Terms of Reference (ToR) for

Hiring Consulting firm for Developmentof MIS& Accounting Software (Service Package # S2A)

1. <u>Background:</u>

The Government of the People's Republic of Bangladesh (GoB) has received loans from the World Bank towards implementation of the Investment Promotion and Financing Facility (IPFF) II Project (July 2017-June 2022) in the amount of USD 356.70 million vide Financing Agreement (IDA Credit No. 6004-BD & 6005-BD) signed on 05 November, 2017. GoB is also providing USD 60 million as counterpart fund to the Project. Bangladesh Bank through its cell named IPFF II Project Cell is implementing the Project on behalf of Finance Division, Ministry of Finance. It is mentionable that IPFF II project is a follow on project of successful IPFF Project (2007-2016).

The main objectives of the project are to increase longterm financing for infrastructure project and to build capacity of the local financial institutions for promoting private sector-led infrastructure financing inBangladesh. IPFF II is designed to achieve the above objectives through following two broad components:

- i) Component 1 (Long-Term Infrastructure Financing Component)
- ii) Component 2(Technical Assistance Component)

With a view to achieve the above mentioned objectives, USD 13.00 million will be utilized for procuring goods and services, building capacity of the stakeholders and meeting operating expenses. Whereas, USD 403.70 million will be lent to the government approved or endorsed (by appropriate authority) or licensed (issued by competent authority in applicable cases) infrastructure sub-projects in eligible to help alleviating constraints in infrastructure financing sectors through Participating Financial Institutions (PFIs). Till Date 11 private commercial banks and 4 NBFIs have signed Master Facility Agreement with IPFF II Project in this regard.

2. Objectives of the Assignment

The objectives of the assignmentare:

- a) To develop a comprehensive Management Information System (MIS) &Accounting Software for the Project in order to facilitate IPFF II Project Cell through maintaining proper records of all financial transactions and non-financial information of the Project etc.;
- b) To secure/obtain (periodic and on-call basis) maintenance service (intended up to 30 June, 2022) for the new and previously developed Management Information System (MIS) & Accounting Software.

3. <u>Scope of Services, Tasks and Expected Deliverables</u>

The scope of services includes the following but not limited to:

A. Developing the MIS and Accounting Software consists of following features

- i) IPFF II Project information
- ii) Document Management System
- iii) Long term Lending

- iv) Training & Administration
- v) Asset management
- vi) Procurement Management System
- vii) Reports
- viii) Security features
- ix) Back log data entry & validation

B. Maintenance Service for the system

- i) The firm will have to provide the maintenance service for the newand previously developedsoftware till the end of the project tenure i.e. June, 2022.
- ii) During the maintenance period, the firm will be responsible for maintaining the software as required.
- iii) During the maintenance period, the firm will be responsible to implement the necessary changerequest(i.e. develop/customize /upgrade etc.) in the software.
- iv) Maintenance service shall be on call basis.
- v) After every 3(three) months a checkup for regular maintenance is required.
- vi) The duration of the intended maintenance period is upto theend of the project tenure i.e. June, 2022.

C. Necessary Functionalities of MIS and Accounting Software but not limited to:

> <u>IPFF II Information</u>

 Record Basic Information of IPFF II Project i.e. formation date, Information of Project Director, Officials, Staffs, Stakeholdersetc.

Document Management System

 Upload various documents(MS word/Excel/PDF etc.)i.e. FinancingAgreement (FA), Master Facility Agreement (MFA), Technical Assistance Project Proposal (TAPP), Circulars etc.

Long Term Lending

- Record management for the PFIs and Investment Sponsors.
- Record Loan disbursement, Schedule and Re-schedule of repayment.
- Record Payment receipt, late payment and other charges.
- Records of vouchers.
- Record & monitorFund movement (transfers to GoB and Internal account,Refund etc.)
- Record withdrawals of IDA fund, GoB fund & other operational account under different credit.
- Maintain Sector/PFI/Entrepreneur wise information etc.
- Other necessary provisions (if required).

> <u>Training & Administration</u>

- Record comprehensive training related information i.e. participant's details, cost for the training programs (Local and overseas) etc.
- Record comprehensive information of different consultants, resource person i.e. contract number, duration, service fee, reference number etc.
- Record comprehensive information of staffs i.e. name, salary, contract duration etc.
- Records of different vouchers for both IDA & GoB fund (payment, receiptand cash back) etc.

Asset management

- Fixed Asset Management (Details of Item purchased, purchase date, Item movement trackingetc.).
- Stationary management (Details of Item purchased, purchase date, Item movement tracking etc.).
- Records Summary and ledger of fixed asset and stationery items.
- Asset Inventory Management.

Procurement Management System

- Record comprehensive procurement information (Annual Procurement Plan and Total procurement plan) according to procurement category (Goods, Services etc.)
- Keepnecessary procurement transaction record in terms of procurement cycle.

> <u>Reports</u>

- Sub-Project based different types of reports (monthly, quarterly, half yearly, annually etc.) for PFIs.
- Reports for procurement plan and schedule (Goods & Services etc.), progress report etc.
- Financial Report including sources and uses of Fund Statement, uses of fund by Project Component etc.
- On lending related necessary reports (payment status, payment received, payment dueetc.), disbursement statement, loan schedule/reschedule, repayment account statement, payment voucher (voucher number, date, code, name, title range), statement of payment to GOB accountetc.
- Report for TA related Payment Voucher (voucher number, date, code, name, title range)
- IMEDreport (Monthly, Quarterly and any interval of date)
- IUFRand statement of DOSA Register (For different credits).
- Various financial Statement i.e. receipt and payment statement, income and expenditure statement, Balance Sheet, VAT/TAXstatement, fund release report etc.
- Statements for Audit reports i.e. financial status, statement of expenditure, special account reconciliation statement, bank account information, statement of expenditure of DOSA, statement of taka account, summary of withdrawal application, statement of repayment account, summary of withdrawal application (direct payment), summary of GoB fund etc.
- Yearly ADP, RADP& Non-ADP allocation of IDA & GoB fund statement for IPFF II.
- Monthly reportfor Chief Accounts Officer (CAO) of Ministry of Finance(Convertible to word/excel).
- Different physical and financial allocation progress report (monthly,quarterly,half yearly and yearly) of the project including various charts and info graphics.
- Project information sheet including donorwise allocation and utilization status, allocation and disbursement status.
- Various Table Format (with provision of Update, Create and Add) for the users.
- Templates of different reports as required.
- Periodic E&S performance report of the sub-projects.
- Reports on different training programs (local & overseas)
- Reports on fixed asset, stationary etc.
- Search options (periodic, alphabetic etc) for each type of reports must be included.
- Sorting options (high to low, low to high, similar sub projects based information etc.) must be included.
- Other necessary reports as needed by the client.

Security Features

- Strong password management system and stored by adopting Encryption Mechanism.
- Provide daily basis scheduled database back up.
- Easy procedure to restore database.
- Audit Trailto monitor the user activities for every Insert, update, delete operations including date, time, device name/IP etc.
- Unauthorized Access must be prohibited.
- Implement all possible security measures to protect Cyber-attack.

The Software covers the following but not limited to:

- Necessary provision for accommodating more similar sub-projects and project.
- The Softwarewould have to run on a networked system paradigm, providing connectivity and accommodating collaborative work around the system from various user groups.
- All the reports, charts and tables should be convertible to MS word/Excel.
- Import data from different prescribed Template (MS Excel/.csv/.txt) into this System.
- Export data(MS Excel/.csv/.txt) from the System.
- Various currencies(USD, BDT etc.) option should be available for data entry.
- This Software should have interface with the previous IPFF to exchange data.
- Provision of Data migration from the previous IPFF Software to new IPFF Software
- Access mechanism would have to be defined and documented.
- User authorization/credential should be done according to IPFF II Project cell.
- The system needs to be integrated and furnished.
- Software and Hardware troubleshooting has to be covered.
- The software should be customizable by the IPFF-II Project Cell Authority (if required).

4. <u>Reporting requirements and Time Schedule for Deliverables</u>

- A complete User manual of the System.
- Provide in house end user training perform smooth operation of the System.
- Full Technical Document including SRS.
- Business Blueprint mentioning all detailed requirements.
- Source code and Credentials.
- Others relevant documents.

Phase 01 (Development Phase)

(% of payment will be finalized during Contract Negotiation) **Tasks/Deliverables Time-lines** Lump-sum SI of Name Deliverables **For Deliverables** Installment no. **Payment** of Contract (% Price) Work Plan and Inception Report setting D-1 Within 15 Calendar 1 5 % out scope of services to be delivered days from the date of On acceptance of under the contract contract signing D-1 2 5 % Requirement analysis D-2 Calendar Days 15 Full Technical Document after completion of On acceptance of Business Blueprint after Approval of D-1 D-2 **IPFF II Project Cell** 3 D-3 System Development 45 Calendar Days 5 % Validation Test by IPFF II Project Cell after completion of On acceptance of D-2 D-3 with dummy data Modification and Bug Fixing according

	to the recommendation of IPFF II			
	Project cell.			_
4	Trial run the software by IPFF II	D-4	30 Calendar Days	5 %
	Project Cell with first round data		after completion of	-
	Modification, Bug Fixing and other		D-3	D-4
	necessary activities to make the			
	software ready for final release			
	according to the recommendations of			
	IPFF II Project Cell.			
5	Final release	D-5	30 Calendar Days	40%
	User Acceptance Test(UAT)		after completion of	On acceptance of
	Operational Acceptance Test(OAT)		D-4	D-5
	Back log data entry & validation			
	Training for implementation of MIS &			
	Accounting Software(3 days training of			
	15 participants)			
	A complete User manual of the System			
	Full Technical Document including			
	SRS			
	Source code and Credentials			
	Others Deliverables (as per scope of			
	work)			
	Final Approval of Software From IPFF			
	II Project Cell.			
Total	for development phase (6 Months)			60 % of Contract
				price

Phase 02 (Maintenance Phase) Intended Maintenance Period-30(Thirty) Months (% of payment will be finalized during Contract Negotiation)

Year of Maintenance Service	Tasks/D	eliverables		Name of Deliverables	Time-lines For Deliverables	Lump-sum Installment Payment (% of Contract
Service	First Service	Quarterly	Maintenance	M1	After completion of deliverables M1	3% of contract price on acceptance M1
	Second Service	Quarterly	Maintenance	M2	After completion of deliverables M2	3 % of contract price on acceptance M2
First Year Maintenance D6 (M1-M4)	Third Service	Quarterly	Maintenance	M3	After completion of deliverables M3	3 % of contract price on acceptance M3
First Year M D6 (M1-M4)	Fourth Service	Quarterly	Maintenance	M4	After completion of deliverables M4	3 % of contract price on acceptance M4
Year	First Service	Quarterly	Maintenance	M5	After completion of deliverables M5	3 % of contract price on acceptance M5
Second Maintenance Service D7 (M5-M8)	Second Service	Quarterly	Maintenance	M6	After completion of deliverables M6	3 % of contract price on acceptance M6
Second Mainten Service D7 (M5	Third Service	Quarterly	Maintenance	M7	After completion of	3 % of contract price on acceptance M7

					deliverables M7	
	Fourth	Quarterly	Maintenance	M8	After	3 % of contract price
	Service				completion of	on acceptance M8
					deliverables M8	
	First	Quarterly	Maintenance	M9	After	3 % of contract price
	Service				completion of	on acceptance M9
Year enanc e 19-M					deliverables M9	
Third Year Maintenance Service D8 (M9-M10)	Second	Quarterly	Maintenance	M10	After	3 % of contract price
Third Maint Servic D8 (N	Service				completion of	on acceptance M10
Thi Ma Ser D8					deliverables M10	
Intended maint	enance ph	ase 30 (Thirt	y) Months		•	30 % of Contract
1 7					Price	
Final Report	Final Re	port /Comple	tion Report	D9	At the end of the	10 % of contract
_	(Includir	ngupdated U	Jser manual,		contract	price on Acceptance
	Technica	al Docume	nt including			of D9
	SRS⪼	ource code an	nd Credentials			
	etc.)					

5. <u>Team Composition and Estimated Time Input for the Service</u>

Sl	Key Expert	Indicative Person-Month		
No.		For Development	For Maintenance	
		Phase	Phase	
1	Team Leader	03	-	
2	System Analyst	03	01	
3	Business Analyst	02	01	
4	Programmer	04	04	
Total		12 Person-Months	6 Person-Months	

The Consultant may propose other experts as Non-key experts (Data entry and validation operators) and supporting staffs if it is deemed required for accomplishing the tasks outlined in the ToR.

6. **Qualification Requirements for the Key Experts**

- **A.** The Consulting Firm should have 7years' relevant experience in the field of similar Software development.
- **B.** The qualification requirements for the Key Experts for the assignment are as follows:

Sl	Key Expert	Qualification Requirements of the Key Experts
No.		
i.	Team Leader	> Should be a Fellow of Chartered Accounts (FCA) or having
		Masters Degree in Business Administration(MBA)/Computer
		Science/ Management Information System(MIS)or an equivalent
		degree from reputed university/institutions.
		Relevant professional qualification would be an added advantage.
		> Should have at least 10 years of relevant experience in software
		development.
		Should have at least 05 (five) years' experience (working in to 2-3
		projects are more preferable) as Team Leader or Deputy Team

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		 Leader in a similar project relating to MIS/Accounting/Project Management development software& implementation. Should have significant knowledge in Project Management, Software Development, Relational Database Management, Networking etc. 5 years of experience in a senior or managerial role of a large public or private sector organization company engaged in lending
		 towards infrastructure projects would be an added advantage. Should have good communication skills (oral and written) in Bangla and English with good interpersonal relationship building and teamwork skills.
ii.	System Analyst	 Should have at least a bachelor degree in Computer Science/ Information Technology or equivalent degree from reputable university/institutions. Relevant professional qualification would be an added advantage. Should have at least 8 years of specific experience as system analyst or with similar role in software development assignment. Should have knowledge and experience related to computer systems and technologies, strong problem solving and analytical skills and the ability to think logically. The consultant must have significant experience in web programming language including C/C++, JAVA/.NET, SQL Server, Oracle, Networking, Database Administration, troubleshooting etc. Should have good interpersonal skills and should be able to communicate effectively with computer personnel, users and other
		staffs who may have no technical background.
iii.	Business Analyst	 The consultant should have at least MBA/Post Graduation with major in Accounting/Finance or an equivalent degree from reputed university/institutions. Relevant professional qualification would be an added advantage. Should have at least 5 years of relevant experience in the field of Finance/Accounting. Should have work experience (as Business Analyst or similar role)in a consultancy Firm, governmental organization/ project in developing software. Should have ability to manage and maintain strong client relationship. Should have worked in similar software development project.
iv.	Programmer	 Should have at least Bachelor in Computer Science/ Information Technology or equivalent degree from a reputable University /institutions. Relevant professional qualification would be an added advantage. Should have at least 8 (Eight) years' specific experience in software development with a role as programmer or similar. Should have experience in developing similar software. The consultant must have significant experience in web programming language including C/C++, JAVA/.NET, SQL Server, Oracle, Networking Database Administration troubleshooting, etc.

	> Should have knowledge and experience related to computer
	systems and technologies, strong problem solving and analytical
	skills and the ability to think logically.

7. <u>Contract type & Payment Mechanism</u>

The type of contract is Lump-sum contract for the assignments in which the scope and the duration of the services and the required output of the consultant are clearly defined. Payments are linked to outputs (deliverables) as mentioned in Reporting requirements and Time Schedule for deliverables. This contract shall be administering on the principle of fixed price for a defined scope, and payments are due on clearly specified outputs and milestones.

8. Client's Input and Counterpart Personnel

- Only the focal persons shall be appointed for facilitation of implementation of the assignment.
- Access to the earlier version of software including data and templates will be provided to the consultants.

9. Consultant Selection Method

The firm will be selected using Quality and Cost Based Selection [QCBS (National)] method under World Bank's Procurement Regulations for IPF Borrowers, July 2016.