for Operational Analysis, development of the final Design and Transition of the modules specified in Annexure A.

6.4. Post Roll Out Acceptance

- 6.4.1 Following roll out of Customized modules in different phases mentioned in Project Plan (Annexure E), PTA shall, operate the IBS for a period of one month during which a monthly report will be produced to confirm the results of their operations through the implemented applications. This will determine whether:
 - a. The implementation conforms to the Specifications of **Annexure A** and details available in To Be Process Model for ERP Solution (Annexure B) and Document (Annexure C) for Customized applications.

6.4.2 PTA shall with Consultant Firm'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 6.4.1(a).

6.4.3 The Acceptance Testing will be based on One Monthly report. PTA will ensure completion of this activity.

6.4.4 Notice of Acceptance

If the Software satisfies the Acceptance Tests PTA will promptly confirm such satisfaction of the Acceptance Tests to Consultant Firm in writing and will issue a Final Acceptance Certificate (FAC).

6.5. System Ownership:

After production / cutover the System ownership will be transferred to PTA. Source code of customized modules developed by Consultant Firm will be handed over and will become property of PTA after successful completion. In case of termination of contract or incase of Consultant Firm goes out of business during the time of implementation or support period the source code and database design will be handed over to PTA and will become property of PTA.

ARTICLE 7- PAYMENT

7.1 The Client shall pay the Consultant Rs. _____. This amount has been established based on the understanding that it includes all of the Consultant costs and profits as well as any tax obligation that may be imposed on the Consultant.

7.2 Schedule of Payment The schedule of payment is specified below.

Activity	Payment Schedule
First: Upon signing of the Agreement	5% of the contract price to be paid to the vendor upon signing of the Agreement
Second: After Go Live Phase by Consultant	25% of the contract price to be paid to the vendor after GO Live Phase by the Consultant and seen by PTA that application is accessible
Third: After issuance of Final Acceptance Certificate (FAC) by PTA	50% contract price to be paid on Final Deployment and Acceptance of Final Version. The payment will be released subject to satisfactory acceptance by the PTA
Forth: One year support service after FAC	10% of the contract price
Fifth and Final: End of Support Services	10% on Completion of support services

7.3 Performance Bank Guarantee

The Consultant shall submit a Performance Bond in shape of Bank Guarantee (BG) in the prescribed format for an amount equal to 10 % percent of the total contract price in Pak Rupees before signing the contract for carrying out the assignment. On satisfactory completion of

contract i.e. after fifth and final payment, this BG shall be released. The Standard Performa of BG can be used.

7.4 Payment Conditions

Payment shall be made on submission of invoices (in triplicate) by the Consultant to the Client. Each payment to be made after activities mentioned at clause 7.2 will be subject to issuance of acceptance/clearance certificate by the client.

ARTICLE 8- UNDERTAKING

8.1 The Successful Consultant shall submit an undertaking duly notarized within three (3) days of the effective date of this Agreement, assuring that in the event of failure to comply with TOR and failure to produce quality work at any time of the contract period, the client shall have the right to forfeit the contract price in addition to any other remedies available under the law to claim damages or specific performance of the contract, etc.

ARTICLE 9- PROJECT ADMINISTRATION

9.1 Coordinator: The client designates Project Manager (IBS) 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 Consultant and approving invoices for the payments.

9.2 The Consultant shall promptly replace any of the employees working on the project if deemed unsatisfactory by the client.

9.3 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.

ARTICLE 10- CONFIDENTIALITY OF CLIENT INFORMATION

10.1 The Consultant 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 Consultant as per applicable laws of the country.

10.2 Consultant shall ensure that no application/ system shall be affected during the audit due to usage of penetration tools

10.3 Both parties shall sign Non-Disclosure Agreement (NDA) to ensure security.

ARTICLE 11- OWNERSHIP OF MATERIAL

11.1 Any software, report, drawing or other material, graphic, etc or otherwise, prepared by the Consultant for the Client under the 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 Consultant. Complete source code, graphical source files, DB architecture, user/administrator manuals, required add-ons, related software's, components, will be provided by the Consultant.

ARTICLE 12- PROHIBITED ACTIVITIES

12.1 The Consultant agrees that, during the term of this agreement and after its termination, the Consultant and any entity affiliated with the Consultant shall not provide any information which he may have obtained as a result of the project 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 Consultant shall be disqualified for any consultancy/agreement/contract in future.

ARTICLE 13- ASSIGNMENT

13.1 The Consultant shall not assign this agreement or any portion of it without the client's prior written consent. PTA Integrated Billing System is exclusive right of PTA and shall not be used for any other client.

ARTICLE 14- LAW GOVERNING THE AGREEMENT AND LANGUAGE

14.1 The agreement shall be governed by and under the laws of Pakistan and the Language of the agreement will be English.

ARTICLE 15- DISPUTE RESOLUTION

15.1 Any dispute arising out of the agreement between the parties shall be referred to the Client and shall be settled amicably. In case of failure to settle the dispute, it may be referred to agreed arbitrator mutually agreed by both the parties for arbitration in accordance with the applicable law for the time being in force.

ARTICLE 16-PENALTY CLAUSES

16.1 If the Consultant fails to provide the deliverables under the Agreement within the time specified in the agreement, except Force Majeure, the Consultant will be subject to the following obligation:
If the project is not completed within the stipulated time, the Consultant shall be liable to fine @ Rs. 25,000/- per day, as penalty for the breach.

ARTICLE 17- TERMINATION OF AGREEMENT:

17.1 Subject to Force Majeure, failure of the Consultant to complete the project within 6 months, beyond the time of completion of project shall be deemed a total failure on the part of the Consultant and the Client may terminate the agreement without any liability or responsibility, provided, however, the Consultant will return any or all amounts paid by the Client up to date of termination without any deduction. Further, earnest money deposited by the Bidder shall also be forfeited in favor of Client and fine @ 25,000 per day shall be charged as penalty till the date of termination of agreement.

17.2 Any and all remedies of the client for defective or delayed performance or non-performance of obligations by the Consultant 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.

ARTICLE 18- FORCE MAJEURE

18.1 Consultant shall not have liability whatsoever or be deemed to be in default for any delay or failure in performance under this agreement resulting from acts beyond the control of Consultant, including and without limitation to the acts of God, acts or regulations of any governmental or supra-national authority, war or national emergency, accident, fire, lighting, equipment failure, computer software malfunction, electrical power failure, telecommunication line failure, riot, strikes, lock-outs, industrial disputes or epidemics of infectious diseases

provided that the Consultant provides a 14 days' notice to the Consultant after occurrence of such event.

18.2 In case of non commissioning of billing system development within time frame given in work order due to default of the Consultant, the earnest money shall be forfeited in favor of Pakistan Telecommunication Authority.

ARTICLE 19- PROHIBITED ACTIVITIES

19.1 The Consultant agrees that, during the term of this agreement and after its termination, the Consultant and any entity affiliated with the Consultant shall not provide any information which he may have obtained as a result of the project 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 Consultant shall be disqualified for any consultancy/agreement/contract in future.

ARTICLE 20- DOCUMENTS

20.1 The following documents form an integral part of 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.

- i. The Agreement
- ii. Its attached annexure and appendixes,
- iii. Request for Proposal
- iv. Performance Bond

ARTICLE 21- CONFLICT OF INTEREST

21.1 Except as otherwise expressly provided herein, neither Party nor any of its employee, or agent or its subcontractors or vendors 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 Consultant 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 Consultant, the Client may at its sole option terminate this Agreement and notwithstanding any other provision of this Agreement, pay the Consultant only that amount earned prior to the date of termination. Any designated representative for the Client may audit any and all records of the Consultant for the purpose of confirming compliance with this clause.

FOR THE CLIENT

Signed by _____
Official seal

Witness 1

FOR THE CONSULTANT

Signed by _____
Official seal

Witness 2

SCOPE OF WORK

In the light of objectives defined above, a comprehensive database management solution of international quality is required to be developed. The Vendor will provide complete turn-key solution in English Language for the PTA.

Vendor will be expected to provide comprehensive integrated billing system to address the work specifications outlined in this RFP. The requirements listed below may not be all inclusive of the work needed to accomplish the respective tasks. It is expected that the vendors will have sufficient qualifications and experience to provide complete services without having each individual task identified herein. The work involved under the terms of the contract with the successful Bidder shall be full and complete execution of an integrated billing system including the items as mentioned in deliverables at "b" and as described further throughout the RFP.

a) Requirements Outline***i. Admin Side***

- a. Admin(s) of the database will be PTA Officer(s) having full access to the system through secure logins, authorized to perform the following tasks: Data input, Data Modification and Data Reporting.
- b. Admin(s) will also be given full data reporting authorization for all telecom operators' liabilities including segregation of sub-judice and non-subjudice amount and their status in tabular, graphs, charts etc form.
- c. Log of the Admin(s) who adds or modifies data will be maintained
- d. Admin(s) of each division will define the formulae for calculation of Principal/LPAF/penalties as per regulations in place etc.
- e. Administrator of concerned division would be able to generate Demand Note/ reminder manually.

ii. User Side

- a. Users of the system are employees of divisions, who are not admin. These users will be given with access for entry of the record having provision of attaching a Word/Excel/PDF document; however, any edition will be done by authorized officers of division.
- b. User will be able to issue demand notes as well and book payment in the system when received.
- c. Flexible reporting in the form of Tables, graphs and charts to be made available which will also be downloadable in Word/Excel/PDF.

iii. Consumer Side

- a. Consumers would be able to file their application for new resource and track their application.
- b. System should provide user-friendly interface for working and saving data, however data once submitted to PTA may not be edited unless desired by Administrator.
- c. Data consistency and error checks shall be put into place to monitor the data entered. Data other than the defined template will not be accepted. Any discrepancy, unusual trend shall be reported to Admin(s) immediately.

iv. Data migration

- a. System should provide interfaces to migrate the legacy data which in present in excel format or any other indigenous system.
- b. System should also provide interfaces for administrator for correction of migrated data.

v. Features

- a. System should be integrated with other system especially Oracle financial System and internal communication module for transferring the data in desired format.
- b. System should be implemented on SSL and only authenticated users will be allowed to access the system as per their define rights and privileges.

vi. License

Licenses required (e.g. Application/Database Servers) for proposed solution will be communicated by the Bidder according to design/ architecture of Solution Product. Licenses should be decided / communicated after having consultation with technical team of PTA. Proposed Licenses should be quoted in the financial bid as an optional cost.

b) Deliverables

The Vendor is required to submit following deliverables:

- i. Detailed specification document, database design document, project plan and complete solution with the source files.
- ii. Database Solution: Software along with source code of the database solution complete in all aspects as required by PTA. The requirements are as follows:
 - a. A module for Licensing Division containing information of License including but not limited to Name of licensee/ applicant/ Ex-licensee, License/ Application type, license number, license issuance date, licensed region, service type, licensee/ applicant details: postal address, phone numbers, email, licensee/ applicant contact person details: name, designation. CNIC, postal address, phone numbers, email, directors details: names, designations, CNICs, postal addresses, phone numbers, emails, license expiry date, license commencement due date, license commencement status, license status, If license status is terminated then termination date to be inserted and details of scarce resources assigned.
 - b. A module for Finance Division containing information regarding billing, receipts, receivables e.t.c.
 - c. A module for RBS containing information regarding licensees record of RBS Fixed and Mobile licensees w.r.t (issuance, expiry, Board of directors details, assigned frequency spot, Bandwidth, timeliness, FAB BTS/Microwave approvals/rejection e.t.c)
 - d. A module for CA Division containing information regarding billing, receipts, receivables, Traffic e.t.c
 - e. A module for Numbering containing information regarding licensee's record of geographic and non geographic numbering resource and billing of such allocated numbering resource (Number issuance, renewal, cancellation, category e.t.c)
- iii. To migrate the historic data, currently available in MS Excel format or from existing database.
- iv. The software solution must be highly secure and resilient to any hack attempts and virus attacks.
- v. Highly user friendly search mechanism will be developed for easy access to information.
- vi. All the modules will be providing multiple Access controls for different users and Divisions of the Authority.
- vii. Any other module, requirement, functionalities and enhancements can be added at any stage during development phase before final acceptance of the project.
- viii. User may be given an option for auto transmission of Demand notes to concerned licensee/party through email and intimation regarding Demand note through SMS to the Licensee's or party's provided mobile number.
- ix. Auto uploading of Demand note on to the portal file (electronic document management system)
- x. Web based License Application Portal: A comprehensive portal to apply online for licensing and numbering recourses.

- xi. Database Management System: The database management system will allow the database administrator(s) to modify and maintain the database contents, structure, user profiles and security controls from an Admin Panel.
- xii. Training of PTA Officers/officials and User Manual for Administrators will be provided.
- xiii. Vendor will ensure complete transfer of technology to PTA.
- xiv. Vendor will provide two (2) years maintenance and support services and in critical situation, the Developer will provide immediate support within one hour of the reported complaint(s).
- xv. Detail of security standards and user access policies to be provided.
- xvi. Detail of the Technology Platform to be used and related certificates and licenses etc.

xvii. Reporting Requirements:

a) Licensing Division

i. License detail including but not limited to the following report generation formats:

- a. List of All Licensees with All Detail
- b. Type Wise
- c. Region Wise
- d. Service Wise
- e. Issuance Date Wise
- f. List of All Valid Licenses
- g. List of All Expired Licenses
- h. List of All Terminated Licenses
- i. List of All Commenced Licenses
- j. List of All Non Commenced Licenses
- k. List of All Directors of All/ Selective Licensees

Note: These all reporting shall have the option of selective Dates, e.g. List of All Expired Licenses from 01-10-2000 to 31-12-2000.

- ii. Track of changes in particulars of licensees
- iii. License Expiry and Commencement Expiry Alert
- iv. Generation of letters to Applicant/ Licensees on a prescribed format
- v. Generation of License on a prescribed License Format
- vi. List of Licensees for Pak & AJK/GB

b) Finance Department

- v. License wise and head wise outstanding dues information regarding principal and LPAF, subjudice and nonsubjudice, aging report (principal & LPAF), segregation of Pak, MoIT& AJKGB dues, RP's filed, status column.
- vi. License wise, year wise and party wise report of Annual Gross Revenue and details of deductions allowed in the demand notes.
- vii. Automated and customized issuance of Reminders/ Demand note to licensees for submission of Annual Audited Accounts and payment (Principal + LPAF wherever applicable) of ALF, USF and R & D Contributions.
- viii. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment of installments of ILF and ISF, ARFSF and ASAF.

c) RBS Department

- xii. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment RBS dues
- xiii. Frequency details, bandwidth, timelines, BTS/MW links charges
- xiv. Payment acknowledgement
- xv. Cancellation Letter
- xvi. Total Nos of licensee organization (year wise/ category wise)

- xvii. List of licensee in the order of frequencies
- xviii. Renewal status
- xix. Specified time duration reports (issuance, renewal & cancellation)
- xx. Spectrum/ withdrawal of spectrum
- xxi. Report of Board of Directors/ search option from name/CNIC of the director
- xxii. Customized reports to be generated through interactive GUI query form and all the configurable attributes to be included in the query form

d) **CA Department**

- vi. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment APC for USF Contribution with serial number
- vii. Daily Dues position (Principal Dues paid, LPAF paid e.t.c)
- viii. Record of Total Traffic Minutes Report including segregation of Fixed-line and Mobile.
- ix. APC Rate History Report
- x. Subjudice and Non subjudice dues

e) **Numbering Department**

- xi. Automated issuance of Reminders/ Demand note (Principal + LPAF where ever applicable) for payment Numbering dues with serial number
- xii. Geographic/non geographic number details
- xiii. Payment acknowledgement
- xiv. Cancellation Letter
- xv. Total Nos of licensee organization (year wise/ category wise)
- xvi. List of licensee/ number holders
- xvii. Renewal status
- xviii. Specified time duration reports (issuance, renewal & cancellation)
- xix. Report of Board of Directors/ search option from name/CNIC of the director/ owner of number
- xx. Customized reports to be generated through interactive GUI query form and all the configurable attributes to be included in the query form.

f) **Common Requirements:**

- xviii. Ability to trace an amount through cheque number
- xix. Ability to trace a cheque number through amount.
- xx. Each party should be given unique identification number
- xxi. Mapping of the amount received against the demand notes issued.
- xxii. Automatic calculation of LPAF as per procedure/regulations.
- xxiii. Generation of alerts for cases to be initiated for SCN, hearing, determination and license termination.
- xxiv. Consolidated and separate license wise and party wise demand notes issued (after incorporating adjustments for under/over billing and showing year wise Demand note)
- xxv. Consolidated and separate license wise and party wise bank receipt report for any given period after incorporating adjustments for excess payments and dishonored cheques and which shows recovery against current year dues and prior year dues.
- xxvi. Ability to create and update notes regarding status of dues.
- xxvii. Ability to generate aging report showing principal and LPAF.
- xxviii. License wise chronological Demand note and payment history of parties and receivable status.
- xxix. To generate dynamic, flexible and user-defined reports in the form of lists, graphs, tables, charts, calculations etc.
- xxx. Generate alerts to issue reminders for deficiencies and any pending dues/fees of the licenses.

- xxxi. To analyze the stored data for unusual trends, accuracy, consistency and to point out the same, if any.
- xxxii. To develop a user friendly interface for data entry, analysis and retrieval of reports from the software solution.
- xxxiii. The billing system should keep year /month wise record of the rates used for the purpose of calculating dues.
- xxxiv. Defaulters List.

NON DISCLOSURE AGREEMENT FOR INTEGRATED BILLING SYSTEM OF PTA

This MUTUAL NON-DISCLOSURE AGREEMENT is made as of the ____ day of ____ 2017, between **PAKISTAN TELECOMMUNICATION AUTHORITY** (hereinafter referred to as “Client”)

AND

M/s _____ (hereinafter referred to as “**Consultant**”), having its office at Islamabad, which includes its employees and successors.

FOR

The purpose of preventing the unauthorized disclosure of Confidential Information as defined below. The parties agree to enter into a confidential relationship with respect to the disclosure of certain proprietary and confidential information (“**Confidential Information**”).

1. **Definition of Confidential Information.** For purposes of this Agreement, “Confidential Information” shall include all information or material utilized by the Consultant.

2. **Obligations of Receiving Party.** Consultant (receiving party) shall hold and maintain the Confidential Information in strictest confidence for the sole and exclusive benefit of the Customer (disclosing party). Receiving Party shall carefully restrict access to Confidential Information to employees, contractors and third parties as is reasonably required. Receiving Party shall not, without prior written approval of Disclosing Party, publish, copy, or otherwise disclose to others, or permit the use by others, any Confidential Information. Receiving Party shall return to Disclosing Party any and all information, records, notes, and other written, printed, or tangible materials in its possession pertaining to Confidential Information immediately if Disclosing Party requests it in writing.

3. **Confidentiality of Client Information**

- a. The Bidder 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 Bidder as per applicable laws of the country.
- b. Bidder shall ensure that no application / system shall be affected during the audit due to usage of penetration tools
- c. Both parties shall sign Non-Disclosure Agreement (NDA) to ensure security.

IN WITNESS NON DISCLOSURE AGREEMENT has been executed in the presence of the following witnesses on the date first above written.

SIGNED on Behalf of Client

Official Seal

Witness 1 _____

SIGNED on Behalf of Bidder

Official Seal

Witness 2 _____

TECHNICAL EVALUATION CRITERIA

Part A) Mandatory Requirement *		
1	Service provider has to produce tax details (GST and NTN certificate, Active Tax payer list and PSEB Certificate)	
2	Registrations Certificates (e.g. SECP/ Registrar of firms)	
3	Minimum five years of relevant experience	
4	Presence at Islamabad/ Rawalpindi	
5	Provision of information as per Annexure III, IV, V, VI and VII	
6	Certificate, regarding attachment of earnest money with financial proposal, shall be submitted with Technical proposal. Amount of earnest money shall NOT be mentioned in the certificate.	
7	An undertaking on judicial paper that consultant is neither blacklisted nor involved in any illegal activity	
Part B) Technical Capabilities of Bidder		
Sr.#	Attributes	Max. Score
1	Team Expertise and details as per Annex-VII (Minimum three years of software development experience and having graduation/master degree in IT/Computer Sciences) 3 marks / person	15
2	Details of five (5) projects completed of billing system (as per Annex-V) (documentary proof be provided i.e. copy of work order / agreements and client references etc.) 8 marks / project	40
Part C) Functional Evaluation (described on next page)		
a.	Modularity & Scalability	5
b.	Security, Penetration Testing & Code Verification	5
c.	User Interface Design	5
d.	Methodology	5
e.	Integration with existing system	5
f.	CMS: Content Management System	5
g.	Migration of existing data	5
h.	Accessibility	5
i.	Licensing model and approach The model, vendor proposed for licensing of software to PTA	5
Total		100
Minimum technical qualifying marks are 70%		

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.

Security in computer program designed to enhance software **security**. The defense of computers against intrusion and unauthorized use of resources is **security**.

Penetration essentially provides all the security tools as a software package. The vendor will mention the tool used for penetration testing in submitted proposal; vendor 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 fulfills its intended purpose.

User interface design (UI) is the design of user interfaces for software with the focus on maximizing usability and the user experience.

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 artifacts that are created and completed by a project team to develop or maintain an application.

Integration with existing system. Its need to assess our existing system and data to determine the most effective method(s) to either integrate them with any available software like Internal Communication module or Oracle Financial or convert them to formats that can be imported into Oracle Financial databases.

Content management system (CMS) is a computer application that supports the creation and modification of digital content. It is often used to support multiple users working in a collaborative environment.

Migration of Existing data. Migrating all the existing data available in different formats in excel or any other existing database to the new system.

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.

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.

FORMAT FOR FINANCIAL BID

Note: The financial bid shall be submitted on separate letter head (s) of consultant 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 development services of **Integrated Billing System**, published at PTA and PPRA websites and/or in the daily _____ dated _____. The detail of Financials is mentioned in below.

Sr. #	Item	Qty	Unit Price (PKR)	Total Price (PKR)
1.	Proprietary Software (custom software solution developed for PTA)	1		
2.	Third Party Software (optional)			
3.	Maintenance & Support	2 years		
	Grand Total			

Bid amount shall be inclusive of all applicable taxes.

We undertake to abide by the rules/ regulations /decisions made by the Authority regarding award of said consultancy.

We also confirm to abide by the conditions of Agreement given in Agreement Document, in case PTA considers us to award said consultancy.

ANNEXURE V

DETAIL OF PROJECTS OF BILLING SYSTEMS

Name of Applicant or Partner of a Joint venture whose experience is being mentioned.

Use a separate sheet for each project:-

1	Name of the Project
2	Name of Client
3	Clients' address
4	Value of the Project
5	Date of Award
6	Date of Completion
7	Brief Detail of Project and Development

Supporting documentary evidences e.g.; agreement, certificates etc may be attached.

COMPANY (BIDDER) INFORMATION

- a. Name of firm:- _____
- b. Date of Establishment of Business:- _____
- c. Address:- _____
- d. Telephone No:- _____ Fax No. _____
- e. Email:- _____

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

PERSONNEL SUMMARY

Name of employee

Position		
General Information	1. Name	2. Date of Birth
	3. Professional Qualification	
	4. Telephone	
	5. Fax	
	6. Email	
	7. Years with Present Employer	

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

DD/MM/YY		Company/ Project/ Position/ Specific Technical Experience
From	To	