

Contract No.:46.05.0000.223.32.009.22/2022-23/T01/

Date: 03/01/2023

CONTRACT AGREEMENT

The CONTRACT AGREEMENT is made on 03-January-2023 between Engr. A. K. M. Shahid Uddin, Deputy Managing Director (O&M) & Senior Systems Analyst (A.C.), MIS & Billing Dept., Dhaka WASA, 98 Kazi Nazrul Islam Avenue, Kawran Bazar, Dhaka 1215, hereinafter referred to as “Dhaka WASA” (here-in-after called “the Purchaser”) of the one part and Md Rafikul Islam, Managing Director, Coder De Dhaka Ltd., having its Registered Address at 45/A, Dilu Road, New Eskaton, Dhaka-1217 (here-in-after called “the Supplier”) of the other part. Whereas the Purchaser invited tenders for certain goods and related services “**Budget Management System Software for Dhaka WASA**” and has accepted the quote offered by the Supplier for the supply of goods and related services for the sum of **Tk. 28,80,000/- (Taka Twenty-Eight Lac Eighty Thousand Only.)**, here-in-after call “the Contract Price”.

NOW, THEREFORE, THIS CONTRACT AGREEMENT WITNESSETH AS FOLLOWS:

1. This Contract Agreement will be followed as per rules of PPR-2008.
2. The above price quotation is including VAT & TAX as per government rules.
3. The Contract Agreement shall remain valid for a period of 12 months (03 months for development, piloting and deployment & End user training + 09 Months for warranty period) from its effective date of contract signing
4. Payment: No partial payment is allowed. 100% payment shall be processed after the completion according to TOR and acceptance by Dhaka WASA.
5. Software solution related any hardware, network, deployment and software environment creation and maintenance by the purchaser. If the supplier needs any hardware, network support, the purchaser will be provided as per requirement.
6. In case of failure to supply the goods/software within the scheduled time period, penalty will be imposed as per the rules of PPR-2008.
7. PENALTY: Delay of supplying goods and installation shall be charged 0.5 percent of the contract price for each month. The maximum amount of liquidated damages shall be Ten (10%) percent of the contract price.
8. AMC Contract: At the expiry of warranty period, the purchaser may come into an Annual Maintenance Contract with the Supplier on a Separate Contract Agreement along with Terms & Condition.
9. Terms & Conditions including Work Module, Technical Specification, and Project Duration are mentioned in Annexure -1, which is to be considered part of this Contract Agreement.
10. **Termination:** Any party is entitled to terminate this agreement giving a thirty (30) day's prior written notice to the other at any time during this Contract period with a valid reason. Neither party shall be responsible to the other for any costs or damages relating to or resulting from the termination or expiration of this Contract Agreement in accordance with its terms of this Contract Agreement.

11. **Future Enhancement:** As per Purchaser's necessity, the Supplier may deliver any services in supporting to this software after the pilot period; which will be considered as Future Enhancement (out of scope of mentioned services in this Contract Agreement). However, that dealing will also be considered as CR. Number of Man-days will be finalized upon mutually agreed by both parties.
12. **Copyright:** The copyright of the developed Software System must belong to Dhaka WASA and in no way the Supplier shall copy or use this software for any other purpose and hand over to anybody without written permission for Dhaka WASA. In case of violation Dhaka WASA may initiate legal action against the Supplier according to the prevailing law of the country.
13. **Limitation of Liability and Force Majeure:**
 - a. The Supplier suffers any direct, indirect or consequential losses or damages arising out of the subject matter of the Contract Agreement or due to the act, omission, negligence, misconduct, fault on the part of the Purchaser or its employees/personnel, then the Purchaser hereby agrees to indemnify and hold the Supplier harmless from any such losses, damages, claims, charges, costs or expenses (including reasonable attorney fees).
 - b. **Force Majeure:** In the event that either Supplier is unable to perform any of its obligations under this Contract Agreement as a result of natural calamity/disaster, or unexpected/unwanted/unavoidable circumstances including any order by any Court or the Government Authorities that may occur delay in granting any permission/s by the concerned authorities, or any other restrictions beyond the reasonable control of the Supplier. (Hereafter referred to as a "Force Majeure Event"), the Supplier whose performance has been so affected shall not be liable for such nonperformance but shall promptly give notice to the Purchaser and shall do everything reasonably possible to resume performance. If the period of nonperformance exceeds thirty (30) days from the receipt of notice of the Force Majeure Event, the Supplier whose ability to perform has not been so affected may by giving written notice of seven (7) days terminate this Contract Agreement.
14. **Dispute Resolution:** If any dispute arises between the Purchaser and the Supplier, the Purchaser or the Supplier will attempt to resolve the dispute in good faith by senior level negotiations. If such negotiations do not result in a resolution of the dispute within 30 (thirty) days, the Purchaser or the Supplier shall refer such dispute to sole Arbitrator to be appointed by the both Parties mutually. The arbitration shall be conducted in accordance with the Arbitration Act, 2001 of Bangladesh. The arbitration shall be conducted in English and the venue of the arbitration shall be at Dhaka, Bangladesh. The decision of the arbitrator shall be final and binding upon both the Parties. This clause shall survive upon termination of the Contract Agreement.

15. Non-Solicitation

Neither the Purchaser nor the Supplier shall during the term of this Contract Agreement and for a period of one & half year thereafter, directly or indirectly, solicit or recruit the employees of the other Party who are directly involved or associated with the Opportunity, Proposal and/or the Project at any time during the term of this Contract Agreement.

In witness whereof the both parties hereto have caused this Contract Agreement to be executed in accordance with laws of Bangladesh on the day month and year first written above.

**Signed on behalf of
DHAKA WATER SUPPLY AND
SEWERAGE AUTHORITY**

**Signed on behalf of
CODER DE DHAKA LTD.**

Eng. A K M Shahid Uddin
Deputy Managing Director (O&M)
&
Senior Systems Analyst (A.C)
MIS & Billing Department
Dhaka WASA

Md Rafikul Islam
Managing Director
Coder De Dhaka Ltd.

Witness (1) –

Witness (1) -

Arpita Saha
System Analyst (CC)
MIS & Billing Department
Dhaka WASA

Ashraful Alam
Director
Coder De Dhaka Ltd.

Witness (2) –

Witness (2) -

Md. Shahidul Islam
Programmer
MIS & Billing Department
Dhaka WASA

Bulbul Ahammed
Programmer
Coder De Dhaka Ltd.

Terms of References

Budget Management System Software

Background

"Digital Bangladesh" is one of the dreams of the country, and therefore Digital technology to realize Vision 2021, which we commonly call Digital Bangladesh. Despite some Work is underway to achieve bottlenecks and limitations, Digital Bangladesh. Multiple projects Digitization has been completed and numerous projects are underway. Today's people with over 12 core mobile subscribers and 4.4 core internet subscribers, Digitization in various fields of activity. The ultimate objective is to make more and more services available at the doorsteps of the people with increased digitalization where possible. The government emphasized on four elements of "Digital Bangladesh Vision" which are human resource development, people involvement, civil services and use of information technology in business. The Dhaka WASA (Dhaka Water Supply and Sewerage Authority) is currently taking many initiatives to digitalize different services to make it more efficient available, relevant and persistent. Dhaka WASA intends to bring procurement and Inventory department under ICT automation coverage and ensure information availability for decision makers through integrated dashboard mechanism. This dynamic dashboard will be accumulated information from different types of data source. In this regard, procurement 1 of Dhaka WASA is trying to overcome all the barriers and spread the e-services throughout the under-coverage area. Already there is mentionable progress in ICT. However, the current rank and status in comparison with other government organization and the rapid development of ICT, the involvement of ICT in DWASA activities should be expanded in order to ensure reliability & transparency into its service. Currently, HQ of Dhaka WASA is required to billing information from internal and external data source and providing service for management decision support. The high authority is frequently asking for different types of statistical information from said source. However, it takes a lot of time to collect information because it takes a lot of time. Important paperwork, per-channel communication, data source connectivity, and administrator approval Delays for correct determination and analysis of the current situation.

Budget Software User Levels:

This software will be operating in two different modes. User Mode & Administrative Mode.

Administrators:

The Administrators will have control over the main features in the system. Some of these include:

- Set up of the annual budget
- Allocate funds to the various Cost Centers/ Circle
- View and draw reports on amounts spent
- View remaining amounts
- Track the funds as the Cost Centers spend
- Draw reports on budget allocations
- Set up alerts to track whether Cost Centers are overspending
- Send notifications to Cost Centers who seem to be overspending
- Block funds

Users:

The users will normally consist of the persons who have access to the funds allocated to their departments. Some features include:

- ✓ View the amount allocated to their Cost Centers/ Circle
- ✓ Enter expenditure information
- ✓ Upload supporting documentation
- ✓ View amounts spent
- ✓ Draw reports on the amounts spent
- ✓ View amount remaining
- ✓ Control what your users view or have access to:
- ✓ Edit Data, View Data
- ✓ Cost Center Access
- ✓ Circle Access
- ✓ Category view/edit rights
- ✓ Approval over user's submissions, Certifications, Verifications, Scrutinizes, Check etc.

Limit User access to certain accounts or Section for any user

Locked down data that can't be edited

Get the layered control over your data you can't get with Excel

Enjoy the collaborative Budgeting process the way it should be:

Better performance review Improve your performance across operational divisions and planning accuracy with streamlined tracking of financial figures in the system and better performance visibility in real time comparative reports.

Improved control over budgeting Centralize your budget information on one place and integrate it with the other financial data in General Ledger in order to make better decisions and gather financial inputs in a timely manner.

Flexible Approval Process Cost Centers the budget approval workflow according to your existing processes and be able to manage your budgets more flexibly.

BM, the Budget software helps the financial fleet Cost Center and Accounts. organizations manage different types of costs from cost center like Contractor, technical, non- technical costs and other costs. It helps to manage your cost center costs while increasing performance and dependability. It helps to keep flexible of the complete details of the cost center and accounts out notifications on renewals like taxes, certifications, oil changes, general services etc. BS also provides information on the changed amount, ledger etc. The budget profitability report is also available in the system which provides adequate

Information for accounts analysis.

This module eliminates costly unscheduled maintenance, increase Trace out value by proper maintenance and checkup. It helps in accurate record keeping for any type of costs and helps to plan annual budgets faster, easier and more accurately.

Major Modules:

1. Integrated Budget Software (IBS).

Key Features:

- User Friendly Software Interface,
- Three-Tier Architecture,
- Real-time connectivity with Web-portals,
- Complete Self-integrated Solution,
- Online Software with High-end Security Design,
- Real Time Notifications System,
- Comprehensive Reporting,
- Unlimited Users with multiple permission levels,
- Diverse Report generation,
- Data Analytics for decision making and prediction,
- Multiple Dashboard Features,
- Auto Generated Email Systems, and
- Multi Language Support.

Module Details

Menu Setup

- User Setup
- Units/ Branch Setup
- Administration Setup
- Work Details Setup
- Demand Setup
- Cost center Management
- Circle Setup
- Accounts Setup
- Statement Budget Setup
- Reverse Budget Setup
- Budget Follow up
- Costs related complete information
- Upcoming Events Setup
- Budget Approval
- Notice Board
- Dashboard

Setup Detail

- + User Setup:
 - ✓ Create User
 - ✓ User Access
 - ✓ User Menu Access
 - ✓ User Role
 - ✓ Role Setup
- + Units/ Branch Setup
 - ✓ Create a New Branch
 - ✓ Branch Report
- + Administration Setup
 - ✓ Cost Center Create
- + Work Details Setup
- + Demand Setup
 - ✓ New Ledger Head
- + Cost center Management
 - ✓ Submission Section (Cost center) Record
 - ✓ Certification Section (Cost center) Record
 - ✓ Verification Section (Cost center) Record
 - ✓ Approve Section (Cost center) Record
- + Circle Setup
 - ✓ Submission Section (Circle) Record
 - ✓ Certification Section (Circle) Record
 - ✓ Approve Section (Circle) Record
- + Accounts Setup
 - ✓ Submission Section (Accounts) Record
 - ✓ Certification Section (Accounts) Record
 - ✓ Verification Section (Accounts) Record
 - ✓ Approve Section (Accounts) Record
- + Statement Setup
- + Reverse Budget
- + Budget Follow up
- + Costs related complete information
- + Upcoming Events Setup
- + Budget Approve
- + Notice Board
- + Dashboard
- + Current Operating Budget Report
- + Current Expense Budget Report
- + Variance Reports
- + Burn Ratio Reports
- + Planned Value (PV)
- + Actual Cost (AC)
- + Service Complain Entry
- + Budget Increment per Annum
- + Budget Decrease per Annum
- + Live Work Status Update
- + Multi-level Estimate Create
- + Budget Adjustments
- + Guidelines
- + Fund Transfer
- + Fund Restrictions
- + Download select information into Excel
- + Vouchers
- + Recovery
- + Multi-Level Bill Create
- + Usage Requisition Create
- + Methodologies used to calculate costs

Budget Stage

- ❖ Budget Preparation
- ❖ Budget calendar
- ❖ Budget Controlling
- ❖ Pre-Booking Budget
- ❖ Budget Approval
- ❖ Payment Submit
- ❖ Report & Revolution
- ❖ Monitoring
- ❖ APP (Annual Procurement Plan)
- ❖ RAPP (Reverse Annual Procurement Plan)
- ❖ RAPP & APP Adjustment
- Flexible set-up of budget submission and approval workflows.
- Automated creation of Balance Sheet budgets.
- A wide selection of built-in financial, budgeting and forecasting functions, rules, and algorithms.
- Allocations and Activity-based Costing (ABC).
- Financial Consolidations, including multi-currency support.
- Powerful reporting capabilities, including general ledger reporting, budget to actuals reporting, self-service analysis, scorecards, dashboards, financial statements, budget books, and more.

Single Data Entry Point

- All data is controlled from one place for easy learning and navigation
- Easily add description, vendor or notes to any detail line for reference later
- Categories can be assigned to one or more Cost Center
- Instantly compare Actual data to Budget data
- Enter data quickly using built in spreading tools
- User permissions controlled at Category and Department level
- Attach supporting documents to and sub-categories

Instant Navigation

All Budgeted data is hyperlinked for rapid navigation and look up Drill down to review underlying assumptions instantly including notes, description or vendor information.

Budget to Actual Reporting is automatically organized by:

- ✓ Cost Center
- ✓ Super Header
- ✓ Header
- ✓ Dimension
- ✓ Group
- ✓ Category
- ✓ Sub-Category
- ✓ User Permissions
- ✓ Perfectly Formatted Reports

All reports export to Excel & PDF and are formatted by:

- ✓ Cost Center
- ✓ Circle
- ✓ Ledger
- ✓ Super Header
- ✓ Header
- ✓ Category
- ✓ Sub-Category
- ✓ Category Notes
- ✓ User Permissions
- ✓ Budget to Actual Comparisons for all Cost Center
- ✓ Reports instantly distributed to all users according to their permissions
- ✓ Easily accessible via the report library

Multi-Department Formulas

Our formulas are built specifically to handle structural changes in multiple department Strategy.

- ✓ Formulas are easy to make but hard to break
- ✓ Navigating our formulas is intuitive and easy
- ✓ Control which assumptions your users can view or edit
- ✓ No need to learn any codes or syntax

Support Services for the Software

Support services for the software consist of technical support and assistance by e-mail or telephone to the user. These services include receiving, classifying, and logging support requests, and the assignments thereof to the technical experts and project managers who are responsible for troubleshooting the problem until it is resolved.

A problem is considered resolved when:

- The software conforms substantially to its specifications; or
- The user has been advised on how to correct or bypass the error through telephone; or
- Security issues or any other software problem/defect is fixed by the Maintenance Professionals within the specified time frame.

The Support Team will support the user by call handling and problem resolution as well as call classification and escalation. Any sort of software problem is fixed within 3 days; and incase of security issues (including virus attacks and other security problems) are fixed within 36 hours.

❖ Server Specification

Motherboard	PowerEdge R740/R740XD Motherboard
Chassis Configuration	Chassis with up to 16 x 2.5" SAS/SATA Hard Drives for 2CPU Configuration
Processor	2 x Intel® Xeon® Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666
Memory Capacity	256GB (4 x 64GB) RDIMM, 3200MT/s, Dual Rank
RAID Configuration	C7, Un-configured RAID for HDDs or SSDs (Mixed Drive Types Allowed)
RAID/Internal Storage Controllers	PERC H730P+ RAID Controller, 2GB NV Cache, Adapter, Low Profile
Hard Drives	7 x DELL 2.4TB 2.5 INCH 10K SAS 12GBPS HARD DISK DRIVE 2 x 1.92TB SSD SAS 12Gpbs RI 2.5in Hot-Plug Hard Drive
Embedded Systems Management	iDRAC9, Enterprise
Network Daughter Card	Broadcom 5720 Quad Port 1GbE BASE-T, rNDC
Power Supply	Dual, Hot-plug, Redundant Power Supply (1+1), 750W
Power Cords	Jumper Cord - C13/C14, 4M, 250V, 10A (US, EU, TW, APCC countries except ANZ)
Bezel	Power Edge 2U Standard Bezel (Dell EMC)
Fans	6 Standard Fans for R740/740XD
Rack Rails	Ready Rails™ Sliding Rails with Cable Management Arm

❖ Application System Requirement

SL#	Name of the component	Details Description
1	Server Device Type	RAC Mounted Server
2	Processor	2x Intel® Xeon® Gold 6244 3.6G, 8C/16T, 10.4GT/s, 24.75M Cache, Turbo, HT (150W) DDR4-2933
3	RAM	128GB RDIMM, 2400MT/s
4	Hard Drive	960GB X6-5.7 TB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD, 1752 TBW
5	Server Access Card	Hot-plug AG Drive, 1 DWPD, 1752 TBW Different Server call this device in different name like DELL call it iDrac HP call it ilo etc. But the device must have visual control capability with enterprise license
6	Ethernet Adapter	10 GbE or more.
7	Power Supply	Must have Redundant Power supplies

Technologies to be used

If awarded, Coder De Dhaka Ltd. Will develop, customize and maintenance the systems in the following technology platform:

SL	Tools/Technology	Features
01	Software Development Mythology	Agile Scrum
02	Operating System	Windows/Linux
03	Architecture	Three Tier Base/ Micro service
04	Backend Technology	Java (Spring Boot), Oracle
05	Frontend Technology	Oracle Apex 21.2
06	Database	Oracle 19c
07	Web Server	Apache Tomcat or Jetty
08	API	REST
09	Load Balancer	Nginx
10	Micro service Registration Discover Server	Eureka
11	Deployment Process	Docker/Kubernetes
12	In Memory Caching	Redis

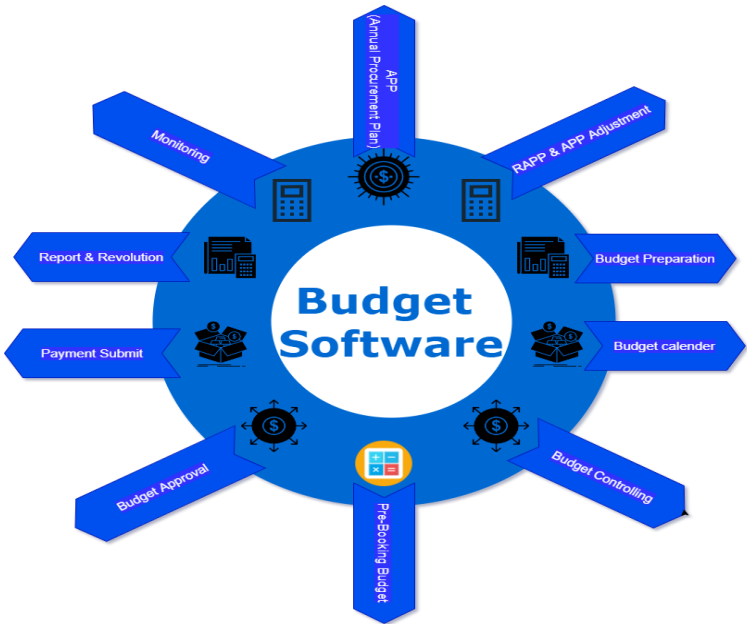
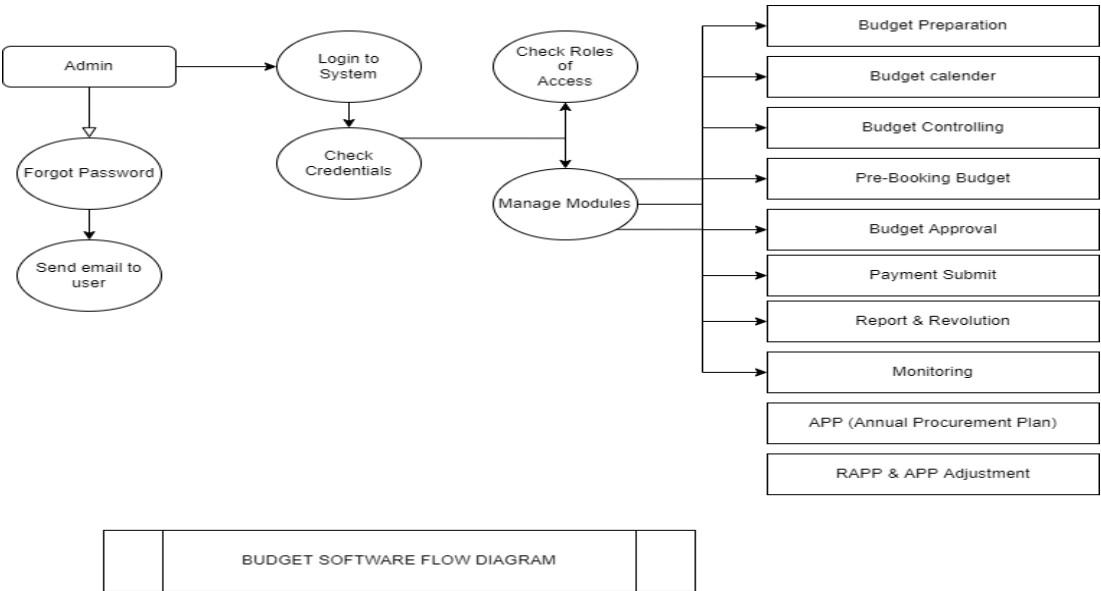


Fig. Zero Level Data Flow

Approval process and workflow

- Regain control over the budget process by enforcing users to submit data for approval
- Ideal for expense control as well
- Audit log for all submissions for approval and pending approvals
- View data by Submitted, Pending or Approved
- Track conversations around approvals or disapprovals



A. THE PROJECT DELIVERABLES:

- i. **Specification/QA Documents**
 - System Requirements Specification (SRS)
 - Software Design Document (SDD)
 - Test Plan and Procedure
 - System Test Case with Test Data and Test Report
- ii. **Manuals/Guide (provide to DWASA both hard copy and softcopy):**
 - Operational Manual
 - Technical Manual
 - Compiled Source Code
 - Test Manual
- iii. **Training Program**
 - End User/Management Training
 - 2 (Two) days conference training
 - Online training through WhatsApp, skype or any suitable medium
- iv. **A course will be conducted by the Supplier as follows –**
 - Understanding & Handover of the software with source code & process flow scheduled on 7 working days maximum 5 nominated personnel of MIS & Billing Department of the Purchaser.
 - Server Configuration, Software Installation process on 3 working days of 5 nominated personnel of MIS & Billing Department of the Purchaser.

B. DURATION OF THE CONTRACT PERIOD:

- i. This Contract Agreement of Procurement of Software for Public Information Division becomes effective from Work Order date to next 12 months (3 months for deployment, implementation, testing& troubleshooting, training and 09 months for warranty/support period) unless it is extended by the mutual understanding of two parties. For any changes/modifications/bug fixing for “**Budget Management System Software for Dhaka WASA**” the Purchaser will follow Change Request procedure and the Supplier will response within 48 hours excluding Government holidays & weekends without any additional charges within this Warranty Period (09 months).
- ii. The Supplier Coder De Dhaka Ltd., will do the total work within first three months as software deployment, Testing & Troubleshooting, training, implementation as identified and agreed in defined Scope of Work and after successful training and handover to Dhaka WASA, the next nine months software will run/operate by the personnel of MIS & Billing Department with cooperation of Coder De Dhaka Ltd. Raised bug/error or Change Request (CR) getting from the user department will be mitigated within the warranty period. There is maximum 20 (twenty) percent tolerance level of Change Request (CR); which will be considered as out of charge. More than the tolerance level will be considered as “Future Enhancement” of the Software Services.

C. PAYMENT PROCEDURE OF THE WORK:

- i. The cost of total goods/software value is **Tk. 28,80,000/- (Taka Twenty-Eight Lac Eighty Thousand Only.)**; which does not include any hardware/physical tools/any other license cost of the third-party tools.
- ii. No partial payment is allowed. 100% payment shall be processed after the completion according to TOR and acceptance by Dhaka WASA.
- iii. After completion of 09 (Nine) months of Warranty Period; the Performance Security (10% of the total contract price) **Tk. 2,88,000/- (Two lac Eighty-Eight Thousand Taka Only)** will be released;
- iv. Training Cost (i.e., training material, entertainment, and any other cost related to the training) will be borne by the Vendor.