



Government of the People's Republic of Bangladesh
Ministry of Local Government Rural Development and Cooperatives

TERMS OF REFERENCE
OF THE
(INDIVIDUAL INFORMATION AND COMMUNICATIONS
TECHNOLOGY(ICT) CONSULTANT)
FOR

**Western Economic Corridor & Regional Enhancement Program (WeCARE) Phase-I: Rural Connectivity,
Market and Logistic Infrastructure Improvement Project (RCMLIIP)**

May 2021

Local Government Engineering Department



List of Abbreviations:

| | |
|--------|--|
| ICT | : Information and Communications Technology |
| IDA | : International Development Association |
| IFAD | : International Fund for Agricultural Development |
| IFC | : International Finance Corporation |
| INDC | : Intended Nationally Determined Contribution |
| GOB | : Government of Bangladesh |
| RHD | : Local Government Engineering Department |
| PPA | : Public Procurement Act |
| PPR | : Public Procurement Rule |
| PMC | : Project Management Consultant |
| RHD | : Roads and Highways Department |
| SAARC | : South Asian Association for Regional Cooperation |
| WB | : World Bank |
| WeCARE | : Western Economic Corridor and Regional Enhancement |



TERMS OF REFERENCE OF THE CONSULTANCY SERVICES FOR PIU SUPPORT (INDIVIDUAL INFORMATION AND COMMUNICATIONS TECHNOLOGY(ICT) CONSULTANT)

1. INTRODUCTION AND BACKGROUND

INTRODUCTION

- 1.1 The Local Government Engineering Department (LGED) seeks to engage a qualified and experienced individual to provide support to the Project Management Unit (PMU) of WeCARE Phase – I with ICT operations of the project.

BACKGROUND

- 1.2 WeCARE program is aimed at providing efficient, safe, and resilient connectivity along a section of a regional transport corridor in Western Bangladesh. To that end, intended outcomes of the program are: Reduced transport and logistics costs (including post-harvest losses) along a regional transport corridor in Western Bangladesh, Safer and resilient road network in Bangladesh, and Faster and reliable internet connectivity in Western Bangladesh, and
- 1.3 The WeCARE program will support the Bangladesh Roads and Highways Department (RHD) to upgrade 260 km of national highway from a two-lane single carriageway to four lanes which will reduce the time and cost of travel for passengers and freight. The local impacts of the corridor would be transmitted through investments in LGED managed rural roads, local markets, and agro-logistics in the ten districts through which the corridor passes. The World Bank and Asian Infrastructure Investment Bank (AIIB) are joint-financing for the Program.
- 1.4 WeCARE is a ten year long Multiphase Programmatic Approach (MPA) initiative. The program will consist of the following five phases:

- **Phase 1: Upgrading of Jashore- Jhenaidah road section as a smart, resilient and safe highway; and local economic infrastructure in four districts**

Scope: This phase will upgrade the Jashore-Jhenaidah national highway (48km) from a two-lane single carriageway to four lane dual carriageway. It will include separate service lanes for slow moving vehicles and vulnerable users on both sides of the carriageway, installation of OFC, and deployment of ITS. It will also finance the upgrading of priority Upazila, Union, and village roads and complementary logistics infrastructure at rural markets (commonly referred to as growth centers) in the four (4) Program Districts of Jashore, Jhenaidah, Magura, and Chuadanga.

- **Phase 2: Road Maintenance Financing; and Strengthening Road Sector Management & Institutional Capacity**

Scope: This phase will primarily focus on improving the management and maintenance regime of the primary road network, including the provision of seed funds to reduce the financing gap in the GoB's maintenance budget and operationalization of the road maintenance fund. This Phase will include the development of a Transport Sector Master Plan to enhance multi-modal transport integration and reduce institutional fragmentation in planning, implementation and operations; a comprehensive "Business Delivery Process Review"; and introduction and mainstreaming of good industry practices in areas of private sector financing and investment, contracting, road safety, value engineering, asset management, environment and social safeguards, climate resilience in design, construction and highway operations. The phase will also build on the reform efforts under the Bank's ongoing LGED portfolio, including reforming the maintenance regime of rural



economic infrastructure. Training and capacity building activities of the RHD and LGED as well as the industry (e.g. consultants, contractors) will also be financed under this Phase.

- **Phase 3: Upgrading of Bhomra-Satkhira-Navaron section as a smart, resilient and safe highway; and local economic infrastructure in three districts**

Scope: This phase will upgrade the Bhomra-Satkhira-Navaron national highway (62km) from a two-lane single carriageway to four lane dual carriageway. It will include separate service lanes for slow moving vehicles and vulnerable users on both sides of the carriageway, installation of OFC, and deployment of ITS. It will also finance priority Upazila, Union, and village roads and complementary logistics infrastructure in the three (3) Program Districts of Satkhira, Natore, and Shirajganj.

- **Phase 4: Upgrading of Local Economic Infrastructure in three districts**

Scope: This phase will upgrade priority Upazila, Union, and village roads and complementary logistics infrastructure in the three (3) Program Districts of Kushtia, Pabna, and Meherpur. It will also undertake a needs assessment for farmers benefiting from the investments made in all 10 Program Districts.

1.5 WeCARE Phase 1 has the following components:

- **Component 1: Upgrading National Highway Corridor and enhancing digital connectivity:** This component will upgrade Jhenaidah-Jashore highway to a four-lane divided carriageway and will install Intelligent Transportation System features and Optical Fiber Cable features along the highway. This will be implemented by Roads and Highways Department.
- **Component 2(a) - Development and upgrading complementary logistics infrastructure and services:** This sub-component will finance the development of about 32 selected markets and logistics infrastructure involving storage, grading, sorting, packaging, collecting and selling facilities for selected agriculture value chains and livestock/fishing; and associated amenities like parking, sheds, piped-water supply, toilets, sanitation, waste management, banking, real time display of commodity prices using ICT, etc. The component will also finance associated services, including but not limited to, surveys, investigations, data collection, feasibility, design, individual experts, supervision, market allocation and management, training and capacity building of stakeholders & M&E. An ex-ante prioritization approach, utilizing geospatial modelling, will be used to select growth centers and economic hubs that can be improved to stimulate inclusive local economic growth. An ongoing gender needs assessment aims to ensure that the logistics infrastructure and services are gender sensitive. Specific resilient norms for cyclones/flooding risks will also be incorporated in design and construction.
- **Component 2(b) - Upgrading of secondary and tertiary road network serving selected markets:** This sub-component will finance upgrading and development of about 600km of priority Upazila, Union, and village roads serving selected markets; and associated services, including but not limited to, surveys, investigations, data collection, feasibility, design, individual experts, NGOs, supervision and M&E. Specific attention will be given to ensure safety and resilience in design and construction through the use of cost-efficient alternatives, green and local pavement material able to withstand high temperatures; provision of sufficient numbers of culverts/ditches/cross drainage to address the risk of flooding based on site-specific hydrological studies results; safe provisions for the Vulnerable Road Users (VRUs) and non-motorized transport (NMT) will be addressed by including traffic calming measures like lateral shift, chicane, realigned intersection, traffic circle, speed hump, speed table, raised crosswalk, raised intersection, corner extension, and chokers. The roads will be selected to enhance the logistics efficiency for select value chains in the selected markets based on a multi criteria assessment and rigorous fieldwork that takes into account the location and area of influence of rural markets, difference in the levels of poverty and economic development, levels of existing road connectivity, and the potential to benefit women within the districts.
- **Component 3 - Project implementation support and sustainability:**
This component will be implemented by both RHD and LGED and will finance associated services and goods for following sub-components:



- a) Training and capacity building;
- b) Strategic Environmental and Social Assessment (SESA);
- c) Establishing a Fiduciary Advisory Panel;
- d) Establishing a Transport Sector Integration and Coordination Platform (TSICP) and operationalizing the Road Maintenance Fund Board Act; and
- e) Preparatory Activities for Subsequent Program Phases.

- **Component 4 – COVID-19 Relief and Recovery**

This component will be implemented by both RHD and LGED and will support the following:

- (a) Designing and implementing a program to foster employment opportunities for vulnerable local populations, including, on routine maintenance of roads, clearing of water passages, and hygiene-related small works; and as relevant, the provision of working tools and personal protective equipment;
- (b) Supporting the development and dissemination of an emergency response plan for COVID-19 for RHD and LGED; and
- (c) Supporting the provision of necessary upgrades at RHD and LGED offices to ensure business continuity and improve work environment safety.

- **Component 5 -Contingent Emergency Response:**

This component will provide immediate response to an Eligible Crisis or Emergency, as needed.

1.5 The scope of work for the consultant pertains to the WeCARE activities to be implemented by LGED, i.e. components 2(a) and 2(b) for Phase -1

2. OBJECTIVE

The main objective of this consultancy service is to ensure smooth functioning of ICT aspects of the project which will ultimately help PIU to implement Phase – I of WeCARE project. The consulting services shall be provided by an experienced and qualified individual. The specific objectives include, but are not necessarily be limited to the following:

- Assist LGED to set up, operationalize and run ICT system required for efficient running of the project.
- Help PIU explore areas where ICT can be deployed for ease of project implementation.
- Advise PIU about ICT initiatives for project documentation, operation, supervision, management etc. and implement them.
- Improve ICT initiatives over time to ensure IT security, efficiency and transparency.

3. TASK SUMMARY

Key tasks to be performed by the consultants are as follows:

- Ensures remote supervision and introduction/implementation of systems/technologies,
- Ensures quality assurance of Third -Party deliverables and collaboration with other units
- Effective functioning of the hardware and software packages.
- Provision of networks administration and ensure business continuity.
- Ensure cyber security of the ICT components.
- Provision of administrative support.
- Facilitation of knowledge building and knowledge sharing including relevant training conducting as required and organized by PIU.
- Other duties as assigned.

3.1 Ensures remote supervision and introduction/implementation of systems/technologies, focusing on tracking and monitoring of the project deliverables:

- Initiation of remote supervision process to ensure the timely and quality delivery of project activities. Assist PIU in remote supervision process with the help from World bank and consultants.
- Performance in accessing, using, integrating available ICT applications in LGED for WeCARE project. These includes: Electronic-Project Management System (ePMS), Field Inspection and Monitoring system (FIMS) and Environmental Management Information System (EMIS).



- Technical Assistance for tracking project performance through online application/software, specifically help to analyse project related data management and presentation.
- Assist PIU with setting up Geo-Enabling Initiative for Monitoring and Supervision (GEMS) based database, survey mechanism, associated training, management, system maintenance and information analysis.
- Advise and collaborate with other stakeholders like consultants and contractors to monitor specific elements of the project. (e.g. materials delivery, quality assurance database, forecasting and communicating needs)

3.2 Ensures quality assurance of Third -Party/Consultant's deliverables and collaboration with other units focusing on achievement of the following activities:

- Provide significant substantive technical inputs on WeCARE project implementation plans, including advice to the project implementation team and relevant consulting firms on their area of specialization.
- Effective functioning of requirement analysis and requirement finalization of relevant software applications/package, network design and/or other IT/ICT related issues with the consulting firms.
- Synthesize solution design, architectural patterns, policy and regulatory frameworks, privacy considerations, and risks in the creation of holistic solutions that span technologies and capabilities.
- Quality control of the acceptance and deployment of procured equipment / services, oversight of the performance of selected vendors for the systems or services, to ensure effective implementation and operations.
- Quality assurance of deliveries and outputs of the consulting firm engaged to carry out development and/or implementation of IT-ICT-MIS based services.
- Provide technical support to specialist units of LGED on their database development or any upgradation needs.

3.3 Ensures efficient networks administration, ensure network security and improve office working environment:

- Monitoring of the network connection on a daily basis to ensure a stable and responsive network environment.
- Maintenance of measures in place for business continuity, digital connectivity between various offices and LGED and improving the work environment at both agencies. Advice for High-speed internet connections and IT services will be provided at LGED Headquarters, PIUs and field divisions.
- Ensure disaster recover processes and procedures including backup and restoration of both server and local storage facilities.
- Assist for building and maintaining the day-to-day operation of computer networks that companies and organizations rely on. These networks typically include an intranet, extranet, local area network (LAN), and wide area network (WAN).
- Monitor information systems, computers and networks to detect cyber threats and respond to cyber threats and finally to remediate information security threats and vulnerabilities.

3.4 Ensures effective functioning of the hardware and software packages, focusing on the achievement of the following results:

- Effective functioning (installation, operation and maintenance) of all project supported hardware equipment and acquisition of hardware supplies;
- Performance of specific technical functions, including changing of hardware electronic components (disks, memories, network wiring, power sources, etc.) and routine repairs;
- Installation of commercial and in-house developed software and related upgrades, anti-virus programs on a timely basis.

3.5 Provides administrative support, focusing on achievement of the following results:

- Provides administrative support of advice on and assistance in procurement of new ICT equipment for the delivery of project activities, provision of technical specifications and information on best options in both local and international markets, review of quotations and bids during the tender preparation and evaluation process.
- Maintenance of the inventory and stock of supplies and spare parts in cooperation with the Administration and Procurement Teams.
- Provision of ICT support to events organized in virtual/physical conference facilities of the PIU.
- Ensure day to day ICT related services to Project staff and LGED employees.

3.6 Facilitates knowledge building and knowledge sharing, focusing on achievement of the following results:

- Participation in identification and promotion of different systems and applications for project management, information provision.
- Participation as resource person during the workshops and trainings for the LGED officials on ICT issues and maintenance of personnel training profiles.
- Synthesis of lessons learned and best practices in ICT;
- Train project stakeholders or personnel as instructed by PIU.
- Sound contributions to knowledge networks and day to day ICT related support for project management.

3.7 Carry out other relevant tasks as mentioned /identified by his /her supervisor.

4. Education and experience

- Bachelor's degree in IT / CSE or relevant technical science, post graduate degree on IT/CSE preferred.
- Ability to operate and maintain network, computer, telecommunication and other office equipment.
- Excellent knowledge of computer hardware, LAN, WAN networks; setup video-audio conferences.
- At least 5 years of working experience in the ICT sector.



- Excellent written and verbal communication skills in both Bangla and English.
- Must be pro-active and a self-starter as this position requires a lot of independent work. Ability to work efficiently and effectively in a multidisciplinary team.

5. Reporting Requirement

- (1) Monthly Activity Report.
- (2) Quarterly Summarized Report.
- (3) Final Report.
- (4) Other report as requested.

5. Institutional Arrangement

The Consultants will work under general supervision and guidance of the Project Director. He/she will report directly to the Projector Director with close collaboration with other officials of the Project. The Consultants will be accountable to the Project Director for his/her day-to-day activities.

6. Selection Method

Selection of the consultant will follow the procedures for selecting Individual Consultants described in the World Bank's Procurement Regulation for IPF Borrowers, July 2016, updated in August 2018.

7. Duration

Duration of the assignment will be for approximately 42 months.