

**Request for Proposal (RFP) for Design, Development and Maintenance of Dhaka Metro App for Dhaka Mass Transit Company Limited (DMTCL)**

RFP Number: JICADXL-DMTCL-20240716

**Corrigendum #1**

Date: 17th July 2024

The blue colored texts in the following stipulated sections are modified from the original RFP document.

**1. Section 7.1 Governance Mechanism**

The Digital Partner will adhere to the stakeholder’s role and governance mechanism outlined below for executing the work.

**Stakeholder’s role in governance:**

Stakeholder	Governance role
DMTCL	Overall accountability of the Dhaka Metro App, web and admin portal – feature prioritization, product roadmap, content and facilitation of access and approvals as required
DTCA	Overall accountability of Dhaka Metro top-up server and AVMS – product roadmap, 3 transaction APIs development, delivery and maintenance; and facilitation of access and approvals as required
Digital Partner	Design, build, test, launch, maintain and handover the Dhaka Metro App (android, iOS & web) to DMTCL and top-up server and AVMS to DTCA, along with necessary tech integrations
JICA DXLab/Orderer	Overall project planning and management, consultation on the Dhaka Metro App features, UI/UX design, and technical architecture including product solutions

**Governance mechanism:**

Meeting	Objective	Participants	Frequency
Daily Stand-up	<ul style="list-style-type: none"> <li>• Address daily operational issues and make quick decisions</li> <li>• Facilitate continuous communication and feedback</li> <li>• Post launch on day-to-day challenges faced</li> </ul>	<ul style="list-style-type: none"> <li>• Designated Operational Team Members from DMTCL, JICA DXLab, and the Digital Partner</li> </ul>	Daily
Fortnightly Review Meeting (App & web development)	<ul style="list-style-type: none"> <li>• Review application progress and address broader constraints &amp; issues</li> <li>• Align on priorities and plan for the upcoming week</li> <li>• Facilitate problem-solving, resource allocation, and strategic planning</li> <li>• Working level escalation</li> </ul>	<ul style="list-style-type: none"> <li>• DMTCL Project Mgrs.</li> <li>• Representatives of JICA DXLab</li> <li>• Representatives of Digital Partner</li> </ul>	Weekly
Fortnightly Review Meeting (For online recharge feature development & infrastructure)	<ul style="list-style-type: none"> <li>• Align on current progress, architecture, and implementation approach</li> <li>• Address implementation challenges</li> <li>• Oversee the development and implementation by the selected vendor.</li> <li>• Foster technical collaboration between existing/ planned technical players and Digital Partner</li> </ul>	<ul style="list-style-type: none"> <li>• DMTCL Stakeholders</li> <li>• JICA DXLab Stakeholders</li> <li>• Representatives of Digital Partner</li> <li>• DTCA Stakeholders</li> <li>• DTCA Tech. vendor representatives</li> </ul>	Fortnightly
Monthly Steering Committee	<ul style="list-style-type: none"> <li>• Ensure strategic alignment and resolve roadblocks</li> <li>• Facilitate change management processes &amp; review milestones progress</li> <li>• Discuss and adjust priorities for successful implementation</li> </ul>	<ul style="list-style-type: none"> <li>• DMTCL Business &amp; Technical Leaders</li> <li>• DTCA Business &amp; Technical Leaders</li> <li>• Representatives of Digital Partner</li> <li>• JICA DXLab Stakeholders</li> </ul>	Monthly
Dispute Resolution Committee	<ul style="list-style-type: none"> <li>• Resolve disputes or grievances related to the application scope, or contractual terms</li> <li>• Address critical issues to ensure continuity and mitigate risks.</li> </ul>	<ul style="list-style-type: none"> <li>• DMTCL Stakeholders</li> <li>• DTCA Stakeholders (if required)</li> <li>• Digital Partner Management Team</li> </ul>	On-Demand

Meeting	Objective	Participants	Frequency
		<ul style="list-style-type: none"> <li>• JICA DXLab Stakeholders</li> <li>• Legal Representatives (if required)</li> </ul>	

In addition to above participate in following meetings:

- (1) Final project handover meeting with extended members of JICA DXLab, DMTCL and DTCA
- (2) JICA DXLab seminars to be held both internally with JICA investment and evaluation teams, and externally with relevant stakeholders and potential clients interested in the Digital Partner’s solution.

**2. Section 5.1.7: AVM procurement & software configuration**

The Digital Partner will place in principal order for 75 secure access modules (“SAM”) enabled AVMs together with a supplier, however delivery will happen in 2 batches: 8 AVMs during the App development and testing phase, with the remainder (67) to be procured upon successful completion of testing and sign off. The Digital Partner will ensure necessary hardware and software modifications, if any due to technical and system compatibility requirements, with no impact on the Orderer or its affiliate parties. The first batch of 8 AVMs to be deployed for two stations to be finalized with DMTCL later.

Of these 75 AVMs, 72 will be installed, while 3 will be reserved as backups and stored under the physical custody of DTCA. These AVMs will be deployed across 17 stations (16 currently operational and Kamalapur, which is under construction). Each station will have 4 AVMs, except for the hub stations (Uttara and Motijheel), which will have 5 AVMs each.

The user journey and specifications are detailed below. The Digital Partner must also undertake software development and configurations as specified in section 5.1.1 (b). Additionally, the Digital Partner will be responsible for the installation, operationalization (including electricity and internet connectivity), and maintenance of the AVMs, as specified in Attachment 6. This includes obtaining the necessary permissions and coordinating with the affiliate partners (i.e., DTCA & DMTCL), and

their contractors. As part of the AVM installation, DMTCL and DTCA may help with physical caging options for security and theft protection, if agreed to be necessary among the stakeholders.

**AVM user journey:** A passenger uses the App or website to recharge their NFC-enabled card with a desired amount. The recharge information is stored on the top-up server. The passenger approaches an AVM installed at the metro station. The passenger taps their NFC-enabled card on the AVM. The AVM reads the card details and sends a request to the top-up server to retrieve the latest recharge data. The top-up server verifies the request and sends the updated balance information to the AVM. The AVM updates the balance on the card and displays the updated balance on the screen.

### Major Hardware Specifications for AVM:

Component	Specifications
<b>NFC Reader</b>	<b>Standard:</b> Type F (FeliCa - ISO/IEC 18092 / JIS X 6319-4), <b>Operating Frequency:</b> 13.56 MHz, <b>Range:</b> 0-4 cm
<b>Display</b>	<b>Type:</b> LCD/LED touchscreen, <b>Size:</b> 7-10 inches, <b>Resolution:</b> 1024x600 or higher, <b>Brightness:</b> Adjustable, suitable for various lighting conditions
<b>Processor</b>	<b>Type:</b> ARM Cortex-A53 or better, <b>Clock Speed:</b> Minimum 1.5 GHz, <b>Cores:</b> Quad-core or higher
<b>Operating System</b>	Android 11.0 and above
<b>Memory</b>	<b>RAM:</b> Minimum 2 GB, <b>Storage:</b> Minimum 16 GB, expandable via SD card
<b>Connectivity</b>	<b>Network :</b> Ethernet, Wi-Fi (802.11 b/g/n), and optional LTE
<b>Power supply</b>	<b>Input Voltage:</b> 110-240V AC, <b>Battery Backup:</b> Optional, for up to 2 hours of operation
<b>Security</b>	<b>Encryption:</b> SSL/TLS for data communication, <b>Authentication:</b> Secure boot, hardware-based key storage, <b>Tamper Detection:</b> Alerts for unauthorized access attempts
<b>Enclosure</b>	<b>Material-</b> Durable, weather-resistant casing (IP54 rating or higher), <b>Dimensions:</b> Compact form factor for easy installation at gates, <b>Mounting:</b> Wall-mounted
<b>User Interface</b>	<b>Languages-</b> Bangla & English, <b>Audio Feedback:</b> Speaker for audio confirmations and instructions
<b>Environmental Specifications</b>	<b>Operating Temperature:</b> 0°C to 60°C, <b>Humidity:</b> 10% to 90% non-condensing.

### 3. Attachment 6: Warranty

The Digital Partner warrants that the products supplied under the Contract are new, unused, of the most recent or current model and they incorporate all recent improvements in design and / or features. The Digital Partner further warrants that all the products supplied under this Contract shall have no defect, arising from design or from any act of omission of the Digital Partner that may develop under normal use of the supplied products in the conditions prevailing in Bangladesh.

### **Warranty for Hardware**

Onsite comprehensive warranty for all the hardware components including free replacement of spares, parts, kits as and when necessary will be 36 months from date of installation.

**On-site comprehensive warranty and AMC:** The warranty and AMC would be on-site and comprehensive in nature. Digital Partner will warrant all the hardware and software against defects arising out of faulty design, materials, and media workmanship etc. for the 36 months warranty period. Digital Partner will provide support for operating systems and other preinstalled software components during the warranty period of the hardware on which this software & operating system will be installed. Digital Partner shall repair or replace worn out or defective parts including all plastic parts of the Equipment at his own cost including the cost of transport.

Free maintenance services during the period of warranty and AMC. Professionally qualified personnel who have expertise in the hardware and system software supplied by Digital Partner will provide these services.

Digital Partner shall ensure that faults and failures intimated by Orderer/ DMTCL/ DTCA/ JICA DX Lab as above are set right within 12 hours of being informed of the same.

### **Warranty for Services**

The Digital Partner warrants that all services under this Contract will be performed with promptness and diligence and will be executed in a workman like and professional manner, in accordance with the practices and high professional standards used in well-managed operations performing services similar to the services under this Contract. The Digital Partner represents that it shall use adequate numbers of qualified individuals with suitable training, education, experience, and skill to perform the services hereunder.

Digital Partner shall ensure that faults and failures intimated by Orderer/ DMTCL/ DTCA/ JICA DX Lab are resolved at the earliest as per the service level agreement (“SLAs”)

*(SLAs will be finalized basis the priority and the severity of the issue with the selected Bidder.)*

### **Warranty for Software**

The Digital Partner warrants that all custom developed and off-the-shelf software developed will operate in accordance with the agreed service level agreement (“SLAs”) and performance metrics for the period of the Contract from the date of delivery. **Should any breach of the SLAs occur, or a critical issue arises, the Digital Partner commits to resolving such issues within 2 to 24 hours of notification. However, the high-criticality issues (i.e.; payment failures, balance updation, etc.) must be resolved within 2 hours of notification.** This warranty is contingent upon the software being used as prescribed under normal conditions and within the specified environment.

*(SLAs will be finalized basis the priority and the severity of the issue with the selected Bidder.)*

### **4. Section 10 : Submission process & proposal formats**

Electronic submission must be received at JICADXLab@bcg.com by the latest 11:59 PM Bangladesh Standard Time on July 31, 2024. The email subject needs to be changed to “RFP-DMTCL-App”, followed by your organization name (for instance, RFP- DMTCL-App-Name).

The submission shall consist of the three separate files, Overview of General Information, Technical Proposal Pitch Deck, and Commercial Proposal (password protected), all in the form of PDF. Note that all submission materials need to be prepared in English. The size of all files should be less than 70 pages each (including annexures, ensuring minimum 12 font size).

The Bidders may make inquiries/information requests by email to JICADXLab@bcg.com. For any inquiry, the email subject must be changed to “Inquiry- DMTCL-App”, followed by your organization name (e.g., “Inquiry- DMTCL-App-Name). The deadline for receipt of inquiry is **12:00 noon** Bangladesh Standard Time on July 19, 2024.

### **5. Table Index & Form 1.9 title**

**Form 1.9 Development Pricing Schedule **beyond this work** (1st March 2025 onwards)**

Note: All other terms and conditions, forms of the RFP document remain unchanged. In case of any ambiguity, the RFP document will stand.