



***Invitation to Bid for the***

***Contract for the Supply of One (1) Lot Upgrading of Train Propulsion System under PR No. RS-0322-010 and ITB No. 2204-073-11***

**Schedule of Activities**

- Pre-bid Conference** : **24 June 2022 (Friday)** at 10:00 A.M.  
Cafeteria, LRTA Line 2- Depot, Santolan, Pasig City
- Deadline of Submission of Bids** : **08 July 2022 (Friday)** at 9:30 A.M.  
Cafeteria, LRTA Line 2- Depot, Santolan, Pasig City
- Opening of Bids** : **08 July 2022 (Friday)** at 10:00 A.M.  
Cafeteria, LRTA Line 2- Depot, Santolan, Pasig City

*Complete details of the Technical Specifications are in the Bidding Documents, and can be viewed on PhilGEPS and LRTA websites.*

The Light Rail Transit Authority (LRTA), through its CY 2022 General Appropriations Act (GAA)/CBI 2022-2024 Fund, intends to apply the sum of **Six Hundred Ninety-Eight Million (P698,000,000.00) Pesos**, inclusive of all duties, taxes, and/or other charges, being the Approved Budget for the Contract (ABC) to payments under the afore-mentioned contract. Bids received in excess of the ABC shall be automatically rejected at bid opening.

**LRTA** now invites bids from Prospective/Interested Bidders with the following details:

Description	Approved Budget for the Contract (ABC)	Bid Security		Cost of Bid Documents
		Cash/CC-MC Bank draft/ guarantee or ILC (2%)	Surety bond (5%)	
<b>One (1) Lot Upgrading of Train Propulsion System</b>	<b>₱698,000,000.00</b>	<b>₱13,960,000.00</b>	<b>₱34,900,000.00</b>	<b>₱75,000.00</b>
<b>TOTAL</b>	<b>₱698,000,000.00</b>	<b>₱13,960,000.00</b>	<b>₱34,900,000.00</b>	<b>₱75,000.00</b>

**Note:** Prospective bidders have the option to post a Bid Securing Declaration which commits to pay the corresponding amount as fine and be suspended for a period of time from being qualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as required in the guidelines issued by the GPPB.

The delivery period is Eighteen (18) months upon receipt of Notice to Proceed (NTP). Bidders should have completed, within fifteen (15) years from the date of the deadline for the submission of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

Bidding will be conducted through open competitive bidding procedure using a non-discretionary "pass/fail" criterion as specified in the 2016 Implementing Rules and Regulations (R-IRR) of Republic Act No. 9184.

**Address:**

Line 2 Depot, Marcos Highway, Santolan, Pasig City, M.M., Philippines  
Trunkline: 86473479 / 86473481 / 86473484 / 86473485 / 86473487  
website: www.lrta.gov.ph

Bidding is restricted to Filipino citizens / sole proprietorships, partnerships, corporations, cooperatives or joint ventures with at least sixty (60%) percent interest or outstanding capital stock belonging to citizens of the Philippines and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

Prospective Bidders may obtain further information from LRTA and inspect the Bidding Documents at the BAC Secretariat Office, LRTA Line 2 Depot, Marcos Highway, Santolan, Pasig City during office hours from 8:00 A.M. to 5:00 P.M.

A complete set of Bidding Documents may be acquired by interested Bidders on **17 June 2022 (Friday)** until not later than the deadline for the submission and receipt of bids from the address below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount indicated above. The LRTA shall allow the bidder to present its proof of payment for the fees through personal appearance, facsimile, or through e-mail.

The LRTA will hold a Pre-Bid Conference on the date and address as described above, which shall be open to prospective bidders.

Bids must be duly received by the BAC Secretariat through manual submission at the address indicated above on or before **08 July 2022 (Friday) at 9:30 A.M.** Late bids shall not be accepted.

All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in the Instruction to Bidders and the Bid Data Sheet.

Bid opening shall be on **08 July 2022 (Friday) at 10:00 A.M.** at the address indicated above. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

The LRTA reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

For further information, please refer to:

**Atty. AYLWINSTON C. PILLOS**

Head, BAC Secretariat

BAC Secretariat Office

LRTA Line 2 Depot, Marcos Highway, Santolan, Pasig City

Tel. Nos. 647-3484 to 85 loc. 29872

Email Address: [bacsec@lrta.gov.ph](mailto:bacsec@lrta.gov.ph)

Facsimile No. 647-3484 to 85 loc. 29906/29

You may visit the following websites:

<https://www.lrta.gov.ph/>

<https://philgeps.gov.ph/>

**PAUL Y. CHUA PhD**  
Chairperson, Bids and Awards Committee

*Simultaneously posted @ PhilGEPS and LRTA websites, as well as in the LRTA Bulletin Board on 17 June 2022*

REPUBLIC OF THE PHILIPPINES  
Department Of Transportation  
LIGHT RAIL TRANSIT AUTHORITY

**BIDDING DOCUMENTS**  
(Procurement of GOODS)

*Contract for the Supply of One (1) Lot Upgrading  
of Train Propulsion System*

under

PR No. RS-0322-010 and ITB No. 2204-073-11

Posting Date : 17 June 2022

Sixth Edition  
July 2020



# Table of Contents

<b>Glossary of Acronyms, Terms, and Abbreviations .....</b>	<b>3</b>
<b>Section I. Invitation to Bid.....</b>	<b>6</b>
<b>Section II. Instructions to Bidders.....</b>	<b>9</b>
1. Scope of Bid .....	11
2. Funding Information.....	11
3. Bidding Requirements .....	11
4. Corrupt, Fraudulent, Collusive, and Coercive Practices .....	11
5. Eligible Bidders.....	11
6. Origin of Goods .....	12
7. Subcontracts .....	12
8. Pre-Bid Conference .....	13
9. Clarification and Amendment of Bidding Documents .....	13
10. Documents comprising the Bid: Eligibility and Technical Components .....	13
11. Documents comprising the Bid: Financial Component .....	14
12. Bid Prices .....	14
13. Bid and Payment Currencies .....	15
14. Bid Security .....	15
15. Sealing and Marking of Bids .....	16
16. Deadline for Submission of Bids .....	16
17. Opening and Preliminary Examination of Bids .....	16
18. Domestic Preference .....	17
19. Detailed Evaluation and Comparison of Bids .....	17
20. Post-Qualification .....	18
21. Signing of the Contract .....	18
<b>Section III. Bid Data Sheet .....</b>	<b>20</b>
<b>Section IV. General Conditions of Contract .....</b>	<b>23</b>
1. Scope of Contract .....	24
2. Advance Payment and Terms of Payment .....	24
3. Performance Security .....	24
4. Inspection and Tests .....	25
5. Warranty .....	25
6. Liability of the Supplier .....	25
<b>Section V. Special Conditions of Contract .....</b>	<b>26</b>
<b>Section VI. Schedule of Requirements .....</b>	<b>32</b>
<b>Section VII. Technical Specifications .....</b>	<b>33</b>
<b>Section VIII. Checklist of Technical and Financial Documents .....</b>	<b>43</b>

# ***Glossary of Acronyms, Terms, and Abbreviations***

**ABC** – Approved Budget for the Contract.

**BAC** – Bids and Awards Committee.

**Bid** – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

**Bidder** – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

**Bidding Documents** – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

**BIR** – Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

**Consulting Services** – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

**CDA** - Cooperative Development Authority.

**Contract** – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

**CIF** – Cost Insurance and Freight.

**CIP** – Carriage and Insurance Paid.

**CPI** – Consumer Price Index.

**DDP** – Refers to the quoted price of the Goods, which means “delivered duty paid.”

**DTI** – Department of Trade and Industry.

**EXW** – Ex works.

**FCA** – “Free Carrier” shipping point.

**FOB** – “Free on Board” shipping point.

**Foreign-funded Procurement or Foreign-Assisted Project**–Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

**Framework Agreement** – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as “Call-Offs,” are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

**GFI** – Government Financial Institution.

**GOCC** –Government-owned and/or –controlled corporation.

**Goods** – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term “related” or “analogous services” shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

**GOP** – Government of the Philippines.

**GPPB** –Government Procurement Policy Board.

**INCOTERMS** – International Commercial Terms.

**Infrastructure Projects** – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

**LGUs** – Local Government Units.

**NFCC** – Net Financial Contracting Capacity.

**NGA** – National Government Agency.

**PhilGEPS** - Philippine Government Electronic Procurement System.

**Procurement Project** – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described,

detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

**PSA** – Philippine Statistics Authority.

**SEC** – Securities and Exchange Commission.

**SLCC** – Single Largest Completed Contract.

**Supplier** – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

**UN** – United Nations.

***Section I***  
***Invitation to Bid***



***Invitation to Bid for the  
Contract for the Supply of One (1) Lot Upgrading of Train  
Propulsion System under PR No. RS-0322-010 and ITB No. 2204-  
073-11***

**Schedule of Activities**

- Pre-bid Conference** : **24 June 2022 (Friday)** at 10:00 A.M.  
Cafeteria, LRTA Line 2- Depot, Santolan, Pasig City
- Deadline of Submission of Bids** : **08 July 2022 (Friday)** at 9:30 A.M.  
Cafeteria, LRTA Line 2- Depot, Santolan, Pasig City
- Opening of Bids** : **08 July 2022 (Friday)** at 10:00 A.M.  
Cafeteria, LRTA Line 2- Depot, Santolan, Pasig City

*Complete details of the Technical Specifications are in the Bidding Documents, and can be viewed on PhilGEPS and LRTA websites.*

The Light Rail Transit Authority (LRTA), through its CY 2022 General Appropriations Act (GAA)/CBI 2022-2024 Fund, intends to apply the sum of **Six Hundred Ninety-Eight Million (₱698,000,000.00) Pesos**, inclusive of all duties, taxes, and/or other charges, being the Approved Budget for the Contract (ABC) to payments under the afore-mentioned contract. Bids received in excess of the ABC shall be automatically rejected at bid opening.

**LRTA** now invites bids from Prospective/Interested Bidders with the following details:

Description	Approved Budget for the Contract (ABC)	Bid Security		Cost of Bid Documents
		Cash/CC-MC Bank draft/ guarantee or ILC (2%)	Surety bond (5%)	
<b>One (1) Lot Upgrading of Train Propulsion System</b>	₱698,000,000.00	₱13,960,000.00	₱34,900,000.00	₱75,000.00
<b>TOTAL</b>	<b>₱698,000,000.00</b>	<b>₱13,960,000.00</b>	<b>₱34,900,000.00</b>	<b>₱75,000.00</b>

**Note:** Prospective bidders have the option to post a Bid Securing Declaration which commits to pay the corresponding amount as fine and be suspended for a period of time from being qualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as required in the guidelines issued by the GPPB.

The delivery period is Eighteen (18) months upon receipt of Notice to Proceed (NTP). Bidders should have completed, within fifteen (15) years from the date of the deadline for the submission of bids, a

contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

Bidding will be conducted through open competitive bidding procedure using a non-discretionary” pass/fail” criterion as specified in the 2016 Implementing Rules and Regulations (R-IRR) of Republic Act No. 9184.

Bidding is restricted to Filipino citizens / sole proprietorships, partnerships, corporations, cooperatives or joint ventures with at least sixty (60%) percent interest or outstanding capital stock belonging to citizens of the Philippines and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

Prospective Bidders may obtain further information from LRTA and inspect the Bidding Documents at the BAC Secretariat Office, LRTA Line 2 Depot, Marcos Highway, Santolan, Pasig City during office hours from 8:00 A.M. to 5:00 P.M.

A complete set of Bidding Documents may be acquired by interested Bidders on **17 June 2022 (Friday)** until not later than the deadline for the submission and receipt of bids from the address below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount indicated above. The LRTA shall allow the bidder to present its proof of payment for the fees through personal appearance, facsimile, or through e-mail.

The LRTA will hold a Pre-Bid Conference on the date and address as described above, which shall be open to prospective bidders.

Bids must be duly received by the BAC Secretariat through manual submission at the address indicated above on or before **08 July 2022 (Friday) at 9:30 A.M.** Late bids shall not be accepted.

All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in the Instruction to Bidders and the Bid Data Sheet.

Bid opening shall be on **08 July 2022 (Friday) at 10:00 A.M.** at the address indicated above. Bids will be opened in the presence of the bidders’ representatives who choose to attend the activity.

The LRTA reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

For further information, please refer to:

**Atty. AYLWINSTON C. PILLOS**  
Head, BAC Secretariat  
BAC Secretariat Office  
LRTA Line 2 Depot, Marcos Highway, Santolan, Pasig City  
Tel. Nos. 647-3484 to 85 loc. 29872  
Email Address: [bacsec@lta.gov.ph](mailto:bacsec@lta.gov.ph)  
Facsimile No. 647-3484 to 85 loc. 29906/29

You may visit the following websites:

<https://www.lrta.gov.ph/>  
<https://philgeps.gov.ph/>

**PAUL Y. CHUA PhD**  
*Chairperson, Bids and Awards Committee*

*Simultaneously posted @ PhilGEPS and LRTA websites, as well as in the LRTA Bulletin Board on 17 June 2022*

***Section II***  
***Instructions to Bidders***

## **1. Scope of Bid**

The Light Rail Transit Authority (LRTA) wishes to receive Bids for the Contract for the Supply of One (1) Lot Upgrading of Train Propulsion System under PR No. RS-0322-010 and ITB No. 2204-073-11

The Contract is composed of *various items*, the details of which are described in Section VII (Technical Specifications).

## **2. Funding Information**

2.1. The CY 2022 General Appropriations Act (GAA)/CBI 2022-2024 through the source of funding as indicated below for CY 2022 in the amount of Six Hundred Ninety-Eight Million (₱698,000,000.00) Pesos.

2.2. The source of funding is:

CY 2022 General Appropriations Act (GAA)/CBI 2022-2024

## **3. Bidding Requirements**

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

## **4. Corrupt, Fraudulent, Collusive, and Coercive Practices**

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

## **5. Eligible Bidders**

- 5.1. Only Bids or Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. a. Foreign ownership exceeding those allowed under the rules may participate pursuant to:
- i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;
  - ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
  - iii. When the Goods sought to be procured are not available from local suppliers; or
  - iv. When there is a need to prevent situations that defeat competition or restrain trade.
- b. Foreign ownership limited to those allowed under the rules may participate in this Project.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:
- The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.*
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

## 6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

## 7. Subcontracts

- 7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that:



a. ~~Subcontracting is allowed. The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the BDS, which shall not exceed twenty percent (20%) of the contracted Goods.~~

b. *Subcontracting is not allowed.*

~~7.2. The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in ITB Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.~~

~~7.3. The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in ITB Clause 5 to the implementing or end-user unit.~~

~~7.4. Subcontracting of any portion of the Project does not relieve the Supplier of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants, or workmen.~~

## **8. Pre-Bid Conference**

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through as indicated in the **IB and Clause 8 of the BDS**.

## **9. Clarification and Amendment of Bidding Documents**

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

## **10. Documents comprising the Bid: Eligibility and Technical Components**

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.

10.2. The Bidder's SLCC as indicated in **ITB Clause 5.3** should have been completed within **15 years** prior to the deadline for the submission and receipt of bids.

10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by

the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

## **11. Documents comprising the Bid: Financial Component**

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.
- 11.5. Financial proposals for single or multi-year Framework Agreement shall be submitted before the deadline of submission of bids as prescribed in the **IB**. For multi-year Framework Agreement, evaluation of the financial proposal during this stage is for purposes of determining eligibility and whether or not such financial proposal is within the ABC.

## **12. Bid Prices**

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
  - a. For Goods offered from within the Procuring Entity's country:
    - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
    - ii. The cost of all customs duties and sales and other taxes already paid or payable;
    - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
    - iv. The price of other (incidental) services, if any, listed in the **BDS**.
  - b. For Goods offered from abroad:

- i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
  - ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications)**.
- 12.2. For Framework Agreement, the following should also apply in addition to Clause 12.1:
  - a. For a single year Framework Agreement, the prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.
  - b. For a multi-year Framework Agreement, the prices quoted by the Bidder during submission of eligibility documents shall be the ceiling and the price quoted during mini-competition must not exceed the initial price offer. The price quoted during call for mini-competition shall be fixed during the Bidder's performance of that Call-off and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.

### **13. Bid and Payment Currencies**

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in:
  - a. Philippine Pesos.
  - b. ~~[indicate currency if procurement involves a foreign-denominated bid as allowed by the Procuring Entity, which shall be tradable or acceptable by the BSP].~~

### **14. Bid Security**

- 14.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

- 14.2. The Bid and bid security shall be valid until *120 calendar days from the date of opening of bids*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.
- 14.3. In the case of Framework Agreement, other than the grounds for forfeiture under the 2016 revised IRR, the bid security may also be forfeited if the successful bidder fails to sign the Framework Agreement, or fails to furnish the performance security or performance securing declaration. Without prejudice on its forfeiture, bid securities shall be returned only after the posting of performance security or performance securing declaration, as the case may be, by the winning Bidder or compliant Bidders and the signing of the Framework Agreement.

## **15. Sealing and Marking of Bids**

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

## **16. Deadline for Submission of Bids**

- 16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in the **IB and Clause 16.1 of BDS**.
- 16.2. For multi-year Framework Agreement, the submission of bids shall be for the initial evaluation of their technical and financial eligibility. Thereafter, those declared eligible during the said initial eligibility evaluation and entered into a Framework Agreement with the Procuring Entity shall submit anew their best financial offer at the address and on or before the date and time indicated in the Call for each mini-competition.

## **17. Opening and Preliminary Examination of Bids**

- 17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

- 17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

## 18. Domestic Preference

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.
- 18.2. For multi-year Framework Agreement, determination of margin of preference shall be conducted every call for Mini-Competition.

## 19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated “*passed*,” using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- a. In the case of single-year Framework Agreement, the Lowest Calculated Bid shall be determined outright after the detailed evaluation;
  - b. For multi-year Framework Agreement, the determination of the eligibility and the compliance of bidders with the technical and financial aspects of the projects shall be initially made by the BAC, in accordance with Item 7.4.2 of the Guidelines on the Use of Framework Agreement.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case may be. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:
- Option 1 – One Project having several items that shall be awarded as one contract.
- ~~Option 2 – One Project having several items grouped into several lots, which shall be awarded as separate contracts per lot.~~
- ~~Option 3 – One Project having several items, which shall be awarded as separate contracts per item.~~

- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

## **20. Post-Qualification**

- 20.1. For multi-year Framework Agreement, all bidders initially determined to be eligible and financially compliant shall be subject to initial post-qualification. The BAC shall then recommend the execution of a Framework Agreement among all eligible, technically and financially compliant bidders and the Procuring Entity and shall be issued by HoPE a Notice to Execute Framework Agreement. The determination of the Lowest Calculated Bid (LCB) shall not be performed by the BAC until a Mini-Competition is conducted among the bidders who executed a Framework Agreement. When a Call for Mini-Competition is made, the BAC shall allow the bidders to submit their best financial proposals on such pre-scheduled date, time and place to determine the bidder with the LCB.
- 20.2. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, or in the case of multi-year Framework Agreement, that it is one of the eligible bidders who have submitted bids that are found to be technically and financially compliant, }the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**. For every mini-competition in Framework Agreement, the LCB shall likewise submit the required documents for final Post Qualification. }

## **21. Signing of the Contract**

- 21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.
- 21.2. At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity shall send the Framework Agreement Form to the Bidder, which contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.
- 21.3. Within ten (10) calendar days from receipt of the Notice to Execute Framework Agreement with the Procuring Entity, the successful Bidder or its duly authorized representative shall formally enter into a Framework Agreement with the procuring entity for an amount of One Peso to be paid to the procuring entity as a consideration for the option granted by the procuring entity to procure the items in the Framework Agreement List when the need arises.



- 21.4. The Procuring Entity shall enter into a Framework Agreement with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.
- 21.5. The following documents shall form part of the Framework Agreement:
- a. Framework Agreement Form;
  - b. Bidding Documents;
  - c. Call-offs;
  - d. Winning bidder's bid, including the Technical and Financial Proposals, and all other documents/statements submitted (*e.g.*, bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
  - e. Performance Security or Performance Securing Declaration, as the case may be;
  - f. Notice to Execute Framework Agreement; and
  - g. Other contract documents that may be required by existing laws and/or specified in the **BDS**.

***Section III***  
***Bid Data Sheet***

# Bid Data Sheet

ITB Clause															
5.3	<p>For this purpose, contracts similar to the Project shall be:</p> <p style="margin-left: 40px;">a. <i>Any contract involving the Supply, Delivery and Commissioning of Rolling Stocks, or Supply, Delivery and Installation of mechanical/electrical parts/components/assemblies of Rolling Stocks.</i></p> <p style="margin-left: 40px;">b. <i>The Bidder must have completed, within the last fifteen (15) years prior to the date of the deadline for the submission of bid, a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.</i></p>														
7.1 (b)	<b><u>Sub-contracting is NOT ALLOWED</u></b>														
12	<p>Refer to Section V – Special Conditions of Contract on Incidental Services.</p> <p>The bid/price quote shall be delivered duty paid (DDP) with destination: Light Rail Transit Authority (LRTA), Line 2 Depot, Marcos Highway, Santolan, Pasig City.</p>														
14.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Item no.</th> <th rowspan="2" style="text-align: center;">Description</th> <th colspan="2" style="text-align: center;">Bid Security</th> </tr> <tr> <th style="text-align: center;">Cash/CC-MC Bank draft/ guarantee or ILC (2%)</th> <th style="text-align: center;">Surety bond (5%)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;"><b>One (1) Lot Upgrading of Train Propulsion System</b></td> <td style="text-align: right;">₱13,960,000.00</td> <td style="text-align: right;">₱34,900,000.00</td> </tr> <tr> <td></td> <td style="text-align: center;"><b>TOTAL</b></td> <td style="text-align: right;"><b>₱13,960,000.00</b></td> <td style="text-align: right;"><b>₱34,900,000.00</b></td> </tr> </tbody> </table> <p>For <i>Surety Bond</i>, the ORIGINAL RECEIPT (O.R) which corresponds to the payment of premium as well as a copy of a Certification duly signed by the insurance Commission authorizing such surety or insurance company to issue such security must be attached and submitted.</p>	Item no.	Description	Bid Security		Cash/CC-MC Bank draft/ guarantee or ILC (2%)	Surety bond (5%)	1	<b>One (1) Lot Upgrading of Train Propulsion System</b>	₱13,960,000.00	₱34,900,000.00		<b>TOTAL</b>	<b>₱13,960,000.00</b>	<b>₱34,900,000.00</b>
Item no.	Description			Bid Security											
		Cash/CC-MC Bank draft/ guarantee or ILC (2%)	Surety bond (5%)												
1	<b>One (1) Lot Upgrading of Train Propulsion System</b>	₱13,960,000.00	₱34,900,000.00												
	<b>TOTAL</b>	<b>₱13,960,000.00</b>	<b>₱34,900,000.00</b>												
15	In addition to the one (1) set original, Each Bidder is requested to submit additional one (1) hard copy and one (1) scanned PDF copy in a CD/USB Flash Drive of each of the first and second components of its Bid.														
16.1	In case the deadline for submission of bids fall on a non-working day duly declared by the president, governor or city/municipal mayor or other government official authorized to make such decision, the deadline shall be the next working														

	day.		
19.3	Item no.	Description	Approved Budget for the Contract (ABC)
	<b>One (1) Lot Upgrading of Train Propulsion System</b>		
	Materials		
	1	VVVF Inverter Assembly	₱
	2	Train Monitoring System (TMS)	₱
	3	Master Controller	₱
		Sub-Total	₱
	Labor		
	4	Rolling Stock Expert	₱
	5	Project Manager/ Engineer	₱
	6	Safety Officer	₱
	7	Lead Technician	₱
	8	Technicians	₱
		<b>TOTAL</b>	<b>₱698,000,000.00</b>
<b>Note:</b>	<b><u>Bidder must submit unit prices for the above listed items in the Price Schedule for Goods Offered from Abroad and/or Price Schedule for Goods Offered from within the Philippines.</u></b>		
20.2	<i>For further instruction upon issuance of Notice of Post-Qualification.</i>		
21.1	<i>No further instruction.</i>		
21.2	<i>Not applicable.</i>		

***Section IV***  
***General Conditions of Contract***

## 1. **Scope of Contract**

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC)**.

## 2. **Advance Payment and Terms of Payment**

- 2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.
- 2.3. For a single-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier in its bid.
- 2.4. For multi-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier during conduct of Mini-Competition.

## 3. **Performance Security**

Within z (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184. *In the case of Framework Agreement, the Bidder may opt to furnish the performance security or a Performance Securing Declaration as defined under the Guidelines on the Use of Framework Agreement.*



#### **4. Inspection and Tests**

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project or Framework Agreement/ specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC, Section IV (Technical Specifications)** shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

#### **5. Warranty**

6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.

6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

#### **6. Liability of the Supplier**

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

*Section V*  
*Special Conditions of Contract*

## Special Conditions of Contract

GCC Clause	
1	<p><b>Delivery and Documents –</b></p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p><i>For Goods supplied from abroad:</i> “The delivery terms applicable to the Contract are DDP delivered Light Rail Transit Authority (LRTA), Line 2 Depot, Marcos Highway, Santolan, Pasig City. In accordance with INCOTERMS.”</p> <p><i>For Goods supplied from abroad:</i></p> <p>Upon shipment, the Supplier shall notify the Procuring Entity and the insurance company by cable the full details of the shipment, including Contract Number, description of the Goods, quantity, vessel, bill of lading number and date, port of loading, date of shipment, port of discharge etc. Upon delivery to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents as applicable with the documentary requirements of any letter of credit issued taking precedence:</p> <ol style="list-style-type: none"> <li>a) Original and four copies of the Supplier’s invoice showing Good’s description, quantity, unit price, and total amount;</li> <li>b) Original and four copies of the negotiable, clean shipped on board bill lading marked “freight pre-paid” and five copies of the non – negotiable bill of lading;</li> <li>c) Original Supplier’s factory inspection report;</li> <li>d) Original and four copies of the Manufacturer’s and/or Supplier’s warranty certificate;</li> <li>e) Original and four copies of the certificate of origin (for imported Goods);</li> <li>f) Delivery receipt detailing number and description of items received signed by the Procuring Entity’s representative at the Project Site;</li> <li>g) Certificate of Acceptance/Inspection Report signed by the Procuring Entity’s representative at the Project Site; and</li> <li>h) Four copies of the Invoice Receipt for Property signed by the Procuring Entity’s representative at the Project Site;</li> </ol> <p><i>For Goods supplied from within the Philippines:</i> “The delivery terms applicable to this Contract are delivered Light Rail Transit Authority (LRTA), Line 2 Depot, Marcos Highway, Santolan, Pasig City. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</p> <p><i>For Goods supplied from within the Philippines:</i></p>

Upon delivery of the Goods to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents to the Procuring Entity:

- a) Original and four copies of the Supplier's invoice showing Good's description, quantity, unit price, and total amount;
- b) Original and four copies delivery receipt/note, railway receipt, or truck receipt;
- c) Original Supplier's factory inspection report;
- d) Original and four copies of the Manufacturer's and/or Supplier's warranty certificate;
- e) Original and four copies of the certificate of origin (for imported Goods);
- f) Delivery receipt detailing number and description of items received signed by the authorized receiving personnel;
- g) Certificate of Acceptance/Inspection Report signed by the Procuring Entity's representative at the Project Site; and
- h) Four copies of the Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.

Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).

For purposes of this Clause the Procuring Entity's Representative at the Project Site is *Light Rail Transit Authority (LRTA), Line 2 Depot, Marcos Highway, Santolan, Pasig City*.

**Incidental Services –**

The Supplier is required to provide all of the following services, including additional services, if applicable as required in Section VII Technical Specifications and/or as pertinent and due to and based on the nature and character of the goods subject of the procurement:

- a. performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- b. furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty

obligations under this Contract; and

- e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- f. Cost of photocopying of Contract and Implementation Documents in such number of sets required by LRTA; and,
- g. Cost of notarization of contract and implementation documents.

The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

**Packaging –**

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity

Name of the Supplier

Contract Description

Final Destination

Gross weight

Any special lifting instructions

Any special handling instructions

Any relevant HAZCHEM classifications

A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.

**Transportation –**

Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.

Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.

The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.

**Intellectual Property Rights –**



	The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.
2.2	<i>Thirty (30) calendar days upon final acceptance of goods and submission of complete documents required by existing accounting and auditing rules of the government specifically, among others, COA CIRCULAR No. 2012-01.</i>
4	The inspections and tests that will be conducted are: <u><i>Refer to Annexes “C, D, and E” (Test Parameters) of Section VII - Technical Specifications (if applicable)</i></u>

## *Section VI*

### *Schedule of Requirements*

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

<b>Item Number</b>	<b>Description</b>	<b>Quantity</b>	<b>Total</b>	<b>Delivered, Weeks/Months</b>
<b>1</b>	<b>One (1) Lot Upgrading of Train Propulsion System</b>	<b>One (1) Lot</b>	<b>One (1) Lot</b>	<b>Eighteen (18) months upon receipt of Notice to Proceed (NTP)</b>

*Section VII*  
*Technical Specifications*

## *Technical Specifications*

[Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution.]

<b>Description</b>	<b>Statement of Compliance</b> (State whether “ <b>Comply</b> ” or “ <b>Not Comply</b> ”) <u>must be supported by evidence in a Bidders Bid and cross-referenced to that evidence</u>
<b>One (1) Lot Upgrading of Train Propulsion System</b>	
<p><b>1. SCOPE OF WORK</b></p> <p>The project shall consist of the following scope of works; but not limited to:</p> <ol style="list-style-type: none"> <li>1.1 Mobilization and preparatory works for the design and manufacture of prototype VVVF Inverter Assembly.</li> <li>1.2 Supply, delivery and installation of twenty-eight (28) brand new VVVF Inverter assemblies, seven (7) upgraded Train Monitoring Systems and fourteen (14) Master Controllers that shall seamlessly interface with the existing rolling stock system.</li> <li>1.3 Replacement of old VVVF Inverter assemblies, Train Monitoring Systems and Master Controllers with brand new VVVF Inverter assemblies, Train Monitoring Systems and Master Controllers at 100% operational condition.</li> <li>1.4 Provision and supply of all materials, tools &amp; equipment and manpower for the removal of old VVVF Inverter Assemblies, Train Monitoring Systems and Master Controllers</li> <li>1.5 Provision and supply of all materials, tools &amp; equipment and manpower for the installation, testing and commissioning of the new VVVF Inverter assemblies, Train Monitoring Systems and Master Controllers</li> <li>1.6 Supply and Delivery of the following:               <ol style="list-style-type: none"> <li>a. Installation manuals</li> <li>b. Maintenance Instruction manuals</li> <li>c. Parts Catalogue</li> </ol> </li> <li>1.7 Training for Four (4) Operations, Ten (10) Engineering and Six (6) Maintenance Personnel for a total of Twenty-four (24) Hours at LRTA Line 2 Depot. All training modules, manuals and materials shall likewise be provided by the Contractor.</li> <li>1.8 The Contractor shall provide a minimum of three (3) laptops installed with all the necessary programs/software needed for the successful implementation of the Project which shall be turned over to LRTA after the completion.</li> </ol>	

1.8.1 The Contractor shall conduct comprehensive technical (theory and actual) training on the operation and maintenance of Rolling Stock using these programs/software to be attended by ten (10) LRTA qualified technical personnel particularly the end-user.

1.9 Any item, activity, material, parts, component and equipment necessary for the proper completion and implementation of the works and deliverables subject of the contract, which is not specified or described herein, shall be deemed part of the Contract and has to be complied without additional cost

1.10 All the items subject of the contract must undergo proper testing procedure in accordance with relevant and pertinent international testing standards, and such testing procedure must be certified by accredited independent 3<sup>rd</sup> party certifying body.

1.11 The testing report, Quality Assurance Report and Quality Control Reports must be submitted by the contractor prior to the shipment of the items to the Philippines.

1.12 The scope of the Contract shall also include the following:

a. The Contractor shall deliver prototypes of upgraded VVVF Inverter Assembly, Train Monitoring System and Master Controller for one (1) Train Set. The prototypes shall be installed and should seamlessly interface with the existing rolling stock system. The testing and interfacing of the prototypes shall be conducted for a minimum of two (2) weeks. Failure to meet the said testing and interfacing period shall result to termination of Contract.

b. Should the prototype fail to interface with the existing rolling stock system and/or does not meet the required operational performance or other performance specifications, the Contractor shall be required and compelled to install back at its original condition the old VVVF Inverter assembly. The cost of the removal of the old VVVF Inverter assembly, installation of the prototype, testing of the prototype, and if applicable the removal of ineffective prototype and reinstallation of old VVVF Inverter assembly shall be to the exclusive account of the Contractor.

c. Any loss of revenue suffered or incurred by LRTA due to defective or unacceptable prototypes shall be to the sole account of the Contractor.

d. Any damage to property or injury to any person due to the defective or unacceptable prototypes shall be to the sole account of the Contractor.

e. The production of the VVVF Inverter Assembly, Train Monitoring System and Master Controller should be commenced only upon formal approval of the prototypes.

1.13 The Contractor shall provide a certification of after sales support (Technical Service and Spare parts) from the Manufacturer of at least Ten (10) years after the end of production of the Model being offered.

1.14 Testing, Commissioning and Acceptance

a. Dimensional Measurement

<p>Measures the dimensions and compare it to the required measurement.</p> <p>b. Technical Specification Evaluation</p> <p>Compares the delivered items technical specifications to the required specifications.</p> <p>c. Fitting and Functional Test</p> <ol style="list-style-type: none"> <li>1. Perform train preparation functionality test of the delivered Prototypes of upgraded VVVF Inverter assembly, Train Monitoring System (TMS) and Master Controller at Depot Area (see attached checklist as Annex C).</li> <li>2. Perform low speed functionality test of the delivered Prototypes of upgraded VVVF Inverter assembly, Train Monitoring System (TMS) and Master Controller at Depot Area for Four (4) loops (see attached checklist as Annex D).</li> <li>3. Perform high speed functionality test of the delivered Prototypes of upgraded VVVF Inverter assembly, Train Monitoring System (TMS) and Master Controller at the Revenue Line for Two (2) loops (see attached checklist as Annex E).</li> <li>4. The prototypes of upgraded the VVVF Inverter assembly, Train Monitoring System (TMS) and Master Controller shall be considered Technically Acceptable if they conform / comply / pass with the required technical specifications and pass the required functional test.</li> <li>5. The prototypes shall be part of the delivery if successfully pass the above testing, commissioning and acceptance procedures.</li> </ol>	
<p><b>2. PESONNEL REQUIREMENT</b></p> <p>The Contractor shall provide and deploy the following Key Personnel for the Project:</p> <p>2.1. Rolling Stock Expert</p> <p>The Qualification Standard of the Rolling Stock Expert:</p> <ol style="list-style-type: none"> <li>2.1.1 Electrical/Mechanical Engineer/Electronic Engineer or equivalent Profession;</li> <li>2.1.2 With at least Ten (10) Years experience in the manufacturing/repair/restoration/rehabilitation/upgrading/maintenance of rolling stock system;</li> <li>2.1.3 With at least Five (5) Years employment as Rolling Stock Expert/Technical Personnel on train propulsion system with the Manufacturer of the subject items to be delivered by the Contractor.</li> </ol> <p>2.2. Project Manager/Engineer</p> <p>The Qualification Standard of the Project Manager:</p>	

<p>2.2.1. Electrical/Mechanical Engineer Licensed by the Professional Regulations Commission of the Philippines</p> <p>2.2.2. Minimum of Two (2) Years experience in the project implementation/management of any of the following:</p> <ul style="list-style-type: none"> <li>a. Installation of train propulsion system;</li> <li>b. Repair/Rehabilitation/Upgrading of train propulsion system; or,</li> <li>c. Maintenance of train propulsion system.</li> </ul> <p>2.3. Safety Officer</p> <p>The Qualification Standard of the Safety Officer:</p> <p>2.3.1 Graduate of any Engineering Course</p> <p>2.3.2 Minimum of Two (2) Years experience in the supervision and implementation of safety programs, activities, standards and policies in an industrial workshop, or project.</p> <p>2.3.3 Should be accredited by DOLE.</p> <p>2.4. Lead Technician</p> <p>The Qualification Standard of the Lead Technician:</p> <p>2.4.1 At least graduate of any technical/vocational course;</p> <p>2.4.2 Minimum of Two (2) Years experience in the project implementation of any/all of the following:</p> <ul style="list-style-type: none"> <li>a. Installation of train propulsion system;</li> <li>b. Repair/ Rehabilitation/Upgrading of train propulsion system; or</li> <li>c. Maintenance of train propulsion system.</li> </ul>	
<p><b>3. WORK PLAN</b></p> <p>The Contractor shall provide the following Work Plan but not limited to:</p> <p>3.1. Work Methodology Plan</p> <p>A narrative plan which define the activities and procedures that will be adapted for the performance of the project. The Work Methodology Plan shall include among others the work plan for each identified scope of work, area of work, logistics, supports, etc.</p> <p>3.2. Safety and Security Plan</p> <p>A narrative plan which demonstrates clearly the policies, procedures and guidelines for the effective and efficient achievement of safety and security practices in the performance of the project. The Safety and Security Plan include the safety procedure, regulations and implementation guidelines and policy for ensuring safety and security including the preventive actions.</p> <p>3.3. Storage Plan</p> <p>Narrative plans which facilitate the effective and efficient storage of all the</p>	

materials, tools and equipment needed for the project. The Storage Plan describes how store and secure these materials, tools and equipment to free from any defects while on the stock.

3.4. Communication Plan

A narrative plan which facilitate the effective and efficient communications between the LRTA and the Contractor, and other offices / agencies or individual having a major stake in the project. The Communication Plan describes how project communications will occur. A good communication forestalls surprises, prevents duplication of effort, and can help to reveal omissions and misallocation of resources early enough to permit corrections.

**4. SAFETY AND SECURITY REQUIREMENTS**

- 4.1. Contractor must comply with all Safety, Security and Health procedures and policies of LRTA.
- 4.2. Authorized Heavy Maintenance personnel of the LRTA Maintenance Contractor shall be the operator of the overhead crane, and the electro-in ground lifter. Contractor personnel are prohibited to operate the said machines.
- 4.3. Assistance of Rolling Stock Technicians of the LRTA Maintenance Contractor shall be required with respect to the operation of the train subject of the work of the Contractor.
- 4.4. Before the start of the implementation of the Contract, all personnel of Contractor must attend Security and Safety Orientation to be conducted by LRTA Security and Safety Officers.

**5. TECHNICAL SPECIFICATIONS**

Train Propulsion System technical data/specifications:

5.1 VVVF INVERTER

ITEM	SPECIFICATION
Continuous output power	610 kVA
Peak output power	1445 kVA
Output voltage	0 to 1100 Vac (at line voltage 1500 V)
Output frequency	0 to 170 Hz
Dynamic brake	Regenerative and compact rheostatic blended brake
Cooling	Self-cooling with no blower
Weight	760 kg



**Configuration**

The propulsion inverter mainly configures the line breaker LB1 for applying main power supply to the main circuit, charging the filter capacitors or isolating the inverter unit, the line breaker LB2 for short-circuiting the charging resistors and the discharging resistor R1, a braking chopper unit, one IGBT inverter unit, a logic control unit and voltage/current sensors.

The inverter unit drives four (4) traction motors.

## 5.2 TRAIN MONITORING SYSTEM

### Train Monitoring System Hardware Architecture

ITEM	SPECIFICATION
Input voltage	110 Vdc (77 Vdc to 121 Vdc)
Ambient temperature	15 to 40 ° C
Relative humidity	Maximum 90% at 33.5 °C
Shock and vibration	To be tested according to IEC 77
Dielectric strength (between case and terminal of 110 Vdc line)	1200 Vac 1 minute
Dielectric strength (between case and terminal of DC 24 V line)	500 Vac 1 minute
Cooling	Natural cooling

### EQUIPMENT FUNCTIONS

TYPE	DESCRIPTION
Monitor	The Train Monitoring System (TMS) monitors the status of subsystems, such as the driver's cab, lighting system, air conditioning system, auxiliary AC power system, propulsion system, and friction brake system.
Generate alarms	The TMS analyzes the inputs and outputs and determines whether fault or failure conditions exist. Once the TMS recognizes failure, the failure is displayed on the display screen, and an audible warning alerts the driver.
Remedial action guidance	Guidance for remedial action is displayed on the display screen when failure occurs.

	Store history of faults	The TMS records fault equipment status, including operational data such as speed, P/B command, etc., before 7 seconds and after 3 seconds. The memorized data is read out with a laptop computer through 10 base-T Ethernet.																													
<b>5.3 MASTER CONTROLLER</b>																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">COMPONENT</th> <th colspan="2">DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td rowspan="4">External Form</td> <td>Length</td> <td>365 mm</td> </tr> <tr> <td>Width</td> <td>250 mm</td> </tr> <tr> <td>Height</td> <td>282.5 mm</td> </tr> <tr> <td>Weight</td> <td>16.5 ±0.5kg</td> </tr> <tr> <td rowspan="2">Cam Switch (DC110V)</td> <td>Type</td> <td>S800a</td> </tr> <tr> <td>Contact breaking capacity</td> <td>DC100V =&gt; 1.5A</td> </tr> <tr> <td rowspan="2">Cam Switch (DC24V)</td> <td>Type</td> <td>S826a</td> </tr> <tr> <td>Contact breaking capacity</td> <td>DC100V =&gt; 1.5A</td> </tr> <tr> <td>Key Switch</td> <td>Type</td> <td>CA10 RK2103*9EL</td> </tr> <tr> <td>Potentiometer</td> <td>Type</td> <td>J50s 500 ohm</td> </tr> </tbody> </table>				COMPONENT	DESCRIPTION		External Form	Length	365 mm	Width	250 mm	Height	282.5 mm	Weight	16.5 ±0.5kg	Cam Switch (DC110V)	Type	S800a	Contact breaking capacity	DC100V => 1.5A	Cam Switch (DC24V)	Type	S826a	Contact breaking capacity	DC100V => 1.5A	Key Switch	Type	CA10 RK2103*9EL	Potentiometer	Type	J50s 500 ohm
COMPONENT	DESCRIPTION																														
External Form	Length	365 mm																													
	Width	250 mm																													
	Height	282.5 mm																													
	Weight	16.5 ±0.5kg																													
Cam Switch (DC110V)	Type	S800a																													
	Contact breaking capacity	DC100V => 1.5A																													
Cam Switch (DC24V)	Type	S826a																													
	Contact breaking capacity	DC100V => 1.5A																													
Key Switch	Type	CA10 RK2103*9EL																													
Potentiometer	Type	J50s 500 ohm																													
<p>5.4 The Contractor certifies that the equivalent parts / components / assemblies that shall be supplied and installed or upgraded and compatible versions shall be available for the next ten (10) years upon completion and acceptance of the project. This certification must be supported by certification from the concerned manufacturer.</p> <p>5.5 The Contractor certifies the proven track record of the company manufacturing the equivalent parts / components/assemblies that shall be supplied and installed pursuant to the Contract. This certification must be supported by the company profile and business documents and licenses of the said manufacturer.</p> <p>5.6 Any and all equivalent parts / components / assemblies supplied and delivered by the Contractor shall be compatible and seamlessly interface with the existing system.</p> <p>5.7 Any and all parts/components/assemblies and equipment to be used for the upgrading of train propulsion system shall be in accordance with the applicable railway standards.</p> <p>5.8 The Contractor shall supply, deliver and install all needed and required parts for the complete and successful implementation of the Contract.</p>																															

## 6. CONTRACT PERIOD

The Contractor agrees and obligates itself to perform and complete all the works and deliverables provided under the Contract within **Eighteen (18) months** upon receipt of Notice to Proceed (NTP).

## 7. PAYMENT

### 7.1. PAYMENT SCHEDULE

Payment for accomplished works under the project shall be based on the listed project Milestones and its corresponding indicated cost.

Item no.	Description	Requirements	Percentage
1	<ul style="list-style-type: none"> <li>Supply and Delivery of all spare parts, special tools and equipment for Seven (7) Trainsets</li> </ul> <p>(Partial delivery, partial payment is allowed.)</p>	<ul style="list-style-type: none"> <li>Acceptance Report</li> <li>Delivery Receipt</li> <li>Delivery Inspection Report</li> </ul>	37%
2	<ul style="list-style-type: none"> <li>Decommissioning of defective parts/components/assemblies</li> <li>Repair/restoration/rehabilitation/upgrading of the 1<sup>st</sup> of the seven trains including testing, commissioning and acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Accomplishment Report</li> <li>Acceptance Report</li> </ul>	9%
3	<ul style="list-style-type: none"> <li>Decommissioning of defective parts/components/assemblies</li> <li>Repair/restoration/rehabilitation/upgrading of the 2<sup>nd</sup> of the seven trains including testing, commissioning and acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Accomplishment Report</li> <li>Acceptance Report</li> </ul>	9%
4	<ul style="list-style-type: none"> <li>Decommissioning of defective parts/components/assemblies</li> <li>Repair/restoration/rehabilitation/upgrading of the 3<sup>rd</sup> of the seven trains including testing, commissioning and acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Accomplishment Report</li> <li>Acceptance Report</li> </ul>	9%
5	<ul style="list-style-type: none"> <li>Decommissioning of defective parts/components/assemblies</li> <li>Repair/restoration/rehabilitation/upgrading of the 4<sup>th</sup> of the seven trains including testing, commissioning and acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Accomplishment Report</li> <li>Acceptance Report</li> </ul>	9%

6	<ul style="list-style-type: none"> <li>Decommissioning of defective parts/components/assemblies</li> <li>Repair/restoration/rehabilitation/upgrading of the 5<sup>th</sup> of the seven trains including testing, commissioning and acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Accomplishment Report</li> <li>Acceptance Report</li> </ul>	9%
7	<ul style="list-style-type: none"> <li>Decommissioning of defective parts/components/assemblies</li> <li>Repair/restoration/rehabilitation/upgrading of the 6<sup>th</sup> of the seven trains including testing, commissioning and acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Accomplishment Report</li> <li>Acceptance Report</li> </ul>	9%
8	<ul style="list-style-type: none"> <li>Decommissioning of defective parts/components/assemblies</li> <li>Repair/restoration/rehabilitation/upgrading of the 7<sup>th</sup> of the seven trains including testing, commissioning and acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Accomplishment Report</li> <li>Acceptance Report</li> </ul>	9%

## 7.2 RETENTION

The obligation for the warranty shall be covered by retention money in an amount equivalent to at least three percent (3%) of the total contract price or a special bank guarantee equivalent to at least three percent (3%). The said amounts shall only be released after the lapse of the warranty period. Provided, however, that the goods supplied and services rendered are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

## 8. DEFECTS LIABILITY/WARRANTY PERIOD

8.1 The Contractor shall be responsible for any defect or failure of the new VVVF Inverter assemblies, TMS and Master Controller or workmanship thereof for the whole one (1) year Defects Liability and Warranty Period.

8.2 Defects Liability/Warranty period shall start from the date of final acceptance of each trainset installed with upgraded propulsion system.

## 9. OTHER TERMS AND CONDITIONS

### 9.1. RESPONSIBILITIES OF THE CONTRACTOR

- 9.1.1. Satisfactorily render, perform, deliver, finish and complete all of the works stipulated under Clause 1.0 Scope of Work and other Clauses hereof.
- 9.1.2. Procure all required and necessary spare parts or material, if there is a need for such, and include the lead time for their ordering, delivery and receipt, and reasonable maintain substantial inventory of needed materials and spare parts in the area within LRTA Depot provided by LRTA to the Contractor. Tariffs, duties, taxes and all other payments to be made for the delivery of all spare parts or materials shall be for the full account of the Contractor.
- 9.1.3. Provide for itself storage compartments and facilities for its tools, equipment and materials necessary for the project. Such storage compartments and facilities as well as tools, equipment, and materials prior to their entry to the premises of the LRTA Line 2 System, should be duly covered by an approved entry pass and the same must be presented during withdrawal/s in the presence of authorized LRTA personnel.
- 9.1.4. Formally signify in advance its intent to alter any existing LRTA facility/ies, if there is a need for the efficient delivery of the subject work/s, i.e. electrical and mechanical disconnection and disassembly, within the identified and designated work area/s. Any alteration shall require prior written approval of LRTA.
- 9.1.5. Strictly adhere to the Work Program, Schedule and Work Methodology it has submitted and approved, and accepted by LRTA for the timely completion of the project as well as other related documents.
- 9.1.6. Ensure at all times that any work activity work will not in any manner cause any form of delay in the day-to-day operation of the LRTA and of the Line 2 System.
- 9.1.7. Notify LRTA in writing of any incident/accident occurring during the performance and delivery of the Contract soonest time possible but should not be later than twenty-four (24) hours from occurrence of said accident/incident.
- 9.1.8. Assume full responsibility of the conduct of all its employees during the execution of the contract. Safety of its own workers, LRTA employees and all other individuals within the designated workplace should always be parts of the prime concern of the Contractor.
- 9.1.9. Ensure that while performing the services, the behavior of all its employees shall conform to generally accepted standards and act in any manner consistent with the physical safety of all persons in LRTA premises. LRTA reserves the right to remove from or to refuse admittance to its premises those personnel/staff affected by alcohol, drugs or any intoxicating substance or banned by Philippine Law, or who for any other reason be deemed incapable of reliably carrying out the prescribed duties and responsibilities. Drug Test results for employees shall be submitted to LRTA prior to actual deployment of the concerned employee.
- 9.1.10. Ensure that all activities undertaken and all its personnel comply with the health and safety protocol being imposed and implemented by LRTA, Department of Health and the Inter Agency Task Force on Covid-19 Pandemic.
- 9.1.11. Immediately stop/cease/abort any work in progress and/or clear

<p>the work area/s concerned if needed and upon receipt of a written order from LRTA.</p> <p>9.1.12. Provide the needed and required manpower to satisfactorily finish the subject contract, taking in for consideration the following concerns.</p> <p>9.1.13. Ensure that all personnel are adequately trained for their respective individual jobs/assignments/duties.</p> <p>9.1.14. Ensure that each personnel is at all times free from any communicable diseases, and is physically and mentally fit for each job assignment/duty.</p> <p>9.1.15. Ensure that all personnel are fully vaccinated and with booster shot against Covid-19 virus.</p> <p>9.1.16. The Contractor shall, as soon as practicable prior to the commencement of the services, submit to LRTA the names of its nominated personnel, designation, and home address, for the proper issuance of an approved duty/access pass. LRTA reserves the right to refuse entry to any personnel of the Contractor whose name does not appear in the approved roster or listing of personnel with duly issued duty/access pass.</p> <p>9.1.17. Apply for needed work clearance/s from LRTA forty eight (48) hours before the commencement of work.</p> <p>9.1.18. Twenty four (24) hours prior to any approved night work schedule, the Contractor should formally notify LRTA in writing of such schedule and attach the duly approved work clearance for immediate reference and allocation of the needed personnel by LRTA.</p> <p>9.1.19. Provide all the necessary and mandated bonds such as but not limited to performance, warranty and third party bonds within the specified period. Warranty for the work done and materials/spare parts delivered and installed must be free from any form of defect from their installation and commissioning.</p> <p>9.1.20. Immediately replace free of labor, material/s charge/s and cost/s any identified defective materials/spare parts delivered and installed by them.</p> <p>9.1.21. The Contractor shall formally notify LRTA of its intent to submit conceptual design/s or spare parts or any material/s due for installation/use on the subject contract for purposes of technical analysis, testing and acceptance.</p> <p>9.1.22. All the required measuring and testing equipment and devices for the conduct of acceptance procedure/s shall be for the account of the Contractor.</p> <p>9.1.23. The Contractor shall warrant that it has all the necessary permits and clearances from concerned government agency/ies for the execution of the works subject of the Contract.</p> <p>9.1.24. In the event that the Contractor fails to complete the works within the specified duration, the Contractor shall pay LRTA by way of liquidated damages. The liquidated damages shall be imposed by the sole fact of delay, and it is not necessary that LRTA suffered lost of production, profits, business opportunity or any other indirect or consequential damages by reason of the said delay.</p> <p>9.1.25. For security purposes, each employee of the Contractor shall have a valid NBI clearance prior to and during his employment under the Contract.</p> <p>9.1.26. Used parts shall be properly cared of, inventoried and turned-over to LRTA.</p>	
---	--

<p>9.2. RESPONSIBILITIES AND RIGHTS OF THE LRTA</p> <p>9.2.1. Pay the Contractor the cost of works duly accepted and covered with the necessary documentation within the prescribed period.</p> <p>9.2.2. Attend to the needs of the Contractor upon presentation of a formal notice.</p> <p>9.2.3. Monitor the over-all performance of the Contractor for the whole duration of the contract.</p> <p>9.2.4. Staging area shall be provided by LRTA free of charge.</p>	
<p>9.3. QUALITY CONTROL REQUIREMENTS</p> <p>9.3.1. All measuring and test devices and equipment shall be duly covered by a valid and current certificate of calibration from concerned regulatory agency/ies.</p> <p>9.3.2. The Contractor shall submit:</p> <ul style="list-style-type: none"> <li>a. Bar Chart Schedule and S-curve showing among others the comparison of planned vs. actual done activities;</li> <li>b. Project pictorials on weekly intervals upon receipt of the Notice to Proceed with caption including negatives in any form of electronic media, i.e. cd's, dvd's, USB's;</li> <li>c. Quality Control Inspection Reports;</li> <li>d. Test Reports and Certificates;</li> <li>e. Copies of approved changes in design / specification / contract documents.</li> </ul>	
<p>9.4. GENERAL TERMS AND CONDITIONS</p> <p>9.4.1. LRTA may at any time terminate the contract forthwith if, in the reasonable opinion of LRTA, the Contractor is in breach of any provision of the Contract and fails to remedy the breach within seven (7) days after written notice from LRTA. The termination of the contract shall not affect the right and remedies of either party against the other for any previous breach of Contract.</p> <p>9.4.2. The Contractor is to understand that any work not specifically mentioned herein, and in all other bid and contract related documents officially issued or submitted during the contract period and its extension as the case may so apply, but which is necessary, either directly or indirectly, for the proper carrying out of the intent of the Contract, shall be deemed required, and Contractor shall supply, deliver, perform such items and goods and works just as if it was particularly defined, described or required. Proper documentation for such occurrence should be on the initiative of the Contractor and will be for the evaluation, approval and acceptance of LRTA subject to existing guidelines, laws, and standards. Unless specifically mentioned above, all works shall conform to the standards of the LRTA and of the LRT Line 2 System.</p> <p>9.4.3. All and every acts, activities and behaviors, in the execution of the contract, shall in no way contravene any existing law, rules, regulations, and government and LRTA policies.</p> <p>9.4.4. There shall be no assignment whatsoever of any or all parts of the Contract to a third party without prior written consent of LRTA.</p> <p>9.4.5. LRTA shall not bind itself in any manner to any agreement for the</p>	

<p>exclusion of certain competitions of the Contractor.</p> <p>9.4.6. The Contractor is an independent Contractor of LRTA and that no employer and employee relationship is created between LRTA on one hand and the Contractor or its employees or other persons engaged in performing the services on the other hand.</p> <p>9.4.7. Contractor shall hold LRTA free and harmless from any and all fines, penalties, losses, liabilities and litigation expenses incurred or suffered on account of death, injury, loss or damage to persons and properties arising from the execution/implementation of the Contract.</p> <p>9.4.8. LRTA shall review the performance of the Contractor's personnel engaged in the carrying out of the works and services. In the event that LRTA determines the performance of any of the personnel is not in accordance with accepted industry/commercial standards, LRTA, may request the replacement of such personnel, within a reasonable time, subject to pertinent requirements of the Philippine Labor Laws or the rules or regulations of any government agency or of LRTA.</p>	
<p><b>10. CHANGE IN THE WORK</b></p> <p>LRTA may after prior notice and subject to existing rules and regulations (Annex D, Goods and Services, 2016 Revised IRR of RA No. 9184), order extra work or make changes by altering, adding to or deducting from the work where it is found necessary as covered by the specifications and other documents pertinent to the Contract and within the general scope thereof. LRTA in writing shall order such change and the Contractor shall immediately proceed with the implementation of the written order within two (2) days from receipt thereof.</p>	
<p><b>11. FORCE MAJEURE</b></p> <p>The Contractor, subject to Annex D, Goods and Services, 2016 Revised IRR of RA No. 9184 shall not be liable for non-performance of any of the provisions of the Contract when the same is due to force majeure such as, but not limited to fires, floods, earthquakes, typhoons, storm, strikes, lockouts, civil commotion, riots, rebellion, insurgency, blockades or any government embargo, regulation or restriction, epidemic, acts of God, wars or any other causes beyond their control, regardless of whether such causes arises directly or indirectly.</p>	
<p><b>12. PHILIPPINE LAW</b></p> <p>12.1. The Contractor shall comply with all relevant requirements of Philippine Laws such as of the rules and regulations of any government agency or LRTA, including laws, regulations and policies concerning the employees of the Contractor engaged in performing the works and services.</p> <p>12.2. The Contractor shall give all notices and secure all permits and certificate required by such laws, regulations and decrees. The Contractor shall be solely liable for any and all Contractor's taxes, levies, duties and fees pertinent to the performance of the obligations, works and services subject of the contract.</p> <p>12.3. The provision of R.A. No. 9184 and its 2016 Revised Implementing Rules</p>	



and Regulations shall among other laws, primarily govern the Contract.	
<p><b>13.</b> Aside from the conformity with the <b>Schedule of Requirements</b> and <b>Technical Specifications</b>, enumerated and specified in <b>Sections VI</b> and <b>VII</b>, respectively, of the Bidding Documents, bidders must also submit the following additional duly signed Technical Documents that must be included in the first envelope, to wit:</p> <ol style="list-style-type: none"> <li>1. Warranty Package (<b>Minimum of One (1) Year upon acceptance</b>);</li> <li>2. Manufacturer’s Brochures and/or Technical Drawings;</li> <li>3. Certificate of Dealership or Authority to Sell Directly or indirectly issued by the Manufacturer. For indirect issuance, Bidders shall provide documents linking the authorization from the manufacturer down to the bidder; and</li> <li>4. Any verifiable International Standard Certificate on the design and testing procedures of parts, assemblies, components, tools, equipment, goods and products for railway rolling stock application as listed/enumerated but not limited to <b>Annex “A” (Design Standards)</b> and <b>Annex “B” (Manufacturing and Test Standards)</b> of the Bidding Documents.</li> </ol>	

*Note: The bidder’s proposal must specifically indicate the brand, make and/or model of the offered product/item in the Bidders proposal column together with the “Comply” or “Not Comply” remark or in a separate sheet if necessary.*

\_\_\_\_\_  
 (Name and Signature)  
 Authorized Representative

Company:\_\_\_\_\_

Date:\_\_\_\_\_

## Design Standards:

ARR	Association of American Railroads, USA
AISI	American Iron and Steel Institute, USA
ANSI	American National Standards Institute, USA
AREA	American Railway Engineering Association, USA
AS	Australian Standards, Australia
SAA	Standards Australia, Australia
BS	British Standards, UK
BSI	British Standards Institution, UK
CAN	National Standards of Canada, Canada
DIN	Deutsches Institute for Normung, Germany
JIS	Japanese Industrial Standards, Japan
PNS	Philippine National Standard, Philippines
BPS	Bureau of Product Standards, Philippines
ISO	International Organization for Standardization
UIC	International Union of Railways Standards
IEC	International Electrotechnical Commission

## Manufacturing and Testing Standards

### IEC Standards

- IEC 310 Traction transformers and inductors.
- IEC 494 Rules for pantograph of electric rolling stock.
- IEC 1133 Electric traction-rolling stock test method on completion of Construction and before entry of service.
- IEC 60077-3 Railway applications – Electric equipment for rolling stock – Part 3: Electro technical components – Rules for DC circuit breakers
- IEC 60077-4 Railway applications – Electric equipment for rolling stock -- Part 4: Electro technical components – Rules for AC circuit breakers
- IEC 60077-5 Railway applications – Electric equipment for rolling stock – Part 5: Electro technical components – Rules for HV fuses
- IEC 60310 Railway applications – Traction transformers and indicators on board rolling stock
- IEC 60322 Railway applications – Electric equipment for rolling stock – Rules for power resistors of open construction
- IEC 60349-2 Electric Traction – Rotating electrical machines for rail and road vehicles --part 2: Electronic converter-fed alternating current motors
- IEC 60494-2 Railway applications – Rolling stock – Pantographs -- Characteristics and tests -- Part 2: Pantographs for Light Rail Vehicles
- IEC 60529 Degrees of protection provided by enclosures (IP Code)
- IEC 60571 Electronic equipment used on rail vehicles
- IEC 60631 Characteristics and tests for electro dynamic and electromagnetic braking systems
- IEC 60850 Railway applications -- Supply voltages of traction systems
- IEC 61287-1 Railway applications – Power converters installed on board rolling stock --Part 1: Characteristics and test methods
- IEC 61373 Railway applications – Rolling stock equipment – Shock and vibrations tests
- IEC 61375-1 Electric railway equipment – Train bus -- Part 1: Train communication network
- IEC 61375-2 Electric railway equipment -- Train bus -- Part 2: Train communication network conformance testing
- IEC 61377-1 Railway applications – Rolling stock – Part 1: Combined testing of inverter-fed alternating current motors and their control system

IEC 61881 Railway applications – Rolling stock equipment – Capacitors for power electronics

IEC 61991 Railway applications – Rolling stock – Protective provisions against electrical hazards

IEC 62236-1 Railway applications – Electromagnetic compatibility – Part 1: General

IEC 62236-3-1 Railway applications – Electromagnetic compatibility – Part 3-1: Rolling stock – Train and complete vehicle

IEC 62236-3-2 Railway applications – Electromagnetic compatibility – Part 3-2: Rolling stock – Apparatus

IEC 62278 Railway applications – Specification and demonstration of reliability, availability, maintainability and safety (RAMS)

IEC 62279 Railway applications – Communications, signaling and processing systems – Software for railway control and protection systems

IEC 62280-2 Railway applications – Communications, signaling and processing systems – Part 2: Safety-related communication in open transmission systems

ISO 9000 Quality management systems – Fundamentals and vocabulary (ISO 9000:2005)

ISO 3095 Acoustics – Measurement of noise emitted by rail vehicles.

ISO 3381 Acoustics – Measurement of noise inside rail vehicles.

ISO 2631 Ride Quality

#### **UIC Standards**

UIC 505-1 Car outline – Manufacturing, static and kinematic/dynamic gauge

UIC 505-4 Effects of the application of the kinematics' gauges defined in the 505 series of leaflets on the positioning of structures in relation to the tracks and of the tracks in relation to each other

UIC 513 Guidelines for evaluating passenger comfort in relation to vibration in railway vehicles

UIC 515\_5 Powered and trailing stock – Bogies -- Running gear -- Tests for axle-boxes

UIC 518 Testing and approval of railway vehicles from the point of view of their dynamic behavior – Safety – track fatigue – ride quality

UIC 519 Method for determining the equivalent conicity

UIC 533 Protection by the earthing of metal parts of vehicles

UIC 541\_05 Specifications for the construction of various brake parts – wheel slide protection device (WSP)

UIC 541\_3 Brakes – Disc brakes and their application – General conditions for the approval of brake pads

UIC 552 Electrical power supply for trains – Standards technical characteristics of the train line

UIC 553 Heating, ventilation and air-conditioning in coaches

UIC 553-1 Heating, ventilation and air-conditioning in coaches – standard tests

UIC 555 Intensity of lighting on passengers compartment

UIC 555\_1 Transistorized inverters for supplying fluorescent lamps

UIC 560 Doors, footboards, windows, steps, handles and handrails of coaches and luggage vans

UIC 564\_1 Coaches – Windows made from safety glass

UIC 564\_2 Regulations relating to fire protection and fire fighting measure in passenger carrying railway vehicles or assimilated vehicles used on international services.

UIC 564-2 Car flooring

UIC 60 494-2 Operational of current collector (pantograph)

UIC 610 Rail vehicles shall be manufactured, assembled, quality controlled and tested (IEC 61133).

UIC 615 Tractive units – Bogies and running gear – General provisions

UIC 615-4 Test of bogie frame structures.

UIC 616 Rules for electric traction equipment (IEC 60077)

UIC 617\_4 Position of front and side windows and of other windows situated in the driving compartments of electric powered stock

UIC 651 Layout of the driver's cab

UIC 803\_35 Selective list of rigid pipe connections for steel pipes (screw type pipe couplings)

UIC 810\_1 Technical specification for the supply of rough rolled non-alloy steel tyres for tractive and trailing stock tolerances



UIC 810\_2 Technical specification for the supply of rough tyres for tractive and trailing stock - tolerances

UIC 810\_3 Technical specification for the supply of non-alloy flat and sectional steel for tyre retention spring rings

UIC 812\_1 Technical specifications for the supply of rolled or forged wheel centers for tyre wheels for trailing stock. Quality requirements

UIC 812\_4 Technical specification for the supply of tire wheels for tractive and trailing stock. Type fitting and tolerances

UIC 822 Technical specification for the supply of helical compression springs, hot or cold coiled for tractive and trailing stock

UIC 827\_1 Technical specification for the supply of elastomer components for buffers

UIC 829\_1 Technical specification for the supply of heads for the UIC type automatic coupler with center buffer for tractive and trailing stock

UIC 829\_2 Technical specification for the supply of castings in Gray iron, malleable cast iron or spheroid graphite cast iron for the UIC type automatic coupler with a center buffer for tractive and trailing stock

UIC 829\_3 Provisional technical specification for the supply of parts in forged or rolled steel intended for the UIC type automatic coupler with a center buffer for tractive and trailing stock

UIC 830\_3 Technical specification for the supply of coupler heads

UIC 840\_2 Technical specification for the supply of steel castings for tractive and trailing stock

UIC 842\_1 Technical specification for the supply of paint products for the protection of railway vehicles and containers

UIC 842\_3 Technical specification for the surface preparation of metallic and non-metallic materials used in the construction of railway vehicles and containers

UIC 842\_4 Technical specification for methods for testing paint products

UIC 842\_5 Technical specification for the protection against corrosion and painting of coaches and tractive units

UIC 842\_6 Technical specification for the quality inspection of railway vehicle paint systems

UIC 844\_4 Technical specification for the supply of layered panels, with decorative surface, with a base of heat-hardening resins

UIC 845 Technical specification for the supply of elastomer flange connections for intercommunicating gangways



UIC 895 Technical specification for the supply of insulated electric cables for railway vehicles

UIC 896\_2 Recommendations for the protection of steel structures against corrosion

UIC 897\_13 Technical specification for the quality control of welded joints on steel rolling stock  
European Standards

EN 40000 Railway applications –

EN 50121-3-2 Railway applications – Electromagnetic compatibility – part 3-2: Rolling stock - Apparatus

EN 50124-1 Railway applications- Insulation coordination – part 1: Basic requirements – clearances and creep age distances for all electrical and electronic equipment

EN 50124-2 Railway applications – Insulation coordination – part 2: Over voltages and related protection

EN 50125-1 Railway applications – Environment conditions for equipment – part 1: equipment on board rolling stock

EN 50126 Railway applications – The specification and demonstration of reliability, availability, maintainability and safety (RAMS).

EN 50128 Railway applications – Communication, signaling and processing systems – Software for railway control and protection systems

EN 50153 Railway applications – Rolling stock – protective measures relating to electrical hazard.

EN 50155 Railway applications – Electronic equipment used on the rolling stock.

EN 50159-2 Railway applications – Communication, signaling and processing systems – part 2: Safety related communication in open transmission systems

EN 50163 Railway applications - Supply voltages of traction systems.

EN 50215 Railway applications – Testing of rolling stock after completion of construction and before entry into service.

EN 50264-1 Railway applications -- Railway rolling stock cables having special fire performance -- standard wall – part 1:

EN 50305 Railway applications – Railway rolling stock cables having special fire performance -- test methods

EN 50306-1 Railway applications – Railway rolling stock cables having fire performance -- thin wall – part 1: general requirements

EN 50306-2 Railway applications – Railway rolling stock cables having special fire performance -- thin wall – part 2: single core cables

EN 50306-3 Railway applications – Railway rolling stock cables having special fire performance -- thin wall – part 3: single core and multi core cables (pairs, triples and quads) screened and thin sheathed.

EN 50306-4 Railway applications – Railway rolling stock cables having special fire performance -- thin wall – part 4: multi core and multi pair cables standard wall sheathed.

- EN 50343 Railway applications – Rolling stock – rules for installing of cabling.
- EN 50128 Railway applications – Communication, signaling and processing systems – Software for railway control and protection systems
- EN 50153 Railway applications – Rolling stock – protective measures relating to electrical hazard.
- EN 50155 Railway applications – Electronic equipment used on the rolling stock.
- EN 50159-2 Railway applications – Communication, signaling and processing systems – part 2: Safety related communication in open transmission systems
- EN 50163 Railway applications - Supply voltages of traction systems.
- EN 50215 Railway applications – Testing of rolling stock after completion of construction and before entry into service.
- EN 50-264-1 Railway applications – Railway rolling stock cables having special fire performance –standard wall – part 1:
- EN 50305 Railway applications – Railway rolling stock cables having special fire performance -- test methods
- EN 50306-1 Railway applications – Railway rolling stock cables having fire performance – thin wall – part 1: general requirements
- EN 50306-2 Railway applications – Railway rolling stock cables having special fire performance – thin wall – part 2: single core cables
- EN 50306-3 Railway applications – Railway rolling stock cables having special fire performance – thin wall – part 3: single core and multi core cables (pairs, triples and quads) screened and thin sheathed.
- EN 50306-4 Railway applications – Railway rolling stock cables having special fire performance – thin wall – part 4: multi core and multi pair cables standard wall sheathed.
- EN 50343 Railway applications – Rolling stock – rules for installing of cabling.
- EN 60529 Degrees of protection provided by enclosures.
- EN 61377 Combined testing of inverter.
- EN 60077-1 Railway applications – Electric equipment for rolling stock – part 1:General service conditions and general rules (IEC 60077-1:1999, modified)
- EN 60077-2 Railway applications – Electric equipment for rolling stock – part 2: electro technical components – general rules (IEC 60077-2:1999,modified)





EN 14535-1 Railway applications – Brake discs for railway rolling stock – part 1: rake discs pressed or shunk onto the axle or drive shaft, dimensions and quality requirements

EN 14750-2 Railway applications. Air-conditioning for rolling stock. Mass transit and Light rail vehicle: type tests

EN ISO 15609 Specification and qualification of welding procedures for metallic materials -- Qualification based on pre-production welding test (ISO 15613:2004)

EN ISO 15613 Specification and qualification of welding procedures for metallic materials -- Qualification based on pre-production welding test (ISO 15613:2004)

EN ISO 3095 Railway applications – Acoustics – Measurement of noise emitted by railbound vehicles (ISO 3095:2005)

EN ISO 3381 Railway applications – Acoustics – Measurement of noise inside rail bound vehicles (ISO 3381:2005)

EN ISO 5817 Welding – Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) – Quality levels for imperfections (ISO 5817:2003)

EN ISO 9000 Quality management systems -- Fundamental and vocabulary (ISO 9000:2005)

ASTM 119 Fire tests of buildings construction and material

# Annex "C"

## UPGRADING OF TRAIN PROPUSION SYSTEM Train Preparation Functionality Test at Depot Area

Trainset Number: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Checklist.

Equipment / Assembly	Test Criteria	Result		Remarks
		Passed	Failed	
<b>I. VVVF and Propulsion Equipment</b>				
Neutral Position	Check if VVVF Equipment operates and in normal status without failure indication at TMS Display Unit			
Forward Test	Check if Propulsion in normal condition in forward position at M+25 manual driving mode at depot area.			
Coasting Test	Check if Coasting in normal condition or in a free wheeling condition movement.			
Reverse Test	Check if Propulsion in normal condition in reverse position in accordance to the given powering position in manual driving mode.			
<b>II. TMS Unit</b>				
TMS Test	Check if all history faults and current status of Pantograph, SIV Equipment, Pneumatic Equipment (Braking, Air Compressor, Air spring and Passenger doors), Air-conditioning and Propulsion System is seen and monitored at TMS Display Unit			

Recommendation:

---



---



---

<b>Contractor</b>	<b>LRTA/End-user</b>

## Annex “D”

### UPGRADING OF TRAIN PROPULSION SYSTEM Low Speed Functionality Test at Depot Area for Four (4) Loops

Trainset Number: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Checklist.

#### VVVF Inverter Test

No.	Test Item/Test Method	Test Criteria	Result		Remarks
			Passed	Failed	
1	<p><b>Visual Inspection.</b></p> <p>After the completion of all installation work of the car. Check the following items, with no voltage applied to the main, auxiliary, or control circuit</p>	<p>It checks an apparatus attachment state visually.</p> <p>1) No breakage 2) No slack 3) Waterproofing processing was performed</p>			
2	<p><b>Sequence test.</b></p> <p>Test mode operation (SqS SW)</p> <p>(1) Check that control power is turned off as well as the lowered condition of the pantograph. Set the SqS switch in the VVVF inverter to “TEST”.</p> <p>(2) HSCB sequence after turning the control power on, press the RS switch on the driver’s console.</p> <p>(3) LB1 and LB2 sequences</p> <p>Set the reverser handle to “F” and the Master Controller to “P1”.</p> <p>Change the Master Controller to “C”.</p> <p>Change the Master Controller to “B1”.</p> <p>Change the Master Controller to “C”.</p> <p>Carry our R position of the reverse handle similarly.</p>	<p>Check the above states by the screen display of TMS.</p> <p>HSCB turns on.</p> <p>LB1 turns on.→ LB2 turns on.→ Gate control starts.</p> <p>Gate control stops, and LB1 and LB2 turn off.</p> <p>LB1 turns on. →LB2 turns on.→Gate control starts.</p> <p>Gate control stops, and LB1 and LB2 turn off.</p> <p>(The gate control check by the LED or VVVF control unit)</p>			

3	<p><b>Fault detection sequence.</b></p> <p>Test mode operation. (SqS SW)</p> <p>Simulate CFD in the following manner.</p> <ol style="list-style-type: none"> <li>1) Disconnect the connector CN14 on the control unit for the gate feedback signal line of phase U, V or W.</li> <li>2) Change the main handle of the master controller over from C to P1 position.  Key-on&gt; F &gt; EB &gt; B &gt; C &gt; RS &gt; P1</li> <li>3) connect the connector CN14</li> </ol>	<p>On the screen display of TMS, display failure detailed contents and check the state.</p> <p>The following occurs immediately after LB1 and LB2 turn on and gate control starts.</p> <ol style="list-style-type: none"> <li>a) Gate control stops.</li> <li>b) LB1 and LB2 turn off.</li> <li>c) HSCB turns off.</li> </ol>			
4	<p><b>Start-up motor current and direction.</b></p> <p>Normal mode operation. (SqS SW)</p> <ol style="list-style-type: none"> <li>1) Preparation for starting. Fix the car body by triangular wood blocks. Make sure that the pantograph is lowered and that the control power supply is turned off. Set the SqS switch of all VVVF inverters to NORMAL position. Set the main switch of all vehicles to NORMAL position. Turn on the control power supply and raise the pantograph. Push the RS switch in the head cab.</li> <li>2) Start up motor. Set the master controller to <ol style="list-style-type: none"> <li>a) F/P1</li> <li>b) R/P1</li> </ol> </li> </ol> <p>&lt;Note&gt;</p> <p>The train will be moved.</p>	<p>Check the above states by the screen display of TMS</p> <ol style="list-style-type: none"> <li>a) HSCB, LB1 and LB2 sequences in normal condition. After once turned on, HSCB, LB1 and LB2 continue to be turned on.</li> <li>b) Motor running direction. All the motors must rotate in correct direction. (Visual inspection only.)</li> <li>c) Motor current check It checks that the motor current of all vehicles flows.</li> </ol>			

**TMS TEST**

No.	Test Item/Test Method	Criteria	Result		Remarks
			Passed	Failed	
1	<p><b>Visual Inspection.</b></p> <p>After the completion of all installation work of the car. Check the following items, with no voltage applied to the main, auxiliary, or control circuit</p>	<p>It checks an apparatus attachment state visually.</p> <p>1) No breakage</p> <p>2) No slack</p>			
2	<p><b>Train bus and serial communication check.</b></p> <p>Confirm that the Mus and Sus communicate properly each other through train bus.</p> <p>Confirm that TMS and each equipment shown below is transmitting properly</p> <p>1) ATP/ATO</p> <p>2) Radio</p> <p>3) DIC</p> <p>4) VVVF</p> <p>5) BCU</p> <p>6) SIV</p> <p>7) ACU</p> <p>8) Door</p>	<p>Check the above states by the screen display of TMS.</p>			

**Recommendation:**

---



---



---

<b>Contractor</b>	<b>LRTA/End-user</b>

# “Annex E”

## UPGRADING OF TRAIN PROPULSION SYSTEM High Speed Functionality Test at Revenue Line for Two (2) Loops

Trainset Number: \_\_\_\_\_

Date/Time: \_\_\_\_\_

No.	Test Item	Procedure	Criteria	Result		Remarks										
				Passed	Failed											
1	Characteristic of powering	<p><b>[condition]</b> Load condition: Tare load Driving mode: Manual HAS switch condition: off/on Catenary voltage: 1500Vdc</p>	_____	_____	_____	_____										
		<p>&lt;Maximum speed&gt; Carry out the maximum powering (4N) with master controller operation in special mode (ATP isolated), and check the maximum speed. (HAS-off)</p>	√The maximum speed must be 80km/h or higher.													
		<p>&lt;Manual driving mode – M+25&gt; Set the operation mode switch to M+25 position. Then, operate the master controller main handle to P4 position to run the train. (HAS-off)</p>	√ An emergency brake should be performed by ATC when train speed exceeds 25 km/h													
		<p>&lt;Manual driving mode – ATP&gt; Set the operation mode switch to ATP position. Then, operate the master controller main handle to P1 to P4 position to run the train. (HAS-off) And the train is run by P4 with HAS-on.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Position</th> <th>IM</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>172A(172A)</td> </tr> <tr> <td>P2</td> <td>216A(216A)</td> </tr> <tr> <td>P3</td> <td>272A(268A)</td> </tr> <tr> <td>P4</td> <td>304A(296A)</td> </tr> <tr> <td>HAS-on P4</td> <td>372A(364A)</td> </tr> </tbody> </table> <p>Tolerance : +21.2A -21.2A (##A) –M1,M2 car</p>	Position	IM	P1	172A(172A)	P2	216A(216A)	P3	272A(268A)	P4	304A(296A)	HAS-on P4	372A(364A)	√Measure the value of IM by screen display of TMS. IM in constant torque range shall be in the range shown in the following table. <Current with tare load>	
Position	IM															
P1	172A(172A)															
P2	216A(216A)															
P3	272A(268A)															
P4	304A(296A)															
HAS-on P4	372A(364A)															
2	Characteristic of braking	<p>Load condition: Tare load Speed condition: maximum speed (80km/h) Driving mode: Manual Catenary voltage: 1650Vdc Train formation: 4M (MC1, M1,M2, and MC2 CAR)</p>	_____	_____	_____	_____										
			√Measure the value of IM by the screen display of TMS. IM in constant torque range shall be in the range shown in the following table.													

		<p>&lt;Manual driving mode&gt;  Set the operation mode switch to ATP position. Then, while running at the maximum speed, apply maximum brake (B7) to stop the train. Similarly, apply B4 brake to stop the train.</p> <p>However, when sufficient distance is not securable, a brake applies and the start is carried out in 60km/h</p>	<p>(constant range : 10~35km/h)</p> <table border="1"> <thead> <tr> <th>Position</th> <th>IM</th> </tr> </thead> <tbody> <tr> <td>B4</td> <td>214A(207A)</td> </tr> <tr> <td>B7</td> <td>299A(283A)</td> </tr> </tbody> </table> <p>Tolerance : +40A -40A  (##A) -M1, M2 car</p>	Position	IM	B4	214A(207A)	B7	299A(283A)			
Position	IM											
B4	214A(207A)											
B7	299A(283A)											

**FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY PERSONNEL**

---

Proposed Position: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Name of Staff: \_\_\_\_\_

Profession: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Years with Firm/Entity: \_\_\_\_\_ Nationality: \_\_\_\_\_

Membership in Professional Societies: \_\_\_\_\_

---

Detailed Tasks Assigned: \_\_\_\_\_

---

**Key Qualifications:**

*[Give an outline of staff member's experience and training most pertinent to tasks on project. Describe degree of responsibility held by staff member on relevant previous projects and give dates and locations. Use about half a page.]*

---

**Education:**

*[Summarize college/university and other specialized education of staff members, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.]*

---

**Employment Record:**

*[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of projects. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.]*

---

**Languages:**

*[For each language, indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.]*

---

**Certification:**



I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

**Commitment:**

I also commit to work for the Project in accordance with the time schedule as indicated in the contract once the firm is awarded the Project.

\_\_\_\_\_ Date: \_\_\_\_\_  
*[Signature of staff member and authorized representative of the firm]* *Day/Month/Year*

Full name of staff member: \_\_\_\_\_  
Full name of authorized representative: \_\_\_\_\_

**SUBSCRIBED AND SWORN** to before me this \_\_\_ day of *[month]* *[year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. \_\_\_\_\_.

Witness my hand and seal this \_\_\_ day of *[month]* *[year]*.

**NAME OF NOTARY PUBLIC**

**Serial No. of Commission** \_\_\_\_\_  
**Notary Public for** \_\_\_\_\_ **until** \_\_\_\_\_  
**Roll of Attorneys No.** \_\_\_\_\_  
**PTR No.** \_\_, *[date issued]*, *[place issued]*  
**IBP No.** \_\_, *[date issued]*, *[place issued]*  
**Doc. No.** \_\_\_\_  
**Page No.** \_\_\_\_  
**Book No.** \_\_\_\_  
**Series of** \_\_\_\_.

**Section VIII**  
**Checklist of Technical and Financial**  
**Documents**

# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class “A” Documents*

#### Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;

#### Technical Documents

- (b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- (c) Statement of the bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; **and**
- (d) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
- or**
- (e) Original copy of Notarized Bid Securing Declaration; **and**
- (f) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- (f) Original duly signed Omnibus Sworn Statement (OSS); **and** if applicable, Original Notarized Secretary’s Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.
- (g) Warranty Package (**Minimum of One (1) year upon acceptance**);
- (h) Manufacturer’s Brochures and/or Technical Drawings;
- (i) Certificate of Dealership or Authority to Sell Directly or indirectly issued by the Manufacturer. For indirect issuance, Bidders shall provide documents linking the authorization from the manufacturer down to the bidder; and
- (j) Any verifiable International Standard Certificate on the design and testing procedures of parts, assemblies, components, tools, equipment, goods and products for railway rolling stock application as listed/enumerated but not limited to **Annex “A” (Design Standards)** and **Annex “B” (Manufacturing and Test Standards)** of the bidding document.
- (k) Delivery Period/ Schedule of Requirements/Schedule of Delivery under Section VI;
- (l) Work Plan
- Work Methodology Plan;
  - Safety and Security Plan;
  - Storage Plan; and
  - Communication Plan;
- (m) Key Personnel to be assigned to the Project (with duly Accomplished Curriculum Vitae)see **Annex “F”**;

- Rolling Stock Expert;
- Project Manager/Engineer;
- Safety Officer; and
- Lead Technician

(n) Certification from the manufacturer that all equivalent parts/components/assemblies that will be supplied and installed or their upgraded and compatible resources shall be available for the next ten (10) years upon completion and acceptance of the Project;

(o) Manufacturer’s Company Profile and Business License and Documents;

*Financial Documents*

(p) The prospective bidder’s computation of Net Financial Contracting Capacity (NFCC);

**or**

A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

***Class “B” Documents***

(q) If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence;

**or**

duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

*Other documentary requirements under RA No. 9184 (as applicable)*

(r) *[For foreign bidders claiming by reason of their country’s extension of reciprocal rights to Filipinos]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.

(s) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

**25 FINANCIAL COMPONENT ENVELOPE**

(a) Original of duly signed and accomplished Financial Bid Form; **(Form -5)**  
**and**

(b) Original of duly signed and accomplished Price Schedule(s). **(Foreign – Form – 6) / (Local – Form – 6A) / (Bill of Quantities – Form – 6B)**

# ***Section IX***

## ***Bidding Forms***

### **TABLE OF CONTENTS**

FORM NO. 1 – List of All On-going Contracts .....	61
FORM NO. 2 – List of Completed Contracts .....	62
FORM NO. 3 – Bid Securing Declaration.....	63
FORM NO. 4 – Omnibus Affidavit, Waiver and Undertaking .....	64
FORM NO. 5 –Bid Form.....	67
FORM NO. 6 – For Goods Offered From Abroad.....	69
FORM No. 6 A– For Goods Offered Within the Philippines.....	70
FORM No. 6 B– Bill of Quantities.....	71
FORM NO. 7 – Contract Agreement Form.....	72

**PR No.** : *RS-0322-010*

**ITB No.** : *2204-073-11*

**Project Title** : *Contract for the Supply of One (1) Lot Upgrading of Train Propulsion System*

**Statement of Bidder of All Its On-going Government and Private Contracts, Including Contracts Awarded  
But Not Yet Started**

As of \_\_\_\_\_

Name of Bidder: \_\_\_\_\_

<u>Client and Address</u>	<u>Date of Award</u>	<u>Contract</u>	<u>Description of Project/s</u>	<u>Contract Date of Delivery/ Completion</u>	<u>Amount of Contract</u>	<u>Specify whether as Manufacturer, Supplier or Distributor</u>

*Bidder is requested to submit copies of Notice of Award and/or Purchase Order/Contract; or equivalent documents for post-qualification evaluation purposes.*

Submitted by (Print Name and Sign)

Designation

\_\_\_\_\_

\_\_\_\_\_

PR No. : RS-0322-010

ITB No. : 2204-073-11

Project Title : Contract for the Supply of One (1) Lot Upgrading of Train Propulsion System

**Statement of Bidder of at Least One (1) Completed Contract Compliant With the Track Record Requirement Specified in BDS Clause 5.3 In Relation to ITB Clause 5.3**

As of \_\_\_\_\_

Name of Bidder: \_\_\_\_\_

<u>Client and Address</u>	<u>Date of Award</u>	<u>Contract</u>	<u>Description of Project/s</u>	<u>Date of Completion</u>	<u>Amount of Contract</u>	<u>Specify whether as Manufacturer, Supplier or Distributor</u>

*The statement must be accompanied with copies of Contract / Purchase Order and Certificate of Completion / Acceptance/Official Receipt; or equivalent documents.*

Submitted by (Print Name and Sign)

Designation

\_\_\_\_\_

\_\_\_\_\_

**Bid Securing Declaration Form**

*[shall be submitted with the Bid if bidder opts to provide this form of bid security]*

REPUBLIC OF THE PHILIPPINES)  
CITY OF \_\_\_\_\_) S.S.

**BID SECURING DECLARATION**  
**Project Identification No.: *[Insert number]***

To: *[Insert name and address of the Procuring Entity]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
  - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
  - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
  - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this \_\_\_\_ day of *[month]* *[year]* at *[place of execution]*.

*[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]*  
*[Insert signatory's legal capacity]*  
Affiant

**[Jurat]**

*[Format shall be based on the latest Rules on Notarial Practice]*



**Omnibus Sworn Statement (Revised)***[shall be submitted with the Bid]*

REPUBLIC OF THE PHILIPPINES )  
 CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

**AFFIDAVIT**

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. *[Select one, delete the other:]*

*[If a sole proprietorship:]* I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

*[If a partnership, corporation, cooperative, or joint venture:]* I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. *[Select one, delete the other:]*

*[If a sole proprietorship:]* As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

*[If a partnership, corporation, cooperative, or joint venture:]* I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

*[If a sole proprietorship:]* The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

*[If a partnership or cooperative:]* None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

*[If a corporation or joint venture:]* None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
  - a. Carefully examining all of the Bidding Documents;
  - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
  - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
  - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

**10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_ day of \_\_\_, 20\_\_ at \_\_\_\_\_, Philippines.

*[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]*

*[Insert signatory's legal capacity]*

Affiant

**[Jurat]**

*[Format shall be based on the latest Rules on Notarial Practice]*

**Bid Form for the Procurement of Goods**  
*[shall be submitted with the Bid]*

---

**BID FORM**

Date : \_\_\_\_\_

Project Identification No. : \_\_\_\_\_

To: *[name and address of Procuring Entity]*

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to *[supply/deliver/perform]* *[description of the Goods]* in conformity with the said PBDs for the sum of *[total Bid amount in words and figures]* or the total calculated bid price, as evaluated and corrected for computational errors, and other bid modifications in accordance with the Price Schedules attached herewith and made part of this Bid. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein or in the Price Schedules,

If our Bid is accepted, we undertake:

- a. to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements of the Philippine Bidding Documents (PBDs);
- b. to provide a performance security in the form, amounts, and within the times prescribed in the PBDs;
- c. to abide by the Bid Validity Period specified in the PBDs and it shall remain binding upon us at any time before the expiration of that period.

*[Insert this paragraph if Foreign-Assisted Project with the Development Partner:*

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount	Purpose of Commission or gratuity
---------------------------	--------	-----------------------------------


(if none, state "None" )

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

We certify/confirm that we comply with the eligibility requirements pursuant to the PBDs.

The undersigned is authorized to submit the bid on behalf of *[name of the bidder]* as evidenced by the attached *[state the written authority]*.

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Name: \_\_\_\_\_

Legal capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

## *Price Schedule for Goods Offered from Abroad*

*[shall be submitted with the Bid if bidder is offering goods from Abroad]*

### *For Goods Offered from Abroad*

Name of Bidder \_\_\_\_\_ Project ID No. \_\_\_\_\_ Page \_\_\_ of \_\_\_

1	2	3	4	5	6	7	8	9
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place  (specify border point or place of destination)	Total CIF or CIP price per item  (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)
1								

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

**Price Schedule for Goods Offered from Within the Philippines**  
*[shall be submitted with the Bid if bidder is offering goods from within the Philippines]*

**For Goods Offered from Within the Philippines**

Name of Bidder \_\_\_\_\_ Project ID No. \_\_\_\_\_ Page \_\_\_ of \_\_\_

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of origin	Quantity	Unit price EXW per item	Transportation and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)
1									

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

**BILL OF QUANTITIES**

SUBJECT: UPGRADING OF TRAIN PROPULSION SYSTEM

## 1. MATERIALS

Item	Description	Quantity	Unit	Unit Cost	Total Cost
1	VVVF Inverter Assembly	28	Assy		
2	Train Monitoring System (TMS)	7	Trainset		
3	Master Controller	14	unit		
Sub-Total					

## 2. LABOR

	Description	No. of Personnel	No. of Days	Rate per Day	
4	Rolling Stock Expert	2	270		
5	Project Manager/ Engineer	1	432		
6	Safety Officer	1	432		
7	Lead Technician	2	432		
8	Technician	12	432		
Sub-Total					
Total Cost of the Project					

**Contract Agreement Form for the Procurement of Goods (Revised)**  
*[Not required to be submitted with the Bid, but it shall be submitted within ten (10) days after receiving the Notice of Award]*

**CONTRACT AGREEMENT**

THIS AGREEMENT made the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_ between [name of PROCURING ENTITY] of the Philippines (hereinafter called “the Entity”) of the one part and [name of Supplier] of [city and country of Supplier] (hereinafter called “the Supplier”) of the other part;

WHEREAS, the Entity invited Bids for certain goods and ancillary services, particularly [brief description of goods and services] and has accepted a Bid by the Supplier for the supply of those goods and services in the sum of [*contract price in words and figures in specified currency*] (hereinafter called “the Contract Price”).

**NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:**

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as integral part of this Agreement, *viz.*:
  - i. Philippine Bidding Documents (PBDs);
    - i. Schedule of Requirements;
    - ii. Technical Specifications;
    - iii. General and Special Conditions of Contract; and
    - iv. Supplemental or Bid Bulletins, if any
  - ii. Winning bidder’s bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;
 

Bid form, including all the documents/statements contained in the Bidder’s bidding envelopes, as annexes, and all other documents submitted (*e.g.*, Bidder’s response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity’s bid evaluation;
  - iii. Performance Security;
  - iv. Notice of Award of Contract; and the Bidder’s conforme thereto; and
  - v. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. **Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.**
3. In consideration for the sum of [*total contract price in words and figures*] or such other sums as may be ascertained, [*Named of the bidder*] agrees to [*state the object of the contract*] in accordance with his/her/its Bid.



4. The *[Name of the procuring entity]* agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

*[Insert Name and Signature]*

*[Insert Name and Signature]*

*[Insert Signatory's Legal Capacity]*

*[Insert Signatory's Legal Capacity]*

*for:*

*for:*

*[Insert Procuring Entity]*

*[Insert Name of Supplier]*

**Acknowledgment**

*[Format shall be based on the latest Rules on Notarial Practice]*

