

CORRIGENDUM NO 1

INTERNATIONAL COMPETITIVE BIDDING (PROCUREMENT OF GOODS)

INDUCTION OF E-BUSES IN PUNJAB (GS# 3482), INDUCTION OF ECO-FRIENDLY BUSES IN LAHORE (12 METER BUSES) (GS# 3476) AND INDUCTION OF ECO-FRIENDLY BUSES IN LAHORE (9 METER BUSES) (GS# 3475)
REQUEST FOR PROPOSAL

DATED:
APRIL 22, 2025

THE PUNJAB MASSTRANSIT AUTHORITY
(A Statutory Body Established By Government Of Punjab)

The "PUNJAB MASSTRANSIT AUTHORITY" has hereby notifies that it has resolved to make following amendments to the Request for Proposal document titled above:

- 1) Please note that (iii) of Section 2.3.7. (*Bid Security*) of Section – I: *Invitation to Bids* shall stand deleted in entirety and be replaced with:

"The Bid Security shall be submitted by bidder in United States Dollars and shall be in one of the following forms: Bank call-deposit (CDR), Demand Draft (DD), Pay Order (PO) or Bank Guarantee, valid for thirty (30) days, beyond the validity of Bid.
- 2) Please note that Sr. No. 6 – "Section 2: *Specification Summary*" of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: *Technical Specifications* shall stand amended from **325 mm** to **280 mm**.
- 3) Please note that Sr. No. 6 – "Section 2: *Specification Summary*" of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: *Technical Specifications* shall stand amended from **325 mm** to **280 mm**.
- 4) Please note that Sr. No. 8 – "Section 2: *Specification Summary*" of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: *Technical Specifications* shall stand amended from **2.1 meter** to **1.9 meter**.
- 5) Please note that Sr. No. 8 – "Section 2: *Specification Summary*" of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: *Technical Specifications* shall stand amended from **2.1 meter** to **1.9 meter**.
- 6) Please note that Sr. No (31) – "Section 2: *Specification Summary*" of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: *Technical Specifications* shall stand amended from **275 / 70R22.5** to a range of **255 / 70R19.5 to 275 / 70R22.5**.
- 7) Please note that Sr. No (32) – "Section 2: *Specification Summary*" of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: *Technical Specifications* shall stand amended from **295 / 70R22.5** to a range of **275 / 70R22.5 to 295 / 70R22.5**.
- 8) Please note that Sr. No (7.1.1) – "Section 7: *Mechanical/Electrical Drive*" of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: *Technical Specifications* shall stand amended as follows:



“The vehicle fleet shall be based on a Full-Electric System where Vehicles should be capable of taking fast charging and slow charging both to drive a total of not less than 250 km on single charge (100% to 20% battery consumption) fully loaded with AC working.”

- 9) Please note that Sr. No (7.12.7 – Self Disinfectant System) – “Section 7: *Mechanical/Electrical Drive*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand deleted in entirety.
- 10) Please note that Sr. No (7.12.7 – Self Disinfectant System) – “Section 7: *Mechanical/Electrical Drive*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand deleted in entirety.
- 11) Please note that Sr. No (16) – “Section 2: *Specification Summary*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from **2.5 meter** to a range of **2.4m – 2.75m.**
- 12) Please note that bullet point 2 under the rider of “*Safety of chargers*” in Sr. No 7.2.8 (*Slow & Fast Charger*) – “Section 7: *Mechanical/Electrical Drive*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:
- “All charging equipment exterior casings must be demonstrably capable of achieving the IP55 standard of ‘Ingress Protection’ from dust, humidity, condensation and flood water. This standard prevails over any other standards quoted within this section of the specifications.”*
- 13) Please note that bullet point 2 under the rider of “*Safety of chargers*” in Sr. No 7.2.8 (*Slow & Fast Charger*) – “Section 7: *Mechanical/Electrical Drive*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:
- “All charging equipment exterior casings must be demonstrably capable of achieving the IP55 standard of ‘Ingress Protection’ from dust, humidity, condensation and flood water. This standard prevails over any other standards quoted within this section of the specifications.”*
- 14) Please note that paragraph 4 under the Section 9.15 (USB Ports For Passenger Devices) – “Section 9: *Intelligent Transportation System (ITS)*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:
- “QTY: 1 set (Type A & Type C) for each seat.”*
- 15) Please note that paragraph 4 under the Section 9.15 (USB Ports For Passenger Devices) – “Section 9: *Intelligent Transportation System (ITS)*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:
- “QTY: 1 set (Type A & Type C) for each seat.”*
- 16) Please note that Sr. No (3) – “Section 2: *Specification Summary*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from **2.55 meter** to a range of **2.45m – 2.55m.**
- 17) Please note that Sr. No. 29 – “Section 2: *Specification Summary*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from **150mm** to a range of **150 mm to 225 mm.**



- 18) Please note that Sr. No. 30 – “Section 2: *Specification Summary*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from 150mm to a range of 150 mm to 225 mm.
- 19) Please note that Sr. No. 30 – “Section 2: *Specification Summary*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from 200mm to a range of 200 mm to 230mm.
- 20) Please note that Sr. No. 31 – “Section 2: *Specification Summary*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from 200mm to a range of 200 mm to 230mm.
- 21) Please note that Sr. No. 39 – “Section 2: *Specification Summary*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from IP69K to IP6K9K.
- 22) Please note that Sr. No. 40 – “Section 2: *Specification Summary*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from IP69K to IP6K9K.
- 23) Please note that Sr. No. 40 – “Section 2: *Specification Summary*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from IP69K to IP6K9K.
- 24) Please note that Sr. No. 41 – “Section 2: *Specification Summary*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended from IP69K to IP6K9K.
- 25) Please note that paragraph 1 of Sr. No 5.10.3 – *Roof Escape Hatch/Air Vents*– “Section 5: *Body*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:

“At least one emergency roof escape hatch shall be provided in each vehicle. The hatch shall have a seal around the opening, and shall be opened by pulling the release handle. Instruction decals shall be placed on the underside of the hatch. The roof hatch may also act as a fresh air ventilator at times when the air conditioning is not in use.”

- 26) Please note that Sr. No 7.2.1 (*Regenerative Braking System*) – “Section 7: *Mechanical/Electrical Drive*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as: EBS (Electronic Braking System).
- 27) Please note that Sr. No 7.2.1 (*Regenerative Braking System*) – “Section 7: *Mechanical/Electrical Drive*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as: EBS (Electronic Braking System).
- 28) Please note that under the heading of “*Display*” in Section 9.18 (*Driver Console*) – “Section 9: *Intelligent Transportation System (ITS)*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:

*“Display Touchscreen display with a size of 9-12 inches with 720p 1280*720 min”*



- 29) Please note that under the heading of “*Display*” in Section 9.18 (*Driver Console*) – “Section 9: *Intelligent Transportation System (ITS)*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:

*“Display Touchscreen display with a size of 9-12 inches with 720p 1280*720 min and viewing angle 178/178 (Left, right/up, down)”*

- 30) Please note that under the heading of “*Local Date Storage*” in Section 9.21 (*Charging Management System*) – “Section 9: *Intelligent Transportation System (ITS)*” of 9 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:

“Local Data Storage: 128MB onboard memory for offline data logging”

- 31) Please note that under the heading of “*Local Date Storage*” in Section 9.21 (*Charging Management System*) – “Section 9: *Intelligent Transportation System (ITS)*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:

“Local Data Storage: 128MB onboard memory for offline data logging”

- 32) Please note that paragraph 1 of Sr. No 7.12.4 – *Roof Ventilator* – “Section 7: *Mechanical/Electrical Drive*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:

“Atleast one roof ventilator shall be provided in the roof of the vehicle, approximately in the middle of the vehicle”

- 33) Please note that paragraph 1 of Sr. No 7.12.4 – *Roof Ventilator* – “Section 7: *Mechanical/Electrical Drive*” of 12 meter buses Section 3.1. (*Technical Specifications*) of Section – III: Technical Specifications shall stand amended as:

“Atleast one roof ventilator shall be provided in the roof of the vehicle, approximately in the middle of the vehicle”

- 34) The following shall stand inserted in the Technical Specifications for the 12m buses.

“Warranty – Two (02) year warranty will be provided by the supplier required by the document. Further, the supplier must provide 5% hardware as a backup in the ITS inventory of the procuring agency during the warranty period. The supplier must maintain the threshold of 5% parts or minimum threshold as mentioned in the spare part ITS hardware inventory and should replace faulty/damaged parts within the time period prescribed in the Contract. If the supplier will fail to replace the faulty/damaged part within the time period prescribed in the Contract then the penalty will be imposed to the supplier as per terms and conditions agreed in the Contract.”

- 35) Please note that Sr. No (12) of Sub-Section 4.1 (*Bid Data Sheet (BDS)*) of Section – IV: Bid Data Sheet stands deleted in entirety and inserted with:

“Spare parts required from the delivery of the last bus to completion of first year of operation”.



- 36) Please note that the paragraph after the table in Sub-Section 1 (*financial Score (40 points)*) under “*Criteria For Detailed Evaluation*” of Section – IV: Bid Data Sheet being “*Prequalified Applicants falling in between the evaluation bracket for Financial Evaluation will be assigned marks on interpolation basis*” shall stand deleted in entirety.
- 37) Please note that Sr. No. 2 – “*Specific Production Capacity*” of Sub-Section 2 (*technical Score (60 points)*) under “*Criteria For Detailed Evaluation*” of Section – IV: Bid Data Sheet:
- 25 Points, if: sold a minimum of four hundred (400) units (CBU) of pure electric city buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04) years (i.e. 2020, 2021, 2022 & 2023).
 - 20 Points, if: sold a minimum of three hundred and fifty (350) units (CBU) of pure electric city buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04) years (i.e. 2020, 2021, 2022 & 2023).
 - 15 Points, if: sold a minimum of three hundred (300) units (CBU) of pure electric city buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04) years (i.e. 2020, 2021, 2022 & 2023).
- 38) Please note that (a) of Sub-Section 8.1. (*Bid Form Section*) – Of Section VIII: Sample Forms shall be amended as follows:
- “Complete Bidding document signed and stamped by the Bidder”*
- 39) Please note that section c (*Staff And Last Month Payroll*) of 8.4 (*Bidder Profile Form*) of Section – VIII: Sample Forms stands deleted in entirety.
- 40) Please note that the definition of “*Registration Formalities Invoice*” provided in Clause 1.1 (*Definition*) of Section X – Conditions of The Contract shall stand deleted in entirety.
- 41) Please note that the definition of “*Services*” provided in Clause 1.1 (*Definition*) of Section X – Conditions Of The Contract shall stand deleted in entirety and be replaced with:
- ““Services” means, whenever the context permits or requires, any or all of the services as set out in detail in the Procuring Agency’s Requirements including the Driver’s and Maintenance Training Programme and Maintenance Supervision to be performed in accordance with the Applicable Standards and which are required to ensure that the Manufacturer’s Obligations are Fit for Purpose.”*
- 42) Please note that the definition of “*Vehicle Registration Formalities*” provided in Clause 1.1 (*Definition*) of Section X – Conditions of The Contract shall stand deleted in entirety.
- 43) Please note that the proviso provided in Clause 11.10 (*Application for Interim Payments for Supply of Services*) after sub-clause (a)(iii) of Section X – Conditions Of The Contract shall stand deleted in entirety and be replaced with:
- “Provided that for completion of the Vehicle Registration Formalities, it is hereby stipulated that any and all costs payable to the relevant governmental authorities/departments shall be borne by the Procuring Agency in accordance with the Applicable Laws. Provided that the Manufacturer shall timely provide any and all documents and assistance in respect the matters provided herein this Clause.”*



- 44) Please note that (c) of “Schedule 8 –Release Certificate Criteria” Of The Contract shall stand deleted in entirety and be replaced with:

“the Manufacturer has performed and completed the Training Programme and Maintenance Supervision that are contemplated under this Contract to be performed by the Manufacturer in accordance with the Applicable Standards and have demonstrated to be Fit for Purpose;”

- 45) Please note that Paragraph 2 of the Section 8.11 titled “Form of Bid Security” shall be amended as follows:

“KNOW ALL PEOPLE by these presents that We [name of bank] of [name of country], having our registered office at [address of bank] (hereinafter called “the Bank”), are bound unto the “Masstransit Authority Non-Fare Revenue (NFR) Fund Account” operated by the Punjab Masstransit Authority (hereinafter called “the Procuring Agency”) in the sum of USD [insert amount of Bid Security in numerals] (United States Dollars [insert amount of Bid Security in words] Only) for which payment well and truly to be made to the said Procuring Agency, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ____ day of _____ 20____.”

Furthermore, please note that no other changes shall be made to the Form of Bid Security unless acceptable by the Procuring Agency

- 46) Please note that in Category “Fare Validator” at Sr. No 9.16 of Section 9: “Intelligent Transportation System (ITS) of specifications for 9-m vehicles of Section III “Technical Specifications” of RFP, following amendments are made:
- a. Hardware requirement of SAM Slots stands deleted in its entirety.
 - b. Last line stated as “QTY: 2 for each door” shall be amended as “QTY: 2 for each bus”
- 47) Please note that in Category “Fare Validator” at Sr. No 9.16 of Section 9: “Intelligent Transportation System (ITS) of specifications for 12-m vehicles of Section III “Technical Specifications” of RFP, following amendments are made:
- a. Hardware requirement of SAM Slots stands deleted in its entirety.
 - b. Last line stated as “QTY: 1 for each door” shall be amended as “QTY: 2 for each bus”
- 48) Please note that in Category “Driver Console” at Sr. No 9.18 of Section 9: “Intelligent Transportation System (ITS) of specifications for 9-m vehicles of Section III “Technical Specifications” of RFP, the minimum hardware specifications for Section “Display”, the resolution mentioned as “720p 1280*800 min” shall be amended as “720p 1280*720 min”
- 49) Please note that in Category “Driver Console” at Sr. No 9.18 of Section 9: “Intelligent Transportation System (ITS) of specifications for 12-m vehicles of Section III “Technical Specifications” of RFP, the minimum hardware specifications for Section “Display”, the resolution mentioned as “720p 1280*800 min” shall be amended as “720p 1280*720 min”
- 50) Please note that in Category “Charging Management System Camera” at Sr. No 9.21 of Section 9: “Intelligent Transportation System (ITS) of specifications for 9-m vehicles of Section III “Technical Specifications” of RFP, the local data storage requirement of 128 GB shall be amended as “128 MB”
- 51) Please note that in Category “Charging Management System Camera” at Sr. No 9.22 of Section 9: “Intelligent Transportation System (ITS) of specifications for 12-m vehicles of Section III “Technical Specifications” of RFP, the local data storage requirement of 128 GB shall be amended as “128 MB”



- 52) Please note that in Section 9: “Intelligent Transportation System (ITS)” of specification for 9-m vehicles & 12-m vehicles of Section III “Technical Specifications” of RFP, , following new section is added:

“The Supplier/OEM of the ITS hardware must ensure the presence of their purely technical resource in Pakistan for technical support to representative designated by Procuring Agency for the Hardware integrations , SDK’s functionality test support , open loop payment system integrations and any other technical support which is required by representative designated by Procuring Agency for hardware integration.”

- 53) Please note that the table provided under the heading of “List Of Spare Parts To Be Provided By The Manufacturer For 9 Meter Buses” after Section 3.1. (Technical Specifications) in Section – III: Technical Specifications shall stand deleted and replaced in entirety as:

BUS PART	QUANTITY TO BE PROVIDED AT THE END OF THE TERM
Full Battery Pack For Electric Propulsion System (Complete Set For Bus)	1
Complete brake assembly (excl. Axles)	5
Disc Brake Pads	15
Touch-Up Paint For All Colors Used On The Vehicle (Quantity In Litters)	15
Full Windscreen Assembly	3
Side Window Glass Unit (Complete Set For Bus)	3
Head Lamp Assembly, Including Globes (2 Lamps Per Set)	6
Rear Brake Light / Indicator Light Assembly, Including Globes (2 Assemblies Per Set, Left And Right)	6
Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set)	12
Wiper Blades (2 Per Set)	35
Interior Light Globes	15
Full Seat Assembly (Complete Set For Bus)	2
Back And Bottom Seat Cushion Set (Complete Set For Bus)	2
Floor Cover Material (Quantity In Square Meters)	6
Door Assembly (Including Doors, Valves, Switches)	2
Interior Partition Wall / Advertising Unit	3
Wheel Unit	3
Electric Motors (Complete Set For Bus)	3
Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Condenser Assembly, etc.)	4
Vehicle Logic Unit (VLU)	4
Driver Data Terminal (DDT)	4
Digital Video Recorder (DVR)	4
Door Opening And Closing Synchronization Unit	4
CCTV Cameras (6x AI , 6x Passenger count, 6x Dash cam, 6x Surveillance, 6x rear, 6x front)	15
Interior Variable Messaging Display Unit	4
Infotainment Display Unit	4
Spare Wheel	1 per bus

- 54) Please note that the table provided under the heading of “List Of Tools To Be Provided” after the heading of “List Of Spare Parts To Be Provided By The Manufacturer For 9 Meter Buses” in Section – III: Technical Specifications shall stand deleted and replaced in entirety as:

TOOLS	QUANTITY TO BE PROVIDED
Air chisel	1
Air drill	2
Air grinder	2
Air gauge kit – brake system	1
Air riveter	2
Battery charger	1
Battery load tester	1
Bench grinder	2
Bench vice	2
Bottle jacks	2
CO2-welder	1
Creepers	2
Drill press	1
Electric drill	1
Electric grinder	1
Electric shear	1
Electric steel cutter	1
Extension leads	2
Floor material welder	1
Gas welder	1
Headlight tester/adjuster	1
Heavy duty socket set (multiple sizes, as required)	1
Hydrometer	2
Impact screw driver	1
Impact wrench, large size	1
Impact wrench, medium size	1
Impact wrench, small size	2
King pin press	1
Lead lights	6
Magnetic base and gauge	1
Metal sheet bender	1
Micrometer set	1
Multimeter	2
Paint heat kit	1
Polisher	1
Portable arc welder	1
Portable gas welder	1
Power jack (60 ton)	2
Puller set	1
Radiator pressure tester	1
Refractometer – antifreeze tester	2
Sander	1
Spray gun	1
Torque wrench 0-60 Nm	1
Torque wrench 201-450 Nm	1
Torque wrench 451-800 Nm	2
Torque wrench 61-200 Nm	1
Transmission jack (1000 kg)	1
Tire hammer	1
Tire stripping and fitting kit (Tire Changing Machine)	1
Vernier set	1

Wheel stopper blocks	6
Wheel Alignment Machine	1
Diagnostic Equipment Set (As mentioned in Detailed Specifications above)	1

- 55) Please note that the table provided under the heading of “*List Of Spare Parts To Be Provided By The Manufacturer For 12 Meter Buses*” after Section 3.1. (*Technical Specifications*) in Section – III: Technical Specifications shall stand deleted and replaced in entirety as:

BUS PART	QUANTITY TO BE PROVIDED AT THE END OF THE TERM
Full Battery Pack For Electric Propulsion System (Complete Set For Bus)	4
Complete brake assembly (excl. Axles)	20
Disc Brake Pads	50
Touch-Up Paint For All Colors Used On The Vehicle (Quantity In Liters)	50
Full Windscreen Assembly	10
Side Window Glass Unit (Complete Set For Bus)	10
Head Lamp Assembly, Including Globes (2 Lamps Per Set)	20
Rear Brake Light / Indicator Light Assembly, Including Globes (2 Assemblies Per Set, Left And Right)	20
Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set)	40
Wiper Blades (2 Per Set)	120
Interior Light Globes	60
Full Seat Assembly (Complete Set For Bus)	11
Back And Bottom Seat Cushion Set (Complete Set For Bus)	11
Floor Cover Material (Quantity In Square Meters)	20
Door Assembly (Including Doors, Valves, Switches)	8
Interior Partition Wall / Advertising Unit	8
Wheel Unit	8
Electric Motors (Complete Set For Bus)	8
Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Condenser Assembly, etc.)	8
Vehicle Logic Unit (VLU)	12
Driver Data Terminal (DDT)	12
Digital Video Recorder (DVR)	12
Door Opening And Closing Synchronization Unit	12
CCTV Cameras (6x AI , 6x Passenger count, 6x Dash cam, 6x Surveillance, 6x rear, 6x front)	60
Interior Variable Messaging Display Unit	12
Infotainment Display Unit	12
Spare Wheel	1 per Bus

- 56) Please note that the table provided under the heading of “*List Of Tools To Be Provided*” after the heading of “*List Of Spare Parts To Be Provided By The Manufacturer For 12 Meter Buses*” in Section – III: Technical Specifications shall stand deleted and replaced in entirety as:

TOOLS	QUANTITY TO BE PROVIDED
Air chisel	2
Air drill	4
Air grinder	4
Air gauge kit – brake system	1
Air riveter	2
Battery charger	2
Battery load tester	2

Bench grinder	4
Bench vice	4
Bottle jacks	4
CO2-welder	1
Creepers	21
Drill press	1
Electric drill	2
Electric grinder	2
Electric shear	2
Electric steel cutter	2
Extension leads	4
Floor material welder	1
Gas welder	2
Headlight tester/adjuster	1
Heavy duty socket set (multiple sizes, as required)	2
Hydrometer	4
Impact screw driver	2
Impact wrench, large size	2
Impact wrench, medium size	2
Impact wrench, small size	4
King pin press	2
Lead lights	12
Magnetic base and gauge	2
Metal sheet bender	1
Micrometer set	2
Multimeter	4
Paint heat kit	2
Polisher	2
Portable arc welder	2
Portable gas welder	2
Power jack (60 ton)	4
Puller set	2
Radiator pressure tester	1
Refractometer – antifreeze tester	4
Sander	2
Spray gun	2
Torque wrench 0-60 Nm	2
Torque wrench 201-450 Nm	2
Torque wrench 451-800 Nm	4
Torque wrench 61-200 Nm	2
Transmission jack (1000 kg)	2
Tire hammer	2
Tire stripping and fitting kit (Tire Changing Machine)	2
Vernier set	2
Wheel stopper blocks	12
Wheel Alignment Machine	2
Diagnostic Equipment Set (As mentioned in Detailed Specifications above)	2

THE PUNJAB MASSTRANSIT AUTHORITY (PMA)

MINUTES OF PRE-BID MEETING

REQUEST FOR PROPOSAL

HIRING OF ORIGINAL EQUIPMENT MANUFACTURERS (OEMS) FROM PRE-QUALIFIED APPLICANTS FOR:

Agenda

- i. **INDUCTION OF E - BUSES IN PUNJAB & INDUCTION OF ECO-FRIENDLY (EV) BUSES IN LAHORE (9 METERS & 12 METERS)**
- ii. **INDUCTION OF ECO-FRIENDLY (EV) BUSES IN RAWALPINDI**
- iii. **INDUCTION OF ECO-FRIENDLY (EV) BUSES IN MULTAN**

Date:

10th April, 2025

Venue

Committee Room,
Punjab Transport Company (PTC)
Office, 1st Floor, EOBI Building, #66,
Shahrah Nazria Pakistan, Near
Ayyub Chowk, Johar Town, Lahore-
Pakistan.

Chair:

Mr. Muhammad Oziar Shah, General
Manager (Operations) PMA/ Chairman
Tender Evaluation Committee (TEC)

Tender Evaluation Committee (TEC)

1. Mr. Hafiz Salman Tanveer, Secretary, PMA (Member TEC)
2. Mr. Rizwan Aziz, Manager Planning, PMA (Member TEC)

Companies/Organizations Participated

3. Representatives from BYD Auto Industry Company Limited
4. Representatives from Xiamen King Long United Automotive Industry Co. Ltd.
5. Representatives from Zhongtong Bus Holding Co. Ltd
6. Representatives from Yutong Bus Co. Ltd

Companies/Organizations Participated Online through Zoom

1. Representatives from King long
2. Representatives from Zongtong Bus

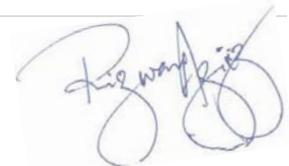
DISCUSSIONS:

The meeting started at 1100 hours (PST). The Chair welcomed the participants followed by a round of introduction. Thereafter, each firm posed its queries, and comprehensive discussions ensued. The detailed responses to the queries are attached at **Annex-1.** The attendance record is attached at **Annex-2.** The resulting amendments in the RFPs are reflected in the respective corrigendum uploaded on E-PADS, PPRA and PMA official website.

ANNEXURE - 1

PUNJAB MASSTRANSIT AUTHORITY – REQUEST FOR PROPOSAL – PRE BID QUERIES – LAHORE, MULTAN & RAWALPINDI

SR. No.	QUERY	RESPONSE
1.	Bid security: clause 2.3.7, (iii) The Bid Security shall be in Pakistan Rupees and shall be in one of the following forms:(a) Bank call-deposit (CDR), Demand Draft (DD), or Pay Order(PO) valid for twenty eight (28) days, beyond the validity of Bid. --- the bid security should be in USD or PKR? Will bank guarantee from overseas bank acceptable?	<p>Please note that (iii) of Section 2.3.7. Bid security of Section – I: Invitation to Bids shall stand deleted in entirety and be replaced with:</p> <p><i>“The Bid Security shall be subPunjabmitted by bidder in United States Dollars and shall be in one of the following forms: Bank call-deposit (CDR), Demand Draft (DD), Pay Order (PO) or Bank Guarantee, valid for thirty (30) days, beyond the validity of Bid.</i></p> <p>Please note that though an overseas instrument shall be acceptable, the same has to be counter guaranteed by local bank / local branch of overseas bank having minimum Acceptable Credit Rating as defined in the bidding document.</p>
2.	2.3.9. FORMAT AND SIGNING OF BID, (iv) Each Bidder shall prepare Bid by filling out (by hand) the forms comprising the Bid. After filling out the forms, all the documents should be signed & stamped by Bidder and will be uploaded on EPADS. and (v) The forms of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. All pages of the Bid shall be initialed and stamped by the person or persons signing the Bid. – Pls confirm the information needed by the forms can be only filled by hand writing or can be typed by computer?	Please note that all documents may either be hand written or typed but the same should be signed and stamped by OEM/firm.
3.	D. PREPARATION AND SUBMISSION OF BIDS, 12 - 2.3.6 Spare parts required for [insert number] of years of operation. - -- Pls specify the year number.	<p>Please note that Sr. No (12) of Sub-Section 4.1 (Bid Data Sheet) of Section – IV: Bid Data Sheet stands deleted in entirety and inserted with:</p> <p><i>“Spare parts required from the delivery of the last bus to</i></p>



		<i>completion of first year of operation”.</i>
4.	2. SPECIFIC PRODUCTION CAPACITY, 25 Points, if: sold a minimum of three hundred (400) units (CBU) of pure electricity buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04) years (i.e. 2020, 2021, 2022 & 2023). 20 Points, if: sold a minimum of two hundred and fifty (350) units (CBU) of pure electric city buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04)years (i.e. 2020, 2021, 2022 & 2023). – Pls clarify the required minimum units.	<p>note that the points awarded with respect to the Specific Production Capacity shall be as follows:</p> <ul style="list-style-type: none"> ▪ <i>25 Points, if:</i> <ul style="list-style-type: none"> ▪ <i>sold a minimum of four hundred (400) units (CBU) of pure electric city buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04) years (i.e. 2020, 2021, 2022 & 2023).</i> ▪ <i>20 Points, if:</i> <ul style="list-style-type: none"> ▪ <i>sold a minimum of three hundred and fifty (350) units (CBU) of pure electric city buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04) years (i.e. 2020, 2021, 2022 & 2023).</i> ▪ <i>15 Points, if:</i> <ul style="list-style-type: none"> ▪ <i>sold a minimum of three hundred (300) units (CBU) of pure electric city buses from seven and a half meters (7.5 m) to thirteen meters (13 m) over the last four (04) years (i.e. 2020, 2021, 2022 & 2023).</i>
5.	Staff Detail and last month Payroll, it's related to the privacy of the company staff, can we just provide the staff quantity.	Please note that section (c) of 8.4 – Bid Profile Form stands deleted in entirety.
6.	Payment milestone on Issuance of Certificate of Compliance, is it 30% or 50% of the contract amount to be made? please clarify.	Please note as mentioned in Schedule 7 of Section X – Condition of The Contract, the Advance Payment shall be adjusted from 3 rd payment milestone and shall be paid in full along with 4th payment milestone upon issuance of certificate of

		compliance for the respective batch of goods. Resultantly, the net payment would be paid 50% at 4 th milestone.
7.	2.3.4. BID CURRENCIES, The Bidders must adhere to the minimum wage rate (notified by Labour & Human Resource Department) and all applicable taxes (imposed by PRA/any other government organization) while preparing Financial bid, we as a international bidder, is this clause applicable for us? if yes, is there any evidence we should provide?	<p>Please note that such obligation shall be applicable on the local staff hired with respect to the subject procurement.</p> <p>With respect to evidence, the same may be requested by the Procuring Agency as and when required.</p>
8.	2.3.5. DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATION, (a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer through FORM 8.3 – MANUFACTURER'S AUTHORIZATION FORM or producer to supply the same in Pakistan; We as the OEM of bus production, as per the requirement, we directly manufacture the goods under the contract, so this FORM 8.3 – MANUFACTURER'S AUTHORIZATION FORM should not be applicable for us, pls confirm.	Please note in the event that the OEM is directly submitting its bid in response to the request of proposal, the subject form shall not applicable.
9.	1.1.5 MAINTENANCE TOOLS, "The manufacturer shall deliver one set per depot of the specified maintenance tools, software, and diagnostic equipment required to repair, service, and maintain each type of vehicles", but under it mentions "Two sets of all tools per depot (3 depots)required for the maintenance of the principal vehicle components, including all tools for standard maintenance, repair, and reinstalling of vehicle components.", please clarify.	Please note that the current provision has been drafted with enough clarity. Therefore, the same does not require any further clarification.
10.	Please confirm the 9m and 12m for different tenders are same or not, if everything is same, can we just make one prototype for 9m and 12m each if we win the bid for more than one city.	Please note that the current structuring of the entire procurement requires separate prototypes to be made for each city.

11.	8.10. FINANCIAL BID FORM, in the PRICE OF SCHEDULE table for goods, TOTAL PRICE PER ITEM INCLUDING TAXES, which tax we should include, please specify, as the bidding documents state "Procuring Agency's Taxes" means and includes all Pakistani taxes consisting of: (i) custom and import duties, sales tax, federal excise duty, and other duties and fees payable in the government treasury of Pakistan in respect of the Goods; and (ii) withholding income tax and any tax to be deducted or withheld from the gross amount payable by the Procuring Agency to the Manufacturer on account of all payments being made for Manufacturer's Obligations, in each case shall be the responsibility of the Procuring Agency." so it means all taxes in Pakistan should be paid by the Procuring Agency; and is this comply to all the other materials like spare parts, tools, equipment as per tender requirement, please confirm.	Any and all taxes stipulated in the definition of 'Procuring Agency Taxes' shall be borne by the Procuring Agency and shall be forwarded to the relevant government agencies.
12.	For both 9m & 12m bus, SECTION 2: SPECIFICATIONS SUMMARY, No. 6, Ground Clearance (minimum), 325 mm, we need to know which part of the bus to be measured, because the floor height requirement is 350mm, so it's not possible for the chassis lowest point clearance to be 325mm, pls clarify.	Ground Clearance (minimum) shall be measured from the Road Level to the lowest bottom part of the bus protruding beneath. However, Ground Clearance (minimum) shall stand amended from 325 mm to 280 mm for both for 9 m & 12 m buses.
13.	For both 9m & 12m bus, SECTION 2: SPECIFICATIONS SUMMARY, No. 8 "Ceiling height in front passenger area (from interior floor to ceiling) (minimum)" to be 2.1 meters, this requirement is conflict with 5.6.1, "The minimum clearance height at the doorway shall be 1.9 m", we suggest to make it all same 1.9 meters, 2.1 meters are not possible.	For the purposes of clarity the following shall be applicable: <i>"Ceiling height in front passenger area (from interior floor to ceiling) (minimum) for both 9 m & 12 m buses is to be 2.1 meters"</i> <i>However, "The minimum clearance height at the doorway for both 9 m & 12 m buses shall be 1.9 m"</i>
14.	For both 9m & 12m bus, SECTION 2: SPECIFICATIONS SUMMARY, Tire Construction / Width, for 9m bus we suggest to use 255 / 70R22.5, for 12m bus we suggest to use 275 /	Agreed. For the purposes of clarity the following ranges shall now be

	70R22.5, to make sure the floor height to be 350mm.	<p>applicable:</p> <p><i>For 9 m bus Tire Construction Width, the range is from 255 / 70R19.5 to 275 / 70R22.5</i></p> <p><i>For 12 m bus Tire Construction Width, the range is from 275 / 70R22.5 to 295 / 70R22.5</i></p>
15.	7.1.1, PROPULSION SYSTEM, "to drive a total of not less than 275 km on single charge (100% to 20% battery consumption) fully loaded with AC working" this requirement is conflict with 7.2.2 BATTERY SIZE AND RANGE CAPACITY, "The battery portion of the Full Electric system shall hold a charge capacity capable of delivering a minimum drive range of not less than 250 km", please clarify.	<p>Please note that para 1 of Section 7.1.1 (Propulsion System) of Section 3: Technical Specification shall stand amended as for 9m buses as :</p> <p><i>"The vehicle fleet shall be based on a Full-Electric System where Vehicles should be capable of taking fast charging and slow charging both to drive a total of not less than 250 km on single charge (100% to 20% battery consumption) fully loaded with AC working."</i></p>
16.	For both 9m and 12m bus, HEATING, VENTILATION & AIR CONDITIONING (HVAC) SYSTEM, will the Diesel - power bus heater be acceptable, in this way it can save the battery consumption during winter time when the heater is needed.	Not Acceptable.
17.	7.12, HEATING, VENTILATION & AIR CONDITIONING (HVAC) SYSTEM, it mentioned "The coefficient of performance should not be less than 3.5", what is the meaning of this, please clarify.	The coefficient of performance is an indicator of energy efficiency, hence, the requirement stipulated in the subject provision.
18.	For both 9m and 12m bus, the "SELF-DISINFECTANT SYSTEM", we suggest to remove this requirement, if it is acceptable, to save cost.	<p>Agreed.</p> <p>Please note that matters pertaining to "Self-Disinfectant System" stand deleted.</p>
19.	For both 9m and 12m bus, BATTERY COMPARTMENT, there is one requirement, "Placement of battery packs should not be	Please note that the battery packs (of high voltage category) to be installed in the buses should not be below passengers level at

	done below passenger level at 600 mm (placement of battery packs in chassis area is not permitted)." this refers to low voltage battery or the power battery (high voltage battery)?.	600 mm.
20.	"16. Centre-line distance between the two doorways", the requirement is 2.5 meters, is it required to be exact 2.5 meters or minimum 2.5 meters, because base on the wheelchair width requirement the distance between the two doorways will be sure more than 2.5 meters. and at 5.6.1, NUMBER OF PASSENGER DOORS AND DIMENSIONS, "The minimum distance between the centerline of the first and the second doors shall be 2.5 m", can we just follow this requirement, please confirm.	Agreed. The minimum centerline distance between the first and second doors shall be 2.4 to 2.75m.
21.	Several figures mentioned in the RFP as the reference for the bus shape and layout, but we can't find those figures, pls re-check.	Please note that upon detailed analysis, no such discrepancy was observed. However, in the event such a discrepancy exists, it is informed that no such figures have been made part of the document.
22.	<p>PARA 1.1.7 1.1.7 REGISTRATION, LICENSING AND HOMOLOGATION The manufacturer will ensure all vehicles are locally registered, licensed, and homologated by the responsible authorities. While the Procuring Agency will be the named leads in officially registering and licensing the vehicles, the manufacturer shall lead the facilitation of all required processes to ensure registration, licensing, whitelisting of ITS Hardware from Pakistan Telecommunication Authority (PTA) and homologation. Application for Interim Payments for Supply of Services Provided that for completion of the Vehicle Registration Formalities, it is hereby stipulated that any and all costs payable to the relevant governmental authorities/departments shall be borne by the Manufacturer in accordance with the Applicable Laws (the "Vehicle Registration Costs"). Following</p>	<p>Point 1 – The Procuring Agency shall bear all costs related to Registration, Licensing, Whitelisting And Homologation. However, the OEM shall be responsible for the completion of the entire process by all means. For the purposes of the same please note the following:</p> <p>(1) Please note that the proviso provided in Clause 11.10 (<i>Application for Interim Payments for Supply of Services</i>) after sub-clause (a)(iii) of Section X – Conditions Of The Contract shall stand deleted in entirety and be replaced with:</p> <p><i>"Provided that for completion of the Vehicle Registration Formalities, it is hereby stipulated that any and all costs payable to the relevant governmental authorities/departments shall be borne by the Procuring</i></p>

<p>such Vehicle Registration Costs having been accrued, the Manufacturer shall be entitled to invoice the Vehicle Registration Costs (accompanied with all requisite documentation) to the Procuring Agency (the "Registration Formalities Invoice"). Subsequently, following receipt of the Registration Formalities Invoice, the Procuring Agency shall, within forty five (45) days from the date of receipt of the Registration Formalities Invoice, issue a cheque, pay order, or bank draft in favor of the Manufacturer for an amount as stipulated in the Registration Formalities Invoice.</p> <p>It is understandable from above that registration charges and other associated charges of the authorities will be paid by procuring agency. However, There are few expenses which are not reflected on the registration invoices how those will be paid.? It is highly suggested that registration of the vehicles should be done by procuring agency as buses are imported in their name.</p> <p>2 Drivers Training The Number of Drivers seems repeated in Faisalabad RFP as for 9m 125 Drivers and for 12m 125 drivers are mentioned . Please clarify.</p> <p>Similarly Maintenance Training are repeated for 9M and 12 M, it should be single training.</p>	<p><i>Agency in accordance with the Applicable Laws. Provided that the Manufacturer shall timely provide any and all documents and assistance in respect the matters provided herein this Clause."</i></p> <p>(2) Please note that the definition of "Services" provided in Clause 1.1 (<i>Definition</i>) of Section X – Conditions Of The Contract shall stand deleted in entirety and be replaced with:</p> <p><i>"“Services” means, whenever the context permits or requires, any or all of the services as set out in detail in the Procuring Agency’s Requirements including the Driver’s and Maintenance Training Programme and Maintenance Supervision to be performed in accordance with the Applicable Standards and which are required to ensure that the Manufacturer’s Obligations are Fit for Purpose."</i></p> <p>(3) Please note that (c) of "Schedule 8 –Release Certificate Criteria" Of The Contract shall stand deleted in entirety and be replaced with</p> <p><i>"the Manufacturer has performed and completed the Training Programme and Maintenance Supervision that are contemplated under this Contract to be performed by the Manufacturer in accordance with the Applicable Standards and have demonstrated to be Fit for Purpose;"</i></p> <p>(4) Please note that the definition of "Registration Formalities Invoice" provided in Clause 1.1 (<i>Definition</i>) of Section X – Conditions of The Contract shall stand deleted in entirety.</p> <p>(5) Please note that the definition of "Vehicle Registration Formalities" provided in Clause 1.1 (<i>Definition</i>) of Section</p>
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		<p>X – Conditions of The Contract shall stand deleted in entirety.</p> <p>Point 2 – Please note that this query pertains to the city of Faisalabad and does not fall within the preview of the Punjab Masstransit Authority.</p>
23.	<p>Technical Bid Includes The Following</p> <p>(a) Complete Bidding document (without filling) signed and stamped by the Bidder.</p>	<p>Please note that (a) of Sub-Section 8.1. (<i>Bid Form Section</i>) – Of Section VIII: Sample Forms shall be amended as follows: "<i>Complete Bidding document signed and stamped by the Bidder</i>"</p>
24.	<p>We understand that Import duties and all related taxes on goods will be paid by the Procuring agency on arrival at Karachi Port. From our past experience , the port charges, port clearance charges and Clearing agent Charges will be paid by the Procuring agency . Thereafter, Transportation of Goods to designated depots will be the manufacturer's responsibility. Need your confirmation on this.</p>	<p>Yes, the understanding is correct.</p> <p>Moreover, all taxes & duties related items are stipulated in detail in the bidding documents.</p>
25.	<p>Stamp Duty on signing of the contract to be bear by procuring agency as it is a local expense. Please confirm.</p>	<p>With reference to Sub-Section 1.9 of Section X - Conditions of the Contract, all costs pertaining to Stamp Duty shall be borne by the OEM.</p>
26.	<p>5.7.3, Windshield And Windshield Wipers, "The wiper arms and windscreen should not be protruding beyond the front GRP moulding in order to prevent damage of windscreen during the operation of bus washing machine." For the modern design of city bus, the wiper mostly is beyond the front wall of bus, like the city buses from China currently running in Pakistan, please clarify.</p>	<p>Agreed. Windshield Wipers can be slightly protruding beyond the front wall of the buses.</p>
27.	<p>7.2.9, Water Integrity of Battery packs, "The batteries and battery management system (BMS) external casings should be capable of meeting IP69K." According to the feedback from CATL, the BMS case will comply with IP67. Since the BMS is</p>	<p>Not Agreed.</p>

	mounted on top of the bus, there is no concern regarding its water integrity, please clarify.	
28.	SECTION – IX: CHECK LIST, Original receipt for purchase of tender along with Standard Bidding Documents, as per today's meeting this should be removed.	Agreed. The requirement for submission of original receipt for purchase of tender stands deleted. Additionally, Checklist of documents comprising of technical proposal for Lahore, Multan & Rawalpindi are annexed as Annexure B to the response document.
29.	Government-owned enterprises may participate only if they are duly/legally authorized in this regard by the respective/relevant competent forum/authority, this should be removed as per today's meeting, since we're already pre-qualified.	The bidding documents have been issued to the prequalified OEMs/firms. Considering they are not Government-owned enterprises or not this provision has no applicability. However this will not be deleted.
30.	Reference battery type specification under the section of technical specifications for 9m and 12m bus – The battery pack shall be with protection level IP69K – Prequalification document specified IP68 or IP69K. Will IP68 be acceptable?	Not Agreed. Both IP68 & IP69K are required.
31.	Reference section slow and fast chargers under technical specifications of 9m and 12m bus. The chargers the standard should be IP55, chargers do not have IP69K standard.	Agreed. IP55 is acceptable.
32.	Reference section slow and fast chargers under technical specifications of 9m and 12m bus. The chargers should follow Chinese GBT Standard not IEC.	Not agreed. Please follow the provisions as mentioned in RFP.
33.	Reference to the section Maintenance Tools under technical specifications of 9m and 12m bus. Kindly provide exact numbers of depots for each city.	The following depots have been planned for each city: 1) Lahore – two (2) depots; 2) Multan – one (1) depot; and 3) Rawalpindi – one (1) depot. The same has been reflected in the bidding documents.

34.	Kindly clarify the level of detail required when completing the 8.8 Technical Bid Form. Should it be filled out component by component, mirroring the technical specifications sheet? Or should it be completed at the finished component level, such as for buses, chargers, and spare parts?	Please note that all the components listed in the technical specifications should be addressed separately in the technical bid form.
35.	Please provide clarity regarding point 2.3.6 (iii) (c) of ITB – an item-by-item commentary on the procuring agency’s technical specifications demonstrating responsiveness of the goods and services to those specifications or as statement of deviations and exceptions to the provisions of the technical specifications.	Please see response No. 34 above.
36.	Regarding form 8.4 Bidder profile form – Kindly provide clarity reading point b) what should be filled here, as we are providing information and relevant documents for electric bus projects undertaken for technical score evaluation.	Please note the regardless of what documents have been submitted, details of experience along with supporting attachments should be inserted in the relevant section of Technical Bids. If any of the supporting document is translated in English language, the document shall be duly apostilled and notarized for submission.
37.	Reference point c) of 8.4 Bidder profile form - We cannot provide payroll details as it is confidential information.	Please see response No. 5 above.
38.	What's the trade term-incoterm? (Not available in the RFP).	Please note that the incoterm is DAP.
39.	Please specify the warranty for CBU, Battery, Motor, Structure and charger. (As we found some points contradicting with each other).	Please refer to the definition of “ <i>Bus Battery and Structure Warranty Period</i> ” of Clause 1.1 (<i>Definition</i>) of Section X – Conditions Of The Contract.
40.	Please specify the way to issue Bid Security and local counter guarantee bank. Please confirm. By telegraph or letter? Direct - Bank to Authority or local verification?	Please see response No. 1 above.
41.	When's the expire date of advance payment bond? Why both warranty bond and detention bond required? These two types of bonds are similar to secure the benefit of the procuring	As per Clause 8.1 (<i>Advance Payment Bond</i>) (b) of Section X – Conditions Of The Contract “ <i>The Manufacturer shall ensure that the Advance Payment Bond is valid and enforceable (without</i>

	agency.	<p><i>further action) from the date of issuance until the entire Advance Payment has been adjusted by the Manufacturer”.</i></p> <p>In consideration of the same, this shall be valid till date of delivery of goods at delivery point (Karachi, Pakistan).</p> <p>Please note that this is the commercial discretion of the Procuring Agency.</p>
42.	How to define the delivery date? related to “Performance Guarantee Original Expiry Date”).	Please refer to Definition of Delivery Date which is the date of issuance of Certificate of Compliance for the Batch of Goods.
43.	Is there any clear schedule to construct the charging stations in other cities, except Lahore?	Please note that slow chargers shall be installed at the depot sites while fast chargers will be installed at locations designated by the Procuring Agency in the respective city. Locations and details of the same shall be shared with subsequently after the award of the Contract with the successful bidder.
44.	9M/12M Prototype delivery -60 days – Propose to prolong it.	Not Agreed.
45.	Maintenance supervision 12 Months timeline - please clarify.	Please note that this will be 12 months from the date of delivery of the last Bus.
46.	Registration, Homologation and licensing – Please share precedent (initial information) EV bus Withholding tax mechanics etc. to be shared. Propose procuring agency manage by themselves and OEM to support.	Please see response No. 22 above.
47.	Maintenance supervision - replacement of tires if required. Please clarify the list of items.	Please note that the query is not clear.
48.	Warranty bond: Within twenty (28) days from expiry of the Bus Battery and Structure Warranty Period, [Fifty] percent ([50] %) of the Retention Money shall be released to the Manufacturer through adjustment in the face value of Retention Money Bond	As per Clause 8.3 (<i>Warranty Bond</i>) (f) of Section X – Conditions Of The Contract “ <i>The Procuring Agency shall return the Warranty Bond to the Manufacturer within twenty eight (28) days after the Final Release Date...</i> ”. Therefore, in light of the definition of Final

	/ bank security. Battery warranty and structure warranty are different. This clause contradicts with the warranty and how long shall it remain valid?	Release Date, the warranty bond shall be valid the issuance of the Final Release Certificate.
49.	At least 96% of the fleet will be operationally available at any time during system operating hours. This requirement is somewhat highly demanding. Propose to lower to 90%.	Not Agreed.
50.	ITS - what about software (compatibility) – please confirm.	Software will be developed and integrated by ITS company based on the SDKs provided by the bidder as mentioned in RFP Document. (Refer to 9.24 - Documentations And SDKS in RFP)
51.	GPS---which company will cooperate to install – please confirm.	All relevant hardware shall be provided and installed by the bidder along with SDKs. Related functionality will be developed and integrated by ITS company as per RFP. (Refer to 9.24 - Documentations And SDKS in RFP & 9.17 - Automatic Vehicle Location (AVL) System)
52.	PTA - approvals authority. please confirm the requirement.	Yes.
53.	Inland transport/insurance (3 months validity) – please confirm.	Please note that the query is not clear.
54.	Diagnostic tools (need to specify as there're some required tools not for EV) – please confirm.	Please refer to the revised list annexed as Annexure A herewith this document.
55.	Prototype tests and simulation. Procuring Agency to share requirement – please confirm.	All requirements related to prototype testing have been stipulated in detail in Section 10: Prototype Testing in Section 3 – Technical Specifications.
56.	Delivery Destination – location initially and later condition of depot to be shared.	All depot locations are within the respective cities.
57.	Slow / Fast Charges – What is the required GBT or CCS2 socket standard for PMA.	IEC 60309 or latest IEC standard shall be acceptable.

58.	Payment Terms – Bank Name of 100% LC issuing.	The Punjab Masstransit Authority shall share their LC issuing bank with the successful bidder only.
59.	What is the timeline of last 50% - estimated clearance time. Is it on site certification or offsite.	Please note that the query is not clear.
60.	CATL Batteries 2025 – New generation batteries from CATL. Old model production is going to be stopped. The new generation capacity close specs for 9m city bus are 266 and 310KWH. How much variation is acceptable. Or you may provide the running mileage and operation time for 9M city bus. We can value how many kwh is suitable.	Not Agreed. Please note that a battery size of 275kWh is the minimum requirement for 9m buses.
61.	Battery positioning is one above the bus (roof) and other set on the back side for the best optimized design. Acceptable or not please elaborate. This is a low floor bus and all battery cannot be place on the roof.	Please note that battery packs to be installed in the buses should not be below passengers level at 600 mm.
62.	9M bus doors – One door in 9M and 2 Doors in 12 M - is this requirement based on some survey-Suggest to provide two doors for 9m bus as 12m bus.	Not Agreed.
63.	Self-Disinfectant system – Propose to remove it.	Please see response No. 18 above.
64.	Driver Seat – Please share details of a precedent.	Please note that detailed requirements related to the Diver Seat are provided therein the Request for Proposal document.
65.	Viper blade – 2 motors 2 viper blades can be 1 motor and 2 blades considering the place adjustment of motor.	Not Agreed.
66.	Bus testing – Quite a few tests can cause damage to demo during demonstrations. For a few simulations have been approved and mentioned in the RFP. Please update who are the third parties or what is the criteria for 3rd party testing and	Please refer to Clause 6.4 (<i>Prototype Tests</i>) (f) of Section X – Conditions Of The Contract.

	compliance. Which agency shall cover the fee of this third party? And how about the procuring agency representative's accommodation and flight and other fees incurred? What's the testing standard?	
67.	Aluminum Alloy Rim, 295 / 70R22.5 5 The vehicle is equipped with 295/80R22.5 tires, which are large tires. The minimum height of the first step must be at least 380mm. If a step height of 350mm is required, 275/70R22.5 tires must be used.	Please refer to response No. 14 above.
68.	Ground Clearance – 1. The vehicle's minimum ground clearance is 165mm, measured at the U-bolt location on the rear axle (with 295/80R22.5 tires). 2. Is this referring to the curb-side ground clearance?	Please see response No. 12 above.
69.	Axle weight 7700 – The maximum front axle load is 7500kg. A low-entry portal axle is used. The front independent suspension can achieve 8200kg.	Not Agreed. Please note that this is the maximum requirement.
70.	Departure angle – 6.5 Acceptable (variation allowed? %).	Please note that only the variations (related to dimensions) stipulated in the Request for Proposal documents shall be accepted.
71.	For the middle (right-hand side) of the vehicle, the maximum distance from the outer edge of the rearview mirror to the vehicle body must not exceed 150mm; our vehicle measures between 150–200mm.	Please refer to response No. 149 and response No. 150
72.	The minimum rated power of the drive motor is required to be 230kW. Our current motor has a peak power of 350kW and a rated power of 200kW, what is the variation.	Please note that only the variations (related to dimensions) stipulated in the request for proposal document will be accepted.
73.	The maximum internal idling noise standard is 60dB, whats the variation allowed under acceleration with A/C fully on.	Please note that only the variations (related to dimensions) stipulated in the request for proposal document will be accepted.

74.	The maximum external idling noise standard is 65dB - variation confirmation with AC full on and gradient. All track is not straight line.	Please note that only the variations (related to dimensions) stipulated in the request for proposal document will be accepted.
75.	Vehicle width (excluding rearview mirrors) of 2.55m is non-compliant; our 9m vehicle model is 2.5m.	Please refer to response No. 140 below.
76.	Minimum ground clearance requirement of 325mm cannot be met.(This contradicts with the requirement of 275/70R 22.5 tire size).	Please refer to response No. 12 above.
77.	Minimum door height (floor to top of door opening) requirement of 2.1m is unreasonable; our 9m model is approximately 1.93m. This contradicts the front passenger area ceiling height requirement of 2.1m.	Please refer to response No. 13 above.
78.	Only one passenger door is required; is this practical or reasonable? suggest to provide two doors for 9m city bus.	Not Agreed.
79.	Distance from the outer edge of the left-side rearview mirror to the vehicle body must not exceed 200mm; our vehicle measures 250mm. This requirement appears unreasonable.	Please refer to response No. 149 below.
80.	Tire specification requirement of 275/70R22.5 is not suitable; our 9m model uses 265/70R22.5 tires. Same as clause 6.	Please refer to response No. 14 above.
81.	Clause 7.3.1: Maximum internal idle noise shall not exceed 60dB. Our vehicle reaches 70dB with A/C on at idle. Only when A/C is off can it meet the <60dB requirement at all points.	Please note that only the variations (related to dimensions) stipulated in the request for proposal document will be accepted.
82.	Maximum external idle noise must not exceed 65dB; linear movement?	Please note that only the variations (related to dimensions) stipulated in the request for proposal document will be accepted.
83.	Can you provide applicable local regulations or guidance on where to obtain them? (If no response, we will seek assistance	Kindly seek assistance from local partners.

	via local partners.)	
84.	Axle load requirement: front axle 7700kg, rear axle 13,000kg – appears unreasonable and more applicable to full-sized buses. Proposed for 9M front axle: 5000kg, rear axle: 9500kg.	Please refer to response No. 69 above.
85.	Vehicle width requirement is 2.55m with $\pm 2\%$ tolerance; our vehicle is 2.5m, which is within acceptable range. (Is this in conflict with width requirement on P42?).	Please refer to response No. 140 below.
86.	Body structure must comply with ECE R66. No actual rollover test report is available; can CAE rollover simulation report be accepted instead?	Yes, for roll over test simulation results shall be acceptable for both 9m buses and 12m buses.
87.	Vehicle design must allow for automatic washing machine without catching on the brushes. Share design requirement.	The requirement is stipulated in detail in Section – III: Technical Specifications
88.	Only anti-pinch sensor equipped for the door closing, direction. No sensor for the reverse direction. Need to clarify.	The requirement is stipulated in detail in Section – III: Technical Specifications
89.	Driver-side window glass must be tinted laminated glass with tint in upper one- third. This is unreasonable, as the driver-side window also serves as an emergency exit. Laminated glass is difficult to break and may compromise driver safety. Tinting in the upper third may obstruct rearview mirror visibility. Suggest revising this requirement.	Not Agreed.
90.	Wiper arms and windshield should not extend beyond the front GRP body panel. Does this refer to the front bumper?	Please refer to response No. 26 above.
91.	Is there a requirement for two wiper motors? (Wiper system uses two wiper arms and two motors.)	Not Agreed. Please refer to Section 5.7.3 (Windshield And Windshield Wipers) of Section 3 – Technical Specifications.
92.	Apart from bumpers, no part of the vehicle shall be damaged in a 10 km/h frontal or rear collision. (Share precedent; a 10 km/h	Please refer to Section 5.8.3 (Bumpers) of Section 3 – Technical Specifications.

	collision will cause full frontal/rear damage, including windshield.)	
93.	Front and rear license plate dimensions – please provide (if no response, will obtain via alternative means).	Kindly seek assistance from Local Authorized Dealer.
94.	Only service light provided for rear compartment since other compartments are half opened area, no need for light.	Not Agreed.
95.	Is it acceptable for safety belt to comply with ECE R16?	Not Acceptable.
96.	Driver seat must be equipped with pneumatic side bolsters – it is a city bus - is it mandatory). Vehicle has built-in MAXI warning system that prompts unbraked driver seat exit on the instrument cluster – is this acceptable?	Not Agreed.
97.	Battery CATL NEW Generation – Minimum driving range under full load with A/C on shall not be less than 275 km. CATL's upgraded 282kWh battery is being discontinued. Available options are 266kWh and 351kWh. Suggest to provide route length and daily operation time be evaluated to determine suitable battery option.	Not Agreed. Please note that 275kWh and 350kWh are the minimum requirement for 9m buses and 12m buses respectively.
98.	Chargers – 1. 320kW dual-gun charger requires 0–500A output; our national standard charger is rated at 250A per gun, Please confirm the correctness . (The output current requirement of 0-500A refers to whether the 500A is for a single gun output or the total combined output of both guns?) 2. Rated grid voltage of our charger is 380V – It's not reasonable for 400V, please help figure out. 3. "The output voltage range should be 100 V ~ 1,000 V" is contradicted with "Output voltage 200VDC-1000VDC" in the specs sheet below. Recommending to keep 200VDC- 1000VDC. 4. Working Environment Temperature of chargers requires"–25°C-55°C". Recommend to revise as "-30°C-50°C" because he device	Please refer to response No. 162 below. In respect of standards, please follow the provisions as mentioned in RFP.

	reduces power output at 55°C, and prolonged use of the charging gun at this temperature may affect its service life even it still works at 55°C. 5. What's the final water and dust proof requirement for chargers "All charging equipment exterior casings must be demonstrably capable of achieving the IP69k standard of 'Ingress Protection' from dust, humidity, condensation and flood water." or IP54? "Protection class Outdoor IP54" Propose to be IP54. 6 . What's the required standard for chargers? Propose to accept GBT standard. 7.If GBT standard acceptable, the term "All charging equipment to be independently certified to be compliant with the standard IEC 61851" shall be revised accordingly to GB/T 27930-2023, GB/T20234-2023, GB/T18487-2023.	
99.	At all operating modes, external noise level must not exceed 65dB measured 15 meters from centerline of vehicle path. Under any operating condition, internal noise at any point 300mm from inner window or wall and 1.2m above the floor must not exceed 60dB. Additionally, manufacturer must comply with applicable external noise standards as determined by the procuring agency.	Please note that the query is not clear
100.	FTA Docket 90? What's this standard – FTA Docket 90? What is this standard? Please help figure out.	FTA Docket 90 refers to a set of standards and guidelines established by the Federal Transit Administration (FTA), USA for fire safety and material selection in transit buses and vans.
101.	Public buses generally do not include Automatic Emergency Braking (AEB) systems. If installed, braking inertia poses safety concerns for standing passengers when it works. Propose to remove this requirement.	Please refer to response No. 160 below.
102.	Wheel Rims – Powder-coated wheels are not typically used; standard options are steel or aluminum rims.	Not Agreed.

103.	<p>Splashguards / aprons made of composition or rubberized material shall be installed on the body around the periphery of the wheel. The design of the splashguards / aprons shall preclude the accumulation of dirt. Our company uses a steel plate combined with damping adhesive coating treatment. Is it acceptable? (Damping adhesive is a type of polymer material with shock-absorbing, sound-insulating, and vibration-damping properties. It is commonly used in vehicles, electronic devices, buildings, and other fields to reduce the transmission of vibrations and lower noise levels.)</p>	The requirement is stipulated in detail in Section – III: Technical Specifications
104.	<p>Air Flow – Passenger Area – The cooling mode of the interior climate control system shall introduce air into the vehicle at or near the ceiling height at a minimum rate of 0.7 cubic meters per passenger based on the standard configuration vehicle carrying a number of passengers equal to 1.5 times of the seated load.</p> <p>Airflow shall be evenly distributed throughout the vehicle, with air velocity not exceeding 30 meters per minute on any passenger. The ventilating mode shall provide air at a minimum flow rate of 0.85 cubic meters per passenger. Contradicted with the noise standard requirement if such a highly demanding of cooling speed needed.</p>	Not Agreed.
105.	<p>Two rooftop ventilators are required, one near the front axle or ahead, and the other near the rear.</p> <p>Conflicts with battery placement.</p>	Please see response No. 192 below.
106.	<p>Ventilation fans must be operable by passengers with a height of 1.5m. Battery layout must be considered.</p>	Please note that query is not clear.
107.	<p>Meanwhile fresh dust free / filtered air of equal proportion is to be pumped in from the driver's side of the bus for normal</p>	Air Flow System should be designed in a way that fresh dust free / filtered air should be pumped in for better breathing experience

	breathing of passengers – “Fresh, dust-free/filtered air of equal proportion must be supplied from the driver's side for normal passenger respiration.” This requirement needs elaboration.	of the passengers.
108.	Self-Disinfectant system – No disinfectant system available now for Chinese OEM, please clarify the reason of requiring or suggest to revise it.	Please see response No. 18 above.
109.	Wrong point: No gearbox used for EV, and 1. need to provide depot number for each project. 2. please specify the trolley and cradle specs.	Please note that in 7.15.2 of Section – III: Technical Specifications, the term “Gear Box” shall stand deleted. With respect to the number of depots, please refer to response No. 33 above.
110.	A driver's compartment lamp, with a full-range dimmer, shall be mounted to illuminate the entire driver's area. No full-range dimmer available now, need more time to develop, which might cause a delay for buses delivery schedule. generally it's not necessary for driver's cabin.	Not Agreed.
111.	Prototype testing: 1. Any representative of the procuring agency coming to OEM for testing? 2. Any third party will be appointed to conduct this test? 3. Is simulation report acceptable?	All requirements related to prototype testing have been stipulated in detail in Section 10: Prototype Testing in Section 3 – Technical Specifications.
112.	Each battery shall have a purchase date no more than one year from the date of release for shipment to the Procuring Agency. Please specify the date of release for shipment.	Please note that this is contingent upon the execution of the contract between the Procuring Agency and the successful bidder.
113.	As a minimum, the quantity of spare parts shall be kept at hand at the depot site at all times during first year of operations. If a	Not Agreed.

	part or supply item is replaced, the stock at the depot site shall be replenished within 20 days. It's too strict for foreign OEM to replenish within 20 days, please included the sea freight time.	
114.	Tools – please further provide the specs of required tools : cradle and dolly.	All requirements related to prototype testing have been stipulated in detail in Section 10: Prototype Testing in Section 3 – Technical Specifications. Moreover, please refer to the revised list annexed as Annexure A herewith this document.
115.	Disc Brake Pads – Is this unit referred piece or set? totally 8 pcs of disc brake pads per bus. Please specify how many pcs needed.	Please refer to the revised list annexed as Annexure A herewith this document.
116.	Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set) – if for 39 units of buses, 6 sets in stock might be suitable.	Please refer to the revised list annexed as Annexure A herewith this document.
117.	Full Seat Assembly (Complete Set For Bus) – if for 39 units of buses, 1 set for whole bus in stock might be suitable.	Please refer to the revised list annexed as Annexure A herewith this document.
118.	Back And Bottom Seat Cushion Set (Complete Set For Bus) – This cannot be separately provided. It's equipped with seat assembly.	Please refer to the revised list annexed as Annexure A herewith this document.
119.	Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Cond – If for 39 units of buses, 1 set of ac ASSEMBLY is suitable.	Please refer to the revised list annexed as Annexure A herewith this document.
120.	Vehicle Performance Monitoring – Need CAN system to provide relative info.	Bus system must be capable of logging the subjected data. CAN data integration with ITS company software must be provided by bidder for these parameters, at least.
121.	Vehicle Weight – Need CAN system to provide relative info.	Bus system must be capable of logging the subjected data. CAN data integration with ITS company software must be provided by

		bidder for these parameters, at least.
122.	VLU, Update Frequency, The device must update the location of buses at least once every second. Local update or platform update? If opting for platform updates, a frequency of 1 second is too high. We recommend adjusting it to 10–20 seconds.	For local update, a minimum of 1 second is required. For platform/OTA update, customizable/adjustable interval is required.
123.	DDT – Need to customize. What kind of vehicle performance and parameters need to show? Please confirm.	Essential parameters related to driver usage must be provided in DDT.
124.	USB Ports For Passenger Devices – How many pcs required?	1 set (Type A & Type C) for each seat as mentioned in RFP document.
125.	Automatic Vehicle Location (AVL) System – Do we need to provide with operation management system?	Required as per RFP Document.
126.	Driver console: a) The Driver’s console must be able to display dispatch plan/schedule, interval information to the bus driver including location, current speed, time headway, distance from the previous and next bus, alert messages and play voice recordings accordingly to timely inform passengers of the next approaching bus. Is that this info needs to be shown on the DDT?	It is not required in DDT rather in Driver Console.
127.	The Driver Console must be capable of collecting, transmitting and reporting in a prescribed Format following data from Controller Area Network (CAN) Bus module. This info needs to be shown on instrument or DDT?	Essential parameters related to driver usage must be provided in DDT.
128.	Charging management system – Is this system for Charger? to be shown on board of the vehicle or for user?	The parameters mentioned must be integrated with ITS company software using SDK & API as mentioned in RFP Document.
129.	On page 5, there is a bank guarantee displayed, but on page 16, there is showing Pakistan rupees and only CDR/DD/PO and no bank guarantee displayed. Do you accept USD bank	Point 1 – Please refer to response No. 1 above. Point 2 – Please note that only a hard copy of the bank guarantee

	<p>guarantees as bid security? The Issuing bank of any guarantee from China will be top 100 in world Like bank of China , ICBC & etc. Those banks have batter credit Rating and So, no need for Counter in any local bank in Pakistan. We Suggest TELEX Release format should be acceptable to save time and procedure . Please confirm ? Do you accept TELEX RELEASE or it should be original hard copy?</p>	<p>will be acceptable and that no TELEX Release format will be entertained by the Procuring Agency for the purposes of bids submitted in respect of either city</p>
130.	<p>At time of submission concept design, production is not yet started. How is it possible to install one set in the bus? This should be done during the proto type production. SDKs are from ITS vendor and all standard one with functional of their standard software. No one can provide with the customized as per PITB. Please amend as per our doubt.</p>	<p>Please note that this refers to the submission of one (01) complete set of ITS hardware at the time of concept design submission which is to be installed in the bus.</p> <p>Not agreed. The required SDKs must be functional in all aspects as specified in RFP document.</p>
131.	<p>The manufacturer will ensure support is OK but for Expenses direct bear by Procuring Agency because as per Land Law Vehicle Owner paid Expenditure and now not Clear Ev policy about this matter. Whitelisting of ITS Hardware from Pakistan Telecommunication Authority (PTA) its related to Operations. We are requesting this is not related to Bus Manufacturing side. Manufacturer provide data/ documents or all support but for local registration or approval with local departments it's Easy to Procuring Agency?</p>	<p>Please see response No. 22 above.</p>
132.	<p>The manufacturer will ensure support is ok but for Expenses direct bear by Procuring Agency because as per Land Law Vehicle Owner paid Expenditure and now not Clear Ev policy about this matter. We are requesting this is not related to Bus Manufacturing side. Manufacturer provide data/ documents or all support but for local registration or approval with local departments it's Easy to Procuring Agency?</p>	<p>Please see response No. 22 above.</p>

133.	One set of complete hardware will be good enough for testing. Two sets will be waste of money. What is work order? Please clarify. One set is suggested. Please clarify work order.	Point 1 – Not Agreed. Point 2 – Please refer to the concept of “ <i>Notice To Proceed</i> ” provided in Section X – Conditions Of The Contract.
134.	Its Mean its DAP term. So, now in China DAP Term is not acceptable from bank sides. Please change the relevant trade terms DAP to CFR, Karachi port unit price in USD.	Please note that the incoterm is DAP
135.	All required samples (if demanded) have been submitted in the Punjab Masstransit Authority sample store. Please clarify what sample is it? Required at time of bid submission?	Please note that under the heading of “ <i>Applicability</i> ”, Sr. No. 2 of Section – IX: Check List shall stand amended as “No”. For the purposes of clarity, this requirement is not applicable. Additionally, Checklist of documents comprising of technical proposal for Lahore, Multan & Rawalpindi are annexed as Annexure B to the response document.
136.	Please Technical and Financial Evaluation will be assigned marks with Maintain Specific Marks. etc. 10, 15 & 20 Points. Please delete this note.	For the purposes of clarity, the following paragraph “ <i>Prequalified Applicants falling in between the evaluation bracket for Financial Evaluation will be assigned marks on interpolation basis</i> ” provided thereunder Section 1 - Financial Score (40 Points) of Criteria For Detailed Evaluation shall stand deleted.
137.	Please clarify PMA have 3 projects total 9 people visit both inspection or 3 different team inspection?	Please note that the current structuring of the entire procurement requires separate inspection visits for each city.
138.	As per Pakistan law Marine insurance bear by LC opening account, we are requesting this insurance bear by in Pakistan with the time of LC Procuring agency.	Not Agreed.
139.	As the attestation and notarization will take much longer time, We suggest that the copy of translation documents which had been notarized and attested by Apostille in Punjab's first pure electric bus project or pre-qualification should be acceptable.	Not agreed. Please follow RFP and submit documents as per checklist mentioned in RFP.

	Please confirm.	
140.	The width of 2.55m is for 12m buses. For 9m buses, it is recommended to adjust the width to 2.4-2.5m. Please adjust this width from 2.4 --2.5 meters.	For 9 m bus, the vehicle width (not including mirrors) shall stand amended as a range of 2.45 m to 2.55 m.
141.	325mm is illogical. According to section 2, No.5 Floor height 350mm, but this Ground Clearance require 325mm, the floor of the bus cannot be only 25mm. Please adjust the ground clearance minimum 140mm.	Please refer to response No. 12 above.
142.	According to RFP 9m technology specification 5.6.1, The minimum clearance height at the doorway shall be 1.9 m. Please change this Clearance at doorway to 1.9m (minimum).	Please refer to response No. 13 above.
143.	7700kg is for 12m bus specification, not suitable for 9meters. Please change it to 5000kg. Please change it to 5000kg.	Please refer to response No. 69 above.
144.	13000kg is for 12m bus specification, not suitable for 9meters, please change to 9,500kg. Please change it to 9500kg.	Please refer to response No. 69 above.
145.	17% is the grade ability of a 12m bus. For a 9m bus, please adjust 17% to 14%. For 9meters bus, the grade ability is min 14%.	Not Agreed.
146.	One front and one middle doors on curb side is suggested to keep the basic design of 9m city bus. And the front overhang of 9m is much less than 12m. So, the front door width size will be 0.75m, and the middle door size will be 1.2m. Please adjust to, Front door: 0.75 meters Middle door 1.2 meters.	Not Agreed.

147.	As per standard design of 9m city buses, one front door and one middle door are recommended. As 9m has less front overhang, so the size is limited to have same width of middle door. The front should be single swing door with 0.75m width and middle door should be double swing with 1.2m width. Please adjust the number of curb-side doorways to 2. (one front door and one middle door).	Not Agreed.
148.	730mm is the specification of 12meters bus, The interior space for a 9-meter bus is smaller. Please adjust to 670mm.	Not Agreed. Please note that the number seats required in 9m buses are lesser than that required in 12m buses.
149.	It is recommended to design it according to the 9-meter vehicle standard. As per 9m design, it will be 222mm.	For the median side (right side) of the vehicle, distance of outside edge of the wing mirror of the vehicle body shall stand amended as in the range of 150 mm to 225 mm.
150.	It is recommended to design it according to the 9-meter vehicle standard. As per 9m design, it will be 228mm.	For the curb side (left side) of the vehicle, distance of outside edge of the wing mirror of the vehicle body shall stand amended as in the range of 200 mm to 230 mm.
151.	The original data is for 12m bus specification, It is recommended to follow the design standard of 9-meter vehicle which should be 265 / 70R19.5. It is suggested to change the Aluminum alloy rim to steel rim. Please adjust to Steel Rim, 265 / 70R19.5.	Please refer to response No. 14 above.
152.	160kw is the specification for 12m bus, it is recommended to design according to 9m bus which should be 120kw. For 9m bus, please adjust the data to 120kW.	Not Agreed.
153.	As per international standard, the protection level should be IP6K9K. Permanent Magnet Synchronous Motor (PMSM), with the Protection level and IP6K9K.	Agreed. The Protection level should be read as " IP6K9K ".

154.	As per international standard, the protection level should be IP6K9K. Lithium-ion (LiFePO4) with protection level IP6K9K.	Agreed. The Protection level should be read as " <u>IP6K9K</u> ".
155.	In Battery Packs Safety required 3 things. But only one certificate for nitrogen protection system is mentioned before or at the time of prototype testing. So, the required 3 things should have 3 certificates which including test force, nitrogen protection and fire resistance of 1300 degree. And all should be submitted at time of bid submission. It is suggested to provide all three certificates at time of bid submission.	Not Agreed.
156.	According to CATL's latest battery design standard, they only have size of 255kWh. or 289kWh in the size range of 250 to 300kWh. Please change 275kWh to 289kWh or 255kwh. We suggest 255kwh will be good enough for the operation.	Not Agreed. Please note that a battery size of 275kWh is the minimum requirement for 9m buses.
157.	As per OME design, we always keep 12% SOC for alarming. If the battery size is 255kwh, we suggest to make SOC 12% for range checking. There should be a condition for range checking. As per international standard, there is a road condition named SORT-II. This mileage should be tested as per SORT-II. The bus SORT-II condition is a test mode in the Standardized On-Road Test Cycle (SORT) developed by the International Association of Public Transport (UITP), which is mainly used to evaluate the energy consumption performance of buses (especially electric and hybrid buses) under mixed driving cycle conditions. Not less than 200 km on single charge (100% to 12% battery consumption) fully loaded with AC working under road condition of SORT-II.	Not Agreed.
158.	It is for 12m bus not for 9m. Normal the design of turning radius should not exceeding length of the bus. Not exceeding 9 meters.	Please note that the maximum turning radius, for outer wheel track is mentioned.

159.	As 9m has less front overhang, so the size is limited to have same width with middle door. The front should be single swing door with 0.75m width and middle door should be double swing with 1.2m width. It is recommended that the front door be single-leaf inward swinging door and the middle door be double-leaf inward swinging door.	Not Agreed.
160.	As per Punjab's first electric bus project, EBS is required for the braking. Also EBS can increase the REGENERATIVE BRAKING efficiency to reduce the consumption. Please change it to EBS.	Agreed. Please note that the requirement is now "EBS (<i>Electronic Braking System</i>)".
161.	Please note that all the pre-qualified OEMS are from China. And all current bus projects in Pakistan are with GB(Chinese) standard chargers. So the chargers shall comply with relevant IEC standards or GB/T standards. The chargers shall comply with relevant IEC standards or Chinese GB/T standard.	Not agreed. Please follow the provisions as mentioned in RFP.
162.	According to industry standards, due to the high output power of the 320kWh charging pile, the circuit generates a large amount of heat. Therefore, in terms of design logic, single gun charging cannot achieve 320kWh in order to protect the safety of the line and vehicles. Meanwhile, the rated Voltage of 9m is 540V which is lower than 12m. So when the current is same and the power will be lower. The formula is $540 \times 250 \times 2 / 1000 = 270$ kWh. Therefore, it is recommended to amend it to dual gun charging, as the fast charging station can output 270kWh of power. Fast chargers should have the capacity to charge at 160 kw per hour per gun so that at a time it can dispense out 320 kw per charger. The charger should be designed such that in case double gun is used, it should dispense out 270 kw per hour.	Not agreed. Please follow the provisions as mentioned in RFP.

163.	Fast and slow chargers have different output voltage ranges and should be distinguished. For 160kw: 200-750V 320kw:100-1000V. The fast charger output voltage range should be 100 V ~ 1,000 V. The slow charger output voltage range should be 200 V ~ 750 V.	Not agreed. Please follow the provisions as mentioned in RFP.
164.	Chinese buses generally follow Chinese GB/T standards. The chargers shall comply with relevant IEC standards or GB/T standard.	Not agreed. Please follow the provisions as mentioned in RFP.
165.	Chinese buses generally follow Chinese GB/T standards. International series of standard for Low Voltage Electrical Installations (IEC 60364 series or GB/T standard.)	Not agreed. Please follow the provisions as mentioned in RFP.
166.	Chinese buses generally follow Chinese GB/T standards. The manufacturer must comply with IEC 60364 part 7-722 or GB/T standard.	Not agreed. Please follow the provisions as mentioned in RFP.
167.	Description error, there is no such standard in the charger industry, the actual standard should be IP55. Please Change to IP55.	Please see response No. 31 above.
168.	Chinese buses generally follow Chinese GB/T standards. Moreover, the Electric Vehicle Supply Equipment shall be in accordance to the relevant part of IEC 61851 series or GB/T standard.	Not agreed. Please follow the provisions as mentioned in RFP.
169.	According to Chinese OEM standard, it should be 380V AC.	Not agreed. Please follow the provisions as mentioned in RFP.
170.	Parameter: grid frequency range: $\pm 2\%$. Please change the date to $\pm 10\%$.	Not agreed. Please follow the provisions as mentioned in RFP.
171.	Fast and slow chargers have different output voltage ranges and should be distinguished. For 160kw: 200-750V – 320kw:100-1000V. Please adjust the output voltage 100VDC-1000VDC.	Not agreed. Please follow the provisions as mentioned in RFP.

172.	This configuration is specific to the COVID-19 epidemic, which is not available at ordinary times, increasing the cost of vehicle procurement. This was already deleted in the Punjab's first pure electric bus project of 27 buses. The same should be done. Delete this self-disinfectant system.	Please see response No. 18 above.
173.	Air curtains on middle door to avoid loss / gain of heat and / or cool air when doors are frequently opened for boarding & alighting of passengers with minimum air flow of 1,000 ± 50 m ³ /hr. Due to small size of front door, it is not possible to be installed. Please adjust the Air curtain on middle door shall be provided.	Not Agreed.
174.	Some battery packs will be placed in the chassis area; however, the protection level of the battery pack is high enough, so there is no need to worry about battery protection issues. Placement of battery packs should not be done below passenger level at 500mm.	Not Agreed.
175.	The requirement of QTY is 1 for each seat, for USB Type A & Type C is not suitable. Please adjust" &" to "or".	Not Agreed.
176.	Each door with one Fare validator is sufficient and there will be two validators for one bus. For 9m bus, only one fare validator can be installed in the front door. Please change QTY to 1 for each door for 9m bus.	Not Agreed.
177.	Display Touchscreen display with a size of 9-12 inches with 720p 1280*800 min SAM slots ISO7816 SAM slots x1 Operating system android 9.0 or above. For 720p, the standard specification is 1280*720, please adjust to 720p	Agreed. Minimum 1280*720 is required for Driver console LCD.

	1280*720. 1280*800 is an inaccurate description.	
178.	API for remote monitoring and data analytics; Local Data Storage: 128GB onboard memory for offline data logging; Live updates on charging status, duration, energy consumed. For local data storage, 128M is suitable and the charging management system can update the charge status in real time, but does not need to update the energy consumption timely.	Please note that "128G" is a typo. Therefore, please note that the minimum 128MB local storage is required. Energy consumption data is required in real time along with other parameters specified in RFP document.
179.	For any dimensions in the table above that are not set as a specific range or described as a maximum / minimum value, then the accepted tolerance for a deviation from the given nominal value will be +/- 2%. Please accepted tolerance for a deviation from the given nominal value will be +/- 5% . Because for making 1st time to Pakistan.	Not Agreed.
180.	2.55 meters. 2.5m.	Please refer to response No. 140 above.
181.	325mm is illogical. According to section 2, No.5 Floor height 350mm, but this Ground Clearance require 325mm, the floor of the bus cannot be only 25mm. Please adjust 325mm to 150mm.	Please refer to response No. 12 above.
182.	Display Touchscreen display with a size of 9-12 inches with 720p 1280*800 min SAM slots ISO7816 SAM slots x1 Operating system android 9.0 or above. For 720p, the standard specification is 1280*720, please adjust to 720p 1280*720. 1280*800 is an inaccurate description.	Agreed. Minimum 1280*720 is required for Driver console LCD.
183.	As per the Punjab's first electric bus project, it was agreed to change it to 2m due to the design standard. Here is required to keep the same on 2m. The clearance at doorway should be 2m.	Please refer to response No. 13 above.

184.	As per Punjab's first electric bus project, there are two doors on curb-side. The distance of two doors should be 2.4 to 2.75m. Please amend the distance between the center-line of the first and the second doors to 2.4--2.75m.	Please refer to response No. 20 above
185.	As per the Punjab's first electric bus project, the manual pull-out boarding bridges is one for curb side middle door. It is enough to operate. Please amend it to 1 for middle door.	Not Agreed.
186.	As per Punjab's first pure electric bus project, it was agreed by the Transport house of changing it to 221mm. Please amend it from 150mm to 221mm.	Please refer to response No. 149 and response No. 150
187.	The description of the tire specifications for 12m vehicles is inaccurate, please adjust it. Steel rim is good enough for the operation. Please adjust to Steel Rim, 295 / 80R22.5.	Please refer to response No. 14 above.
188.	As per international standard, the protection level should be IP6K9K. Permanent Magnet Synchronous Motor (PMSM), with the Protection level and IP6K9K.	Please refer to response No. 153 above.
189.	As per international standard, the protection level should be IP6K9K. Lithium-ion (LiFePO4) with protection level IP6K9K.	Please refer to response No. 154 above.
190.	In most cases, the range of this clearance is 2.0 meters. The minimum clearance should 2.0m.	Please refer to response No. 13 above.
191.	As per Punjab's first electric bus project, there are two doors on curb-side. The distance of two doors should be 2.4 to 2.75m. Please amend the distance between the centerline of the first and the second doors to 2.4--2.75m.	Please refer to response No. 20 above.
192.	As per Punjab's first electric bus project, there is one emergency roof escape hatch due to limited space after installation of battery on the roof. Please amend it to one	Agreed. Please note that at least one emergency roof escape hatches shall be provided in each vehicle.

	emergency roof.	
193.	As per Punjab's first electric bus project, EBS is required for the braking. Also EBS can increase the REGENERATIVE BRAKING efficiency to reduce the consumption. Please change it to EBS.	Please refer to response No. 160 above.
194.	According to industry standards, due to the high output power of the 320kWh charging pile, the circuit generates a large amount of heat. Therefore, in terms of design logic, single gun charging cannot achieve 320kWh in order to protect the safety of the line and vehicles. Therefore, it is recommended to switch to dual gun charging, as the fast charging station can output 320kWh of power. Fast chargers should have the capacity to charge at 160 kw per hour per gun so that at a time it can dispense out 320 kw per charger. The charger should be designed such that in case double gun is used, it should dispense out 320 kw per hour.	Please refer to response No. 162 above.
195.	Fast and slow chargers have different output voltage ranges and should be distinguished. For 160kw: 200-750V 320kw:100-1000V. The fast charger output voltage range should be 100 V ~ 1,000 V. The slow charger output voltage range should be 200 V ~ 750 V.	Please see response No. 18 above.
196.	Chinese buses generally follow Chinese GB/T standards. The chargers shall comply with relevant IEC standards or GB/T standard.	Not agreed. Please follow the provisions as mentioned in RFP.
197.	Chinese buses generally follow Chinese GB/T standards. International series of standard for Low Voltage Electrical Installations (IEC 60364 series or GB/T standard.)	Not agreed. Please follow the provisions as mentioned in RFP.
198.	Chinese buses generally follow Chinese GB/T standards. The manufacturer must comply with IEC 60364 part 7-722 or GB/T	Not agreed. Please follow the provisions as mentioned in RFP.

	standard.	
199.	Description error, there is no such standard in the charger industry, the actual standard should be IP55. Please Change to IP55.	Please see response No. 31 above.
200.	Chinese buses generally follow Chinese GB/T standards. Moreover, the Electric Vehicle Supply Equipment shall be in accordance to the relevant part of IEC 61851 series or GB/T standard.	Not agreed. Please follow the provisions as mentioned in RFP.
201.	According to Chinese OEM standard, it should be 380V AC. Please change to 380V AC (3P+N+PE).	Not agreed. Please follow the provisions as mentioned in RFP.
202.	Parameter: grid frequency range: $\pm 2\%$. Please change the date to $\pm 10\%$.	Not agreed. Please follow the provisions as mentioned in RFP.
203.	Fast and slow chargers have different output voltage ranges and should be distinguished. For 160kw: 200-750V – 320kw:100-1000V. Please adjust the output voltage 100VDC-1000VDC.	Not agreed. Please follow the provisions as mentioned in RFP.
204.	As per Punjab's first pure electric bus project, there is one emergency roof escape hatch due to limited space after installation of battery on the roof. Please amend it to one emergency roof.	Please refer to response No. 192 above.
205.	This configuration is specific to the COVID-19 epidemic, which is not available at ordinary times, increasing the cost of vehicle procurement. This was already deleted in the As per Punjab's first pure electric bus project of 27 buses. The same should be done. Delete this self-disinfectant system.	Please see response No. 18 above.
206.	720P should be 1280*720 1280*800 was wrong description. Please Change to 1280*720.xxx	Please refer to response No. 177 above.

207.	API for remote monitoring and data analytics; Local Data Storage: 128GB onboard memory for offline data logging; Live updates on charging status, duration, energy consumed. For local data storage, 128M is suitable. And the charging management system can update the charge status in real time, but does not need to update the energy consumption timely.	Please see response No. 178 above.
208.	Lead acid battery Charger ? Please clarify.	Please note that the query is not clear.
209.	MDVR:- Note: All relevant functional SDK's & API's, along with their documentation (complete in all aspects) in English Language must be provided but not limited to DOT.NET/Android with Local/International support. An Android SDK is available, but Linux system is not open source, so SDK of Linux is not available. Please note that only the Android SDK is available	Please note that it is clearly mentioned in the RFPs that "All relevant functional SDK's & API's, along with their documentation (complete in all aspects) in English Language must be provided but not limited to DOT.NET/Android with Local/International support."
210.	External Variable Messaging Display:- Note: All relevant functional SDK's & API's, along with their documentation (complete in all aspects) in English Language must be provided but not limited to DOT.NET/Android with Local/International support. For the external variable messaging display, there is no SDK document of Destination board. Please delete this.	Not agreed. Please note that SDK's & API's are essential part of external variable messaging display integration however it is the responsibility of the OEM/bidder to provide this integration through software solution.
211.	Internal Variable Messaging Display / Passenger Information System (Vehicle Grade):- Display Interface: HDMI/VGA OEM could provide LAN interface. Please amend this.	Please note that HDMI/VGA/ any other wired available medium for smooth display on the screen. However, the LAN interface will be used for communication purposes.
212.	Internal Variable Messaging Display / Passenger Information System (Vehicle Grade):- Device Maintenance : OTA, USB Upgrade, Remote management (Refer to 9.18) All OTA and USB upgrades involve software development and have nothing to do with the hardware provided by the supplier. Software upgrades should belong to software service providers/operators. Please delete this.	Not agreed. Please note that OTA /USB upgrade support is required for all firmware/software upgrades other than the system developed by the ITS Company

213.	Internal Variable Messaging Display / Passenger Information System (Vehicle Grade):- Additional Software feature : FTP, remote and local SSH, root access All additional software feature are the responsibility of the software service provider /PITB, and OEM is not responsible for the upgrade and subsequent development of software related functions. Please delete this.	Please note that FTP, remote and local SSH, root access is required to access the device at firmware & OS level features other than the system developed by the ITS company.
214.	Internal Variable Messaging Display / Passenger Information System (Vehicle Grade):- All supplied AFC items (including all hardware, software, networking, fare media etc. should be integrated with third party Mobile Application both Android & IOS. The software side of AFC item should belong to software service provider. Please amend this.	Please note that all of the Android & IOS applications will be developed by the ITS company. However, any support regarding integrating the hardware with the ITS company's software shall be the responsibility of the bidder.
215.	Infotainment Display Back Screen:- An internal rectangular infotainment display screen shall be provided at the back of the bus for advertisement purposes. This screen shall be visible to commuters outside the bus in mixed traffic and pedestrians. OEM can reserve a place to install internal rectangular infotainment display screen, but the installation of the display screen belongs to the advertiser. OEM does not have relevant advertiser resources and is not responsible for installation. Please amend this.	Not agreed. Please note that the display screen along with allied wiring/connectivity is required as per clause 9.11 of the bidding document.
216.	Audio System:- Upon departing a station, a digitally-recorded message will note the doors are closing. The digital announcement will then note the route name, final destination, and the next bus stop. OEMs can provide megaphones, but the implementation of related content belongs to the scope of software and is developed by software service providers/operators themselves Please delete this.	Not agreed. Please note that the development of the software related to the Audio System will be the responsibility of the ITS company, however, smooth announcements through hardware & SDK level support. As well as its compatibility shall be done by the bidder so that all related components i.e. doors, GPS, etc, get integrated for the requisite output.
217.	Audio System:- The volume of the announcements shall be adjustable to a standard level through configuration data. The system shall include an automatic gain control to automatically and independently adjust interior and exterior volumes depending on interior and exterior ambient noise levels. The internal and external volume can be manually adjusted, but	Please note that the driver announcements can be manually adjusted however, the announcement on approaching the bus stop must be configurable through the ITS company software.

	cannot be adjusted automatically Please amend this.	
218.	Driver Displays And On-Board CCTV Cameras:- Passenger Counting at each passenger gate SURVEILLANCE CAMERAS: General surveillance x2 Installing two counting camera will increase the cost of the vehicle by about \$1,000. The counting camera can only be used to count the number of passengers, not for monitoring, which is a waste of resources. In addition, the calculation of the number of people in the vehicle can be achieved through a fare validator It is recommended to cancel it.	Not agreed.
219.	Driver Displays And On-Board CCTV Cameras:- AI CAMERAS: DMS (Driver Behavior Monitoring System) x1 Driver behavior monitoring is an independent system, which increases additional vehicle costs. Also, there are already relevant cameras in the vehicle to monitor the driver's area. It is recommended to cancel it.	Not agreed.
220.	Fare Validator:- All relevant functional SDK's and API's, including open loop SDKs along with their documentation (complete in all aspects) in English language must be provided with Local/International support but not limited to Android. The supplier can only provide Android SDK, and other system SDKs are not available. Please note this.	Not agreed. Please note that it is clearly mentioned in the RFP clause 9.16 that the required SDKs are not limited to Android.
221.	Fare Validator:- Payment Application: Complete functional payment application must be provided by supplier. EMV L3 support must be ensured by the supplier and ensure all Level 3 cases are passed. EMV L3 should be provided by software provider/operator Please delete this.	Yes, the EMV L3 certification is the responsibility of the Purchaser however, the support should be ensured by the bidder in order to achieve the EMV L3 certification.
222.	Fare Validator:- All supplied AFC items (including hardware, software, networking, fare media etc.) should be integrable/compatible with third party Mobile application both Android & IOS. The software side of AFC item should belong to software service provider. Please amend this.	All the Android & IOS applications will be developed by the ITS company. However, if any support regarding integrating the hardware with the ITS company software's shall be the responsibility of the bidder.
223.	Fare Validator:- Note: Equipment will be covered under 02 (two) years standard manufacturer's warranty. QTY: 2 for each door. According to the previous Punjab Province's first batch of	The required quantity shall be considered as "2 fare validators for each bus". The warranty of all ITS equipment shall remain valid for 2 years.

	green bus projects and other RFP projects, the fare validator has a one-year warranty period; and only one fare validator is required to be installed at each door; Please amend this. "Equipment will be covered under 01 (one) year standard manufacturer's warranty; QTY:1 for each door"	
224.	Driver Console:- GPS: High sensitivity GPS module with external antenna For GPS modules, OEM only can provide internal antennas. Please amend this.	Not agreed.
225.	Driver Console:- SAM slots : ISO 7816 SAM slots x 1 The supplier cannot provide this SAM slot. The application is not currently supported. Please delete this.	Agreed.
226.	Driver Console:- Operating System : Android 9.0 or above Currently, for driver console, the Android 9 or above version of operating system are under development. The highest version currently available on the market is Android 7. Relevant manufacturers can develop Android 14 version roughly in August this year. Please amend this to Android 7; If the project is implemented after August, the demand can be satisfied.	Not agreed.
227.	MDM mobile Device Management/ Terminal Management System:- A remote device management system required for configuration and installations, deployed locally. All devices must be pre-configured in the system in groups. For this remote device management system, if it belong to the scope of software, OEM can not provide this software system. Please clarify this system.	Please note that the scope is not related to the software which is developed by the ITS company. The Mobile Device Management/ Terminal Management System is required for configuration / installation deployed locally. Therefore, the required Mobile Device Management/ Terminal Management System is essential and the bidder shall ensure the features required for such activities.
228.	Provision Of Testing Hardware:- Four (04) sets as per above specifications complete hardware set with all relevant functional SDKs, APIs and SDK documentation complete in all aspects i.e. all cables and accessories, simulators, are required within 30 days after the issuance of Work Order. OEMs can provide standard SDK files that from hardware manufacturer. OEM are not responsible for any functional upgrades, which should be provided by software providers; and OEMs can only provide Android SDKs. Please amend this, the one (01) set complete hardware with basic and standard	Not agreed.



	SDKs could be provided	
229.	All functions involving software development/upgrades should be provided by software service providers/operators; OEM can provide hardware but not be responsible for subsequent software development and upgrades. Please clarify the division of responsibilities between OEM and software operation provider.	Please refer to the Terms & Conditions defined in the RFP Documents.
230.	CLARIFICATION	<p>Paragraph 2 of the Form of Bid Security for all three (03) request for proposals shall be amended as follows:</p> <p><i>"KNOW ALL PEOPLE by these presents that We [name of bank] of [name of country], having our registered office at [address of bank] (hereinafter called "the Bank"), are bound unto the "Masstransit Authority Non-Fare Revenue (NFR) Fund Account" operated by the Punjab Masstransit Authority (hereinafter called "the Procuring Agency") in the sum of USD [insert amount of Bid Security in numerals] (United States Dollars [insert amount of Bid Security in words] Only) for which payment well and truly to be made to the said Procuring Agency, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ____ day of _____ 20____."</i></p> <p>Furthermore, please note that no other changes shall be made to the Form of Bid Security unless acceptable by the Procuring Agency</p>
231.	CLARIFICATION	<p>Please note that paragraph 3 under "1.1.11 – Driver Training Program" – "Section 1: Specification Components" of 12 meter buses of Section 3.1. (Technical Specifications) of Section – III: Technical Specifications for the city of Multan shall stand amended as:</p> <p>"Approximately 110 vehicle drivers over a period of four months. Each trainee shall spend at least 8 hours in the actual road testing of a vehicle during the course of the training program."</p>

232.	CLARIFICATION	<p>Please note that the following shall stand inserted in the Technical Specifications for the 12m buses for all the cities of Lahore, Rawalpindi & Multan.</p> <p>Warranty - Two (02) year warranty will be provided by the supplier required by the document. Further, the supplier must provide 5% hardware as a backup in the ITS inventory of the procuring agency during the warranty period. The supplier must maintain the threshold of 5% parts or minimum threshold as mentioned in the spare part ITS hardware inventory and should replace faulty/damaged parts within the time period prescribed in the Contract. If the supplier will fail to replace the faulty/damaged part within the time period prescribed in the Contract then the penalty will be imposed to the supplier as per terms and conditions agreed in the Contract.</p>
233.	CLARIFICATION	<p><u>Intelligent Transportation System (ITS)</u></p> <p>Please note that in Category “Driver Console” of Section 9: “Intelligent Transportation System (ITS)” of specification for 9-m vehicles & 12-m vehicles of Section III “Technical Specifications” of RFP, the minimum hardware specifications for Section “Display”, the resolution mentioned as “720p 1280*800 min” shall be amended as “720p 1280*720 min”</p> <p>Please note that in Category “Charging Management System Camera” of Section 9: “Intelligent Transportation System (ITS)” of specification for 9-m vehicles & 12-m vehicles of Section III “Technical Specifications” of RFP, the local data storage requirement of 128 GB shall be amended as “128 MB”</p> <p>Please note that in Section 9: “Intelligent Transportation System (ITS)” of specification for 9-m vehicles & 12-m vehicles of Section III “Technical Specifications” of RFP, , following new section is added:</p>



		<p><i>“The Supplier/OEM of the ITS hardware must ensure the presence of their purely technical resource in Pakistan for technical support to representative designated by Procuring Agency for the Hardware integrations , SDK’s functionality test support , open loop payment system integrations and any other technical support which is required by representative designated by Procuring Agency for hardware integration.”</i></p>
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ANNEXURE A – REVISED LIST OF SPARE PARTS & TOOLS FOR LAHORE, MULTAN & RAWALPINDI

LAHORE 9M BUSES – SPARE PARTS

LAHORE 9M VEHICLES	
BUS PART	QUANTITY TO BE PROVIDED AT THE END OF THE TERM
Full Battery Pack For Electric Propulsion System (Complete Set For Bus)	1
Complete brake assembly (excl. Axles)	5
Disc Brake Pads	15
Touch-Up Paint For All Colors Used On The Vehicle (Quantity In Litters)	15
Full Windscreen Assembly	3
Side Window Glass Unit (Complete Set For Bus)	3
Head Lamp Assembly, Including Globes (2 Lamps Per Set)	6
Rear Brake Light / Indicator Light Assembly, Including Globes (2 Assemblies Per Set, Left And Right)	6
Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set)	12
Wiper Blades (2 Per Set)	35
Interior Light Globes	15



Full Seat Assembly (Complete Set For Bus)	2
Back And Bottom Seat Cushion Set (Complete Set For Bus)	2
Floor Cover Material (Quantity In Square Meters)	6
Door Assembly (Including Doors, Valves, Switches)	2
Interior Partition Wall / Advertising Unit	3
Wheel Unit	3
Electric Motors (Complete Set For Bus)	3
Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Condenser Assembly, etc.)	4
Vehicle Logic Unit (VLU)	4
Driver Data Terminal (DDT)	4
Digital Video Recorder (DVR)	4
Door Opening And Closing Synchronization Unit	4
CCTV Cameras (6x AI , 6x Passenger count, 6x Dash cam, 6x Surveillance, 6x rear, 6x front)	15
Interior Variable Messaging Display Unit	4
Infotainment Display Unit	4
Spare Wheel	1 per bus

LAHORE 9M – LIST OF TOOLS

TOOLS	QUANTITY TO BE PROVIDED
Air chisel	1
Air drill	2
Air grinder	2
Air gauge kit – brake system	1
Air riveter	2
Battery charger	1
Battery load tester	1
Bench grinder	2
Bench vice	2
Bottle jacks	2
CO2-welder	1
Creepers	2

Drill press	1
Electric drill	1
Electric grinder	1
Electric shear	1
Electric steel cutter	1
Extension leads	2
Floor material welder	1
Gas welder	1
Headlight tester/adjuster	1
Heavy duty socket set (multiple sizes, as required)	1
Hydrometer	2
Impact screw driver	1
Impact wrench, large size	1
Impact wrench, medium size	1
Impact wrench, small size	2
King pin press	1
Lead lights	6
Magnetic base and gauge	1
Metal sheet bender	1
Micrometer set	1
Multimeter	2
Paint heat kit	1
Polisher	1
Portable arc welder	1
Portable gas welder	1
Power jack (60 ton)	2
Puller set	1
Radiator pressure tester	1
Refractometer – antifreeze tester	2
Sander	1
Spray gun	1
Torque wrench 0-60 Nm	1
Torque wrench 201-450 Nm	1

Torque wrench 451-800 Nm	2
Torque wrench 61-200 Nm	1
Transmission jack (1000 kg)	1
Tire hammer	1
Tire stripping and fitting kit (Tire Changing Machine)	1
Vernier set	1
Wheel stopper blocks	6
Wheel Alignment Machine	1
Diagnostic Equipment Set (As mentioned in Detailed Specifications above)	1

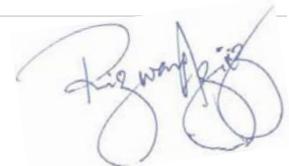
A handwritten signature in blue ink, appearing to read "Rizwan Khan", is located in the bottom right corner of the page.

LAHORE 12M BUSES – SPARE PARTS

LAHORE 12M VEHICLES	
BUS PART	QUANTITY TO BE PROVIDED AT THE END OF THE TERM
Full Battery Pack For Electric Propulsion System (Complete Set For Bus)	4
Complete brake assembly (excl. Axles)	20
Disc Brake Pads	50
Touch-Up Paint For All Colors Used On The Vehicle (Quantity In Litters)	50
Full Windscreen Assembly	10
Side Window Glass Unit (Complete Set For Bus)	10
Head Lamp Assembly, Including Globes (2 Lamps Per Set)	20
Rear Brake Light / Indicator Light Assembly, Including Globes (2 Assemblies Per Set, Left And Right)	20
Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set)	40
Wiper Blades (2 Per Set)	120
Interior Light Globes	60
Full Seat Assembly (Complete Set For Bus)	11
Back And Bottom Seat Cushion Set (Complete Set For Bus)	11
Floor Cover Material (Quantity In Square Meters)	20
Door Assembly (Including Doors, Valves, Switches)	8
Interior Partition Wall / Advertising Unit	8
Wheel Unit	8
Electric Motors (Complete Set For Bus)	8
Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Condenser Assembly, etc.)	8
Vehicle Logic Unit (VLU)	12
Driver Data Terminal (DDT)	12
Digital Video Recorder (DVR)	12
Door Opening And Closing Synchronization Unit	12
CCTV Cameras (6x AI , 6x Passenger count, 6x Dash cam, 6x Surveillance, 6x rear, 6x front)	60
Interior Variable Messaging Display Unit	12
Infotainment Display Unit	12
Spare Wheel	1 per Bus

LAHORE 12M – LIST OF TOOLS

TOOLS	QUANTITY TO BE PROVIDED
Air chisel	2
Air drill	4
Air grinder	4
Air gauge kit – brake system	1
Air riveter	2
Battery charger	2
Battery load tester	2
Bench grinder	4
Bench vice	4
Bottle jacks	4
CO2-welder	1
Creepers	21
Drill press	1
Electric drill	2
Electric grinder	2
Electric shear	2
Electric steel cutter	2
Extension leads	4
Floor material welder	1
Gas welder	2
Headlight tester/adjuster	1
Heavy duty socket set (multiple sizes, as required)	2
Hydrometer	4
Impact screw driver	2
Impact wrench, large size	2
Impact wrench, medium size	2
Impact wrench, small size	4
King pin press	2



Lead lights	12
Magnetic base and gauge	2
Metal sheet bender	1
Micrometer set	2
Multimeter	4
Paint heat kit	2
Polisher	2
Portable arc welder	2
Portable gas welder	2
Power jack (60 ton)	4
Puller set	2
Radiator pressure tester	1
Refractometer – antifreeze tester	4
Sander	2
Spray gun	2
Torque wrench 0-60 Nm	2
Torque wrench 201-450 Nm	2
Torque wrench 451-800 Nm	4
Torque wrench 61-200 Nm	2
Transmission jack (1000 kg)	2
Tire hammer	2
Tire stripping and fitting kit (Tire Changing Machine)	2
Vernier set	2
Wheel stopper blocks	12
Wheel Alignment Machine	2
Diagnostic Equipment Set (As mentioned in Detailed Specifications above)	2

RAWALPINDI 9M BUSES – SPARE PARTS

RAWALPINDI 9M VEHICLES	
BUS PART	QUANTITY TO BE PROVIDED AT THE END OF THE TERM
Full Battery Pack For Electric Propulsion System (Complete Set For Bus)	2



Complete brake assembly (excl. Axles)	20
Disc Brake Pads	30
Touch-Up Paint For All Colors Used On The Vehicle (Quantity In Litters)	30
Full Windscreen Assembly	8
Side Window Glass Unit (Complete Set For Bus)	8
Head Lamp Assembly, Including Globes (2 Lamps Per Set)	12
Rear Brake Light / Indicator Light Assembly, Including Globes (2 Assemblies Per Set, Left And Right)	12
Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set)	20
Wiper Blades (2 Per Set)	60
Interior Light Globes	30
Full Seat Assembly (Complete Set For Bus)	3
Back And Bottom Seat Cushion Set (Complete Set For Bus)	3
Floor Cover Material (Quantity In Square Meters)	12
Door Assembly (Including Doors, Valves, Switches)	5
Interior Partition Wall / Advertising Unit	5
Wheel Unit	5
Electric Motors (Complete Set For Bus)	5
Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Condenser Assembly, etc.)	5
Vehicle Logic Unit (VLU)	6
Driver Data Terminal (DDT)	6
Digital Video Recorder (DVR)	6
Door Opening And Closing Synchronization Unit	6
CCTV Cameras	30
Interior Variable Messaging Display Unit	6
Infotainment Display Unit	6
Spare Wheel	1 per Bus

RAWALPINDI 9M – LIST OF TOOLS

TOOLS	QUANTITY TO BE PROVIDED
Air chisel	1
Air drill	2
Air grinder	2
Air gauge kit – brake system	1
Air riveter	2
Battery charger	1
Battery load tester	1
Bench grinder	2
Bench vice	2
Bottle jacks	2
CO2-welder	1
Creepers	2
Drill press	1
Electric drill	1
Electric grinder	1
Electric shear	1
Electric steel cutter	1
Extension leads	2
Floor material welder	1
Gas welder	1
Headlight tester/adjuster	1
Heavy duty socket set (multiple sizes, as required)	1
Hydrometer	2
Impact screw driver	1
Impact wrench, large size	1
Impact wrench, medium size	1



Impact wrench, small size	2
King pin press	1
Lead lights	6
Magnetic base and gauge	1
Metal sheet bender	1
Micrometer set	1
Multimeter	2
Paint heat kit	1
Polisher	1
Portable arc welder	1
Portable gas welder	1
Power jack (60 ton)	2
Puller set	1
Radiator pressure tester	1
Refractometer – antifreeze tester	2
Sander	1
Spray gun	1
Torque wrench 0-60 Nm	1
Torque wrench 201-450 Nm	1
Torque wrench 451-800 Nm	2
Torque wrench 61-200 Nm	1
Transmission jack (1000 kg)	1
Tire hammer	1
Tire stripping and fitting kit (Tire Changing Machine)	1
Vernier set	1
Wheel stopper blocks	6
Wheel Alignment Machine	1
Diagnostic Equipment Set (As mentioned in Detailed Specifications above)	1

MULTAN 9M BUSES – SPARE PARTS

MULTAN 9M VEHICLES	
BUS PART	QUANTITY TO BE PROVIDED AT THE END OF THE TERM
Full Battery Pack For Electric Propulsion System (Complete Set For Bus)	1
Complete brake assembly (excl. Axles)	5
Disc Brake Pads	15
Touch-Up Paint For All Colors Used On The Vehicle (Quantity In Litters)	15
Full Windscreen Assembly	3
Side Window Glass Unit (Complete Set For Bus)	3
Head Lamp Assembly, Including Globes (2 Lamps Per Set)	6
Rear Brake Light / Indicator Light Assembly, Including Globes (2 Assemblies Per Set, Left And Right)	6
Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set)	12
Wiper Blades (2 Per Set)	35
Interior Light Globes	15
Full Seat Assembly (Complete Set For Bus)	2
Back And Bottom Seat Cushion Set (Complete Set For Bus)	2
Floor Cover Material (Quantity In Square Meters)	6
Door Assembly (Including Doors, Valves, Switches)	2
Interior Partition Wall / Advertising Unit	3
Wheel Unit	3
Electric Motors (Complete Set For Bus)	3
Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Condenser Assembly, etc.)	4
Vehicle Logic Unit (VLU)	4
Driver Data Terminal (DDT)	4
Digital Video Recorder (DVR)	4

Door Opening And Closing Synchronization Unit	4
CCTV Cameras	15
Interior Variable Messaging Display Unit	4
Infotainment Display Unit	4
Spare Wheel	1 per Bus

MULTAN 9M – LIST OF TOOLS

TOOLS	QUANTITY TO BE PROVIDED
Air chisel	1
Air drill	2
Air grinder	2
Air gauge kit – brake system	1
Air riveter	2
Battery charger	1
Battery load tester	1
Bench grinder	2
Bench vice	2
Bottle jacks	2
CO2-welder	1
Creepers	2
Drill press	1
Electric drill	1
Electric grinder	1
Electric shear	1
Electric steel cutter	1
Extension leads	2
Floor material welder	1
Gas welder	1

Headlight tester/adjuster	1
Heavy duty socket set (multiple sizes, as required)	1
Hydrometer	2
Impact screw driver	1
Impact wrench, large size	1
Impact wrench, medium size	1
Impact wrench, small size	2
King pin press	1
Lead lights	6
Magnetic base and gauge	1
Metal sheet bender	1
Micrometer set	1
Multimeter	2
Paint heat kit	1
Polisher	1
Portable arc welder	1
Portable gas welder	1
Power jack (60 ton)	2
Puller set	1
Radiator pressure tester	1
Refractometer – antifreeze tester	2
Sander	1
Spray gun	1
Torque wrench 0-60 Nm	1
Torque wrench 201-450 Nm	1
Torque wrench 451-800 Nm	2
Torque wrench 61-200 Nm	1
Transmission jack (1000 kg)	1
Tire hammer	1

Tire stripping and fitting kit (Tire Changing Machine)	1
Vernier set	1
Wheel stopper blocks	6
Wheel Alignment Machine	1
Diagnostic Equipment Set (As mentioned in Detailed Specifications above)	1

MULTAN 12M BUSES – SPARE PARTS

MULTAN 12M VEHICLES	
BUS PART	QUANTITY TO BE PROVIDED AT THE END OF THE TERM
Full Battery Pack For Electric Propulsion System (Complete Set For Bus)	1
Complete brake assembly (excl. Axles)	6
Disc Brake Pads	18
Touch-Up Paint For All Colors Used On The Vehicle (Quantity In Litters)	18
Full Windscreen Assembly	4
Side Window Glass Unit (Complete Set For Bus)	4
Head Lamp Assembly, Including Globes (2 Lamps Per Set)	7
Rear Brake Light / Indicator Light Assembly, Including Globes (2 Assemblies Per Set, Left And Right)	7
Exterior Wing Mirrors (Arms And Mirrors, Left And Right Mirrors Per Set)	12
Wiper Blades (2 Per Set)	30
Interior Light Globes	15
Full Seat Assembly (Complete Set For Bus)	2
Back And Bottom Seat Cushion Set (Complete Set For Bus)	2
Floor Cover Material (Quantity In Square Meters)	6
Door Assembly (Including Doors, Valves, Switches)	3
Interior Partition Wall / Advertising Unit	3
Wheel Unit	3

Electric Motors (Complete Set For Bus)	3
Air Conditioning Unit (Complete Set For Bus Incl. Pipes, Compressor, Condenser Assembly, etc.)	3
Vehicle Logic Unit (VLU)	4
Driver Data Terminal (DDT)	4
Digital Video Recorder (DVR)	4
Door Opening And Closing Synchronization Unit	4
CCTV Cameras	18
Interior Variable Messaging Display Unit	4
Infotainment Display Unit	4
Spare Wheel	1 per Bus

MULTAN 12M – LIST OF TOOLS

TOOLS	QUANTITY TO BE PROVIDED
Air chisel	1
Air drill	2
Air grinder	2
Air gauge kit – brake system	1
Air riveter	2
Battery charger	1
Battery load tester	1
Bench grinder	2
Bench vice	2
Bottle jacks	2
CO2-welder	1
Creepers	2
Drill press	1
Electric drill	1

Electric grinder	1
Electric shear	1
Electric steel cutter	1
Extension leads	2
Floor material welder	1
Gas welder	1
Headlight tester/adjuster	1
Heavy duty socket set (multiple sizes, as required)	1
Hydrometer	2
Impact screw driver	1
Impact wrench, large size	1
Impact wrench, medium size	1
Impact wrench, small size	2
King pin press	1
Lead lights	6
Magnetic base and gauge	1
Metal sheet bender	1
Micrometer set	1
Multimeter	2
Paint heat kit	1
Polisher	1
Portable arc welder	1
Portable gas welder	1
Power jack (60 ton)	2
Puller set	1
Radiator pressure tester	1
Refractometer – antifreeze tester	2
Sander	1
Spray gun	1

Torque wrench 0-60 Nm	1
Torque wrench 201-450 Nm	1
Torque wrench 451-800 Nm	2
Torque wrench 61-200 Nm	1
Transmission jack (1000 kg)	1
Tire hammer	1
Tire stripping and fitting kit (Tire Changing Machine)	1
Vernier set	1
Wheel stopper blocks	6
Wheel Alignment Machine	1
Diagnostic Equipment Set (As mentioned in Detailed Specifications above)	1

A handwritten signature in blue ink, appearing to read "Rizwan Khan", is located in the bottom right corner of the page.

ANNEXURE B – REVISED CHECKLIST FOR LAHORE, MULTAN & RAWALPINDI

SR. #	DETAIL	APPLICABILITY	RESPONSIVE	NON-RESPONSIVE
1	Original receipt for purchase of tender along with Standard Bidding Documents.	No		
2	All required samples (if demanded) have been submitted in the Punjab Masstransit Authority sample store.	No		
3	Bid Form (as per FORM 8.1 – BID FORM of Bidding documents) on letter head of the firm, duly signed and stamped.	Yes		
4	Bidder's JV Members Form (as per FORM 8.2 – BIDDER'S JV MEMBERS FORM of Bidding documents) on letter head of the firm, duly signed and stamped.	No		
5	Manufacturer's Authorization Form (as per FORM 8.3 – MANUFACTURER'S AUTHORIZATION FORM of Bidding documents) on letter head of the firm, duly signed and stamped.	Yes		
6	Bidder Profile Form (as per FORM 8.4 – BIDDER PROFILE FORM of Bidding documents) on letter head of the firm duly signed and stamped.	Yes		
7	General Information Form (as per FORM 8.5 – GENERAL INFORMATION FORM of Bidding documents) on letter head of the firm duly signed and stamped.	Yes		
8	Affidavit (as per FORM 8.6 – AFFIDAVIT of Bidding documents) on letter head of the firm, duly signed and stamped.	No		
9	Performance Guarantee Form (as per FORM 8.7 – PERFORMANCE GUARANTEE FORM of Bidding documents) on letter head of the firm, duly signed and stamped.	Yes <i>(For successful bidder only after Tender Award)</i>		

10	Technical Bid Form (as per FORM 8.8 – TECHNICAL BID FORM of Bidding documents) on letter head of the firm, duly signed and stamped.	Yes		
11	Price schedule / Financial form (as per FORM 8.10 – FINANCIAL BID FORM of Bidding Documents) on letter head of the firm duly signed and stamped.	Yes		
12	Bid Security amounting to 1) <i>USD 175,000/- (United States Dollars One Hundred Seventy-Five Thousand Only) for Lahore;</i> 2) <i>USD 175,000/- (United States Dollars One Hundred Seventy-Five Thousand Only) for Multan; and</i> 3) <i>USD 175,000/- (United States Dollars One Hundred Seventy-Five Thousand Only) for Rawalpindi,</i> (as per FORM 8.11 – FORM OF BID SECURITY of Bidding Documents).	Yes		

CLARIFICATION MEETING

ANNEXURE-2

- INTERNATIONAL TENDER FOR HIRING OF ORIGINAL EQUIPMENT MANUFACTURERS (OEMs) FOR:**
- i. INDUCTION OF E - BUSES IN PUNJAB & INDUCTION OF ECO-FRIENDLY (EV) BUSES IN LAHORE (9 METERS & 12 METERS)**
 - ii. INDUCTION OF ECO-FRIENDLY (EV) BUSES IN RAWALPINDI**
 - iii. INDUCTION OF ECO-FRIENDLY (EV) BUSES IN MULTAN**

BIDDERS ATTENDANCE SHEET

Place: PTC Office, 1st Floor, EOBI Building, #66,
Shahrah Nazria Pakistan, near Ayyub Chowk, Johar
Town, Lahore

Date: 10/04/2025

Time: 11:00 AM

Sr. No.	Name of Organization with JV Partner (If any)	Representative's Name & Designation	Contact No.	Email Address	Signature
1	BUD AND SAPPHIRE ENERGY LTD.	A. J. BILAL	0300-8154116	jauder.bilal40@ktmail.com	A. J. Bilal
2	KING LONG - VPL Limited	Badar Khawar Country Manager VPL	0300844301	badar.khawar@panasiangroup.com	Badar Khawar
3	Zong tong Buses	Saif ur Ra	03334417711		Saif ur Ra
4	Zhong tong Buses	Zhang Aoyun	03159182541		Zhang Aoyun
5	Zhong tong Bus	CHEN LIDE	03159182439	chenlide@zhongtong.com	Chen Lide
6	Yutong Bus Co., Ltd	Adnan Qayyum	0300-8498006	adnan.yutong@gmail.com	Adnan Qayyum
7	Yutong Bus Co. Ltd	Dylan	03138888717	wangdongf@yutong.com	Dylan
8					