

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|--|---|--|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| <i>Volume I, Part 1 – Bidding Procedures</i> | | | |
| 1 | Section III. Evaluation and Qualification Criteria (EQC) Page EQC-8, 2.4.2 (b) (i) | EQC 2.4.2 (b) (i) states that “A minimum number of two (2) similar operation control systems have supplied”. It is Bidder’s understanding that this requirement shall be satisfied if total number of contracts either successfully completed or under implementation between 1st January 1999 and Bid submission date is more than two (2). Please confirm if our understanding is correct. | For clarity: The Contractor Bid submission to include details of the two (2) or more similar train control system [e.g. Train Operation System with ATO (one-man operation) with Platform Screen Doors] is or being supplied to a similar metro project/s and the projects are either successfully completed and/or is under implementation between 1st January 1999 and Bid submission deadline. |
| 2 | Section III. Bidding Form Technical Bid, Page BF-38, 3. Method of Implementation of the Works | Regarding Article 3. Method of Implementation of Works, Sub-Article 3.2, Bidder would like the Employer to clarify the following comments: 1. Requirement “(i) Appreciation of access constraints” is not clear, and Bidder is uncertain of what should be submitted. Bidder would like to request the Employer to clarify the meaning of requirement (i). 2. It is Bidder’s understanding that requirements “(j) Construction and Installation proposals”, “(k) Method and procedure for testing of Plant”, and “(n) Data for design life of Plant and proposal for overhaul of Plant” are out of the scope of CP107. Bidder would like to request for Employer to explain what information should be submitted. | The following items from Sub-Article 3.2 of Article 3 are deleted and bidders should refer to Item No. 1 of Annex “B” Addendum No.3. Method of Implementation of the Works for efficient bid preparation works: (i) Appreciation of access constraints (j) Construction and Installation proposals (k) Method and procedure for testing of Plant (n) Data for design life of Plant and proposal for overhaul of Plant |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|---|---|---|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| <i>Volume II, Part 2 – Employers Requirements</i> | | | |
| 3 | General Requirement Page ERG-76 Sub-Clause 12.1 GENERAL | <p>ERG Sub-Clause 12.1 states that “The test of on Board Signaling and Communication Equipment provided by the CP106 and CP NS-02 Contractor shall be part of the test plan and the technical responsibility for integrated performance remain with the CP106 and CP NS-02 Contractors” and, “The CP107 Rolling Stock Contractor shall mention the responsibility and demonstration of the design of the Rolling Stock are compliance with the system integration and interface requirements for the interoperation with NSCRP operation:</p> <ul style="list-style-type: none"> • System Integration Tests with NSRP-S • Interface Tests with CP NS-01 E&M Systems and Track Works of NSRP-S • Interface Tests with CP N-06 and NS-02 for NSCR Rolling Stock (if needed) • Any operation and maintenance test as agreed with by the Engineer of NSRP-S.” <p>It is Bidder’s understanding that the above integration testing shall be the responsibility of CP106 Contractor for each line, and that the CP107 Contractor shall prove that the rolling stock functions and performance have met the interface requirements with all Interface requirements. Please confirm if our understanding is correct.</p> | <p>Bidder’s understanding is incorrect. The integration testing shall be the responsibility of CP107 and CP106 in MMSP section.</p> <p>The integration testing with North South Commuter Railway (NSCR) shall be the responsibility of CP107 and CP NS-01 in NSRP_S section.</p> <p>The overall system integration testing and commissioning of the Rolling Stock with Signaling system and ATP/ATO and Radio communication systems shall be the responsibility of CP107 with CP106 and CP NS-01 support.</p> |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|---|---|---|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| 4 | <p>Technical Requirement Page ERT-1 Sub-Clause 1.1 Introduction</p> <p>Page ERT-13 Sub-Clause 1.12.1 Electro-Magnetic Compatibility (EMC)</p> <p>Page ERT-24 Sub-Clause 2.3.1 GENERAL</p> <p>Page ERT-26 Sub-Clause 2.8.1 GENERAL</p> <p>Page ERT-35 Sub-Clause 5.1 GENERAL</p> <p>Page ERT-77 Sub-Clause 14.4 CIRCUIT BREAKER PANELS AND ISOLATING SWITCHES</p> <p>Page ERT-94 Sub-Clause 18.1 GENERAL</p> <p>Page ERT-96 Sub-Clause 18.3 ROLLING STOCK CHARACTERISTICS TO BE USED BY THE FOUR</p> | <p>Bidder reviewed the tender documents and realized that MMSP requires compatibility in various rolling stock design features with NSCR, MCRP and NSRP-South. While the rolling stock for NSCR is currently being designed in advance of MMSP, other projects are still in planning stage; thus, it is unlikely that any specific technical information for those future projects become available for the design, test and commissioning of the MMSP rolling stocks in timely manner. While Bidder fully understand and respect DOTr's desire to make all new lines compatible each other as much as possible, it is not practical or cost effective for Bidder to include any parameters of those future projects as a part of Bidder's technical and price proposals. Therefore, Bidder would like to request for Employer's approval to amend the compatibility/interoperability requirements of the following sections as appropriate ones:</p> <p>ERT Section 1, System Requirements 1.1 Introduction 10) The MMSP Rolling Stock fleet shall be designed to manage interoperability with <u>NSRP-S</u>.</p> <p>1.12 General Electrical Requirements 1.12.1 Electro-Magnetic Compatibility (EMC) EMI/RFI or any other form of interference shall not affect the proper and safe operation of the MMSP and <u>NSRP-S</u> railway and any other facilities.</p> <p>Section 2, Vehicle Body 2.3 Structural Requirement 2.3.1 General</p> | <p>These statements should not be ignored. The requirements are necessary for interoperability with NSRP - South section.</p> <p>In addition, the necessary information for interoperability are to be exchanged in a timely manner between the MMSP CP 107 Contractor and the CP NS-01 Contractors, this is part of the interface requirements of both contractors.</p> <p>The Employer understand the risks related to contract mobilization gaps. The Employers Requirement for MMSP and with NSCR, MCRP and NSRP-South projects encompasses common requirements to meet compatibility & interoperability of Rolling Stock. Furthermore, most of the interfacing with MMSP Rolling Stocks shall be with NSCR - S E&M systems, and this contract is not yet awarded.</p> <p>The Employer expect the Contractors' Interface Management plan/s and procedures are agreed and accepted by all parties.</p> |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|---|--|-----------------|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| | <p>DEVICES CONTRACTOR</p> <p>Page ERT-97 Sub-Clause 18.5.2 Fixtures and Fittings</p> <p>Page ERT-100 Sub-Clause 18.6.2 Fixtures and Fittings</p> <p>Page ERT-102 Sub-Clause 18.7.2 Fixtures and Fittings</p> <p>Page ERT-105 Sub-Clause 18.8.2 Fixtures and Fittings</p> <p>Page ERT-105 Sub-Clause 22.4.3 Integrated Factory Acceptance Test</p> | <p>The Contractor is required to submit supporting calculations to demonstrate compliance, with the calculations taking into consideration the MMSP's and <u>NSRP-S's</u> operating environment.</p> <p>2.8 Equipment Mounting 2.8.1 General</p> <p>The Contractor shall design equipment arrangement in consideration with signaling system and radio system adopted or planned to adopt in NSCR, MMSP, <u>MCRP and NSRP-South</u>. Basically, space of under floor in leading cars shall be secured for signaling equipment, radio equipment, in addition, equipment desirable to be mounted to leading cars such as door controller and so on.</p> <p>The Contractor shall confirm equipment arrangement of rolling stock in NSCR, MMSP, <u>MCRP and NSRP-South</u>, and equipment arrangement shall be unified as possible, paying attention to mounted side, mounted positions (especially test valves, valves and cocks used in emergency), and so on.</p> <p>Equipment arrangement shall be designed not to affect maintainability and emergency operation even if special operations are adopted. Example, equipment arrangement shall be designed in consideration with symmetry, when reversed train formation operation will be adopted.</p> <p>Section 5, COUPLER AND DRAFT GEAR 5.1 General</p> <p>The end vehicle in each train shall be fitted with an automatic coupler. The automatic coupler shall be placed</p> | |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|-------------------------------------|--|-----------------|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| | | <p>in readily accessible position under and near either side of the end vehicle. The position (right side of left side) of parts operated shall be consistent for all end vehicles. It shall be possible to connect with the train of <u>MCRP</u>, NSCR, <u>NSRP-S</u> without any adapter.</p> <p>Section 14, AUXILIARY ELECTRICAL SYSTEMS 14.4 CIRCUIT BREAKER PANELS AND ISOLATING SWITCHES All Circuit breaker panels shall be reviewed by the Engineer. Attention shall be paid that arrangement of the panels are coordinated in consideration with operations in <u>NSRP-South</u>.</p> <p>Section 18, TWO SIGNALING SYSTEMS, RUNNING AND STOPPING ASSISTANT SYSTEM AND PSD CONTROLLER 18.1 GENERAL This section describes the requirements as required for the two Signaling System Contractors, Running and Stopping assistant system Contractor, PSD controller Contractor and the Rolling Stock Contractor. The CBTC shall be in compliance to IEEE 1474.1 or an equivalent standard. The four devices described in this chapter are:</p> <ol style="list-style-type: none"> a. CBTC and PSD controller for MMSP (provided by (CP106) b. ETCS Level 2 for NSRP-South (provided by CP NS-01) | |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|-------------------------------------|---|-----------------|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| | | <p>c. Running and Stopping assistant system for NSRP-South (provided by CP NS-01)</p> <p>d. PSD controller for NSRP-South (provided by CP NS-01)</p> <p>18.3 ROLLING STOCK CHARACTERISTICS TO BE USED BY THE FOUR DEVICES CONTRACTOR The model for calculating the Safe Braking Distance (SBD) by the CP106 and CP NS-01 Contractors shall identify and take into consideration the various systems response times and train operator’s reaction times. The CP107 Contractor shall provide the assured braking rate at the normal braking efficiency, and at the lowest braking efficiency permitted in service, including brake deterioration, and response times of both service brake and emergency brake, to the CP106 and CP NS-01 Contractors. The CP107 Contractor shall provide the speed/acceleration and tractive effort curves, for all loading conditions. In the title of this section, four devices mean as below.</p> <p>a. CBTC and PSD controller for MMSP (provide by CP106)</p> <p>b. ETCS Level 2 for NSRP-South (provided by CP NS-01)</p> <p>c. Running and Stopping assistant system for NSRP-South (provided by CP NS-01)</p> <p>d. PSD controller for NSRP-South (provided by CP NS-01)</p> | |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|-------------------------------------|---|-----------------|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| | | <p>18.5 CBTC EQUIPMENT 18.5.2 Fixtures and Fittings Also, both contractors shall consider position on-board antennas to correspond with <u>MCRP, Limited express for MCRP, NSRP-S</u>, NSCR, and MMSP lines.</p> <p>18.6 ETC EQUIPMENT 18.6.2 Fixtures and Fittings Also, both contractors shall consider position on-board antennas to correspond with <u>MCRP, Limited express for MCRP, NSRP-S</u>, NSCR, and MMSP lines.</p> <p>18.7 RUNNING AND STOPPING ASSISTANT SYSTEM 18.7.2 Fixtures Fittings Also, both contractors shall consider position of on-board antennas to correspond with <u>MCRP, Limited express for MCRP, NSRP-S</u>, NSCR, and MMSP lines.</p> <p>18.8 PSD CONTROLLER 18.8.2 Fixtures and Fittings Also, both contractors shall consider position of on-board antennas to correspond with <u>MCRP, Limited express for MCRP, NSRP-S</u>, NSCR, and MMSP lines.</p> <p>Section 22, INSPECTION, TESTING AND COMMISSIONING 22.4 ACCEPTANCE TESTING 22.4.3 Integrated factory Acceptance Test. Regarding hand over specification around boundary between MMSP section and NSRP-S section, shall be</p> | |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|---|--|---|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| | | applied as the above adding CP NS-01. | |
| 5 | Technical Requirement Page ERT-91 Sub-Clause 17.9 TRAIN RADIO SYSTEM Page ERT-121 Sub-Clause 22.5 TRIAL RUN | <p>Bidder reviewed the tender documents and realized that MMSP requires compatibility in various rolling stock design features with NSCR, MCRP and NSRP-South. While the rolling stock for NSCR is currently being designed in advance of MMSP, other project are still in planning stage; thus, it is unlikely that any specific technical information for those future project become available for the design, test and commissioning of the MMSP rolling stocks in timely manner. While Bidder fully understand and respect DOTr's desire to make all new lines compatible each other as much as possible, it is not practical or cost effective for Bidder to include any parameters of future project as a part of Bidder's technical and price proposals.</p> <p>Bidder would like to request for Employer's approval to add the following sentences to the 2nd sentence of the 9th paragraph, ERT Section 17, COMMUNICATION SYSTEM, Sub-clause 17.9 TRAIN RADIO SYSTEM; "providing such interface information with the train radio system is provided to CP107 Contractor no later than the deadline to be identified at the time of the CP107 Contract Commencement Date".</p> <p>And also, Bidder would like to request for Employer's approval to add the following paragraph after 3rd paragraph of ERT Section 22.5 TRIAL RUN; "The above integration testing shall be the responsibility of CP106 Contractor for each line, and the CP107 Contractor shall prove that the rolling stock functions</p> | <p>Bidder's understanding is incorrect. The integration testing shall be the responsibility of CP107 and CP106 in MMSP section.</p> <p>The integration testing with North South Commuter Railway (NSCR) shall be the responsibility of CP107 and CP NS-01 in NSRP_S section.</p> <p>The overall system integration testing and commissioning of the Rolling Stock with Signaling system and ATP/ATO and Radio communication systems shall be the responsibility of CP107 with CP106 and CP NS-01 support.</p> |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|---|--|--|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| | | and performance have met the interface requirements with all Interface requirements.” | |
| 6 | Technical Requirement Page ERT-3 Sub-Clause 1.2.7 Driver’s Cab and Saloon Mock-up | It is Bidder’s understanding that mock-up shall be built for the purpose of Employer to confirm just layout and design of driver’s cab and saloon, thus mechanical or electrical function of each component shall not be required. Please confirm if our understanding is correct. | Bidder’s understanding is correct. |
| 7 | Technical Requirement Page ERT-16 Sub-Clause 1.13.9 Wire and Cable Installation | ERT Sub-Clause 1.13.9 requires all wires and cables to have sufficient spares. It is Bidder’s understanding that this requirement is for preparation of the installation of different train control systems. Please confirm if our understanding is correct. | Bidder’s understanding is incorrect. The spare core allocation to be proposed by the Contractor, considering the evaluation result that include security of the cable containment, thus mitigating cable core damage during maintenance activities. |
| 8 | Technical Requirement Page ERT-67 Sub-Clause 12.1 GENERAL | It is Bidder’s understanding that CP107 Contractor shall calculate the capacity of propulsion considering that MMSP is planned to be connected only with NSRP-South line. If our understanding is correct, Bidder would like to request for Employer’s approval to delete the word “MCRP” from 12 th paragraph of ERT Sub-clause 12.1. | Bidder’s understanding is correct. MCRP is not required for the calculation. |
| 9 | Technical Requirement Page ERT-112 Sub-Clause 21.5.1 GENERAL | ERT Sub-Clause 21.5.1 requires the Contractor to submit Running maintenance manual, Scheduled maintenance manual and Overhaul manual. On the other hand, ERT Sub-Clause 1.11 defines the maintenance categories of rolling stock. It is Bidder’s understanding that the whole contents of maintenance categories which is mentioned in ERT Sub- | Bidder’s understanding is correct. The contents of the manual shall also include as follows: Running maintenance manual includes departure inspection and other inspections. Schedule maintenance manual includes Light maintenance. |

| Metro Manila Subway Project Phase 1 Package CP107: Rolling Stock | | | |
|---|---|--|--|
| ITEM NO. | REFERENCE / CLAUSE / SECTION | QUERIES | RESPONSE |
| | | <p>Clause 1.11 shall be included into each manual of ERT Sub-Clause 21.5.1 Please confirm if our understanding is correct.</p> <p>In addition, if the above understanding is correct, Bidder would like Employer to indicate the contents of maintenance categories which shall be corresponded to each manuals.</p> | <p>Overhaul manual includes Heavy maintenance.</p> |