**ANNEX E - Digital Fare Media Requirements Traceability Matrix**

Bidders are asked to indicate if they can (Yes) or cannot (No) meet each requirement from 1.0 to 2.12 and to return the completed table (three (3) pages) in their proposal along with a page reference for each requirement.

| **Reqt. #** | **Requirement Description** | **RFP Description** | **Meet Reqt. Yes/No, Pg. Ref.** |
| --- | --- | --- | --- |
|  | **Deliverables** |  |  |
| 1.0 | **Engineering and Project Management**All resources required to develop the proposed digital fare media solution and manage the project in accordance with the contract.  | Resources |  |
| 1.1 | **Hardware**Provision of all hardware associated with the proposed digital fare media solution including, but not limited to, POS, onboard validation for 100 buses and 10 ferries, handhelds, POS terminals or ETMs, hosting servers, Operations, Accounting & Administration terminals. | Hardware |  |
| 1.2 | **Software**Provision of all software associated with the proposed digital fare media solution including, but not limited to, POS, Mobile App, Account-based ticketing, Operations, Accounting & Administration portals. | Software |  |
| 1.3 | **Installation, Test & Commissioning** All resources required for installation, test and commissioning of the proposed digital fare media solution including, but not limited to, local installation of validators, ETMs, POS, servers, Operations, Accounting and Administration terminals; All associated software configuration and testing. | Resources |  |
| 1.4 | **Training**Provision of training on associated hardware, software for Operators, Administrators and local technical support. | Resources |  |
| 1.5 | **Licences**Provision of licenses in accordance with delivery model for the proposed digital fare media solution.  | Software |  |
| 1.6 | **Maintenance & Technical Support** Provision of maintenance and technical support for all aspects of the proposed digital fare media system, for the duration of the contract period.  | Support |  |
|  | **MANDATORY TECHNICAL REQUIREMENTS** |  |  |
| 2.0 | **Ticket Design and Security*** Ticketing solution must contain a robust security feature to prevent fraud
* Ticketing solution must be PCI compliant for Credit Cards encryption
 | Security |  |
| 2.1 | **Software*** Include versions for iOS and Android operating systems open and available in the Bermuda region.
* All system updates included at no additional cost.
* The solution must provide unlimited users access and user access-levels with password protection to ensure system information is secure.
 | Software |  |
| 2.2 | **Web Browser Security*** The web site application must use an SSL Certificate
 | Security |  |
| 2.3 | **Account-Based Ticketing Platform & Mobile App*** Ability to download a ticketing app to a mobile device to purchase and validate tickets.
* Off-line operation and low-cost mobile connectivity are important features.
* Ability to select from current ticketing options within the Bermuda Public Transport system
 | Mobile App |  |
| 2.4 | **Digitization of Cash** * Ability to convert cash to a digital paper ticket or travel card at point-of-sale (POS) using an electronic ticketing machine (ETM) or POS terminal.
* Physical and mobile ticket must carry the Government of Bermuda logo and design, which remain the property of the Government of Bermuda.
 | Payment |  |
| 2.5 | **Contactless EMV** * Ability to tap and ride using major credit/debit cards.
* Ability to purchase multiple fares onboard with a single tap would be advantageous.
* Ability to aggregate a passenger’s journeys for a given day and charge the best value fare.
 | Payment |  |
| 2.6 | **Onboard Validation*** Validation of digital tickets and tokens to allow for rapid boarding and fraud detection.
* Visual and electronic validation through a barcode reader or other means.
 | Validation |  |
| 2.7 | **Fare Media Operations Portal*** Ability for DPT management to access up-to-date information on fare media sales, redemption and revenue remittance
 | Operations |  |
| 2.8 | **Revenue Remittance Methodology** * Proven, timely and secure methodology for remittance of fare media sales and reporting to the Government of Bermuda
 | Financial |  |
| 2.9 | **Real-Time Passenger Information Options** * Ability to view real-time service updates for the published bus and ferry schedule
 | Operations |  |
| 2.10 | **Dispatch and Planning Options** * The ability to view and analyse fleet and passenger data including, GPS fleet tracking, schedule compliance by trip, ridership data, passenger informatics, fleet telematics
 | Operations |  |
| 2.11 | **Scalable, Upgradable & Open System*** Ability to scale the system to support periods of high demand and growth.
* Ability to upgrade for system improvements and additional features.
* Ability to support third party API’s and mobility as a service (MaaS)
 | Operations |  |
| 2.12 | **Support*** Product and service support for the duration of the contract period.
 | Support |  |

**End of Schedule II**