

TENDER No.:- D/16248/ Jt.Dir. (IT)/2018

NEW DELHI MUNICIPAL COUNCIL

(NDMC)

BUDGETARY OFFER

FOR

Annual Maintenance of Oracle Customer Care & Billing (CC&B), Meter Data

Management (MDM) & Work & Asset Management System (WAM)

**Last Date of Submission of Proposal: 03.08.2018 up to 3:30 PM**

NDMC  
नई दिल्ली नगर पालिका परिषद



Joint Director (IT)



**INFORMATION TECHNOLOGY DEPARTMENT**

**NDMC: PALIKA KENDRA, NEW DELHI**  
**Ph: 23743243 (D), 41501353 - 60 Ext. 2240**

---

**BUDGETARY OFFER NOTICE**

The Joint Director (IT) NDMC, Palika Kendra, New Delhi invites on behalf of NDMC sealed budgetary offer for Annual Maintenance of Oracle Customer Care & Billing (CC&B), Meter Data Management (MDM) & Work & Asset Management System (WAM) , Palika Kendra from reputed firms .

The bidder may submit the duly filled up tender documents online **up to 3:30 p.m. on Submission-Date as given above** and the same shall be opened at 3:30 p.m. on the same day in presence of the suppliers or their authorized representative who may desire to attend in conference room of Director (IT) at 7<sup>th</sup> Floor, IT department, NDMC, Palika Kendra, Sansad Marg, New Delhi-110001.

***Letter of Invitation***

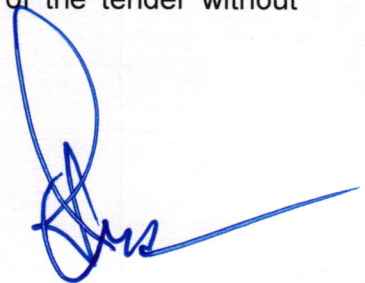
This invitation to Bidder is for "Selection of System Integrator for Annual Maintenance of Oracle Customer Care & Billing (CC&B), Meter Data Management (MDM) & Work & Asset Management System (WAM) 2.0 on AS-IS " by the NDMC.

Bidders are advised to study the RFP Document carefully. Submission of RFP shall be deemed to have been done after careful study and examination of the RFP Document with full understanding of its implications. Bid response prepared in accordance with the procedures enumerated in the RFP should be submitted to the Purchaser not later than the date and time laid down, at the address given in the RFP.

The RFP document can be downloaded from NDMC website [www.ndmc.gov.in](http://www.ndmc.gov.in).

Bidders must note that bids received after due date and time shall be rejected.

N.D.M.C. reserves the right to reject the whole or any part of the tender without assigning any reason.



**JOINT DIRECTOR (IT)**

*10/1*

**1. General:**

- I. Budgetary offer are invited from established, reputed and experienced service provider for Annual Maintenance of Oracle Customer Care & Billing (CC&B), Meter Data Management (MDM) & Work & Asset Management System (WAM)
- II. Bidders are advised to study the tender document thoroughly. Submission of tender should be deemed to have been done after careful study and examination of the tender document with full understanding of its implications.
- III. It will be imperative on each bidder to fully acquaint himself with all the local conditions and Factors, which would have any effect on the performance of the contract
- IV. No conditional/optional bid shall be accepted and bidders shall not be permitted to alter or modify their bids after expiry of the deadline for receipt of Bids
- V. NDMC will not consider the bids delivered through Fax or email.
- VI. The bid should be concise, brief and shall not contain irrelevant material.
- VII. Vendor should be a profit making company for last three years. Average annual service financial turn over during the last 3 years, ending 31<sup>st</sup> March of the previous financial year, should be at least Rs.1 Crore. **(Documents required for qualification of Technical Bid)**
- VIII. Company should be an ISO Certified for ISO 20000 or ISO 27000. **(Document required for qualification of Technical Bid)**
- IX. The firm shall be registered with Registrar of companies. **(Document required to qualify Technical Bid) with the Delhi Sales Tax Department for Works Contract Tax and should have valid ESI and PF registration.**
- X. Following documents shall be furnished by the bidder to enable the purchaser to make an assessment as to whether or not the bidder complies with the required. **((Document required for qualification of Technical Bid))**
  - a) Balance sheet for the last three years indicating turnover of the firm.
  - b) Permanent Account Number (PAN) issued by Income Tax Department.
  - c) Copies of **Service Tax & VAT** Registration .
  - d) Copy of Income Tax Registration Certificate.
  - e) Details of service center with list of equipment available and stock of spare parts shall also be furnished along with the technical bid.
- XI. Bidders are advised to study the tender document thoroughly. Submission of tender should be deemed to have been done after careful study and

examination of the tender document with full understanding of its implications.

- XII. It will be imperative on each bidder to fully acquaint himself with all the local conditions and Factors, which would have any effect on the performance of the contract and cost of the Stores. No request for the change of price or time schedule of delivery of Stores shall entertain; on account of any local condition or factor once the offer is accepted by NDMC.

**Schedule of Offer:**

- i) The Offer Document will be made available to the NDMC Portal (**[www.ndmc.gov.in](http://www.ndmc.gov.in)**).
- ii) The sealed bids containing technical details and price quotation shall be **received online up to 3:30 PM on Submission-Date as given above.**
- iii) The bids will be **opened at 4.00 PM on Submission-Date as given above** and it must enclose all technical details.

**Procedure for submission of Offer (Please read carefully)**

- i. Technical & Financial should be submitted in physical form to NDMC as per scheduled .
- ii. The offer shall contain no erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be authenticated by the person or persons signing the document.
- iii. **All pages in the technical documents must be duly self-attested and sequentially numbered by the firm.**

**Financial proposal:**

The bidder shall indicate total cost of the complete project in the Price Schedule.

## **2. TERMS & CONDITIONS OF CONTRACT**

### **2.1 *Scope of work***

#### **2.1.1 The scope of Work of the existing System Integrator includes following:**

- a. Development, Customization and rollout of following applications:
- b. ORACLE UTILITY application including Metering, Billing, Collections, Customer Care, Workforce Management and Asset Management
- c. Business Productivity Suite
- d. Operating System
- e. Document Management System
- f. EMS Solution
- g. Audit log Solution
- h. Security Solution
- i. VPN Solution

#### **2.1.2 Integration of the developed system with:**

- a. Payment Gateways
- b. Internet banking
- c. Mobile Wallets
- d. Provision of training to NDMC personnel for using the system
- e. Installation, Commissioning and Rollout of Hardware at NDMC Data Centre
- f. Provision of Desktops, Printers, Biometric Devices, UPS and HDDs (at all 40 locations)
- g. Setting up of network at Zonal Centers
- h. Service Level Monitoring
- i. Deployment of SLA monitoring tool
- j. Generation of SLA reports at regular intervals as desired by NDMC
- k. Other Activities
- l. Preparation of technical and training documentation
- m. Provisioning of consumables and spares
- n. Operational Support for rest of the contract period
- o. Provision of network connectivity (primary, secondary and Internet) from a third party vendor
- p. Facility Management Services

- q. A four seat Help desk for internal users
- r. Maintenance of assets on behalf of NDMC
- s. Maintaining a Customer Care for citizens
- t. Generation of Reports and incident reporting

**2.1.3 Asset Management:-** Bidder may quote work and asset management. The functionality must be capable of distributed asset support, with particular importance attached to linear asset structures, remote locations of assets, short-term work and condition, Performance monitoring and preventive maintenance. Some of the functionalities are explained below:

S. No.	Requirement Description
1.	Ability to define structure of NDMC Maintenance department in the system
2.	Ability to define various kinds for equipments and locations which are relevant for cost analysis
3.	Provision to associate an equipment with a location and maintaining temporal relationship between an equipment and its location
4.	Ability to integrate equipment to a Asset record for managing depreciation, expense capitalization etc as per DERC regulation and accounting requirements
5.	Provision to store equipment specific information like manufacturer, Purchase details, Installation date and any other information useful for business
6.	Ability to “search” an equipment based on any information maintained in equipment record
7.	Ability to define “Bill of Material” for a equipment which may include spares, assemblies etc
8.	Ability to provide usage report for a spare-part in various equipments
9.	Provision to include Notes, drawing etc for the equipments
10.	Ability to maintain vendor specific warranty information and display the same when a problem is notified.
11.	Provision to define equipment dependency in order to determine other equipment that gets impacted.
12.	Ability to define Preventive Maintenance checklist for various kinds of equipment
13.	Ability to manage calibration schedule for specified equipment
14.	Ability to record calibration results and decision whether the equipment can be used or not
15.	Ability to define Preventive Maintenance schedules based on time, counter or combination of two
16.	Ability to forecast to cost, including cost of spares, manpower and purchased services, of Preventive Maintenance activities based on pre-defined checklist
17.	Seamless integration with Human Resources application to allocate craftsman with requisite skills for maintenance activities.
18.	Ability to list and print the maintenance schedule due for different time period like next 1 week, 2 weeks, or 1 month
19.	Ability to capture the compliance of maintenance schedule and record the delay /early completion of schedule

20	Automatic computation of scheduling dates depending upon early/late completion of maintenance of schedule
21	Automatic routing of complaints to the authorities concerned
22	Ability to create Work Orders (Demand Attention Jobs) with minimum planning data as well as with detailed planning data
23	Ability to plan the resources, including workforce, spares, external services etc in the Work Order.
24	Ability to incorporate safety specific permissions/permits before execution of Work Orders.
25	Provision to define authorizations/approvals for the execution of Work Orders
26	Ability to compute Planned cost based on planning data which may include manpower, spares, procured services etc.
27	Ability to view workload of technicians/resources and optimize scheduling of Work Orders
28	Ability to view stock for the spares, included in Work Order, from Work Order
29	Seamless integration with Material Management for raising material request, viewing inventory status, posting un-planned goods movement and including material cost in Work Order.
30	Automatic scheduling of maintenance orders based on priorities
31	Ability to record actual completion data in respect of tasks in the Work Order
32	Ability to report Planned Cost and actual Cost for Work Orders
33	Ability to record tasks against Annual Maintenance Contracts
34	Seamless integration with Finance and Controlling applications for transfer of Work Order costs
35	Ability to define hierarchy of Work Orders
36	Ability to define budget for a Work order and restrict Work Order processing if budget is exceeded
37	Provision to build failure history for a equipment which may include type of fault part impacted, its cause, corrective activities etc
38	Ability to report failure history based on parameters like fault, cause, part impacted corrective activities.
39	Automatic computation of MTBF (Mean Time Between Failures) and MTTR (Mean Time to repair) for an equipment
40	Ability to plan shutdown related tasks separately and provision to include a non-critical breakdown task into shutdown plan
41	Seamless integration with Project Management application for controlling Work Order cost based on project budget
42	Provision of reporting of maintenance cost for an equipment based on criteria such as location, cost center, Department responsible period etc. Ability to create a trouble-shooting guide by associating a set of problems, their causes and their corresponding remedial actions Provision to define transformers, Equipments with their corresponding serial numbers for identification
43	Ability to manage refurbishment process of equipment and maintaining different price for refurbished equipment
44	Ability to track different status of Work Order tasks during the entire refurbishment process

45	Ability to capitalize refurbishment expenses, if desired
46	Ability to support Reliability Centred Maintenance
47	Ability to provide two way interface with GIS system through standard adaptors
48	Ability to plan and execute maintenance tasks through GIS based interface
49	Ability to support and provide mobile based solution for asset maintenance

#### 2.1.4 Meter Data Operation System

NDMC is looking for MDM solution which can perform Load forecasting, Load Analysis, Settlements, Collection system integration, Interval data management, Versioned data storage, Two-way communications between customer information systems and AMI systems. It must provide a platform to enable oehr AMI applications and business processes.

S. NO.	Requirement Description
1.	It should be easy to configure interfacing tool for getting information into Meter Data Management Solution
2.	Should have automated process for validating and correcting invalid data
3.	Should have sophisticated graphical analysis tools for comparing the raw data to system edited data, and for tracking any manual user changes
4.	Should have formal process for historical versions and audit trails
5.	Meter Data Management Solution should have been implemented with at least 3 AMI implementations.
6.	Should be possible to configure user interface and business rules for adding validation rules and applying other rules to prepare data for other uses like billing, without coding/ programming
7.	Should have Integrated exception management module that provides a platform and process for you to efficiently manage work
8.	Should have web framework that allows end users direct access to their data
9.	It should be possible to enable End-User Access via thin-client user interface by the application of security rules to allow a given user to see only their data
10.	It should be possible to do Data Validation , Cleaning and Estimation for ensuring that downstream systems will get the data they need
11.	System should have Different validation parameters for different entities
12.	It should be possible to add validation through standard configuration or 3 <sup>rd</sup> parties
13.	Users can adjust parameters over time to remove false positives, or configuration can automate this process
14.	It should be possible to Version the business validation rules
15.	Reports should show which meter reads have failed and passed the validations
16.	The Report should show which meter had replacement data and for what periods of time.
17.	MDM solution should include revenue protection functionality by using rules to check potential slow meters, theft.
18.	Functionality to interface with metering systems including traditional



	systems as well as AMI/Smart Meters which employ two (2)- way communications infrastructure.
19.	Standard Critical Validations- Invalid unit of measure, invalid meter number, invalid channel ID, too many intervals, stop date/time>start date/time etc.
20	Standard Usage Validations-Gap checks, negative value checks, zero (0) value checks, data spike checks, high/low checks, energy sum checks, etc.
21	Estimations- Includes rebuilding routines to estimate missing data, using estimation techniques such as linear interpolation and historical like day values.
22	Should have Integrated revenue protection functionality to indentify missing revenue
23	Should Provide numerous standard functions to access, manipulate, validate, and aggregate meter data. These functions are available as the basis for configured business rules to address custom business requirements for validations, revenue protection rules, or queries.
24	Should Provide automated error handling for exceptions and Work Queues functionality for errors that require manual intervention.
25	Should store meter data in one (1) central repository and acts as a service to other applications, users and customers. Supports open technologies to allow easy integration with other systems.
26	Should Maintains an audit trail of all changes made.
27	Should have Rich security features to control user and system access.
28	Should Scale linearly to support increased meter counts and any technology changes that require converting existing cumulative meters to advanced/interval meters.
	<b>Energy Accounting</b>
	System should provide a capability to produce energy accounting/energy balance reports based on
29.	At area level
30.	At distribution transformer level
31.	System should have a capability to generate energy profile based on load survey data
32.	System should provide capability to generate distribution transformer wise energy profile report for different consumer categories for losses analysis
33.	System should provide capability to relate the consumer indexing information with distribution transformer, feeder, substation, administrative areas
	System should provide validation test for high value customers based of load survey data to analyze discrepancy such as
34.	Interval validation
35.	Energy Discrepancy
36.	Spike Interval
37.	Dip Interval etc
38.	What if analysis for individual customers
	Load Analysis

39.	System should provide Load Research capabilities to analyze how the customer class use the energy
40.	System should provide load profile generation capabilities based on load survey data of 15,30,60 min interval
41.	System should provide for totalizing reports providing load profile data and summary statistics for industrial, HT, EHV consumers and energy input points
42.	Should have a capability to extrapolate based on the selected samples to produce load profiles
43.	Coincident Peak Analysis
44.	Ratio analysis
45.	System should provide mechanism to support demand side management program at consumer level
46.	System should have a capability to produce consumer profiles based on statistics as a standard and ad hoc reports
	Cost of Service & Rate analysis
47.	The load analysis should provide a module for cost of service analysis
48.	Cost of service analysis should have a capability to analyze the contribution of various customer classes to the system peak demand
49.	Should have a capability to apply cost allocation formulas to develop allocation factors
50.	Should have a capability to do what if analysis on proposed rate schedule
51.	Simulate rate impact based on load profile analysis
	Load Forecast System
52.	Forecast System should include default processes for daily and monthly forecast processes, as well as the ability to add new forecast processes if desired. It should give the option of running the forecasts automatically
53.	System should have the ability to do Scenarios and Sensitivity Analysis
54.	Should have the ability to specify how different entities relate to one another Any number of levels in the forecasting and report hierarchy should be possible. The system should automatically aggregate the actual and forecast results up the hierarchy.
55	System should automatically track forecast accuracy and report results to drive continuous forecast accuracy and report results to drive continuous forecast improvement
56	System should allow integration to 3 <sup>rd</sup> party forecasting models
57	The system should automatically checks for required inputs and forecast anomalies/exceptions.
58	System should come with most standard reports including the ability to compare different forecasts to one another and compare forecast to actual
59	System should have ability to automatically back cast process reviews forecast accuracy to assess what model or model combinations would be best to use for future forecasts.
60	System should account for changes in exogenous factors that are not otherwise accounted for or properly accounted for in the historical input data

61	System should have ability to Forecast any duration, from one day to many years
62	The system should have process for mapping detailed source data in situations where the forecasting will be performed at an aggregate level.
63	The system should allow top-down and bottom-up forecast processes to be assigned to a given entity to allow quick comparison to check for data inconsistencies.
64.	System should have user, process and data level security, audit trails, adhoc reporting, powerful interfacing tools, and other functionality
65.	Should Provide numerous standard functions to access, manipulate, validate, and aggregate meter data. These functions are available as the basis for configured business rules to address custom business requirements for validations, revenue protection rules, or queries.
66.	Should Provide automated error handling for exceptions and Work Queues functionality for errors that require manual intervention.
67.	Should stores meter data in one central repository and acts as a service to other applications, users, and customers? It must supports open technology changes that require converting existing cumulative meters to advanced/ interval meters
68.	Should Scale linearly to support increased meter counts and any technology changes that require converting existing cumulative meters to advanced/interval meters.
	Profile and settlement system (ABT)
69.	Profile and settlement system should automate entire load settlement process
70	Profile and settlement system should Accurately verify incoming invoices. It should be possible to run shadow settlements using the same routines that generate the original settlements. It should be possible to run verifications against actual data, not just billing data.
71	Profile and settlement system should aggregate usage data from multiple metering points and meter types, managing diverse information effortlessly.
72	System Should have ability to track historic aggregated loads for dispute resolution
73	It should be possible to run routines whenever it is most convenient overnight, over lunch or even over weekends.
74	It should be possible for system to report the results of its settlement calculation to any other system for analysis or distribution
75	System should be highly scalable, capable of calculating settlement routines for tens of millions of accounts daily
76	System should allow more accurate contracts and procurements it should produce markedly improved load forecasts.
77	Easy categorizing of customer data, combined with powerful analysis of their usage and profitability will provide better, more targeted scheduling of powersupply
78	Automation of the load settlement process
79	Speed and accuracy- Performs complex calculations efficiently and accurately on interval data, billing data and customer information
80	Multiple load profiling methods – Supports industry-standard methods

	for settlement, such as Proxy Day, Templates, Dynamic Load Profiling, Regression Modeling and Actual Metered Loads
81	Should Provide numerous standard functions to access, manipulate, validate and aggregate meter data. These functions are available as the basis for configured business rules to address custom business requirement for validations, revenue protection rules, or queries
82	Should Provide automated error handling for exceptions and Work Queues functionality for errors that require manual intervention.
83	Should Store meter data in on (1) central repository and acts as a service to other applications, users, and customers? It must support open technologies to allow easy integration with other systems.
84	Should Maintains and audits trail of all changes made.
85	Should have Rich security features to control user and system access.
86	Should Scale linearly to support increased meter counts and any technology changes that require converting existing cumulative meters to advanced/ interval meters.s

### 2.1.5 Billing and Customer Care System

NDMC wants to implement Billing and customer Care System, which can be used to bill multiple services like electricity, water, Municipal Services etc. Some of the major functionalities are given under.

S. No.	Requirement Description
	<b>System Basics</b>
1.	The solution should be Web-based and n-tiered. Please include a diagram of the interaction between the different tiers of your product
2.	System should be based on SOA architecture. Pls explain the architecture
3.	System should provide an intuitive, standard web-based interface
4.	Favorite Navigation Options (user based)
5.	Hyperlinks for Navigation
6.	Simple Back/Forward Navigation
7.	Navigation History
8.	Toolbars
9	Customer current context and dashboard
10.	System should feature a "home page" or similar area that is always accessible and visible to end-users while they are navigating to different screens.
11.	System should enable to configure the presentation of data to specific groups of end users based on roles/responsibilities.
12.	System should provide intuitive, context-based menus that enable users to easily navigate to related transactions while maintaining the current customer, account, or premise.
13	System should enable to configure its business processes for its end users while maintaining upgradeability.
14	System should maintain and display alert information to inform the user when a situation merits special or urgent attention.
15	The alert system should enable contextual drilldowns to vital information that can

	help easily resolve the issue.
16	System should provide hierarchical structures that enable the user to easily view and navigate to related data (e.g. the accounts that are linked to a particular customer or address).
17	System should include built-in graphs that help Customer Service Representatives (CSRs) quickly assess customer usage, financial data, and other information over time. With drill down capabilities
18	For large accounts, the system should provide account summaries and drill downs to help streamline the amount of data shown to the end user.
19	System should include web-based, contextual online help with a fully searchable index.
20	System Should include numerous functions to minimize data entry, including data replication and merge functions.
21	System should provide out-of-the- box, utility-specific capabilities, e.g., appropriate terminology, consistency with utility standards and workflows, and the capability to interface seamlessly with other utility-centric software
22	CSRs should be able to modify selected user display data to their specific requirements without requiring customization of the system
	<b>General Functions</b>
23	System should include a fully configurable and extensible data model that is maintained during upgrades, including enabling NDMC to define fields and validation routines that are not included in the base system
24	System should be table-driven and enables NDMC to tailor system rules and behaviours without customization
25	Electricity/Water
26	Sales of Items like CFL etc
27	Third Party Charges
28.	Rental Payments (Meter, Metering Equipment etc.)
29.	Non energy/Non Water bills
30.	System should be able to do property tax bills and bills for property given on lease
31.	System should support the definition of different business rules for multiple jurisdictions, e.g., different tax rates, products, billing/payment options, revenue recovery rules, etc.
	<b>Customer Management</b>
32.	System should enable set-up of a single customer/person record in a single location, so that this data is maintained when that person wishes to purchase
33.	System should support the tracking of complex customer ownerships associated with that person or customer. (One customer with many premises, retail chain owner etc.)
34.	System should enable the definition of user-defined fields to the person and account records, and these user-defined fields are maintained during upgrades.
35.	System should enable multiple name (aliases) to be specified for the same person. These names should all be available for searching.
36.	System should allow multiple forms of identification to be linked to the person. E.g. Drivers license, Voters Id, Ration Card etc. These identifiers should be available for searching.
37.	System should enable the definition of an account that is linked to a specific customer
38.	Account information should contain all critical data related to that account,

	including contact persons and specific payment terms and methods.
39.	Account should remain linked to the specific customer indefinitely, eliminating the need to set up a new account when the person moves or purchases new services.
40.	System should support the definition of certain accounts as critical or important and route these issues to specific NDMC (e.g. consumer desk etc.) staff for special handling.
41.	System should support the association of a single account with multiple services.
42.	System should support the hierarchical linking of services.
43.	For services with multiple locations, services can be set up to consolidate consumption (e.g. add usage from several meters) or subtract from other locations.
44.	System should provide robust, easy-to-use capabilities for starting and stopping customer service.
	<b>Financial Management</b>
45.	System should create a financial transaction after the finalization of a bill, payments, or adjustment.
46.	All financial transactions handled in the system should include general ledger details that can be passed directly to a third party General Ledger (GL) system.
47.	System should enable the cancellation of financial transactions. Cancelling the transaction must not modify the original transaction (for audit reasons)
48.	System should allow for adjustments to be made to virtually any type of financial activity against a Service.
49.	System should maintain a history of all financial transactions, which can be drilled down to examine the history
50.	System should support open-item, cash, and accrual accounting.
51.	System must support financial control functions to ensure the integrity of financial information and reporting
	<b>Customer Lifecycle Management</b>
52.	System should enable searches by name, address, account number, phone number, person identifier, or other criteria.
53.	When a customer is indentified, all appropriate field on the system screen should be populated and contextual information is displayed where necessary (e.g. payment information will display on the payment screen).
54.	System should provide a contextual, user-centric portal that displays only the account information that is most applicable to the needs of the user.
55.	The portal should be fully configurable, allowing NDMC to create specific port lets around alerts, billing graphs, financial balances, others account details, etc.
56.	System should maintain contact notes and other contact data as customer contact records.
57.	System should provide robust integration capabilities with IVR systems.
58.	System should provide a “one –stop” enrolment process for new customers that quickly and efficiently help the CSR log and validate the data.
59.	System should provide for the creation of “packaged” services that may trigger a discount.
	<b>Contract Management</b>
60.	System should provide robust quoting capabilities to support the generation of proposals to provide services, typically for larger customers.
61.	System should support blanket and umbrella agreements to support time based contractual services, typically for larger customers.

62.	Umbrella agreement must enable the specification in a single location of information such as process, which apply to all customer contracts linked to the umbrella agreement.
	<b>Customer Billing</b>
63.	Systems should provide a robust tariff engine that defines the prices for products and services offered.
64.	The tariff engine may be configured without the need for customization.
65.	The tariff engine can define products that accept charges calculated in external application, optionally adding other calculations (e.g., taxes or other fees) to facilitate bill consolidation.
66.	The tariff engine should provide a capability to handle effective dates for external factors such as tax rates etc. without need to change the tariff version.
67.	System should support complex regulated and unregulated (open access) tariff calculations without the need to modify the base system.
68.	System should permit rates to have multiple components that produce the actual charges on bills.
69.	System should support plug-ins or other non-customized functionally that support more complex tariff calculations.
70.	System should handle proration automatically to support short and long billing rates, as well as tariff changes during a period.
71.	System can define many rules use to modify consumption values before applying the tariff.
72.	System should also support consumption estimates where metering is not used or meters are not in working conditions or fails high –low validations.
73.	Directly on the rate
74.	Via a lookup table that can be referenced on multiple rates
75.	As the result of another rate component
76.	As the result of a custom plug-in
77.	As entered into the system via an interface to an external system
78.	The system should allow the definition of look up tables that contain frequently used amounts, and can be set up to define flat fees, per-unit fees, and percentage rates.
79.	The values of bill factors must be date effective to enable simple changes over time.
80.	Proration should be supported when the look up value changes during the billing period.
81.	The system should enable “what if” analysis to test the results of applying a particular tariff in various scenarios.
82.	The system should handle sophisticated cross-product discounting scenarios.
83.	System should provide a capability to embed rate component in the tariff version based on user specific parameters e.g. senior citizen discount, employee discount etc.
84.	Should provide bill cancellation and rebelling capability from individual customer to mass and from any past period.
85.	Should have capability to trigger workflow in case of billing errors during batch runs and bills and bills not in errors should be finalized and processed without any manual intervention
86.	System should, at a minimum, be able to include the following on a bill
87.	Internally computer charges (computed by the system’s tariff engine).

88.	Externally compound charges (passed through from another system).
89.	Complex billing charges (e.g. half-hourly electricity charges).
90.	Billing in advance of advance service provision.
91.	Billing of metered services
92.	Billing of non-metered services.
93.	Fees, such as flat rate (for example, a connection charges). System should also allow for the calculation of fees as a percentage of another charge (for instance, a late fee on an overdue balance).
94.	System should provide the following standard billing capabilities.
95.	Automatic handling of mere exchanges
96.	Proration of long or short bill periods.
97.	First and last bills
98.	Op[optional estimation of meter reads when actual data is not available
99.	Automatic normalization of consumption information for rate calculation for bills when billing period is longer /shorter than user-specified range
100.	Calculation and addition of taxes
101.	Discounts
102.	Margins
103.	Customization of bill due dates
104.	Definition of exact due dated
105.	Overrides on due dates
106.	System should generate a summary bill that can be associated with many services.
107.	System should provide bill printing and online bill image functionally.
108.	System should support cancel/re-bill functionality, to permit recalculation of charges once source data is corrected.
109.	System should support online, real time corrections of individual bills.
110.	System should support automatic rebilling when earlier meter-read estimates fall above or below user-define thresholds.
111.	System should the specification of a date range during which bills may be produced, which enables NDMC to immediately being bill productions as meter reads come in.
112.	System can automatically create statements that consolidate information across multiple accounts.
113.	System should provide billable charge templates and other tools to support one-off and third party charges that fall outside normal business operations.
114.	System can bill customers a standard budget amount each period, based on previous usage trends, customer history, other factors.
115.	System should support convergent billing, i.e., the consolidation of billing information created by other systems in a single bill to customer.
116.	System can add permanent or one-time messages to bills, including meter reading remakes and ad hoc CSR comments.
117.	Produce bill print lines embedded with actual Qty and rate
	<b>Multi Party Billing</b>
	System should maintain contract agreement information for services providers, including the following service provider types:
118.	Energy (energy supply companies, energy service provides, retailers, and suppliers)
119.	Meter service (meter service providers and meter agents)



120.	Meter reading (meter data management agencies and meter reading service providers)
121.	Billing (billing agents )
122.	System should maintain the following relationships types:
124.	Receivable (payment) relationships
	System should support various types of billing calculations and presentation including and following
125.	Rate-ready, when another service provider's rates are loaded into the system.
126.	Bill ready, when another service provider's calculated charges are loaded into the system
127.	Billing on behalf of a service provider
128.	Service provider billing of system charges. In this instance, charges are interfaced to another service provider, which the system views as the customer.
129.	Split billing, where multiple providers are each billing their own charges
130.	System can potentially support market operations in a deregulated market (open access) (e.g., system switches service providers as customers direct)
	<b>Payment Providing</b>
131.	System can manage payments from any number of source, including mailed-in or walk-in payments, remittance processors, lock boxes etc.
132.	System should support batch processing of payments through staging tables or the equivalent, to permit the creation of payments in the system from any source e.g., collection agencies.
133.	For payment distribution, system should support either " balance forward" (in which payments are applied to the oldest debt first) or "open item" distribution (in which payments are applied to specific bills, charges, services agreements, or a combination of these).
134.	System should support automatic payments, including Electronic Funds Transfer (EFT), direct debits, and credit card payments.
135.	System should support payment alternatives (pay plans etc.) under automatic payment provisions.
	System should support the following revenue collection functions:
136.	Adding and viewing payments online
137.	Scanning bill stubs
138.	Endorsing checks
139.	Printing receipts
140.	Managing and balancing individual cash drawers in a payment canter
141.	Single/multiple check(s) for multiple accounts
142.	Pop-up messages alerting operators to excess cash in a drawers
143.	Online, real time transfer or payments between accounts with financial/ accounting entries (facilitate error correction)
144.	Systems can halt on-going revenue recovery/disconnection activity if payment is received for a delinquent account.
145.	System should support online cancellation of payments and levying of automatic fees for bounced checks.
	System should provide powerful search capabilities to help users locate a particular payment including:
146.	Account (by name or Account ID)
147.	Amount (with a 'between' range allowed)
148.	Payer Account (by name or Account ID)

149.	Payment Tender Amount (with a 'between' range allowed)
150.	Tender Source
151.	Payment Data range
152.	System should provide for the creation of non-billed budget plans to help standardize a customer's payments over time, particularly where bills are created infrequently.
	<b>Arrear Recovery</b>
153.	System can monitor how much customers owe to ensure they have not violated debt tolerances as established by NDMC.
	When a violation is detected, the system can support the following events:
154.	Encourage the customer to pay
155.	Terminate service
156.	Write off debt
	System encourages customers to pay by providing, at minimum, the following functions:
157.	Generate notice letters
158.	Credit-rating notifications
159.	Cancel existing instalment plans
160.	Establish payment plans (instalments, levelized bill payments, etc.)
161.	System should initiate disconnection processing if the above steps do not result in a satisfactory payment arrangement.
162.	System can create a write-off event to trigger a collection agency referral.
163.	System should support automatic and manual cancellation of write-offs.
164.	In the case of write-off, system should generate accounting and notification processes required to complete the necessary transactions.
165.	All arrears/revenue recovery activities can be processed automatically or manually, or any combination thereof, based on NDMC's specific business practices or regulatory requirements.
166.	Automatically triggered revenue recovery activities can be overridden manually if required.
167.	System can calculate and maintain an internal credit rating on each account that can be configured based on account lifecycle events.
168.	Arrears recovery rules can be configured to take the credit rating into account when deciding on the appropriate collection path for the customer.
169.	System should support cash and non-cash deposits, such as letters of credit and surety bonds, bank guarantees.
170.	System can automatically recommend a customer's suggested deposit amount.
171.	System can calculate interest on deposits, both periodically (via a batch process) and when a refund is anticipated. If deposits are received over time, system calculates interest on each payment separately.
172.	System can refund deposits automatically when a customer meets user-defined criteria (which may be based on credit rating, length of service or other factors.)
	<b>Geographic Data Management</b>
173.	System can record basic geographic information about each location or address.
174.	Multiple geographic identifiers may be linked to the premise/service location (e.g., map coordinates, latitude/longitude, GPS).
175.	System should support searching by geographic identifiers.
176.	System should support an unlimited number of distinct service points for each premise. (A service point is a location where a given service is actually provided).

177.	System should enable the linkage of multiple service points to either a single service agreement.
178.	System should also enable the linkage of single service point to multiple services.
179.	System should provide for hierarchical structuring of parent and child premises.
	<b>Premises Management</b>
180.	System should provide powerful query and other tools than can quickly perform mass updates on premises or check the account status of, for example, all apartments in building.
181.	Mass updates actions should, at a minimum, include:
182.	Assign or remove parent premise.
183.	Start or stop service.
	<b>Meter and Device Management</b>
184.	System can record the relationships between a device and the service point it serves.
185.	System can track meters and equipment installations through their life cycle, when meters are used at different locations; records are kept of initial and terminal readings at each site.
186.	Users should be able to access the history of a meter or service point, including all meters installed over time.
187.	System should allow for specification of a stock location whenever a meter or item is removed from a service point.
188.	Tracking by stock location can be activated for individual meter types and item types.
189.	System can maintain records on non-metered equipment such as transformers, backflow devices, lamps, and other items installed in the field.
191	To reduce data entry, system should enable data replication from template entries for meters and items, and supports the automatic incrementing of badge numbers and serial numbers.
192.	System should include features for selecting devices to be tested and recording test results.
	<b>Meter Reading</b>
193.	System should support meter read cycles and routes, to which Service Points can be assigned. (A route is a group of properties whose meters can be read by a meter reader on a given full or partial day.)
194.	System provides staging tables to load in the meter read data, which is then processed and used to create meter reads in the system.
195.	System should support the loading of reads from traditional manual reading processes, or from automatic meter reading systems
196.	System should permit uploading remark codes with meter read data.
197.	The remark code should be able to trigger one or more user-defined events, e.g., whenever a meter read with a "broken seal" remark is recorded in the database, the system might trigger the creation of a field activity to investigate the meter.
198.	System should support the tracking, reviewing and correction of meter read errors.
199.	System should enable the ability to add non-cyclical meter reads, such as when a customer starts or stops service.
200.	System should support meter read estimation when an actual meter read is not available.
201.	System should support both trend-based and historical estimation.
202.	System should support the definition of and comparison against high/low limits that

	are based on estimated usage for the account.
203.	System should store a complete online history of all meter reads, including those uploaded from handheld devices, no reads, and manually entered reads.
	Field Work
204.	System should provide handling for all customer field requests, including meter installs & removals, turning service on or off, and service investigations. And should have a capability to levy charges against customer requested services.
205.	When a customer calls to start service at a premise, the system should review the current status of service, and may create one or more field activities as applicable the start service.
206.	System should allow a single field activity to be linked to several pending service agreements.
207.	System should provide a dispatch query that presents pending Field Activities that need to be dispatched, which can be grouped and given to work teams.
	System should feature an automated field order dispatch process that selects pending field activities that:
208.	Are not yet connected to a Field Order
209.	Have been assigned a dispatch group
210.	Are linked to an Field Activity type that permits automated dispatching
211.	Have a schedule date earlier than today's date plus the specified Dispatch Ahead Days
	Field work completion activities should trigger any of the following system updates:
212.	Meter Installation – the new meter and the start reading are recorded
213.	Meter Removal – the removal and the related end reading are recorded
214.	Record Meter Reads
215.	Service Point Connection Status update
216.	Device At Service Point Status – indicates if the meter is on or off (or, for lamps, if the eye is in or out)
217.	System should support appointment functionality. For example, dispatch groups could receive effective-date work schedules, which define their workday with time slots and the number of resources available for each time slot. The system should be able to override a dispatch group's normal work schedule for events like holidays.
218.	Integration with a Workforce Management system (see below) should enable additional appointment functionality in the core system (e.g. whether appointments are required at dispatch time, optional, or not allowed for field activities of that type).
	Work Force Management Integration
219.	System should provide standard integration with a third party workforce management (WFM) system.
220.	Integration between the two systems should permit the user to view the available time slots, choose from them, and, in a real-time transaction, both reserve the time slot in the WFM and update the field activity.
221.	All activities should take place without the need to jump between the two systems.
222.	The WFM should send status values to the customer care and billing system so that users can inform customers about field visit status, e.g., "the worker is on the way."
223.	System should support a field activity history log to capture the changes to the field activity that are triggered by messages coming from the WFM, stamped with

	the date/time and action that was performed.
224.	System should support integration with multiple “point” WFM systems, allowing definition of specific options and messages that should be handled by each system.
	<b>Energy Data Management</b>
225.	System should calculate and manage all types of time series data, including raw consumption, aggregated load, standard load profiles, prices, and other factors.
226.	System should include many features to process this data, including validation, editing & estimation (VEE), derivation, aggregation, time-of-use mapping, and complex billing.
	<b>Meter Data Management</b>
	System should support many forms of interval data, in any interval size, including:
227.	Raw and aggregated data
228.	Consumption values
229.	Standard load profiles
230.	Time of use maps
231.	Prices
232.	Contractual terms
233.	System should allow loading of new or corrected data without corrupting existing data, including a history of what has been loaded in support of retroactive adjustments and calculations.
234.	System should permit calculations and manipulations of this interval data order to perform many different functions.
235.	System should permit interval data processes to be performed as data become available
236.	System should support multiple time zones and daylight-saving shifts.
237.	System should be able to configure and identify revenue protection (Theft or suspected consumption) and trigger a workflow for action to validate the reasons. This should automatically happen whenever new meter read enters the system
238.	System should detect any meter related issues such as meter stop, battery low etc and trigger a workflow
239.	System should provide adapters to accept meter reading data in the XML, CSV format to handle AMR inputs and CMR inputs
240.	System should be capable to define rules by means of inbuilt rules language to enable to configure utility specific validation rules. It also should provide prebuilt rules
241.	Should have a capability to store and use Instantaneous, billing load survey and events, TOU (time of use) data from meters.
	<b>Complex billing</b>
242.	System should include a module for complex billing that takes over when raw interval data has been processed.
243.	System should support aggregation of interval data (the accumulation of data for multiple sources into a single stream, such as when a single Service Agreement exists for multiple service points or meters).
244.	System should support time-of-use mapping by providing tools that help users upload data, define standard reusable templates, classify and price usage periods etc.
245.	System should store and process both interval-based and time to use based prices.

	System should include formulate in the base system that supports, at a minimum, the following:
246.	Profile data conversion for aggregation of peak demand (sum of curves or the maximum peak in each period).
247.	Profile Data conversions for unit of measure and time intervals-for instance. From KWh/15 minute interval values to kwh/30 minute interval values.
248.	A rate component calculation capability to pick out a “peak curve value.”
	Complex billing systems should, at a minimum, be able to support the following:
249.	Straight time-of-use pricing, where time of use data is derived from time series usage.
250.	Pure real time, interval pricing where spot market prices are applied interval by interval to the customer’s time series usage.
251.	Combination products where fixed price are offered for pre-defined loads (or for usage within a band of loads), and the excess or under used energy is sold or bought on a spot market contract.
252.	All of these types of products should support integration with special contract options, such as price or demand response load management triggers.
253.	System should calculate and manage all types of time series data, including raw consumption, aggregated load, standard load profiles, prices, and other factors.
254.	System should support sophisticated contract options for the management of curtailment and interruption periods.
255.	In case of new connection, disconnection, load enhancement etc information received through various types of forms, data should be directly scanned from the form to raise the first bill, pre final bill in time and to eliminate the chances of error through human intervention.
256.	Preparation of reimbursement bill of NDMC employees staying in NDMC flats outside NDMC area and necessary interface required with e fin and billing system.
257.	Boiler charge, misuse charges, concessional unit/code, temp meter all shold be printed in the bill if all are applicable to a consumer or part thereof
258.	Transfer Entry Payment Adjustment/Book Adjustment in case of NDMC buildings
259.	Billing in respect of Member of Parliament which has some special logics such as billing up to certain fixed units to be charged from LS/RS secretariat and excessive units to be charged from the MPs. The account of both has to be kept separately in the same folder. There is a proposal to charge Security depost and Meter rent also from LS/RS secretariat.
	<b>Development Tools</b>
260.	The System should include a set of tools, guidelins, standards, and checklists to assist NDMC develop new system functionality, such as new batch jobs, reports, plug-ins, and user interfaces.
261.	All tools should be based on industry “best in class technologies, and should not require NDMC to acquire expensive third party software in addition to the base system.
262.	The system toolkit should be supplied with a standard API to enable the easy building of interfaces to systems not furnished or implemented by the vendor.
263.	The development toolkit should be flexible enough to respond to current and minimal or no source code modification.
264.	The system should include the ability for NDMC to develop its own plug-in functions. These plug ins should be table based and support NDMC specific.
296.	The system should provide fully configurable, built in workflow tools to automate

	many back office processes, particularly those of long duration.
297.	Workflow processes should be triggered by user-defined system events. Including the definition of multiple decision point event outcomes.
	<b>Integration Scenario</b>
298.	Integration with CBS system for Push and Pull of the Staff Recovery Data.
299.	Integration with e-finance system for security deposit of consumers.
	<b>Operational Tools</b>
300.	The system should support actionable items or “to do” lists, that describe the work that needs to be done via human intervention.
301.	Actionable items should be assigned a status (such as open, in process, completed etc), and completed (but no longer visible) items should be trained in the database for audit purposes.
302.	The system should provide batch process submission tools that are well suited for ad hoc batch runs.
303.	These batch processes should be able to run concurrently with other processes or real time update requests.
304.	The system should support multi-threading (parallel processing) to reduce processing time.
305.	Batch processes should be restart able if they are interrupted for any reason, without corrupting the database.
	Tools should be provided to enable to intelligent moving of data from one environment to another. This should support scenarios such as:
306.	Copying changes only in configuration data from a mater environment to another environment (e.g. test environment)
307.	Copying data from the production environment related to a specific problem account a test environment in order to facilitate easy replication of the problem and enable problem debugging in a safe environment.
	<b>Security</b>
308.	The system should support the assignment of users to groups with specific levels of access to the system.
309.	Users should be able to belong to multiple user groups.
	The system should maintain security at the following levels:
310.	Action level which permits security administrators to define which actions user groups may execute for each transaction.
311.	Field level, which uses system security tables to define and enter field level security privileges to specific user groups and transactions. Users can be assigned codes that are tracked when users exit a transaction; the system should be an optional addition to other levels of security.
312.	Account level, which restricts access to specific accounts. This is useful in protecting important accounts from accidental update by non-authorized users and in convergent billing applications, where NDMC wants to restrict the access of third parties for which they are providing billing services. This security level should be an optional addition to other levels of security.
	<b>Audit Trails</b>
313.	The system should permit the auditing of data changes y users on particular fields, as specified during system implementation.
314.	When a change is made to an audited field, the system should capture the user, the date/time, the prime key of the row, the before/after images of teh field value, and the database action performed.

	The System should also support audit queries based on users or tables, fields, and keys. Depending on specification, users may view audit change to a:
315.	Table
316.	Row in a table (for instance, an account)
317.	Field in a table (for instance, all customers rates)
318.	Given field on a specific row (for instance, a specific accounts bill cycle)
	<b>Upgrade Tools</b>
319.	Each new release of the system's software should be delivered with the necessary database scripts and upgrade instructions to ensure that the system continues to operate with the same business logic.
320.	New fields that are added to the database should be defaulted intelligently, without the need for extensive user intervention.
321.	While NDMC understands any upgrade require some testing, the software should ensure that the impact of the upgrade on NDMC's daily operations is minimal. Please describe what aspects of your software help ensure rapid upgradeability while maintaining most changes to your baseline software.
	<b>Documentation and Online Help</b>
322.	The System should be delivered with complete documentation and a robust, context-sensitive online help system.
	Documentation should encompass the following (not necessarily in the specific format described herein, but including all critical data):
323.	Business Processes documentation should describe every screen in the system. This should provide tips and techniques on how an end user may use the system. End users would be the primary audience for this manual, and it should be available online. The help should be context-sensitive, positioning the appropriate page in the manual to describe the current screen.
324.	Administration documentation should cover the concepts behind the system and present procedures for designing and configuring the system. The primary audience for this manual would be implementers who prepare the system for user and system administrators who maintain control values for use in the system.
325.	Utilities documentation would describe the system utilities available with the system, such as the integration tool, the conversion tool, audit trails, the data dictionary, and a source-code viewer.
326.	Online help should relate to those functions displayed in a particular window or field, and also provide access to data throughout the rest of the application.
327.	The online help should provide an interactive data dictionary that describes that database schema and graphically illustrated relationships among tables. The data dictionary should list every table in the system.
328.	The system should provide an interactive data dictionary that describes the database schema and graphically illustrates relationships among tables. The data dictionary should list every table in the system.
329.	The system should provide an online source code viewer that lets authorized users browse the source code of system modules.
	<b>Archiving</b>
330.	The system should provide for the definition of families of data that can be archived and removed from the production system.
331.	The system should provide representative meta-data to define the most common data objects that would be archived (although the meta-data design should allow for archiving virtually any object in the system).



332.	Rules for which data is to be archived should be configurable to meet the specific requirements of NDMC
333.	The archive data should be accessible from a user interface similar to the production environment
334.	It should be possible to see a combined view of both archived and current production data
	Reporting
335.	Standard reporting should be delivered with the base system, either using a built-in reporting function, using a third party tool or a combination of the tool.
	Standard reports should, at the very least, include the following :
336.	Active Severance Processes
337.	Billed Revenues by Rate
338.	Collection Summary
339.	Customer Contact by type
340.	GL Accounting Summary
341.	Meter Reads Performance
342.	Customers with Life-Support/ Sensitive-Load
343.	Payments Balance
344.	Receivable Aging
345.	Tax payables Analysis
346.	To Do/ Actionable Item Entries
347.	Unbilled Revenues
348.	Vacant Premises with Consumption
349.	The core system should store the definition of reports crated in an external system, to facilitate the creation of additional reports or adhoc report requests.
350.	The system should provide standard data extracts for a data warehouse system.

### **2.1.6 Takeover from existing System Integrator and maintenance**

- a. The successful bidder will perform all functions and services necessary to accomplish the Transition of the entire suite of applications, infrastructure, and services procured under the current utility application from the Current SI.
- b. Successful bidder will be responsible for the overall management of the transition and will work to ensure the Transition is completed on schedule and to identify and resolve any problems encountered.
- c. The successful bidder will demonstrate to NDMC reasonable satisfaction that the SI is ready, prior to the completion of Transition Phase, to begin performing the Services. During this phase the existing System Integrator (SI) will be responsible for meeting the SLAs currently applicable.

### **2.1.7 Responsibilities of the bidder during Transition phase include:**

- a. Perform a smooth transfer of Services from Current SI so as to meet NDMC business requirements without any disruption to NDMC services.

- b. Taking handover of the development servers, in the possession of the current SI
- c. Liasoning with the OEMs for the transition process.
- d. Interacting with departmental officials for getting project related approvals etc.
- e. Develop and implement a detailed Transition Plan that will reflect a granular level of detail required to carry out and manage the Transition within the timelines provided in the RFP. The Transition plan must be exhaustive and inter-alia include:
- f. Perform an Initial wall to wall inventory of all project related assets (Hardware and Software)
- g. Facilitate the effective and smooth transfer of Assets.
- h. Take handover of development servers, currently in possession of the existing System Integrator.
- i. Assume operational ownership (including commercials if any) of the software licenses to the SI and Renewal of Third-Party Contracts.
- j. Implement the required Governance model as agreed after the award of contract.
- k. Develop and implement required plans, as well as the operational Change Management processes required to implement the Transition Plan.
- l. Prepare the functional, system, technical and process documentation of the existing applications and processes necessary for continued operation and maintenance of the services
- m. Provide the Program and Project Management associated with the above activities.
- n. Develop and submit a detailed Transition Risk Management Plan that will identify potential risks, set out possible mitigation approaches, and identify specific tasks the SI will undertake to help avoid identified risks connected with the Transition.
- o. Prepare and obtain necessary approvals for the Implementation plan along with application and infrastructure details. This activity should be carried out in time keeping in mind the implementation and completion dates.
- p. Meet with NDMC and its nominated agency i.e. "PMU" on a regular basis and provide NDMC with a detailed progress report weekly during Transition.
- q. The application consists of the following components

**2.1.8 Consumer Portal:** This portal digitizes all services being offered by NDMC and allows Citizens to access NDMC from their home. This portal helps NDMC's Consumers with the following functionalities:

- a. Know New KNO – from Zone, MR No, Area, Water Connection No.

- b. View/Print Latest Bill
- c. View Balance & Last Receipt
- d. Bill Pay Options
- e. Pay Online using payment gateways mentioned below
- f. Download Centre/Circulars & Notices
- g. Rebate Details

**2.1.9 Employee Portal:** This portal helps NDMC's employee of Revenue Department to carry out following functionalities

- a. Enter New Connection/Regularization Application for consumer
- b. Enter Bulk Connection
- c. Users own Password Management

**2.1.10 Payment Gateways:** Consumer can pay online through various Payment gateways:

**2.1.11 Utility Application:** This application is the Core of RMS which cater to following functionalities:

- a. New Connection
- b. Mutation
- c. Disconnection
- d. Related Field Operations
- e. Metering
- f. Billing
- g. Various CIS Payment channels like :
- h. Cash Counter Operation
- i. 3rd Party Payment-file based integration
- j. Customer Care including grievance registration and resolution.
- k. NON CIS payments

**2.1.12 Data Entry Application:** It is been used for the following activities:

- a. MRD management
- b. Demand Transfer
- c. New Connection Outsourcing Related:

- d. File Submission – New Connection
- e. ARN generation from files and subsequent KNo generation
- f. Route re-sequencing
- g. New Connection DAF entry
- h. Meter replacement
- i. Single consumer billing
- j. HHD Device tagging with Meter reader maintenance
- k. MRD tagging with Meter reader
- l. New Connection DAF entry and search

**2.1.13 Automatic Meter Reading – Bill generation and Printing automation:**

NDMC has provision for Automatic Meter Reading upload by meter readers through MDM.

**2.1.14 Consumer Migration tool:** This upload tool allow upload consumer data to CC&B as implemented for CC&B in specified format for migration from other system.

**2.1.15 Migration of Oracle suite of products**

1. The workhorse of the RMS systems is the Customer Care and Billing (CC&B) Solution tool, The current RMS system has been developed uses the 2.3 version of the tool. The bidder has to upgrade it to the latest version currently being provided by the OEM and which would be supported for the contract period. In addition, the other products deployed within the solution, should be suitably upgraded to maintain compability with it. The list of all such products is as following:
  - I. Oracle Customer Care and Billing (CCC&B version 2.3.1)
  - II. Oracle Database Enterprise Edition (version 11g)
  - III. Oracle Universal Content Management
  - IV. Oracle Access Manager
  - V. Oracle Internet Directory
  - VI. Oracle Https Webserver
  - VII. Other tools from the current software inventory required by the proposed solution

**2.1.16 Data Migration from current application**

- I. The data migration activity shall be preceded by an appropriate data migration strategy and approach, prepared by the bidder and approved by NDMC. Though NDMC is required to provide formal approval for the Data Migration Strategy, it is the ultimate responsibility of the successful bidder to ensure that all the data sets are migrated along with the currently installed software tools to their higher versions. This would include customer details, transaction data,
- II. Billing information and configuration data for the application itself. The bidder at no additional cost to NDMC shall address any corrections. This migration activity would include integration of legacy data pertaining to NDMC customers
- III. At a minimum, the following tasks will be carried out as part of the Data Migration:
- IV. Define all the specifications that are needed to populate the data into the new system
- V. Prepare uniform codification of all data sets.
- VI. Develop the data migration templates/Forms/Format and facilitate the migration of legacy and new data elements into the proposed application
- VII. Identify, configure or develop the data upload/download programs for the data migration
- VIII. Convert the legacy system data, if required, into the format as required by the new system
- IX. Ensure the completeness of data migration in all respects and submit a final detailed report.
- X. The additional storage and rack space required during the migration process will be provisioned in NIC facility. This should be given in the technical proposal of the bidder.
- XI. The data required to be migrated can be classified as:
- XII. Data related to the CC&B platform
- XIII. Documents related to customer accounts stored in UCM

### **3. WORKING HOURS**

The contractor will render maintenance service from 9:00 A.M. to 6:00 P.M. on all working days plus on general holidays as per NDMC's requirement, to keep the equipment in good working condition and order. The service consists of comprehensive, corrective and preventive maintenance and includes carrying out of necessary repairs to the installed equipment and also the loading and reloading of software if required. Two Resident Engineers needs to sit till 7.30 P.M. in the evening.

### **4. PAYMENT OF CHARGES**

- The payment to the contractor for the AMC services shall be made in quarterly installments at the end of each quarter after deducting the penalty amount, if any, on submission of pre- receipted bills in duplicate.
- The contractor shall pay wages to its Engineers through ECS within the time stipulated under the provisions of Minimum wages Act, Govt. of NCT of Delhi.
- The Engineers engages by the Contractor for providing the service to the NDMC shall at all times and for all purposes be the employee of the Contractor who shall solely be responsible for providing all fringe benefits to such employees viz. Wages, Bonus, Provident Fund, ESI, Gratuity etc. as per provisions of the law applicable under Minimum Wages Act, Govt. of NCT of Delhi for such purpose from time to time. The Contractor shall furnish a certificate to this effect every month, failing which the NDMC shall have the right to withhold the payment of professional charges and shall also have the right to examine and verify the original records of the Contractor to ensure the compliance of this Clause by the Contractor.
- That the Contractor shall provide additional personnel as and when required by the NDMC on the same rates, terms and conditions as mentioned in tender document.

## **5. CANCELLATION (VALIDITY OF AGREEMENT)**

The contract period would be for one year initially and will be extendable upto three years on the performance basis. The agreement can be terminated during the period by NDMC by giving one-month prior written notice or at the end of that quarter of calendar year, whichever is later.

## **6. ARBITRATION**

In the event of any question, dispute or difference arising between the NDMC and the contractor in connection to this contract (except in any matters the decisions of which has been expressly provided for in contract) the same will be referred to the Sole arbitrator appointed by the Chairperson, New Delhi Municipal Council, There will be no objection that the arbitrator is an officer of the Undertaking, that he had to deal with the matters which the contract relates or that in the course of his duties as an officer of the Undertaking he had expressed view on all or any of the matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties to this contract. The venue of arbitration shall be Delhi.

## **7. SUB-LETTING OF CONTRACT**

The contractor shall not sublet, transfer or assign the contract or any part thereof without the written permission of the NDMC, in the event of the contractor contravening this condition, the NDMC, shall be entitled to place

the contract elsewhere on the contractor's account and at his risk and the contractor shall be liable for any losses or damage which the contractor may sustain in consequence or arising out of such replacing the contract.

## **8. FORCE MAJEURE**

'Force-majeure' is herein defined as:-

- (i) Any case, which is beyond the control of contractor or customer, as the case may be.
- (ii) Natural phenomena including but not limited to weather conditions, floods, draughts, earthquakes and epidemics.
- (iii) Act of any governmental authority, domestic or foreign, including but not limited to way, declared or undeclared perorations quarantine, embargoes, licensing control or production or distributions.
- (iv) Accidents and disruptions including not limited to fires explosions; breakdowns of essential machinery or equipment and power shortages.

## **9. CONDITIONS FOR REIMBURSEMENT OF LEVY/TAXES IF LEVIED AFTER RECEIPT OF TENDERS**

- 1 All tendered rates shall be inclusive of all taxes and levies payable under respective statutes. However, pursuant to the constitution (46<sup>th</sup> Amendment ) Act, 1982, if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of tender including extension if any and the contractor thereupon necessary and properly pay such tax/levies, the contractor shall be reimbursed the amount so paid provide such payment, if any is not in the opinion of the Secretary (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
- 2 The Contractor shall keep necessary books of accounts and other documents, for the purpose of this conditions as may be necessary and shall allow inspection of the same by a duly authorized/document as the Director (IT) may require from time to time.
- 3 The contractor shall, with in a period of 30 days of the imposition of any such further tax or levy, pursuant to the constitution (Forty Sixth Amendment, 1982) give a written notice thereof to the Director (IT) that the same is given pursuant to this condition, together with all necessary information relating thereto.

## PRICE SCHEDULE

**Request for Proposal Annual Maintenance of Oracle Customer Care & Billing (CC&B), Meter Data Management (MDM) & Work & Asset Management System (WAM)**

<b>Sr No</b>	<b>Item Description</b>	<b>Qty</b>	<b>Unit</b>	<b>Unit rate (In Rs.)</b>	<b>Total Amount (In Rs.)</b>
1.	Annual Maintenance of Electricity, Water & Estate Oracle Customer Care & Billing (CC&B), for a period of one year on AS-IT-IS basis.	1	Year		
2.	Annual Maintenance of Oracle Meter Data Management (MDM) for a period of one year on AS-IT-IS basis.	1	Year		
3.	Annual Maintenance of Asset Management System (WAM) for a period of one year on AS-IT-IS basis.	1	Year		
<b>Total Amount (Inclusive of all taxes)</b>					