



Hiring Services of Software Vendor for Development of Software Package for Domestic PNG segment having Modules for, Billing & CRM, and Optional Modules (Customer Onboarding, DMA & LMC, Consumer Apps, CRM app)

Volume
II of II

Bid Document No. BGL/530/2021-22



BHAGYANAGAR GAS LIMITED

(A JOINT VENTURE OF HPCL & GAIL)

BID DOCUMENT FOR

Hiring Services of Software Vendor for Development of Software Package for Domestic PNG segment having Modules for, Billing & CRM, and Optional Modules (Customer Onboarding, DMA & LMC, Consumer Apps, CRM app)

UNDER OPEN DOMESTIC COMPETITIVE BIDDING

e- tender

Bid Document No.: BGL/530/2021-22

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**Hiring Services of Software Vendor for Development of
Software Package for Domestic PNG segment having Modules
for, Billing & CRM, and Optional Modules (Customer
Onboarding, DMA & LMC, Consumer Apps, CRM app)**


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SECTION-7

SCOPE OF WORK



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1.0 Overview


The scope of work for the Contractor shall be to provide the following services to BGL.

1. Customized Design, Develop & Maintain web portal & mobile applications for BGL for all existing and upcoming locations in future. The Portal shall be deployed on a portal platform hosted at a cloud server hired by BGL or servers of BGL by the party of BGL. The selected Cloud service provider has to be MeitY empaneled and STQC audit complied. Vendor will be responsible for coordination with cloud service provider and licensors of software/ database used for the software solution. This portal will have following provisions
2. The entire software package will be owned by BGL and vendor will have to develop the same either on open access platform & share the source code of the software package so that BGL can maintain the same either on its own or any third party after completion of contract period. Further, BGL will also extend the use of this package for New GA's acquired in future. Vendor may be asked to undertake rollout of entire package for BGL in two Phases as given below.

BGL GAS CGD SOFTWARE APPLICATIONS

*	CGD Application Modules	Web Application	Android Application	Mobile	iOS Mobile Application
1	Customer On-boarding (Optional)	YES	YES		YES
2	DMA & LMC Application (Optional)	YES	YES		
3	Billing Master and Payment	YES			
4	Meter Reading Application, payment collection with tracking	YES	YES		
5	Customer After Sales Services/complaints	YES	YES (Android app Optional)		
6	O&M Application (Optional)	YES	YES		
7	Customer Online web Portal (Optional)	YES			
8	Customer Mobile Application (Optional)	YES	YES		YES
9	Existing DATA MIGRATION	YES			
10	SAP & 3 rd Party Data Integration & Import/ export Transfer ()	YES			

Vendor has to quote compulsorily for the optional requirement.

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2.0 Detailed scope of work Background:

City Gas Distribution (CGD) refers to distribution of natural gas to consumers in domestic, commercial or industrial and transport sectors through a network of pipelines. This business has, over the last decade, attracted several companies to lay a network of gas pipelines. City gas distribution (CGD) network is turning out to be the next big downstream expansion in India, after fuel retailing, with investments of as much as ₹ 1.1 trillion expected over the next decade.

Domestic PNG (DPNG) consumer segment is one of the four segments of City Gas Distribution business. A domestic PNG connection includes laying of pipeline network up to appliance along with necessary fittings, pressure regulator, meter and conversion of LPG appliance to PNG. The business activities in DPNG segment are the perfect example of retail business aspects of CGD and they are driven by large number of consumers & each consumer is consuming small volume (typically 0.5 SCMD per house)

BGL is a wholly Joint venture of GAIL (India) Limited and HPCL was incorporated in 2003 for the implementation of City Gas Distribution (CGD) projects in erstwhile Andhra Pradesh State. BGL is a limited company under the Companies Act, 1956.

Petroleum and Natural Gas Regulatory Board (PNGRB) has authorized BGL to implement CGD Projects in Hyderabad, Vijayawada and Kakinada cities including adjoining rural areas.

BGL intends to use this package for its current & future DPNG customer's across India. DPNG customer base of BGL is expected to reach to around 05 Lacs in 08 years.

2.0 Outline of Activities in DPNG


Following are the activities which are related with DPNG consumer in CGD business and they are spanned over entire life cycle of customer.

A. ACQUIRING CUSTOMER (Optional Development)

- A.01 Carrying out registration with pull down menus.
- A.02 Search, Sort & assign in bulk registrations & assign to installation contractors.
- A.03 Obtaining the relevant documents
- A.04 Obtaining Payment Security and Consumption Security
- A.05 Creation of Business partner Number
- A.06 Mapping of Master Data of consumer in system (i.e., address, contact details etc.)
- A.07 Updating and tracking of Amounts/payments mentioned at A.03

B. PROVIDING CONNECTION TO THE CONSUMER (Optional)

- B.01 Installation stages of Meter & GI piping.
- B.02 Update meter details and other technical details
- B.03 Providing Gas at the burner tip
- B.04 Creation of Document which capture all the relevant Installation to Conversion details of supply

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of Gas at consumer premises

B.05 Uploading the document details mentioned at in the system B.04 & B.02

C. INVOICE GENERATION, PAYMENT COLLECTION AND UPDATION OF DETAILS

C.01 Billing logic with applicable Schemes, Late Fee, Tarif management, consumption slabs, will be a replica of SAP.

C.02 Bi monthly billing cycles and Ability to bill Monthly also.

C.03 Scheme change option to customers.

C.04 Obtaining Meter reading from both Smart Metering systems (integration) and Normal Metering.

C.05 Ability to assist Meter readers to search and navigate to consumer houses for Spot billing and distribution & for door-to-door collection of payments on maps (both online and offline Maps using GPS).

C.06 Update the Meter Reading in system.

C.07 Update meter photo in the system.

C.08 Invoice generation in web application.

C.09 Generate Real-time Spot billing/Invoice.

C.10 Deliver Spot Invoice & take digital signature.

C.11 Real-time Payment integration & Collection (all Digital and Non-Digital, Spot collection) from various modes and sources.

C.12 Collect the payment from consumer application & web application, BGL web site.

C.13 Maintaining data base of all modes of Payment

C.14 Obtain Payment details from various platforms.

C.15 Reconcile and update payment details in system.

C.16 Generate other Invoices for after sales activities/ extra piping and penal charges, inform the same to customer, collect the payment and update the same.

C.17 Automate payment reminders, track the door to door visits for collection, set up reminders for next follow ups, and issue notices to very high OS consumers.

C.18 Ability to track collection, by tele-callers using web application, ability to monitor tracking of collection both by tele calling and door to door agents, thru web application.


C.19 Credit/debit note enabling invoice corrections and MIS of all credit and debit notes.

C.20 Ability to bill certain customers with special rate.

D. CUSTOMER RELATIONSHIP MANAGEMENT

D.01 Provide various windows/interface to customer for lodging the complaint thru web site login, Consumer care apps, and take the requests thru branch office & third-party CC vendors.

D.02 Provide various windows/interface to consumer for up-dation of his/her master data & its link

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- with customer master data captured in system
- D.03 Ticket generation for complaints/requests
- D.04 Forwarding the complaints automatically to various stake holders as per mapped escalation matrix and in line with TAT (Turn Around Time)
- D.05 The concerned stakeholders resolve the complaint and update in the system thru email and SMS, and auto generate reminders at the time lines fixed for each activity.
- D.06 Carrying out activities like Sending SMS & EMAIL for Invoice Generation, payment reminders SMS & EMAIL.
- D.07 Special SMS & EMAIL generation for scheme intimation, safety related aspects, wishes on special days etc.
- D.08 Outbound calls for Invoice generation, payment reminders etc.
- D.09 Autogenerated emails to the customers
- D.10 System generated letters to the customers
- D.11 Able to generate the proforma invoices of various chargeable services and collect payments, integrate with bank accounts.
- D.12 Able to send the proforma invoice of all chargeable services to the customers.
- D.13 Customer Master Data Up dation –on going activity
- D.14 MIS reports.

E. O&M (Android application and web application) (Optional)

Able to schedule various Maintenance activities monthly, Quarterly, and half-yearly and on annual basis.

Able to see notifications of assigned new request on android app.

Able to carry out the maintenance of equipment's and associated parts area wise and take pictures, and fill the customized report, sign the report on android app.

The contractor supervisor shall be able to assign and de-assign the tasks to technicians, monitor the progress of various activities.

The Contractor supervisor and engineers will review and accept the work on android or web application and approve the maintenance reports.

The reports will be reviewed by the O&M engineer and can be reviewed by O&M Manager.

The location of the activities will also be geotagged and can be seen on Maps. Provide navigational assistance.


Capture the scheduled riser and approach piping for leak checking of Consumers society wise as per schedule, signed by technicians, supervisors followed by random review by O&M BGL engineer.

Capture the scheduled leak testing after Meter assembly in the customers premise and take digital signatures.

Pop up reminders of various activities to be planned on android app for next 15 days and month as well as on web application.

Able to add a new activity.

Edit the frequency of each maintenance activity.

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Able to see the customers meter reading for last six billing cycles, payments made on android app.
Able to Capture Damages in the MDPE pipeline along with the location and submit a report of job done.
MIS of various activities performed during the period selected.


2.1 Detailed requirements of Proposed Software Package

A. Existing Setup

1. BGL is using Consumer Services android application, android application for consumer acquisition and its web application from M/s BYNRY Technology.
2. BGL is using the MRBD android and web applications for billing, collection of payments, from BYNRY Technologies (SaaS Model).
3. Currently BGL is implementing SAP.
4. Smart Gas Metering Systems from Two Vendors (M/s Aitu and Hanbit automation).
5. BGL CGD Grid, consumers and various Assets on GIS Software.

B. Required Features of Proposed Software Package –Process Specific

- 1 BP Number Generation in continuation to existing SAP series.
- 2 The software package shall capture, maintain and provide facility to modify the customer master data and technical master data including technical details and contact details.
- 3 Software package should be capable to capture different payment plans/billing schemes of customer which are existing and it should also have flexibility to service immediately the future payment plans / billing schemas.
- 4 The package is required to have functionality wherein different promotional schemes of BGL launched from time to time can also be implemented in different processes and only one flag/identification of promotional scheme maintenance for a particular scheme shall impact all the processes, data & relevant transactions of such consumer.
- 5 Software provider has to develop Mobile App to meet the requirement in such a way that the proposed software shall generate the Spot Invoice in real time in the system and obtain digital signature as acknowledgement.
- 6 Meter reader mobile app should be able to capture the GPS coordinates of meter located against each BP No. during the Billing activity and same should be matched in each billing cycle.
- 7 The software shall have facility to generate the other heads through which the payment is sought/asked from consumer towards any head other than Gas Consumption Invoice.
- 8 The software should be able to generate Invoice for zero gas consumption case.
- 9 The software should be able to tag/label consumer who are ready for conversion (i.e., customer registered, meter installed and existing in gasified area)
- 10 The software should be allowing generation of Invoice as per required period, no separate procedure needs to be carried out for interim billing to be present in case a Customer wants his connection to be moved out. The software should also have tagging facility for VIP customers and others tags as defined by BGL.

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- 11 The software shall be able to capture payment details on the spot both on line and offline.
- 12 The payment updating shall also be done in the software in Realtime.
- 13 **The software shall have complaint management system and service request based on ticket generation and percolating the complaint to mapped stakeholders/officials. A robust, automated structure which includes complaint registering, complaint communication, complain closure and reminders for open complain shall be provided by software.**
- 14 The software shall have capability to generate automated SMS, auto generated emails as per schedulers as per logic and other details provided by BGL from time to time.
- 15 **The software shall provide interface to customer for self-billing**, in such case based on the input from consumer in terms of meter reading. Time and date along with meter photo the software shall immediately show Invoice, if the previous Invoice has been generated in less than 21 days the software shall not allow this facility and the previous invoice shall be shown to the consumer & the customer shall be intimated that he can only generate the invoice after certain date (i.e., 21 days after previous Invoice Generation). Ability to edit the days by super admin.
- 16 The software shall provide interface for customer master data updating to various stake holders including customer.
- 17 The software should be able to integrate itself with existing BGL DPNG customer data base existing in SAP. This data shall be eventually transfer to proposed software platform
- 18 The software should be flexible enough to align itself with new business processes, if BGL shall adopt prepaid meter technology in future.
- 19 **Software Package should be a web-based Software Package**
- 20 **Should provide for multiple city operations. Each city operation shall be standalone strategic business unit (SBU)**
- 21 Should be able to provide MIS based on zones/geographical locations within a city
- 22 Should provide for multiple plans with effectivity dates
- 23 Should cover Domestic consumer billing.
- 24 Should allow to new buckets or add create buckets and MRU with special rate for billing.
- 25 Should provide for multiple billing cycles
- 26 Should provide audit trail of all transactions
- 27 Should provide module wise option wise rights to use
- 28 Should provide all data in a single database
- 29 Should be an integrated application for all modules, should not necessitate data upload/transfer between various modules
- 30 Online Payment realization etc. should be on real-time basis
- 31 The software package will be owned by BGL and vendor will have to develop the same either on open access platform or share the source code of the software package so that BGL can maintain the same either on own or any third party after completion of contract period. Further, in future BGL may also extend the use of the existing package for other GAs being operated by the company.

2.2 Salient Features of Software

- a) The software solution should provide integrated system accessible by every stake holder starting



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from various functions / departments in the BGL , external stake holders like DMA, third party service providers like agencies doing survey before installation, agencies doing installation at customer premises, meter readers (with a facility to provide on the spot bill using blue tooth printers), delivery of bills (including real time availability of bills on the customer APP as well as portal), payment collection agencies, various payment systems for the customers and services (O&M) agencies. Provide Navigational Assist to Meter readers during MRBD and for door-to-door collection agents using Maps and GPS locations for Smart, effective, efficient working. Another important part is a complaint/services management system (Services request management system) for various types of services and complaints, augmentation, shifting or temporary disconnection, reconnection, Permanent disconnection.

- b) **Access to various stake holders should be provided through Mobile APPs** i.e., for DMA field team, survey agencies, meter readers, door to door collection agents, field team for installations, field teams for O&M, handling complaints and service request and most importantly App for customers providing complete details including history of bills as well as payments. **All the mobile applications designed and developed either for external agency or field staff of company/agency/contractors shall be always GPS enabled and there should be a provision to capture the digital signatures including that of (and not limited to) Customers, Contractors and Site officers.**
- c) All the applications should be having facility to generate OTP as and when required for the processes which shall be carried out through the software package.
- d) Same access with **real time updates** should be available to the backend teams of all stake holders including various functions of BGL and all types of service providers as mentioned above.
- e) Solution integrates various digital and non-digital Payment modes including BBPS and payment gateways. Further integration with banks which enables the bank counters to collect payments and update the system in real time.
- f) Keeping the connect with customer is another important feature that enables all information about bills, payments, service requests shared with the customer through various modes of communication like SMS, email, on portal as well through Mobile APP available to the customer. The application to ensure communication through email and SMS for the payments received or complaints resolved as well as in case of bounced cheque or overdue bills.
- g) Proposed integrated system should provide analytics at granular levels
- h) The vendor portal to provide real time update to various functions of BGL as well as vendors, the actual stage of installation for every customer (with relevant information for different levels in the hierarchy). It should capture the material utilized for every customer and enable timely reconciliation.
- i) DMA portal should provide real time update to various functions of BGL as well as DMA/contractors, the actual stage of customer acquisition for every customer (with relevant information for different levels in the hierarchy). It should ensure applicability of scheme for the relevant period only and scheme management and dissipation of information shall be specific to city wise, captures the documents and payments received for every customer and ensures complete track of incomplete forms or bounced cheques etc.
- j) Consumer Mobile APP and Portal: It should ensure instant information available to the customer

about his / her current as well as past bills and payment trends, statement ledger. It should also enable real time information about his services requests as well.

- k) The software should have functionality of First invoice Generation for Consumer through capturing zero consumption which are newly connected.

2.3 General Required Features of Proposed Software Package Solution

1. Flexibility

It should be able to capture the various modifications/changes/ alterations in different business process, offering without lapse of time.

2. Scalability


The package should be able to handle large amount of data horizontally and vertically i.e., Number of customer and different data of customers which is related to all the elements across entire value chain.

3. Mass Data Handling

The package should be able to deal with mass data updation, uploading downloading of mass data related to each feature provided by software. Utilization of mass data feature should not be complex. It should simultaneously able to handle single cases also through direct interface i.e., it should not happen that for single data entry lengthy formats and process for mass data handling to be used.


4. Report Generation

- a) The software shall be able to generate reports based on the various business areas and for different time period. Further it should also be able to generate customer wise report which contains all contact details & technical data, consumption data, invoicing, interaction record and account summary details at one click.
- b) The software should also be able to generate range wise data mainly in case of consumption and O/s amount.
- c) The tendency of customer wrt the Payment also to be reported business area wise and customer wise.
- d) The aging report of O/s to be generated on first in first out (FIFO basis)
- e) The report wrt Security deposit availability needs to be generated
- f) The graphical representation of different reports to be generated.
- g) The package should be easily operable.
- h) The architecture of package should be easy to understand
- i) The fulcrum point of software package shall be the BP No., if any concerned stake holder is having BP No. of customer, he/she should able to see all the relevant data.
- j) The software should provide seamless view through all the features, only one click display shall be able to provide entire view/ modification facility (based on the authorization provided to different stakeholders).
- k) The package should be web based & Mobile App. Based solution

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2.4 System Requirement

1. BGL intends to host the application on Cloud servers or in-house servers or a combination of both types. Accordingly, Vendor will hire suitable Cloud Services in name of BGL for the contract period with the arrangement for continuation in future on direct payment by BGL or through 3rd party to service provider after expiry of contract. The selected Cloud service provider has to be MeitY empaneled and STQC audit complied. Cloud hired should be capable to handle minimum 10 Lacs DPNG customer base in the contract period.
2. Bidder should liaison software licenses process. Company will make a payment as per actual. License ownership shall be of company and purchase process will be managed by bidder. Database and other requisite software licenses should be capable to handle maximum 10 Lacs DPNG customer base in the contract period.
3. Supply of Software & Licenses for Production, Disaster Recovery (DR) System, Development, and Testing Environment (i.e., Operating System, Authentication Mechanism, Antivirus, Database, Replication, Backup solution etc.)
4. Hardware sizing and provisioning in cloud for Production, DR System, Development, and Testing environment (Server, Storage, Backup Solution, Networking devices, Network Security appliance etc.)
5. Provisioning of Application Load Sharing/ Load Balancing solution.
6. Provisioning of Networking Security and maintenance
7. ***Provisioning of integration with web application for converting Image to text***
8. Warranty/AMC of Software and Licenses during the support period as per PO
9. Software deployment Architecture in Production and DR (Active-Active or Active- Passive)
10. Disaster Recovery Plan to arrive at Zero Data loss (as per Recovery Time Objective (RTO) and Recovery Point Objective (RPO))
11. Backend Data tampering Protection Mechanism for Database
12. Audit Trail for users and administrators' activities
13. Audit Logs of Servers, network & security devices etc.
14. User Authorization and Authentication management
15. Data migration from SAP B1 to new software package
16. Data Migration of customers from both web site, web applications, customer Portal, Consumer application to new software package
17. Integration of the software with SAP B1
18. Meter Reading solution for Smart Meters

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19. Vendor should host the entire Cloud infrastructure in a secure data center which should be at least Tier 3 Compliant facility.
20. Vendor should ensure the following features in the Data Centre:
21. Data Centre constructed to world class hosting standards as defined by the "Uptime Institute, USA".
22. Data Centre should be backed by high QOS (Quality of Service) / SLA (Service Level Agreement)
23. Data Centre should have Fire Suppression and Protection System should include three levels of redundancy based on Gas Fired Systems, Carbon Monoxide based systems and Water Sprinkler based systems.
24. Data Centre should have Centralized NMS (Network Management Systems) & 24*7*365 helpdesk
25. Data Centre should have minimum of following industry level certification compliances,
 - ISO 27001
 - ISO 9000
 - ITIL certified Engineers.
 - Vendor should ensure the Purchase, Installation & Configuration of Software at Cloud Infrastructure
 - Vendor should ensure that the entire facility around the data center should also equipped with a fire detection and smoke alarm system to alert the facilities administration group in case of fire hazards, before this can affect the data center area.
 - Vendor should ensure that BGL infrastructure should be provided with assured security with all latest features/appliances with firewalling, content filtering, and intrusion prevention.
26. The monthly charges of hosting the application in Cloud shall be borne by BGL.
27. Vendor has to ensure that the ownership of hosting services shall lie with BGL only.
28. BGL is not having any credit card, therefore any facility requiring the credit card shall be arranged by the Vendor only.

29. Technical Capabilities of Development, Production & Quality Servers

SCOPE		
Sl. No.	PARTICULARS	DESCRIPTION
1	Operating System	Any OS, THAT DOESNOT REQUIRE LICENSING COST.
2	Database	ANY OPENSOURCE SQL DATABASE
3	Application development environment	SEE POINT NO. 6.
4	Web Server	IIS 7+



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5	System Architecture	ANY THREE TIER ARCHITECTURE.
6	Programming Language	ANY OPENSOURCE PROGRAMMING LANGUAGE, WHICH DOES NOT REQUIRE LICENSING FEE.
7	Data Security	<ul style="list-style-type: none"> • Bidder will sign a Non-Disclosure Agreement for data security. • Bidder has to maintain the confidentiality and security of data in true spirit. In no case, breach in security of data will be acceptable. • Send Request to the server in encryption format. Encryption of documents with AES 256-bit. • Audit trail for all financial transactions. • End to end encryption of all transactions. Storing of passwords in encrypted format. • Regular external backups of transactions at least once in a day.
8	Cloud Server	Cloud Infrastructure
9	Server Security	Network firewalls, SSL/TLS Certificate, DDoS Protection, Single Sign-On (SSO), Web Application Firewall
10.	Mobile Application	Native For Android & iOS
12.	System UP Time	99.9%
	Application UP time	99.5%
13	API solution	Utility Network GIS Mapping, Smart metering, Online payment (2 gate ways, BBPS, Mee seva, POS, CMS), SMS and WhatsApp gateway, Google Maps integration to be provided.
14	Server requires public IP that is accessible over the Internet.	
15	Https certificate will be required for secure communication	
16	Domain name will be required for communication.	

2.6. Obligations of Contractor

2.6.1. The contractor shall be responsible for development, installation, configuration & commissioning of the software supplied.

2.6.2. The on-site project location for this project shall be Hyderabad.

2.6.3 The Contractor shall deploy one no-expert manpower for handholding for 02 months at Hyderabad (as per requirement) post completion of successful Lookout period/hand holding period for routine support.

2.6.4. The Contractor shall provide maintenance support for the above initiatives for a duration of 2 years post successful Look Out period plus one year warranty for Billing application. The solution provided by the Contractor should meet the functional and technical requirements as mentioned above.

2.6.5 The Contractor shall also ensure replication of Data at regular interval at BGL server.



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The contractor shall have End to End responsibility for software development, Data Migration from existing applications/software packages used by BGL (including but not limited to SAP), coordination with cloud service provider and license providers

2.6.6 Solution Testing & User Acceptance Test (UAT)

1. The Contractor shall be responsible for the testing processes such as planning (includes preparing test plans and defining roles and their responsibilities), preparation (consists of preparing test requirement and test data) and execution (includes testing at various levels not limited to unit level, integration level, system level and production). For Mobile app, mobile device level performance testing is in the scope. All standard available devices e.g. mobile, tablet etc. should be considered. The bidder needs to communicate the testing requirements to BGL . It is the responsibility of BGL to facilitate the same.
2. The Contractor shall be responsible to provide all necessary testing and commissioning personnel, tools/kits, test equipment etc.
3. The Contractor shall be responsible for training the BGL employees in the areas of operations and management, error handling, system administration etc. for the implemented systems
4. The end user must be trained on all the functionalities required for efficient daily operations of BGL through software package. The training should include functional as well as technical aspects.
5. The Contractor shall provide a detailed training methodology & schedule to the BGL for review prior to commencement of the training
6. The training should cover at least the following areas:
 - a. Functionality available in the solution
 - b. Customization
 - c. Troubleshooting techniques
 - d. Techniques of generating various MIS reports from the solution provided
7. The contractor shall provide the training at BGL premises and BGL shall not make any additional payment to the Contractor for the same. BGL will provide the training infrastructure such as desktops, projector and training room etc.
8. The Contractor shall be responsible for providing the BGL internal users with the requisite training material in both hard and soft copies. The onus of preparing the training material will be on the Contractor.
9. The Contractor shall be responsible for providing ongoing remote training at defined intervals to the identified BGL users. The expected number of users for training is 40.
10. Following training needs are to be provided by Vendor as part of the scope:
 - Training on end use of the mobile application solution.
 - Content Management Training.
 - Deployment & Hosting Training.
 - Application Submission Training.

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- Support Handover.
- Super user training for making subject matter expert for managing / handling certain issues in-house.
- Vendor shall provide Training and user manuals and all relevant details including the design document.

2.6.7 Solution Go-Live

The Go-Live phase shall cover the following activities:

1. Installation of software and transfer of duly tested configuration to the production environment
2. Data population with master records, document upload and indexing with due validation and checklist. Documentation of the data uploads to be maintained
3. Assist in clearing the initial transactions
4. Generation of necessary reports & Dashboard as per the requirements
5. Implementation of access security and data validation controls as required
6. Implementation would include effective running of all data transfer which are planned for effective integration of the software modules with other application and system software
7. The solution implemented by Contractor shall be deemed accepted once the following conditions are fulfilled
 - a. All license certificates are to be validated in listed in the commercial Proposal
 - b. Sign off on UAT has been obtained
 - c. Sign off on successful completion and acceptance of Hand holding/Look out period.
 - d. Sign off on completion of training activities has been obtained

2.6.8 Documentation

The vendor shall provide following documents

Functional Design Document: This document shall cover the design specific information of the proposed solution. The document to be prepared in advance before actual work starts in co-ordination with the user member raising the issue or requirement.

- a) Technical Document: The document to be prepared by the developer containing all the technical details of the related change request, reports, UIs, functionality etc.
- b) Unit Testing Document: Any new development work needs to be properly tested and Unit testing document to be shared with user along with test script and scenarios.
- c) Training document: The Vendor shall prepare relevant user manual or training document for any new functionality or development brought about in the system
- d) Vendor has to start the procedure of handholding and knowledge transfer to BGL and the new vendor before 1 month of the PO end date. Vendor has to transfer all the technical and functional knowledge to BGL before the end of PO
- e) Other documents to be prepared during the project are:



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- I. Architecture Diagram.
- II. Configuration Document.
- III. Integration Documents (API)
- IV. Data model both in GDB format and excel format.
- V. Data validation rules configured for ArcFM connectivity Check
- VI. DB Architecture and relationship Model.
- VII. Source Code
- VIII. Application Software Matrix (DB Relationship)
- IX. List of Routine Activity
- X. User Manual
- XI. Administrator Document

2.6.9 On site Support for Handholding

The Contractor shall deploy one no. expert manpower for handholding for 02 months at Hyderabad (as per requirement) post completion of Lookout period for routine support as per requirement.

2.6.10 Application Maintenance

1. The Contractor shall provide application maintenance as part of the scope of this RFP for a period of 2 years post warranty period. (i.e. after two months of look out after Go-Live of all applications/packages Plus 12 months warranty period).
2. Contractor shall provide all the necessary resources and expertise to resolve any issues and carry out required changes and modification so the system works according to the specified requirements and satisfaction of BGL.
3. Contractor should record defects / bugs encountered as well as provide resolution of the same. The Contractor should also log & update the Consolidated List of Common Errors and their Resolution document with date and time of resolution.
4. Definition of various incidents is as below:
 - a. P1-Emergency Criticality incident, P2-High criticality incident, P3-Medium Criticality Incident, P4-Low criticality incident
 - b. P1 issues should be addressed in max 12 hrs, P2 issues should be addressed max in 24 hrs, P3 issues should be addressed max in 36 hrs, P4 issues should be addressed max in 48 hrs.

If routine delays are noticed in resolving the day-to-day issues, BGL may at its discretion levy penalty on the vendor.

5. The contractor shall provide incident management process details to be followed for application maintenance. He/she shall provide a detailed breakdown of activities with respective roles & responsibilities
6. The Contractor should ensure efficient knowledge transfer on a continuous basis so as to ensure



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- that application knowledge is passed on to new members subsequently joining the team.
7. During AMC Vendor has to provide support after the successful Go-live of both Android based and IOS based version of the Application. Vendor has to provide the AMC for any of the issue and change request required in the Application for the period of 2 years after from end date of warranty period.
 8. During the AMC period Vendor will roll out application changes / update to the various application store from where the customer can update the application. All such updates will be notified to the registered customers. Android and IOS mobile applications shall notify the user and update accordingly.
 9. The Software AMC include monitoring or administrative activities related to the application server, database server and the deployment devices that includes and is not limited to activities such as data archiving, data backup.
 10. The Annual maintenance does not cover issues arising incorrect use of the application. The entire requirement for changes and Enhancement covered in this bucket is non- envisaged as of now.
 11. After the development of required changes, Vendor has to carry out rigorous testing and handover to user for UAT. Once the UAT is done, Vendor has to publish the changes on Production Environment.
 12. Vendor will assign a Project Manager for co-ordination and same will act as a single point of contact from the Vendor's side.
 13. Vendor has to document all the changes in the system required to be performed for resolving any issues.
 14. The outline of Scope of work includes but not limited to the below mentioned, it also covers the any changes in the business process enhancements or implementation of new business process and developments required to meet the business requirements:
 15. Vendor has to fix every bug/error encountered in the application due to any reason.
 16. Vendor has to update the applications for compatibility on release of every latest version of Android and IOS Platform.
 17. Vendor has to appoint at least 1 dedicated Project manager to perform Project Management & co-ordination along with review & share the status to with BGL .
 18. Vendor has to put its best efforts to enhance the rating of the Application on market place.
 19. Software Maintenance, Software Upgrade and applying latest patches & updates.
 20. Vendor has to test the overall functionality of the application in Quality Environment. It is vendor's responsibility to deploy the application on Production Environment after every BGL ' approved version.
 21. Vendor has to carry out the changes in themes of Mobile Application in every 6 months. The vendor has to roll out the updates / application changes to the Google play store and IOS/iTunes/apple store. In this regard auto generated notifications shall be pushed to all end users.
 22. Training shall be conducted to BGL users on quarterly basis informing about the features added and discarded
 23. Vendor has to prepare a report for the work executed under AMC on Quarterly basis.



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24. Any request for changes/enhancements to be made in Mobile Application and having effort less than 7man days, will be covered under AMC.
25. Vendor has to maintain the cloud infrastructure and Physical servers for seamless operations of the application.
26. Vendor has to ensure the proper back-up of the applications.

2.6.11 Application enhancement

1. The Contractor shall be responsible for periodic application enhancements (as and when required) to support changing business requirements and/or application optimization
2. The Contractor shall therefore provision a man-day rate for application enhancement. However, BGL shall be liable to pay for the actual man days provided or on agreed lumpsum basis, which will be accounted separately and certified by BGL 's REPRESENTATIVE.
3. The contractor shall provide change request management process details to be followed for application enhancement. He/she shall provide a detailed breakdown of activities with respective roles & responsibilities
4. Payment for application enhancement / development shall be made on quarterly basis
5. Contractor should support BGL in carrying out the UAT for the modifications / enhancements
6. Any request for changes or enhancement after GO-Live hand holding support and having effort of greater than 7 Man-days will be considered under this section
7. Vendor has to publish the Man-day effort required to affect the requested
8. changes/enhancements and will take up development on the same upon approval of the published effort by BGL
9. The Man-days so required will be consumed from the "Enhancement Post Go-Live".
10. The entire requirement for changes and Enhancement covered in this bucket is non- envisaged as of now.
11. After the development of required changes, Vendor has to carry out rigorous testing and handover to user for UAT. Once the UAT is done, Vendor has to publish the changes on Production Environment.
12. Vendor will assign a Project Manager for co-ordination and same will act as a single point of contact from the Vendor's side.
13. Vendor has to document all the changes in the system required to be performed for resolving any issues.
14. This section covers all the modules of the application

Functional Requirement

As per Attached Annexure-I

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ANNEXURE- I

3	Functional Requirement
3.1	Customer Acquisition Module (Optional)

Table-3

S No.	Particulars
1	For Direct Consumers
1.1	Facility for customers to make online registration through a web portal, Consumer application and website login.
1.2	Online filling of forms by the customer.
1.3	Facility for customers to make online payment of booking amount.
1.4	Facility for customer to upload documents like proof of identity, proof of residence etc.
1.5	Provision to approve/Reject cheques after realization.
1.6	Create Fields (Pull down menu) in the registration form.
1.7	Capture location of connection required.
1.8	Ability to select the scheme applicable during that period.
2	Facility of a web portal for Direct Marketing Agency/Contractors
2.1	Provision to add/update /edit details of customer application forms picked up by field staff of the DMA (Individually as well as through Bulk Upload)
	Ability to select builder/ individual category of registration.
2.2	In case of builder registration, one set of documents (KYC) will be considered and verification in bulk.
2.3	Provision to correct/edit rejected forms by DMA. Tracking of cases with incomplete documents. Provision for DMA supervisor to validate the documents and registration form.
2.4	Create Pull down Fields in the registration form.
2.5	Provision to send SMS to customer in case of rejection with reason for rejection
2.6	Provision to File a list of forms submitted to BGL and accepted for further processing, to be part of the claim being submitted by DMA



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	Ability to enable/disable DMA for verification of documents
2.7	Facility for DMA to know and hence follow up all those customers whose cheques are bounced or documents are incomplete.
2.8	Real time reconciliation of submitted, accepted, rejected and cheque bounce cases
2.9	Module wise authorization.
2.10	Provision to Send SMS and Email to Customer with a link to open and see the registration form along with terms and conditions after acceptance (also to owner in case of tenant)
2.11	Ability to add new Zones, Areas, Colony names/Society Names/ Blocks in the pull- down menu by BGL Admin officer.
2.12	Ability for BGL team to view/validate/approve applications submitted by DMA with a facility to record standard reasons of rejection.
2.13	Ability for BGL team to add new schemes, extend the schemes. All schemes and their validity shall be city specific.
2.14	Ability for BGL team to change scheme after registration.
2.15	Ability to show registration terms and conditions to customer.
2.16	Ability to take NOC from owner for tenant registrations.
2.17	Ability to upload ID proof and address proof of customer through web application
2.18	Ability to capture category, sub-category (Individual/ Apartment/Builder) & type of ownership (owner/tenant)
2.19	Ability to avoid duplicate registration (Name, H.No and Mobile number), analytics web page to be provided for sorting and arranging, reject to BGL official.
3	Facility of a Mobile App for field staff of DMA
3.1	Provision to enter customer details
3.2	Provision to take photo/upload documents like proof of identity, proof of residence, rent agreement etc.
3.3	Provision to take digital signature from the customer.
3.4	Provision to take digital payment from the customer through payment gateway or to provide a link of payment to customer.
3.5	Payment link, if provided to customer, to have auto expiry
3.6	Capture GPS Co-Ordinate, if done at customer premises.
3.7	Ability to Search, Sort location/Area/colony wise, period wise, and assign for feasibility.




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3.8	Ability to monitor Agent wise performance.
3.9	Auto generation of SMS after customer/owner acquisition including tenant
3.10	Ability to upload documents later for builder registrations.
3.11	Obtain the NOC from owner in case of acquisition by tenant
4	Facility for finance team to manage the payment
4.1	Provision to generate cheque deposit slip based on cheque dates, to help team to separate cheques from application forms and deposit in bank
4.2	Provision to enter/update clearing of cheques / bouncing of cheques automatically by importing excel sheet received from bank/downloaded from bank portal
4.3	Provision to communicate to customers through SMS/Email for bouncing of cheques
4.4	Provision to communicate to DMA team by E-Mail for cheque bounce cases of their customers
4.5	Dashboard for sales team performance
4.6	Cross reference of BP Number with Application form number
5	Reports from Customer Acquisition module
5.1	List of customers picked up by DMA in a period
5.2	DMA wise summary of customers picked up in a period
5.3	List of rejected customer for DMA in a period
5.4	Provision to view earlier picked up documents
5.5	Any other customized required report by BGL in future
5.6	Ability to download Registration data with all fields (Date range wise, Vendor wise, Area wise, City wise)
5.7	Ability to see in dash board and search/sort all rejected applications for future reference and also on board upon feasibility.
6	DMA Dashboard
6.1	For the month Sales as on Date
6.2	Cumulative annual sales on date
6.3	Month wise sales trend
6.4	No. of rejected cases as on date
6.5	Zone wise Sales distribution
6.6	Sales Person wise sales in the current month
6.7	Month wise billing trend
6.8	Month wise receipt trend

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3.1 Customer On-Boarding Module (Optional)

Table-4

S No.	Particulars
1	Facility of a Web Portal for Last Mile Connectivity (LMC) Vendors
1.1	Ability to bye- pass feasibility by BGL Admin. Rejected acquisitions can also be viewed by DMA vendor and LMC vendor.
1.2	Ability to Search, Sort period wise, and allot in bulk to the Customer on boarding module/contractors for feasibility by BGL
1.3	Auto assign all feasible registration by BGL to the same LMC contractor.
1.4	Ability to Search assigned customers & re-assign to LMC vendor by BGL
1.5	Ability to import the status of existing work done by LMC contractors.
1.6	Facility for LMC Coordinator to allocate customers both individual and bulk wise to site supervisors & reassign.
1.7	Detailed survey work, Consent form for extra piping & uploading & approval by PMC, Execution of GI & GC work
1.8	Ability to capture Testing Report of GI & GC Work, and update status (testing)
1.9	Ability to assign & re-assign customer for Gas conversion to contractor by BGL and track/monitor.
1.10	Ability by BGL to refund the SD amount, due to non-feasibility, or upon request by customer.
1.11	Uploading of GI, GC, Schematic(s) , JMR/MJC & Details of consent form so that the charges for extra piping can be billed through invoice.
1.12	Capturing of Meter & Regulator (Make & Sr. Nos. & G-rating,) DRS, & SV details & Up loading.
1.13	ability to sort in bulk and update RFC status (Customers who are ready for conversion to PNG)
1.14	Commencement of PNG Supply with entry of relevant details including auto assigning of B P Number, and uploading of Joint meter Reading (JMR)& Initial Reading, with digital signature of customer.



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1.15	Details to be entered (Date of commencement of Gas supply, Initial meter readings)
1.16	FC should be done only after clearance of payment as per booking plan Asset capitalization
2	Facility of a mobile app for Field staff of LMC contractor (The same should be GPS enabled)
2.1	Supervisor to be able to see all the customer sites allocated to him.
2.2	Supervisor to update various stage completion work.
2.3	Provision to update GPS Location of the customer.
2.4	Provision to upload on-spot photographs of the stages LMC activities completed with photographs.
2.5	Provision to verify customer details & upload Joint Meter Report (JMR), with digital signature of both contractor and the owner/tenant
2.6	Provision to take customer signature on Safety tips, Do's and don'ts before conversion.
2.7	Ability to search customer by BP No. Phone number, Meter number, Locality etc.
2.8	Assist installers to use Maps to locate the consumer using GPS coordinates.
2.9	Ability to view in color code as per legends on Maps, the status of each LMC activities.
2.10	Ability to see the targets, actual completed, weekly and monthly.
2.11	Ability to inspect and approve various stages of LMC activities by PMC and Third party, or both.
3	Reports of Customer On-Boarding Module
3.1	Vendor wise stage wise list of customers
3.2	Vendor wise stage wise summary of pendency
3.3	Vendor wise RFC Done in a period.
3.4	Vendor wise FC Done in a period, and pending.
3.5	Vendor wise, area wise, customer wise meters installed in a period
3.6	Vendor wise, area wise, customer wise, piping laid in a period
3.7	Vendor wise age wise pendency of customers



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3.8	A few other related reports
4	Vendor Dashboard
4.1	For the month FC done as on date
4.2	Cumulative annual FC done cases as on date
4.3	Month wise FC Done trend
4.4	Bucket wise pending cases as on date
4.5	Zone wise pending cases as on date
4.6	Month wise billing trend
4.7	Month wise receipt trend

Meter Reading & Billing, Distribution and Payment Module

Table 5

S No.	Particulars
1	Facility of Mobile app For Meter Reading Team (the same should be GPS enabled)
1.1	Provision to view customers allotted to meter reader
1.2	Provision to navigate to customer premises quickly using GPS coordinates on google maps.
1.3	Ability to do MRBD by walk sequence created by GPS coordinates.
1.4	Ability to sync payments/data with server and generate spot invoice.
1.3	Ability to search generate invoice even if not assigned in the current MRU. And ability to review and re arrange MRU of that customer.
1.4	Ability to generate spot provisional bill of ghost customer by input information/details, Lat, Long etc. about Ghost customer.
1.5	Provision to see status of meter reading in the Bill cycle
1.6	Provision to show customer details based on meter number, CRN No., Name, Mobile no, etc
1.7	Provision to capture and save meter photograph with reading along with GPS
1.8	coordinates of the meter
1.9	Provision to enter choice of remark selection against each reading
2	Provision to allow editing of meter number/reading



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2.1	Provision to maintain audit trail of the meter reading
2.2	Provision to generate on the spot bill of meter reading
2.3	Provision to print on-spot bill to an associated blue tooth printer/APOS device. Taking acknowledge after delivering bill
2.4	Provision to collect online payment through payment gateway against the bill
2.5	Provision to send encrypted payment link to customer on his mobile number
2.6	with auto expiry
2.7	Provision to print on-spot receipt of the payment collected.
2.8	Policy of creation of billing order, block wise, society wise.
2.9	Ability to update contact details, capture Meter picture, KYC and profile
3	Ability to print and hand over invoices generated thru smart metering to customer and obtain digital signature.
3.1	Ability to generate bills of normal metering/Missed smart metering and print invoices and take digital signature as acknowledgement.
3.2	For risk mitigation, ability to Limit for collection of payments by MR agent, and after he deposits then only the BGL official will permit to collect further.
3.3	Ability to track/see and navigate to customers for collection of dues, see flagged customers in specified colors and legends on map.
3.4	Ability to log visits /follow ups for collection with an option to select remarks and next visit follow up.
3.5	Ability to see on dash board, List customers as per next follow up date and visit for collections. Able to see history of follow up, both by Field and Branch office/ MRBD contractor, follow ups.
3.6	Ability to see daily, weekly and monthly targets and collections
3.7	Ability to reschedule OS collection and take, digital signature from customer, alerts on collection date.
3.8	Ability to fetch the customer ledger and send SMS link to customer.
	Ability for MR to see previous 3 bills and payments details. If needed he should be able to print
3.9	The generated bills must have dynamic QR Code with all statutory regulations of B2C (Business to Customers) to scan and fetch bill details. Ability to Scan QR code and pay the latest bill.
2	Facility for BGL Team for bill generation process from branch



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	Provision to add special segment of customers to do billing with special rates.
2.1	Provision to allot customers to meter readers
2.2	Provision to generate reporting status of meter readers
2.3	Provision to generate meter reading exception report
2.4	Provision to send SMS to customer for self-meter reading, few days before closure of the billing cycle
2.5	Integration with Smart metering systems.
2.6	Provision to generate standard bills for all customers whose reading is captured
2.7	Provision to generate average bills for Reading couldn't be taken cases. Bills shall not be generated for address not found cases.
2.8	Provision to generate minimum bill for safe custody/RFC customers, if in
2.9	future BGL OPTS FOR THE SAME
2.10	Ability by BGL official to monitor real-time activities of Meter readers and collection agents on offline Google Maps, create Geo fencing, alerts etc.
2.11	Ability to generate out of turn/instant bill by BGL official, due to closure and collect payments.
2.12	Ability by BGL to add new customers for generating invoice, even during billing period.
2.13	Provision to send e-bills to customers who are registered for e-Bill
2.14	Provision to print bills for all zone wise/colony wise customers whom e-bill is not sent
2.15	Provision to allocate bills to meter readers/courier agencies for bill allotment.
2.16	Provision to enter cash collection/Cheque collections and print receipts
2.17	Provision to update cheque collection/online payment MIS
2.18	Provision to generate cheque deposit slip based on cheque dates, to help team
	to separate cheques from application forms and deposit in bank
2.19	Provision to enter/update clearing of cheques / bouncing of cheques automatically by importing excel sheet received from bank/downloaded from
	bank portal. Provision for bulk uploading of payment entries mode wise
2.20	Provision to communicate to customers through SMS/Email for bouncing of



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	cheques
2.21	Provision to integrate bank for Cash/Chq collection through banks (in case BGL opt for cash also in future)
2.22	Provide for Online Transaction Reference reconciliation
2.23	Provide realtime integration with BBPS, Mee seva, Payment gate ways, APOS, CMS, branch office, vendor kiosks.
2.24	Ability to correct bills by BGL, generate debit/ credit invoice.
2.25	Ability to enable and disable temporary disconnections from billing, and alerts for assigning, extend the period of TD.
2.26	Ability to do permanently disconnect and close the connection.
2.27	Ability to Flag all forced disconnections and it should be resumable after receiving payment
2.28	Ability to view all payments, sort payment mode & period wise with summary.
2.29	Ability to search the customers based on Outstanding Values, flag such customers (Not paid for Last three bills, Two bills, by amount range)
2.30	Ability to serve notices to high OS Customers by SMS link, email, by Print and track and monitor number of such notices, visits, follow ups.
2.31	Ability to track vulnerable OS customers.
2.32	Ability to manage Security Deposit refunds.
2.33	Duplicates meter/CRN No should not be allowed. There shall be a pop up if duplicate meter number/CRN No is found
2.34	Ability to view for Meter Details: meter no, make, model, Installation date, commission date, initial reading, inside/outside flag, max reading, meter active flag. Meter sr. no, evc sr. no.
2.35	Ability to update meter, seal and other accessories details
2.36	Ability to handle meter replacement between the cycle and calculate meter reading from both the meters
2.37	Ability to handle reasons for meter replacement
2.38	Ability to handle multiple meters for one customer and addition for billing
2.39	Ability to define meter reading agencies their details like address, name, email, phone no, Work order etc.
2.40	Ability to define details of persons from agency
2.41	Ability to evaluate their performance (Meter Reader)
2.42	Ability to calculate the commission to be paid for the period based on evaluation



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2.43	Ability to assign agency, person to specific area, sub area, group of customers, one time also as and when required for meter reading (out of turn billing)
2.44	Ability to generate meter reading schedule based on location, area, sub area, sub sub area, route
2.45	Ability to generate meter reading sheet based on walk sequence, route
2.46	Ability to assign meter reading cycle – different to different category, segment of customer
2.47	Ability to update meter readings on various frequency, hourly , daily , weekly, fortnightly, monthly, Bimonthly etc
2.48	Ability to change meter reading cycle, meter reading duration
2.49	Ability to provide customer specific information like VIP customers, customer under substitution , meter position, meter location etc in the meter reading sheet etc.
2.50	Ability to enter individual meter wise readings in the system
2.51	Ability to enter meter reading in mass through an excel interface
2.52	Ability to convert meter reading into energy-based consumption
2.53	Ability to generate meter reading sheet for specific customer or group of customer or a sub area
2.54	Ability to enter meter reading walk sheet generation
2.55	Ability to report exceptions where meters have not been read within specified intervals
2.56	Ability to generate alert where meter reading is not completed beyond a defined time period
2.57	Ability to capture various remarks in case of meter reading not happened- house close etc.
2.58	Ability to take alternate action in case of meter reading deviation or non availability of readings
2.59	Ability to make adjustment in meter reading based on calibration
2.60	Ability to calculate consumption based on the type of meter and no of digits
2.61	Ability to maintain a history of meter readings and consumption calculated
2.62	Ability to validate, approve, post meter readings
2.63	Ability to identify in meter reading sheet cases of new customers
2.64	Ability of download of meter reading from the system and to the system
2.65	Ability to divide area into sub sub area for balancing meter reading load per area
2.66	Ability to give Average basis billing for House Closed, address not found.
2.67	Ability to handle Meter Replacement cases where meter reading can be different from previous one
2.68	
2.69	Ability to reflect new area in the meter reading schedule at appropriate place rather than putting in the end
2.70	Ability for Interface to generate walk sequence, area wise and block/apartment wise.
2.71	Ability to Generate Zero bill invoice to new consumer after supply of gas.



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2.72	Ability to generate bill even if meter reading is not done based on rules (covid-19)
2.73	Ability to assign meter to customer on any date
2.74	Ability to capture meter on rent functionality and accordingly charge customer in the gas bill
2.75	Ability to generate bill for customer appearing on one-meter reading sheet/area it should not happen that billing of all such customer stops due to unavailability of meter reading for few customers
2.76	Ability to handle meter type change in between the cycle,
2.77	Ability to attach meter reading sheet document in the system
2.78	Ability to capture actual meter reading date
2.79	Ability to select customer where meter reading is to be done again
2.80	Ability to generate duplicate meter reading sheet of some reasons
2.81	Meter reading through SMS/WA/EMAIL/WA/EMAIL, etc to customer
2.82	
2.83	Upload of nomination, scheduling, rescheduling, allocation reading in the system (assigning to MRU)
2.84	Ability to capture ncv, gcv etc
2.85	Ability to enter nomination, scheduling, rescheduling, allocation reading in the system
2.86	Ability to enter meter reading at the time of disconnection, reconnection etc.
2.87	Ability to revise meter reading if found incorrect even after posting
2.88	Alert if more than one meter are active at the time of replacement
2.89	Ability for entering energy units and convert into other systems
2.90	Ability to define calibration frequency, date area wise location wise (MRS Industrial and Commercial)
2.91	Ability to capture calibration remark
2.92	Ability to split meter reading with different rates when tariff is revised
2.93	Ability to mass meter reading screen for easy entry
2.94	Ability to change area tree for the customer to accommodate load for per day meter reading (Reallocation of MRU)
2.95	Ability to generate a report on how many entries done – reader wise, area wise, correct entries, error entries
2.96	Ability to generate re meter reading due to errors in previous reading
2.97	Ability to have the Ability of Geo fencing
2.98	Ability to handle leakage adjustments and penalty adjustments
3	Reports of Customers Billing and Payment module
3.1	List of customers billed first time in a period
3.2	City wise Zone wise list of customers billed in a period
3.3	List of customers to be metered in a billing cycle



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3.4	Meter reader wise list of customers meter reading status report
3.5	Audit trail of customers meter reading
3.6	Exceptionally high/low list of meter readings
3.7	City wise zone wise billed customer summary
3.8	DPNG sale to be submitted to F&A(format will be shared by BGL)
3.9	Ageing analysis report
3.10	Payments report
3.11	Customer master data
3.12	
4	For Direct Consumers
4.1	Facility for consumers to view bills based on CRN Number/consumer code
4.2	Facility to print Bills
4.3	Facility to make online payment against the bills through payment gateway
5	Dashboard
5.1	No. of bills and bill value as on date in the month
5.2	No. of customers paid bill and collection value as on date in the month
5.3	No. of Outstanding Customers as well as Outstanding amount as on date , period wise.
5.4	No. of complaints received so far in finance department
5.5	No. of open complaints
5.6	Complaint type wise open complaints
5.7	No. and value of vendor bills cleared in the month
5.8	No. and value of vendor bills pending for the month
5.9	City wise open complaints
6	O & M Department Dashboard
6.1	Integrate CRM with O&M dashboard.
6.2	Ability to view various service requests and complaints, by BGL O&M officials
	Ability to assign the service requests and complaints to contractors by BGL O&M officials
	Limited view to contractor to view and assign complaints.




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	Ability to submit the action taken on the Services and complaints by contractor, if required review, edit and submit
	Ability by BGL official to review, edit and close the complaints/services.
6.3	No. of complaints received so far in O & M department
6.4	No. of open complaints
6.5	Complaint type wise open complaints
6.6	City wise open complaints
7	Management Dashboard
7.1	Month by month cumulative BP customers trend - Consolidated and for each city
7.2	Month by month customers booked in each city
7.3	Month by month customers billed in each city
7.4	Month by month billing values in each city
7.5	Month by month collection in each city
7.6	City wise outstanding as on date
7.7	Pending Bucket wise distribution of non-connected customer - Pie chart
7.8	Month wise city wise no of complaints received in a month
7.9	City wise department wise open complaints as on date
7.1	Department wise average complaint closure time in days for the month
7.11	DMA wise month wise sales trend
7.12	Vendor wise month wise RFC/FC done
7.13	Vendor wise bucket wise pendency of bookings
8	Projects Department Dashboard
8.1	No of customers RFC & FC done as on date in the month
8.2	Cumulative No of customers RFC & FC Done in the current year
8.3	City wise, zone, area wise RFC & FC Done
8.4	Vendor wise RFC & FC Done
8.5	City wise customer pendency
8.6	Vendor wise customer pendency
8.7	Bucket wise customer pendency

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8.8	No. of complaints received so far in projects department
8.9	No. of open complaints
8.1	Complaint type & wise open complaints
8.11	City wise open complaints

3.3 Customer Engagement (Optional)

Table-6

S No.	Particulars
1	Consumer Web Site
1.1	Provide an interactive web site portal for consumers
1.2	Provision to register using mobile number/e-mail id registered with BGL
1.3	Provision to change profile - password, profile photo, alternate contact details
1.4	Provision to update Aadhar number & Update KYC Details
1.5	Provision to view last 6 months bills summary
1.6	Provision to download bill in PDF format
1.7	Provision to view payments done by customer in last 6 months
1.8	Provision to print receipt for the last 6 months payments done by customer
1.9	Provision to view current outstanding
1.1	Provision to make online payment against the outstanding payment
1.11	Ensuring instant update into the outstanding amount of the customer
1.12	Provision to refer a customer
1.13	Provision to raise a service request
1.14	Provision to view status of past service requests
1.15	<p>Provision for Consumer Survey</p> <p>This system will be required to capture the customer feedback on Tab or mobile phone. There must be flexibility if creating various questionnaires and their possible answers in form of radio button, check boxes or dropdown menu even Text boxes. The interface should allow the BGL users to create survey on their own based on the campaigns.</p> <p>The data should be saved in database and reports should be available in tabular and graphical form. Historical data should also be available</p>




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2	Consumer APPS (Optional)
2.1	Provide an Android and IOS based mobile app for customers
2.2	Registering mobile app on Google Play Store for customers to download
2.3	Provision to view Emergency contact numbers of the BGL at each city
2.4	Provision to select CNG/PNG portion of the APP
2.5	In CNG Portion, show following static information
2.6	Few lines About CNG
2.7	City wise list of CNG Kit Suppliers
2.8	City wise list of CNG Pumps/Stations with their location on map
2.9	List of Cylinder Testing organisations with address/contact details
2.1	FAQs about CNG
2.11	CNG Car Care tips
2.12	A few options of PNG portion of APP requires registration
2.13	Provision to register APP using mobile number, e-mail id, authentication using OTP
2.14	Provision to update profile, password, photo, alternate contact numbers etc
2.15	Provision to update Aadhar number & KYC
2.16	Provision to view last 6 months bills
2.17	Provision to download bills in PDF format
2.18	Provision to download last 6 months receipts
2.19	Provision to print receipts
2.2	Provision to view current outstanding
2.21	Provision to make online payment of the outstanding amount
2.22	Provision to capture meter reading, auto extract meter number, validate with customer, auto extract meter reading, check for exception and update meter reading to server
2.23	Provision to verify meter reader visiting the premises
2.24	Provision to view standard billing queries along with their answers
2.25	Provision to view places where payment can be made for BGL bills
2.26	Provision to view rate card of PNG
2.27	Provision to view Do's and Dont's of PNG use

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2.28	Provision to view policies and procedures governing PNG supply and billing
2.29	Provision to view FAQs of PNG and their answers
2.3	Provision to download a few forms related to PNG
2.31	Provision of Pictorial presentation of actions to be taken by customers if they smell gas
2.32	Provision to give information about BGL in About Us
2.33	Provision to raise Various service requests & Complaints (as is in CMS)
2.34	Provision to view status of past service requests along with action history
2.35	Provision to Notify the chargeable and Non-Chargeable services.
2.36	Ability to see the proforma and submit acceptance & See Final invoices
2.37	Ability to pay the invoices related to services.
2.38	Ability to View the notifications- the tentative date of resolving the complaint/service requested.

3.4 Complaint & Services Management System (Web Application)

Table-7

S No.	Particulars
1	CMS Portal
1.1	Facility to setup Customer Relationship Officers
1.2	Facility to setup departments to handle requests/complaints
1.3	Facility to setup requests/complaints along with multiple level of escalation matrix
1.4	Facility to setup hierarchy of authority to handle requests/complaints for various cities and zones
1.5	Facility to setup service engineers for various cities and zones
1.6	Facility to search and identify customers based on name, address, contact number, e-mail id, colony name, form number, consumer code etc
1.7	Facility to view customers selected customer's booking information and booking status along with payment information and payment clearing status
1.8	Facility to view customer's status of feasibility survey, and if rejected, the reason for rejection



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1.9	Facility to view customer's date wise stage wise status of installation till final conversion
1.1	Facility to view meter readings of the customer
1.11	Facility to view past bills of the customer
1.12	Facility to view past payments of the customer
1.13	Facility to view up-to-date ledger of the customer
1.14	Facility to know VIP status of the customer
1.15	Facility to view all past requests/complaints of the customer
1.16	Facility to view all actions taken with corresponding resolution given by various departments of all the request/complaints
1.17	Facility to enter new service request/complaint with provision to capture mode of complaint, mark high/medium/low priority, service request type, detailed description of the complaint, with TAT Lines. Send Mail notification as reminders at fixed intervals before TAT, Complaint/Service wise.
1.18	On saving the Complaints/SR, an SMS and EMAIL to be sent to customer and an EMAIL to be sent to first level of officer of the respective department to which the request belongs
1.19	Facility to all users of CRM to view SRs assigned to them or to their subordinates.
1.2	Facility to search SRs based on status/SR No/Department/customer code etc.
1.21	Provision to show escalated CR/SRs in different colour
1.22	Provision to send mails to superior authority when an CR/ SR escalates to them
1.23	Facility to transfer SR to different users
1.24	Facility to change CR/SR type
1.25	Facility to assign CR/SR to service engineer, Project, and Marketing officials
1.26	Facility to print Job Card for service engineer
1.27	Facility to Obtain Feedback from Customers upon successful resolution of Complaints.

1.28	Able to view the chargeable and Non-Chargeable services, send the provisional estimate to customer & Final invoice.
1.29	Ability to collect the payments from the customer for chargeable services.
2	A few reports of the CMS Portal
2.1	Department wise pending list of complaints
2.2	Department wise pending summary
2.3	Department wise request type wise list of pending complaints
2.4	Department wise request type wise pending summary
2.5	City wise List of pending complaints
2.6	City wise Summary of Pending Complaints
2.7	City wise department wise pending complaint summary
2.8	City Wise Department wise Total complaints, Closed complaints and pending complaints summary
2.9	Age range wise pending complaints.
2.1	Department wise Summary with % of complaints resolved in SLA and resolved after SLA
2.11	Auto Mail to department head a summary of open complaints at the EOD
3	Customer Care Dashboard
3.1	No of open complaints as on date
3.2	City wise open complaints as on date
3.3	Zone wise open complaints as on date
3.4	Department wise open complaints as on date
3.5	Age range wise open complaints as on date
3.6	City wise month wise no of complaints received
3.7	Department wise month wise Average resolution time of complaint
4	Android Application (Optional)

Ability to search the customer address, bill information

3.5 A Set of Reports from Software

Table-8



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S No.	Particulars
1	A Set of Reports from the Software
1.1	List of Chq Cleared Forms
1.2	List of Chq Bounced Forms
1.3	List of Reading Sheet
1.4	List of Pending Meter Reading
1.5	Meter Reading Exception Report
1.6	Collection Report
1.7	Cheque bounce Report
1.8	Sale Register
1.9	Billing Summary
1.1	Customer Ledger
1.11	Commissioned Customer Report
1.12	Outstanding Report
1.13	Customer Report
1.14	Defaulters Reports
1.15	Non Commissioned Customer Report
1.16	Meter Reading Audit Trail
1.17	Meter Reading Pending Report
1.18	Meter Reading Taken Report
1.19	Quota Allotted Report
1.2	Mobile APP using Customers
1.21	Online Transactions List
1.21	PAY U transaction list
1.22	BBPS Transactions List
1.23	Online Registration Payment List
1.24	Billing/Exception Report
1.25	O&M Charges Bill Report
1.26	Vendor Project status report
1.27	Customers Rejected by Vendor
1.28	Customers Rejected by Project department
1.29	Front Assigned to Vendor
1.3	RFC Done customer list
1.31	Department wise pending list of complaints



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1.32	Department wise pending summary
1.33	Department wise request type wise list of pending complaints
1.34	Department wise request type wise pending summary
1.35	City wise List of pending complaints
1.36	City wise Summary of Pending Complaints
1.37	City wise department wise pending complaint summary
1.38	City Wise Department wise Total complaints, Closed complaints and pending complaints summary
1.39	Age range wise pending complaints.



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SECTION-8

SPECIAL CONDITIONS OF CONTRACT (SCC)



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1.1 General Instructions

1. Special Conditions of Contract shall be read in Conjunction with the General conditions of Contract, specification of work, Drawings and any other documents forming part of this Contract wherever the context so requires
2. Notwithstanding the sub-division of the documents into these separate sections and volumes, every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract so far as it may be practicable to do so
3. Where any portion of the General Condition of Contract is repugnant to or at variance with any provisions of the Special Conditions of Contract, unless a different intention appears, the provisions of the special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract and shall to the extent of such repugnancy, or variations, prevail
4. Wherever it is mentioned in the specifications that the Contractor shall perform certain work or provide certain facilities, it is understood that the Contractor shall do so at his cost and the value of contract shall be deemed to have included cost of such performance and provisions, so mentioned
5. All the work specifically mentioned in the tender document is under the scope of the contractor. All other works not specifically mentioned but required for successful execution of the work shall also be performed by the contractor and payment shall be paid as per the terms and conditions mentioned elsewhere in this document
6. The BGL office in Hyderabad shall be considered as the location of site for this project
7. Vendor has to ensure the Purchase & Installation of Software, Database, Webserver, Firewall, Secure HTTP etc. along with development of mobile application as per guidelines issued by Application stores i.e., Google play, Apple App. Store etc.
8. Vendor to Structure as per any 3 Tier architecture landscape comprising of Development Server, Testing Server & Production Server. The servers (Physical and cloud) will be hired by BGL.
9. Vendor has to ensure coordination with cloud service provider, licensor of the software/data base used for the software system for smooth functioning of the same during the period of contract.
10. Vendor has to handover the source code to BGL on closure of the order. The software's shall be the property of BGL after the end of 01year warranty period.
11. Vendor has to ensure that all the rights in relation to the ownership of hardware, software, license, source code, Database, Application, Web Server, Data etc. lies with BGL only.
12. Architecture, development environment, native language for development of software solution shall be finalized by the vendor after discussion with BGL' authorized representative.
13. Vendor shall finalize estimating transaction volume, disaster recovery, fail safe measures and for scheduled database backup or any other requirements, after discussion from BGL' authorized representative.




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14. The Software Solution must be dynamic, database driven having admin and client modules.
15. The software must have screens for writing the query and getting instant results on their Mobile Phone/Computers. Query should be stored in the database and, can be retrieved in excel, word and pdf format.
16. Image captured by the software should have different resolutions sets having Zoom in and out features.
17. There shall not be any option of uploading any image from phone gallery or any other folder in case of Mobile App.
18. Vendor shall agree to the enhancement in software solution, and deliver the same, in case of any change in process /feature (addition, deletion, alteration) is required by BGL.
19. Vendor shall submit the project plan in a defined time frame.
20. Vendor has to appoint at least 1 dedicated Project manager to perform Project Management & coordination along with review & share the status to with BGL.
21. Integration with existing software of BGL for getting pending tasks & real time update in replica system will be required in the software solution as it is. However there has to be some more validations and conditions to be implemented. The solution must have an option to save the data in Application (Offline Mode) and synchronize the data later in bulk.
22. The vendor must ensure the expertise of resource(s) for integration with SAP
23. Vendor must ensure an expertise for integration with any 3rd party application.
24. The mobile app needs to check for the updates if any and alert the user to download the latest version.
25. The developed mobile application should support all the latest OS versions.
26. The applications must be developed for ANDROID only except IOS platform also for Consumer services.
27. Any license/financial implication for registering the application on APP Store lie with the vendor only. BGL will not pay any additional charges which are not mentioned in SOR.
28. Any license procured by the vendor to meet the requirement shall be procured in the name of BGL only with the approval of competent authority in BGL.
29. There must be a feature of pushing the notification to the Users of Mobile Application.
30. The application must be able to integrate with Email & SMS APIs.
31. The mobile applications should work in all networks irrespective of mobile device make and model.
32. User should be able to download the correct version of mobile application supported by his/her mobile device.
33. Mobile Application structure should be resolution & platform independent.
34. All icons must be crisp, clean, and distinguishable and should be as per guidelines of respective mobile application platform.
35. All buttons and objects must be reactive to touch and work as intended.
36. All functions must stay within the mobile platform boundaries.
37. The graphics, widgets and colors used in the app should be best in class.
38. The design and development of the mobile application should be scalable to handle increasing number of users.
39. Only Open-source software's/tools need to be used.

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40. In mobile application development, the best practice and standard procedures are to be used by the Vendor.
41. The design and development on the software solution (both mobile app. And web based) should be optimal and give high performance, satisfactory response time even during slow internet connectivity and on different devices.
42. The software solution (both mobile app. And web based) need to integrate and interoperate with various other external entities, therefore, the app should easily and in a relatively seamless manner integrate with external entities.
43. The software solution (both mobile app. And web based) should have the ability to manage various services and systems effectively with its minimum to zero impact on other services
44. The mobile application installed in the smart phones should be able to access the device database securely
45. The software solution (both mobile app. And web based) should have the ability to upgrade services / add new services and mode to access these services effectively in a cost-effective manner without affecting other services with a commitment for backward compatibility as per the policy guidelines of that mobile platform.

BGL Dependencies:

Vendor has to ensure that all the prerequisites viz. coordination with BGL representatives, documentation, reports, database, functional, technical details etc. or any other information what server necessary for development of entire software solution & for the development of mobile application be fetched and collected from BGL well in time. The same shall not constitute for delay in delivery of mobile & web applications.


1.2 Timelines, Deliverables & Payment Schedule

Contractor is expected to follow the schedule as mentioned below. This schedule shall be applicable for each application in scope of the project. Payments shall be released only on satisfactory acceptance of the modules for each Task as per the schedule. **Period of Contract shall be 3 years & 5 Months from the date of FOA/LOA.** However, the bidder shall adhere to the project delivery schedule as mentioned below.

Time schedule for completion of the total scope of the project shall be as per following:

Table-1

S. No.	Activity	Time
1	Requirement Gathering for all solutions. This is the first step. In this, the requirements are to be collected from the users & stakeholders. The blueprint document for solution to be prepared.	T+02 weeks
2	Billing Process Solution with android app with data migration &	T+ 09 weeks

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	Go-Live	
3	CRM solution Go- Live with data migration.	T+ 12 weeks
4	Lookout Period/Hand holding The Software Solution will have about 60 day look out period in which minor flaws, logics, bugs, integrations issues will be rectified and fixed. Also, User interface, look and feel, validations, conditions, reports etc. This will start after successful Go Live of activities 2 to 4 mentioned above.	T+ 21 Weeks
5	Ongoing Support & Maintenance. This will start after completion of lookout period.	2 years from post Warranty period
Note: One year warranty period will commence after successful completion of Hand holding period to the satisfaction of EIC.		

Optional Scope of work		
1	Web application & Mobile app Solution with data migration and Go-Live for each segment Consumer on boarding process including web application and Mobile android apps. i.e. customer apps (IOS & android), contractor android apps (DMA as well as LMC), CRM & O&M android app.	
2	Requirement Gathering	S+02 weeks
3	Go-Live with data migration.	S+12 weeks
4	Lookout Period The Software Solution will have 120 day look out period in which minor flaws will be rectified and fixed like User interface, look and feel, validations, conditions, reports etc. This will start after successful Go Love of activities 2 to 5 mentioned above.	S+28 weeks
5	Ongoing Support & Maintenance. This will start after completion of lookout period.	Till end of contract.


T: One weeks from date of BGL FOA (Fax of Acceptance).

S: Two weeks from the date of intimation for Optional.

Any solution (Web based or Mobile based) shall be considered eligible for “Go Live” upon completion of Design, development & Integration, Testing (UAT signed off) and Cloud Infra Readiness. UAT need to be signed off by Core team members and user manual to be provided for users. The Application will have a 60 day look out period in which minor flaws will be rectified and fixed like User interface, look and feel, validations, conditions, reports, logic issues etc.

1.3 Payment Terms

Quarterly payments shall be made at the end of the quarter.

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Notations are used in the payment schedule should be interpreted as follows:

Table-2

S. No.	Activities for the projects	
	Activity	Payment Terms
I	Application Development	
1	Legacy data migration from SAP/Third Party Software of all gasified customers and Billing Module Go-Live a) (Live customers account mapping along with past records, web application & meter reader mobile app and generation of invoices, online payment synching etc.) b) Navigational assist to MR and Collection agents to search and locate consumer location using maps using GPS location	10 % of the amount quoted against Application Development 25 % of the amount quoted against Application Development
2	Go Live of module with data Migration and successful hand holding for 02 months and support.	20 % of the amount quoted against Application Development
3	CRM Module Go- Live (which includes individual customer interface and complaint management)	15 % of the amount quoted against Application Development
4	at Hyderabad (as per requirement only) including 12 months Support and Maintenance post Hand holding.	30% balance to be paid (As Quarterly payments of the amount as quoted against Maintenance & Support)
II	Application Maintenance & Support post 12 months of successful completion of activities Handholding period.	
1	2 years Support & Maintenance	Quarterly payments of the amount as quoted against Maintenance & Support
III	Application Enhancement	
1	Application Enhancements Charges in form of man-days	Quarterly payment of the amount as quoted against Application Enhancement (on actual man-days consumed)
IV	Application Development (Optional)	



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1	Legacy data migration from SAP/TP software of all registered customers (integrate with web modules of MRBD and CRM) & Customer on board Module Go- Live for new customers (with android app module)	25 % of the amount quoted against Application Development
3	Dashboard Module (MIS reports, specific role mapping for individual users and workflow and SOP)	15 % of the amount quoted against Application Development
4	Legacy data migration from TP software/excel of customers with Mobile app Solutions other than meter reader app Go-Live for each segment i.e., Consumer app (IOS and android Mobile app), contractor apps (DMA as well as GI contractor app), CRM and O&M application.	35 % of the amount quoted against Application Development
5	Application Maintenance & Support post 06 month of successful completion of activities above IV (1-4 above) with 06 month on site hand holding.	25 % of the amount quoted against Application Development
6	Support & Maintenance (Rate quoted is inclusive in III (1))	Quarterly payments of the amount as quoted against Maintenance & Support

The Quarterly payments, wherever applicable, shall be made at the end of respective quarter.

1.4 Price Reduction Schedule (PRS)

Maximum PRS for all the delays combined shall be limited to maximum of 5% of total contract price as per the GCC.

1.5 Contract Performance Security:


The Contractor shall furnish to the Employer, within 30 days from the date of notification (FOI, LOI, LOA, WO) of award, a security of 3% of annualized Order/ Contract Value excl. of taxes & duties.

Contract Performance Security which will be valid for 90 days beyond the contract expiry date shall be refunded after the Defect Liability Period. GCC clause 2.13 of Contract Performance Security shall be followed.

The Contract performance Security shall be released after completion of defect liability period and issuance of completion certificate by Officer-In- Charge (IT).

1.6 Defect Liability Period / Guarantee / Warrantee Period:

The Service Provider unless otherwise specified elsewhere in the tender document shall

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guarantee the installation/Service for a period of 12 months from the date of completion of Service mentioned in the Completion Certificate issued by the EIC. Further, GCC clause no. 3.5.

1.7 CONFIDENTIALITY:

The CONTRACTOR shall not communicate or use in advertising, publicity, sales releases or in any other medium, photographs, or other reproduction of the work/services under this CONTRACT or description of the site dimensions, quantity, quality or other information, concerning the work/services unless prior written permission has been obtained from the EMPLOYER



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SECTION-9

SCHEDULE OF RATES (SOR)



**Hiring Services of Software Vendor for Development of
Software Package for Domestic PNG segment having Modules
for, Billing & CRM, and Optional Modules (Customer
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REFER E-TENDER NO.: BGL/530/2021-22 IN E-
TENDERING WEBSITE /PORTAL -
(<https://petroleum.euniwizarde.com/>) FOR
SCHEDULE OF RATES



Hiring Services of Software Vendor for Development of Software Package for Domestic PNG segment having Modules for, Billing & CRM, and Optional Modules (Customer Onboarding, DMA & LMC, Consumer Apps, CRM app)

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BHAGYANAGAR GAS LIMITED, Hyderabad

SCHEDULE OF RATES (SOR)

Tender : Hiring Services of Software Vendor for Development of Software Package for Domestic PNG segment having Modules for, Billing & CRM, and Optional Modules (Customer Onboarding, DMA & LMC, Consumer Apps, CRM app)

SOR Item No.	Description	Quantity	UOM	Rate (In RS.)	Unit of Rate	Amount (In RS.)
10	Customized Billing & CRM Application Design and Development for Domestic Piped Gas Consumers (automated processes of Billing and CRM as well as minimize manual recurring operations). It also include SAP/TP data transfer process for existing BGL data, Design & Development of package for Billing & CRM [As per details mentioned in Scope of Work and Special Condition of Contract].] includes AMC & support for 12 Months warranty (after the successful Hand holding period) included in the software development rate quoted.	1	Lumpsum			
20	1st year Maintenance and support	1	Lumpsum		per year	
30	2nd year Maintenance and support	1	Lumpsum		per year	
70	1 No. of dedicated resource per Month deployment at Clients Place in Hyderabad	04	Months		per month	
80	Custom Charges for Man Days on call basis for application enhancements and new requirement's.	30	Days		per Day	
200	Optional Development – Customize Application Design and Development of Domestic Piped Gas Customer Consumer apps (IOS & Android app), consumer on boarding processes, DMA & LMC (Installation stages) web and android application, CRM android app & O&M web and android app [As per details mentioned in Scope of Work and Special Condition of Contract]. It also includes SAP/TP data transfer process for existing BGL data during look out period. The AMC & support after successful Hand holding is included in SOR Item No. 10 to 30.	1	Lumpsum			
Basic Amount [including all taxes & duties except GST]						
% and Amount of GST on Basic Amount						
Total Amount [Inclusive of GST]						



Hiring Services of Software Vendor for Development of Software Package for Domestic PNG segment having Modules for, Billing & CRM, and Optional Modules (Customer Onboarding, DMA & LMC, Consumer Apps, CRM app)

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Service Accounting Code (SAC)	
Name of authorized person submitting the tender on behalf of the Bidder (s):	
Designation of authorized person:	
Name of firm / Contractor:	
Address of firm / Contractor:	
Date:	

NOTE

1. Bidders quoting rates without considering the statutory payments applicable & payable to the service unit as specified in the SCC/bid document shall be out rightly rejected.
2. Bidders are required to quote the rates strictly as per the above SOR format and not to use any other format. Any quote received in format other than the tendered SOR, they shall be summarily rejected.
3. If any bidder offers suo-moto discount after opening of un-priced bids, such reduction /discounts shall not be considered for evaluation. However, if the bidder happens to be the lowest evaluated bidder without considering such discount, then benefit of discount will be availed at the time of award of work. No Conditional discount shall be considered.
4. Any error in quoting taxes & duties to bidder's account. Statutory Variation in taxes & duties during contractual completion period shall be to BGL 's account.
5. Bidder is expected to use Schedule of Rates (SOR) only for the price bids
6. The rates quoted by the bidder shall remain firm for the entire contract period
7. The bidder shall mention the rate and amount of GST, if applicable, in the price bid separately and clearly in the above SOR Template. If the same is not mentioned in the price bid, the quoted price shall be deemed to include the applicable GST (as on the date of bid submission).
8. Rate quoted under AMC & Support for each year shall be minimum 10% lesser than the or equal to previous year.
9. 30 man days have been envisaged for the total Application Enhancement per year. Accordingly, the quoted man days rate will be multiplied by 30 days for evaluation purpose. However, BGL shall be liable to pay for the actual man day(s) consumed.