# TENDERERS' REQUESTS FOR CLARIFICATIONS TO THE SUPPLY TENDER DOSSIER AND RESPONSES OF THE CONTRACTING AUTHORITY (No.1)

**Contract Title:** Supply of Equipment for Mersin ITS SAP

Publication Ref.: EC-NEAR/ANK/2024/EA-OP/0047

# **QUESTION-1:**

We hereby kindly request three weeks of time extension for deadline of bid submission date to submit more competitive and comprehensive proposal. Due to the scope and volume of the technical and administrative documents to be submitted with the bid, the requested extension of time is crucial for us to ensure that our bid complies with the specification requirements. We kindly ask you for your understanding.

# ANSWER-1:

The deadline for submission of tenders remains unchanged as stated in the Contract Notice. No extension of time is granted.

# **QUESTION-2:**

We request that the required job completions for the tender (At least one contract with a budget of at least 5,000,000.00 Euros, or two contracts each with a budget of at least 3,500,000.00 Euros) not only cover electric buses but also include electric, diesel, and CNG buses.

# **QUESTION-3:**

# Lot 1-IT Equipment & Software, 3. Technical capacity

# Specification Text

(based on items 5 and 6 of the request to participate form for service contracts and on items 5 and 6 of the tender form for supply contracts). The reference period which will be taken into account will be the last three years from submission deadline. The tenderer has delivered supplies (proportion carried out by the candidate) under at least one contract with a budget of at least EUR 500.000,00 or at least two contracts with a budget of at least EUR 250.000,00 each in supply IT Equipment and Software implemented during the reference period

# Requested Change Notes

We request that the work stoppage is not only for electric buses and/or to be replaced with diesel, CNG buses.

# ANSWER-2 and 3:

The selection criteria remains unchanged as stated in the Article 16 of the Additional Information about the Contract Notice.

# **QUESTION-4:**

INSTRUCTIONS TO TENDERERS, 20. Evaluation of tenders, 20.6

# Existing version of article:

The sole award criterion will be the price. The contract will be awarded to the lowest compliant tender.

# Proposed version of article:

The contract will be awarded by using scoring criteria for each of the below points: - vehicle price - energy consumption (SORT 2) - pre-conditioning - Battery fire prevention / warning system - Driving assistance systems - Charge management system

<u>Reason</u>: To procure the goods of the highest quality at the most affordable price, the selection criterion set out in this article can be diversified in terms of passenger and environmental safety and the total cost of ownership. When the life time of a bus is considered as min. 10 years, it is not for the benefit of the Administration if the pricing is set out as the only criterion. Following evaluation criteria can be added to the tender book: Energy consumption, charge management systems, driving assistance systems, lifetime of buses, availability of spare parts, total cost of ownership and performance of the batteries.

# **ANSWER-4:**

The procedure for the evaluation of tenders remains unchanged as defined in Article 20 of the Instructions to Tenderers.

# **QUESTION-5:**

The electric bus and charging station implementation period is given as 330 days. We demand that it be changed to 360 days.

# **ANSWER-5:**

The implementation period for LOT 3 remains unchanged as stated in the Tender Dossier.

# **QUESTION-6:**

We would like to clarify the below mentioned subjects; - How can we send you our questions about the administrative and technical specifications and contract draft regarding the tender in question? Via e-mail, or through EU Funding&Tender's portal? - By what means should our requests for changes regarding tender documents (technical and administrative) be conveyed to you? Via e-mail, post, or through EU Funding&Tender's portal? - All documents of the tender have been read carefully by us. Our company requests changes in technical and administrative matters. Should these change requests be submitted by hand or by mail? Should it be transmitted electronically? - Will there be additional documents that you would like to be sent in addition to our requests for changes in technical or

administrative matters? We would like to present this matter to your information for your assistance and support in answering our questions above.

# ANSWER-6:

Please refer to Article 21 (Clarifications on the contract notice) of the Additional information about the Contract Notice and Article 13 (Additional information before the deadline for submission of tenders) of the Part A. Instructions to Tenderers.

# **QUESTION-7:**

We have a question regarding the mentioned in the tender document.

- Is it possible to submit a bid with itemized breakdowns within the lot?
- Are the proposed products expected to fully comply with the specifications?
- Can we submit a bid indicating the non-compliant parts?

# ANSWER-7:

- Please refer to the Part 2: Financial offer in the Article 11 of the Instructions to Tenderers in the Tender Dossier.
- Please refer to the Article 20 of the Instructions to Tenderers in the Tender Dossier.

# **QUESTION-8:**

One of the most widely used standards for companies operating in the global market is IFRS, that is, International Financial Reporting Standards. In Turkey, Turkish Financial Reporting Standards (TFRS) are applied. TFRS is the version of IFRS adapted to Turkish legislation and contains some minor differences. These differences are due to special tax obligations and regulations in our country. Our company is a joint stock company operating in four different countries and traded on the stock exchange. In order for shareholders both at home and abroad to understand our balance sheet correctly, reporting determined by IFRS is made. Will the balance sheet determined in accordance with the Tax Procedure Law in the bidder's country be used to determine economic and financial capacity? Will the figures in the balance sheet determined by IFRS be used?

# ANSWER-8:

For assessing economic and financial capacity, financial statements prepared according to your country's accounting standards. However, balance sheets prepared in accordance with IFRS will also be accepted. In this case, it is important to specify and explain the differences between the two standards (local financial reporting standards and IFRS). Relevant documents should be appropriately submitted and verifiable.

# FOR LOT 3

# **QUESTION-9:**

To Contracting Authority, In Technical specifications document of the electric bus for LOT 3 it is mentioned that "The battery shall be Li-ion LFP or LTO." with point 3.1.3.2. Lithium-ion batteries with NMC technologies offer a balanced overall package of competitive costs, high energy densities, long service life and high operational reliability. They are therefore very popular with manufacturers of electric cars. MAN is also relying on Li-ion NMC technology in the Lion's City E. MAN is currently the market leader of Europe regarding electric buses and this was achieved by using NMC type batteries that has proved itself on the field. Due to their lower energy densities, LFP or LTO batteries are not suitable for use in the MAN Lion's City E. Therefore, inclusion of NMC type batteries in the technical specifications will directly affect our decision to participate in this tender. We are awaiting your response on the matter.

# **QUESTION-10:**

NMC batteries are smaller in size than LFP batteries, contain a higher capacity density and the higher density means they can store more energy in a given volume or weight. They perform better than LFP batteries for situations requiring high voltage and power. NMC batteries also perform better at low temperatures. In order to increase the competition between manufacturers in the tender, is it appropriate for the authority to change the clause specified as "The battery shall be Li-on types; LFP or LTO" specification article as follows?

The battery shall be Li-on types; NMC, LFP or LTO.

# **QUESTION-11:**

Specification text 3.1.3.2 The battery shall be Li-ion types; LFP or LTO. Explanation Battery packs with Lithium Ion based NMC, NCM, LFP chemistries are used to meet long range demands in electric buses with a single charge. Due to its energy density, LTO chemical is not suitable for long-range electric buses on a single charge. Therefore, we request the addition of Lithium-based NMC Batteries. All battery packages are produced and certified in accordance with the ECE R100 standard. Therefore, safety levels are equal for every chemical. We request that the item be as follows:

The battery shall be Li-ion types; LFP, or NMC.

# **QUESTION-12:**

Type of batteries used: NMC Technologie accepted in Li-Ion LFP or LTO: 3.1.3.2. The battery shall be Li-ion types; LFP or LTO. Question: This requirement is preventing companies who use superior NMC battery technology (mainly European suppliers) to attend the tender and prevent fair competition. Please confirm if NMC batteries are accepted.

# **QUESTION-13:**

ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER, 3.1.3. Energy Storage System (ESS) Battery, 3.1.3.2

# Existing version of article:

The battery shall be Li-ion types; LFP or LTO.

# Proposed version of article:

The battery shall be Li-ion types; LFP, LTO or NMC.

<u>Reason:</u> Several bus producers are using NMC type of batteries in their e-buses. Not allowing NMC batteries will result in disqualification of several manufacturers and this will reduce the competition at the tender. NMC batteries have better energy density per kg, which enables customers to reach the desired range in their daily operations with a reduced charging cycle. In addition, there are more than two thousand e-buses with NMC batteries running throughout the world without customer complaints.

# ANSWER-9 to 13:

The Specification 3.1.3.2 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-14:**

In Article 3.1.16.6 of the tender technical specifications, the phrase "Vehicles shall be equipped with rain sensors" was requested. "Since urban public transportation vehicles are used within a certain speed limit range, the rain sensor request will increase costs. We request that the relevant article be removed for the benefit of your Ministry and the municipality that will use the vehicle

# ANSWER-14:

The Specification 3.1.16.6 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-15:**

In Article 3.1.24.1 of the tender technical specifications "The bus shall be equipped with low voltage batteries with a minimum capacity of 2x12V and 200Ah each" was requested. Low-voltage batteries of at least 150 Ah may also be sufficient for efficient operation of electric buses. In the interest of the administration, we propose to reduce the capacity.

# ANSWER-15:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-16:**

In article 3.1.26.1 of the tender technical specifications, it was requested that "There shall be a foldable type ramp system electrically operated by the driver's ramp on the second door that allows orthopedically disabled passengers to enter and exit the bus". 'Considering the geographical conditions, road routes and sidewalk heights of our country and the region where the relevant municipality is located, it is foreseen that the use of electric ramps will not be healthy and will cause malfunctions (risk of hitting the sidewalk,

the possibility of rain, mud, stones, etc. entering the system gaps). We recommend changing to manual ramps for the benefit of the administration.

# **QUESTION-17:**

Specification text 3.1.26.1 There shall be a foldable type of ramp system that is operated electrically by the driver ramp on the second door that enables orthopedically disabled passengers to enter and exit the bus. Explanation It is not recommended because the reliability and technical adequacy of electrically controlled ramps cannot be ensured in low-floor vehicles, which will reduce the usage rate during operation. The driver or one of the passengers can open the ramp very simply and quickly thanks to the latch on the ramp. Safe use is ensured by using the necessary sensors. Manual ramping is recommended. We request that the item be as follows: There will be a manual foldable type ramp system at the second door, which will allow orthopedically disabled passengers to get on and off the bus.

#### ANSWER-16 and 17:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-18:**

In article VII. Warranty Requirements of the tender technical specifications; Item 3.1 and 3.2 shall be under warranty by the contractor for at least 5 (five) years. All kinds of repairs, maintenance, and tire operations (including replacement and puncture repair) of the vehicles during the 5-year warranty period shall be the responsibility of the contractor and related costs shall be borne by the contractor. Etc. Tire repair is a condition caused by external factors and should not be covered by the warranty. The cost is unpredictable.

For this reason, we request the following change and is the contractor responsible from supply tires?

Item 3.1 and 3.2 shall be under warranty by the contractor for at least 5 (five) years. All kinds of repairs, maintenance, and tire operations (replacement) of the vehicles during the 5-year warranty period shall be the responsibility of the contractor and related costs shall be borne by the contractor.

#### **QUESTION-19:**

In article VII. Warranty Requirements of the tender technical specifications; Item 3.1 and 3.2 shall be under warranty by the contractor for at least 5 (five) years. All kinds of repairs, maintenance, and tire operations (including replacement and puncture repair) of the vehicles during the 5-year warranty period shall be the responsibility of the contractor and related costs shall be borne by the contractor. The entire body and body parts of the vehicle (chassis and frame, seat frame, etc.) shall have a 10-year warranty from the provisional acceptance against wear, rust, corrosion and paint defects. Only original or approved by the manufacturer(s) spare parts should be used in any repair service. The contractor shall keep an adequate stock of original spare parts to ensure smooth operation during the repair and maintenance processes of the vehicles. All kinds of spare parts, and consumables (except vehicle tires), shall be covered by the warranty. The equipment needed for maintenance and repair operations of the

bus, such as control, test equipment, diagnostic device for electric motors and gearbox, vehicle-specific hand tools, etc., shall be delivered to MMM as "2 set for 14 vehicles" 1 (one) year before the warranty end date. was requested.

Tire repair is a condition caused by external factors and should not be covered by the warranty. The cost is unpredictable. For this reason, we request the following change.

# VII. Warranty requirements

Item 3.1 and 3.2 shall be under warranty by the contractor for at least 5 (five) years. All kinds of repairs, maintenance, and tire operations (replacement) of the vehicles during the 5-year warranty period shall be the responsibility of the contractor and related costs shall be borne by the contractor. The entire body and body parts of the vehicle (chassis and frame, seat frame, etc.) shall have a 10-year warranty from the provisional acceptance against wear, rust, corrosion and paint defects. Only original or approved by the manufacturer(s) spare parts should be used in any repair service. The contractor shall keep an adequate stock of original spare parts to ensure smooth operation during the repair and maintenance processes of the vehicles. All kinds of spare parts, and consumables (except vehicle tires), shall be covered by the warranty. The equipment needed for maintenance and repair operations of the bus, such as control, test equipment, diagnostic device for electric motors and gearbox, vehicle-specific hand tools, etc., shall be delivered to MMM as "2 set for 14 vehicles" 1 (one) year before the warranty end date.

# **QUESTION-20:**

It is requested that the tire operation be removed from the tender specifications.

# **QUESTION-21:**

We kindly ask CA to accept our suggestion the tires are provided by Customer for the maintenance operations after delivery.

# ANSWER-18 to 21:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-22:**

Increasing the carrying capacity of the front axle does not increase the passenger capacity of the vehicle. The passenger capacity specified in the specification can also be achieved with lower front axle capacities. This will lighten the vehicle and reduce the fuel consumption of the vehicle. For this reason, is it appropriate to change the front axle capacity specified in the specification as follows?

Maximum front axle capacity shall be at least 7,100 kg

# ANSWER-22:

The Specification 3.1.7.2 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-23:**

The vehicle is sufficiently ventilated through the side windows and there are also enough emergency exit points in the vehicle. In addition, since the batteries of the vehicle are located on the roof of the vehicle, no roof cover can be used on the roof. For these reasons, is it appropriate for the authority to remove the roof hatch/ventilation requirements from the specifications?

#### ANSWER-23:

Please refer to Changes to the Tender Dossier No.1.

#### **QUESTION-24:**

Chargers' capacity: 3.2.1

The charging unit shall be equipped to charge 2 buses at the same time within a maximum 5 hours; • the total charging capacity of each charging unit shall be a minimum of 180 kW. • When 2 buses are charged simultaneously, the charging capacity shall be divided in a way that allows for equal and efficient charging Question: Is it asked that charging plug of the bus could accept 180kW?

# **QUESTION-25:**

"Battery Charging Time with a 180 kW DC Plug-in charging unit; 1. Charging simultaneously two buses with a 180kW charging unit shall not exceed 5 hours. 2. The time for charging a single bus at a charging station shall not exceed 3.5 hours" The vehicle we intend to offer is capable of being charged with a maximum of 150 kW charging power. In case using 180 kW charger, this limitation must be considered in case only one vehicle is connected to the charger. However, it is suitable to charge 2 vehicles via 2 x 90 kW plugs through a 180 kW charging unit.

# ANSWER-24 and 25:

Please refer to the specifications 3.2.1 and 3.1.3.6 of Annex II+III Technical Specifications + Technical Offer.

# **QUESTION-26:**

2. Scope of works precision for LOT3 (Bus + Chargers): Annex II, General requirements, item 1.2: The contractor is fully responsible for proper connections of supplied items to existing infrastructure for smooth installation and operation.

Can you please confirm that the executive projects and the execution of civil and electric works (including any transformer cabin and cabling) are not in the scope of the contractor responsibilities for LOT 3 The contractor will install and connect the charging stations on pre-existing electric infrastructure supplied by MMM. If not, we kindly ask a description of the "existing infrastructure" to be able to dimension the project.

# ANSWER-26:

All infrastructure works for charging stations will be built by the Mersin Metropolitan Municipality (MMM). The Contractor will only connect the charging devices.

# **QUESTION-27:**

Please Clarify below points regarding technical specification;

- It is stated that "All transportation and installation expenses related to electric buses and charging units shall be covered by the contractor." Under the "Delivery Location" subject. There is no information given in the specification about infrastructure already installed at the Bus Garage of MMM, therefor it's not possible to calculate the true cost of installation process. More detailed information is needed about infrastructure and equipment to be installed at the site.
- Regarding the point at page 37 "All technical infrastructure and systems for remote monitoring and reporting shall be installed. Remote monitoring shall be ensured via the Can bus system and GPRS." No direct connection with canbus system is allowed.

# ANSWER- 27:

- Please refer to Answer 26.
- Monitoring via Canbus can be performed through Gateway.

#### **QUESTION-28:**

Can you please confirm the general operation data for Mersin: - annual mileage and - average commercial speed.

# ANSWER-28:

Annual mileage is between 85.000-100.000 km.

Average commercial speed is between 25-50 km/h.

# **QUESTION-29:**

Changing the 84% charge state of the batteries to 80% with this, it is requested to add the statement "In case the batteries are operated under 1C/1C charged conditions, max. 3500 cycles, CCS2 charge, 25oC battery cell level temperature".

# **QUESTION-30:**

The batteries are parts that the SOH levels may be changed depending on usage conditions. Battery capacity loss shall vary depending on driving profile, ambient conditions, service conditions and situation on routes. It may be more price-effective to balance cost and battery health with the requested amended version of this tender requirement. Changing the ratio of 84% of the item to 80% and we request the addition of the statement "If the batteries are operated under 1C/1C charging conditions, they maintain their state of charge within the warranty period, max. 3500 cycles, CCS2 charging, 250C battery cell level temperature."

# ANSWER-29 to 30:

The relevant statement remains unchanged as defined in the section of VII. Warranty requirements for LOT 3 – Electric bus and charging station in the ANNEX II + III: Technical Specifications + Technical Offer

# **QUESTION-31:**

In the article 3.2.7 Charging Unit of the tender technical specifications, the phrase "Charging plugs shall be type 2 and mode 3 according to 3-phase IEC 62196-3 standards" was requested. The request in the relevant article is written incorrectly and the correct writing will be "Charging socket type shall be "CCS Combo 2". 4 type sockets and are universal in accordance with the IEC62196 standard.

# **QUESTION-32:**

Specification text 3.2.7 Charging plugs shall be the type 2 and mode 3 according to 3-phase IEC 62196-3 standards. Explanation We think it was an inadvertent typo. According to the standards, the DC charging socket of the charging unit cannot be Mode 3, it must be Mode 4. We request that the item be as follows: Charging plugs shall be the type 2 and mode 4 according to 3-phase IEC 62196-3 standards

# ANSWER-31 to 32:

Please refer to Changes to the Tender Dossier No.1

# **QUESTION-33:**

Specification text 3.1.5.4 Charging socket shall be CCS Combo 2 type and compliant with IEC 62196-2 standards. Explanation The charging system in electric buses is DC charging. AC Charging is also possible, but since it does not exceed 22 kW, the time will be very long, and the IEC standard requested in the description of the article and the IEC standard specified in the article do not fully match each other. We think there is an inadvertent typo here. For this reason, we request that the required standard be changed to IEC 62196-3. In addition, when we look at the requirements specified for the Charger in the Specification, the standard required there is stated as IEC 62196-3, therefore we think that there is a typo in article 3.1.5.4. We request that the item be as follows: Charging socket shall be CCS Combo 2 type and compliant with IEC 62196-3 standards.

# ANSWER-33:

The Specification 3.1.5.4 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-34:**

During the warranty period, all planned maintenance, consumable parts replacement and repair service commitment related to Articles 3.1 and 3.2 will be carried out by the technical team in the Mersin Metropolitan Municipality workshop or the contractor's authorized service workshop and a replacement request will be made.

# ANSWER-34:

The relevant statement remains unchanged as defined in the section of VII. Warranty requirements for LOT 3 – Electric bus and charging station in the ANNEX II + III: Technical Specifications + Technical Offer

# **QUESTION-35:**

In emergency situations such as the Contractor cannot be reached immediately or the necessary precautions cannot be taken in cases where it is reached, It is requested to impose a 15-day limit. Additionally, situations designated, as emergencies need to be defined. What is the required time limit for taking measures?

# ANSWER-35:

Please refer to Article VIII. Fleet availability of Annex II+III Technical Specifications + Technical Offer, annex of the Tender Dossier.

# **QUESTION-36:**

In Türkiye, commercial vehicles are not within the scope of the specified Warranty Regulation of Turkish Law as published on Official Gazette no.29029 dated 13.06.2014. Therefore, we request that the relevant article be removed.

#### ANSWER-36:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-37:**

It is very difficult to manage the failure rates under warranty in more than 10% of the same device within the warranty period in the last 12 months. For this reason, it is requested that the rates be changed to 30% and at least three failures in the last 12 months.

# **QUESTION-38:**

ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER, LOT 3 – Electric bus and charging station, VII. Warranty requirements

#### Existing version of article:

During the warranty period, if a malfunction covered by the warranty occurs for the same reason in more than 10% of the same device, unit, equipment, component or part within the last 12 months, malfunction shall be considered as a type defect / chronic malfunction.

Proposed version of article:

# Cancellation.

<u>Reason:</u> The clause should be removed since the vehicle fleet to be purchased is relatively small in number and the issues that will fall within the scope of type defects are not clearly stated.

# ANSWER-37 and 38:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-39:**

We request that the issues excluded from the scope (Improper use, natural disasters, damages caused by electrical infrastructure) be added.

# ANSWER-39:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-40:**

Request for Clarification Please clarify below items;

- Who will be responsible for the towing vehicles to service or garage?
- Who will be responsible for charging operations?
- Who will be responsible for the maneuverer driver for vehicle movements in garage area?
- Who will be responsible for vehicle washing and cleaning operations?

# ANSWER-40:

- Vehicles that break down on the road during the warranty period will be taken to the garage by the contractor free of charge.
- Charging of vehicles will be responsible by the MMM.
- MMM will be responsible for the Maneuverer driver for vehicle movements in garage area.
- Vehicle washing and cleaning operations will be responsible by the MMM.

# **QUESTION-41:**

The Vehicle Tracking System, Validator, Video Recording Device, and other electronic products shall be plug-and-play type. The necessary connection parts for mounting the devices on the bus shall be designed, taking into account the vehicle's ergonomics and the driver's field of view. Please clarify which party shall take the responsibility of purchasing, installation and commissioning of Validators? We shall consider the necessary cable preparations in the bus in any case.

# ANSWER-41:

Validators will be purchased by the MMM. Within one month from the commencement of the contract, the technical specifications of the purchased validators will be shared with the contractor. The Contractor will prepare the necessary cable connections and sockets for the validators in accordance with the technical specifications of the purchased validators. Validators will be installed by MMM when the vehicle is delivered.

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-42:**

The battery system shall be supported by an additional cooling system. The battery cooling system operates independently and capable to provide sufficient cooling, which this system is not a separate installation. We kindly ask CA to accept our solution.

# ANSWER-42

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-43:**

"Total charge/discharge count for the battery" and "Historical data on charging times and quantities Number of balancing operations and their durations, etc." removing the statement.

# ANSWER-43:

The Specification 3.1.4.5 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-44:**

The suspension system shall have a function that allows the vehicle height to be lowered or raised by a minimum of 35 mm from the ground using a button on the front panel. The vehicle we intend to offer is configured based on applicable EU directives, high driving mode provides a minimum of 35 mm raising compared to nominal position. This value ensures the passengers are able to access the vehicle in safe. We kindly ask CA to accept our solution.

# ANSWER-44:

The Specification 3.1.10.4 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-45:**

The suspension system shall have an electronically controlled automatic function to dampen the vehicle's movements if the battery is installed on the vehicle roof. This function shall adjust the vehicle's level based on its speed to ensure safe driving. Question We kindly ask CA to clarify if "battery" refers to accumulators (24V) or traction batteries.

# ANSWER-45:

The battery mentioned in the Specification 3.1.10.8 of Annex II+III Technical Specifications + Technical Offer refers to traction batteries.

# **QUESTION-46:**

Original Text Emergency door buttons shall be mounted internally and externally for each door and shall be easily accessible. When the bus is moving at 5 km/h or faster, manual opening of the doors shall not be possible. The speed value must be corrected with 3 km/h based on the applicable EU directives. "Emergency door buttons shall be mounted internally and externally for each door and shall be easily

accessible. When the bus is moving at 3 km/h or faster, manual opening of the doors shall not be possible".

# ANSWER-46:

The Specification 3.1.14.10 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-47:**

Original Text The dashboard, keys, indicators, and other control lights and devices shall be protected against dust and water droplets (Protection class IP54). Control keys might not have an IP protection class since the nature of the equipment. We kindly ask CA to accept our solution. "The dashboard, indicators, and other control lights and devices shall be protected against dust and water droplets (Protection class IP54)".

# ANSWER-47:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-48:**

Original Text There shall be a button for the parking brake. Reason/Question Our solution provides parking brake with a lever instead of a button. We kindly ask CA to accept our solution. Amended Text There shall be a button or lever for the parking brake.

# ANSWER-48:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-49:**

Original Text The driver's cabin shall be heated and ventilated separately from the passenger area, or the driver shall be able to adjust the climate control system from the control unit. Ventilation for the driver's cabin shall also be manually controllable. Reason/Question The cooling/heating for the driver cabin can only be adjusted via setting a fan level, we kindly ask CA to accept our solution.

# ANSWER-49:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-50:**

Exterior Camera Please clarify the number of cameras and their exact locations.

# ANSWER-50:

There shall be at least of 2 blind spot detection (BSD), 1 on the right rear and 1 on the left rear. In addition to these, there shall be 1 backup camera on the back of the bus.

# **QUESTION-51:**

Driver Control System Reason/Question The vehicle we intend to offer complies with this requirement with an additional screen separated from driver's cluster. We kindly ask CA to accept our solution.

# ANSWER-51:

The Specifications 3.1.51 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-52:**

Specification text • Copy of the original type approval certificate which contains the brand, type and commercial name of the offered electric buses, showing that they have been homologated in the M3 category by a competent authority in one of the EU member states; Explanation As the vehicle configuration changes, the type approval also expands and changes. For this reason, we request that the type approval of the vehicle we propose be requested at the first delivery of the vehicles. We kindly request that the type approval (even if it is not the recommended tool) issued by the competent authorities in Europe be sufficient at the tender stage. We request that the item be as follows: The bidder will submit the Type approval certificate of the electric bus at the bidding stage, and is obliged to submit the type approval of the proposed vehicle upon delivery of the first vehicle

# ANSWER-52:

Copy of the original type approval certificate for the offered electric buses shall be given by the tenderer along with its offer. In case of a change in the vehicle configuration depending on the technical specification, new type approval certificate (if needed) shall be submitted by the contractor during the first vehicle delivery.

# **QUESTION-53:**

Specification text • The test report that the batteries and/or electric buses have successfully passed the safety tests required by ECE-R100.2 or international equivalent standards obtained from independent test organizations. Explanation We request that the item be as follows: The test report showing that the batteries and/or electric buses have successfully passed the safety tests required by ECE-R100.2 (or its more recent version) or international equivalent standards obtained from independent testing organizations will be submitted to the administration upon first vehicle delivery.

# ANSWER-53:

The relevant statement remains unchanged as defined in the section of I. Technical documentation to be provided by the tenderer / the contractor: for LOT 3 – Electric bus and charging station in the ANNEX II + III: Technical Specifications + Technical Offer

# **QUESTION-54:**

Cable lengths for Charging Stations are not given, How many meters will each station's cable length be? Thank you, Best regards.

# ANSWER-54:

The cable length of each plug shall be a minimum of 5 meters.

#### **QUESTION-55:**

Specification text 3.1.9 Brakes Explanation: Since the maximum speed of municipal buses is 80 km/h, all features and safe driving are possible with the Brake system without ESP. ESP request requires extra homologation and documentation process. We request that the item be as follows: The vehicle shall have at least following brake systems; operational service brake (foot brake), hand brake, parking brake, EBS (Electronic Brake System) or equivalent, ABS (Anti-lock Braking System) or equivalent, ASR (Anti-Slip Regulation) or equivalent,

#### ANSWER-55:

The Specification 3.1.9.1 of Annex II+III Technical Specifications + Technical Offer remains unchanged in terms of ESP (Electronic Stability Program) or equivalent systems.

Please also refer to Changes to the Tender Dossier No.1

# **QUESTION-56:**

Specification text 3.1.13.5 The frame profiles used in the body shall be of at least St 44 or at least 14.003 quality. The frame shall be coated with cataphoresis (cathodic dip coating). Explanation Apart from the KTL coating process, there are different processes that protect the vehicle body and the vehicle. To be competitive, it is necessary to accept different solutions that will protect the vehicle chassis for many years. For this reason, we request that all solutions such as special coatings, paints, etc. be accepted. We request that the item be as follows: The body will be designed to avoid any deformation during the requested warranty period and the necessary paint protection or KTL treatment will be applied on the body.

#### **QUESTION-57:**

#### Chassis and Body, 3.1.13.5,

# Specification Text

The frame profiles used in the body shall be of at least St 44 or at least 14.003 quality. The frame shall be coated with cataphoresis (cathodic dip coating). On the upper left and right side of the front mask, there shall be 22 mm inner diameter pipes to hold cylindrical shape flagpoles. These pipes shall be positioned to attach the flags easily.

#### Requested Change Notes

All body structure of the vehicles (including underbody and side frames) shall be cataphoresis against corrosion or the Contractor who does not have cataphoresis application shall make the following application. Sheet metal and profiles used in body manufacturing shall be galvanized inside and outside. Wax application with water-repellent and anti-corrosion properties will be applied to the inside of the

vehicle profile and the inside of the sub-carrier under the vehicle so as to cover at least 50 microns. This article shall not apply if all metal parts of the vehicles are galvanized.

# ANSWER-56 and 57:

The Specification 3.1.13.5 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-58:**

Specification text 3.1.20.3 The seat belt shall comply with the ECE-R14 and R16 regulations. Explanation R16 is not a test regarding the seat or seat belt. Covers crash testing of the R16 seat. Therefore it must be removed. Seat belts are not used in municipal vehicles because there are sitting and standing passengers. Seat belts are recommended for the driver to use, and it is sufficient to meet ECE R 14 as a regulation. We request that the article be as follows. We request that the item be as follows: The seat belt shall comply with the ECE-R14 regulations.

# ANSWER-58

The Specification 3.1.20.3 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-59:**

Specification text 3.1.28.1 The interior of walls and ceiling shall be made of non-flammable, dirtresistant, waterproof, and easily washable plastic materials. Explanation This article is not understood, we demand its removal. It is not understood that plastic material is required for the interior parts of the ceiling and side walls. The inside of the side and ceiling closures are covered with sponge-based insulation material that provides high sound and heat insulation

# ANSWER-59:

Here the subject is not the insulation but the interior trim in other words linings covering the walls, and ceiling shall be plastic, which shall be non-flammable, dirt-resistant, waterproof, and easily washable.

# **QUESTION-60:**

Specification text 3.1.32.18 To increase the performance of the air conditioner, there will be air curtains on the windowsills and doors. Explanation Air curtain is used to prevent losses by dividing two separate areas with temperature differences. Blowing on the windows inside the vehicle does not constitute an air curtain and reduces efficiency. Blowing to the active passenger area is more efficient in both heating and cooling and has a higher comfort rate. For this reason, the request for air curtains on windows should be deleted. We request that the item be as follows: To increase the performance of the air conditioner, there will be air curtains on the doors.

# ANSWER-60:

Specification 3.1.32.18 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-61:**

Specification text 3.1.33.23 All cabinets on the LED display shall be openable from the rear, and all kinds of service to the LED display shall be provided in this way. Explanation We request that the item be as follows: All cabinets on the LED display shall be openable from the rear or the bottom side, and all kinds of service to the LED display shall be provided in this way.

# ANSWER-61:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-62:**

Specification text 3.1.40.4 The proposed in-vehicle industrial LCD monitors should be at least 19" in LCD technology and equipped with LED backlighting. Each vehicle should have two double-sided screens in the middle of the vehicle and one inward-facing screen at the rear. The screens in the middle of the vehicle should be designed to be front/back. Explanation We request that the item be as follows: The proposed in-vehicle industrial LCD monitors should be at least 19" in LCD technology. Each vehicle should have two double-sided screens in the middle of the vehicle should be designed to be front/back.

# ANSWER-62:

Specification 3.1.40.4 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-63:**

Specification text 3.1.25.3 The wheel arches, floor and side walls shall be covered with the sprayed 2component urethane material. Explanation we request that the item be as follows: The wheel arches, floor and side walls shall be covered with the sprayed 2-component urethane material or wax.

# ANSWER-63:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-64:**

Specification text : 3.1.32.22 The heating system will be designed as a hybrid to prevent a decrease of the long-distance range of the vehicle during the cold winter months. Explanation Demands in electric transportation such as 100% electric vehicles and the increase in the rate of green energy are among the trends followed worldwide. In order to pave the way for a more environmentally friendly approach and 100% electrification, it is necessary to pave the way for the air conditioning system in winter to be powered by electricity. For this reason, we request that the relevant article be as follows: The heating

system can be designed as full electric or hybrid so that the required range of the vehicle does not decrease under operating conditions during the cold winter months.

# ANSWER-64:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-65:**

In the tender, the range that the vehicle can travel on a single charge under normal operating conditions was not specified. Instead, it was mentioned that the vehicle should travel 380 km under E\_SORT 2 test conditions. In a different article, it was requested that the heating system be designed as a hybrid in order to prevent the vehicle's range from decreasing during winter months. Since the air conditioning system (Heating or Cooling) is turned off during E-Sort 2 test conditions, the HVAC system does not affect the range of the vehicle tested under Sort 2 conditions. In order for the above two items not to conflict with each other after the delivery of the vehicle, we request that the administration clearly state the operating conditions and the required range that must be driven on a single charge under the operating conditions.

# **QUESTION-66:**

Since the standard planned range for city use is 200kmc, we request that the 380km range specified in the specifications be reduced to 300km. If our request for clarification is not accepted, we will need to obtain a new SORT-2 test for the requested range. Therefore, we request that the SORT-2 test be required before delivery.

# **QUESTION-67:**

Energy Storage System (ESS) Battery, 3.1.3.5,

# Specification Text

The capacity of the battery shall enable the bus to travel a minimum of 380 km per full charge under SORT2 conditions with the air condition system off.

# Requested Change Notes

The capacity of the battery shall enable the bus to travel a minimum of 300 km per full charge under SORT2 conditions with the air condition system off.

# ANSWER-65 to 67:

Please refer to Specification 3.1.3.5 of Annex II+III Technical Specifications + Technical Offer annex of the Tender Dossier.

SORT 2 Test Report will be submitted by the tenderer along with its offer.

# **QUESTION-68:**

Please consider below suggestions for technical specifications;

3.1.2.2 --> "The maximum torque of the electric motor shall be at least 2100 Nm."

3.1.3.1--> "The system shall give warning when charging levels drop below 10% of total capacity." To have a more functional warning and battery management system.

3.1.3.15 --> "The bus shall be equipped with a range warning system that alerts the driver when the battery capacity drops below 10%."

3.1.4.5 --> This points should be removed as the batteries are balanced autonomously, continuously and without affecting customer use so number of balancing operations is irrelevant.

3.1.6.7 --> "The steering wheel shall have a spare air reservoir or equipment that enables filling air from outside that shall open the brakes or a mechanism that shall perform this function when the vehicle needs to be towed with the engine not running, " To have a solution independent of in vehicle equipment.

# **QUESTION-69:**

Please consider below suggestions for technical specifications;

3.1.14.10 --> "Emergency door buttons shall be mounted internally and externally for each door and shall be easily accessible. When the bus is moving at 1 km/h or faster, manual opening of the doors shall not be possible. " To have a safer solution.

3.1.21.11 --> "It shall be designed to deactivate automatically after frost and fog on the glass have been removed or after 10 minutes."

3.1.21.17 --> " Electric motor high temperature warning"

3.1.22.2 --> "The bus's climbing capability shall be at least 17%." It's not indicated if climbing ability is measured in fullty loaded vehicles. If that's the case we request it to be changed to " at least 17%"

3.1.24.1 --> "The bus shall be equipped with low voltage batteries with a minimum capacity of 270 Ah in total"

3.1.30.6 --> "Seats shall be fixed with stainless steel or electroplated hardware."

# **QUESTION-70:**

Please consider below suggestions for technical specifications;

3.1.38.2 --> "It must have a response range of 95 Hz-20 kHz."

3.1.39.3 --> "The sound amplifier should operate in the range of at least 40 Hz-10 kHz.

# ANSWER-68 to 70:

Specifications 3.1.2.2 - 3.1.3.1 - 3.1.3.15 - 3.1.4.5 - 3.1.6.7 - 3.1.14.10 - 3.1.21.11 - 3.1.21.17 - 3.1.22.2 - 3.1.24.1 - 3.1.30.6 - 3.1.38.2 - 3.1.39.3 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

Please refer to Changes to the Tender Dossier No.1 for 3.1.24.1 Specifications of Annex II+III Technical Specifications + Technical Offer annex of the Tender Dossier.

# **QUESTION-71:**

In the "Additional Information About The Contract Notice - Article 16 : Selection Criteria - Lot 3 Electric Bus and Charging Station" you have published within the scope of the tender, the following requirements have been requested within the scope of the tables in the annex of the 'Tender Form for a Supply Contract' 2) Professional capacity (based on items 4 and 5 of the request to participate form for service contracts and on items 4 and 5 of the tender form for supply contracts). The reference period which will be taken into account will be the last three years preceding the submission deadline. Criteria for legal and natural person: a. At least 10 (ten) staff currently work for the tenderer in fields related to each lot to which the tenderer applies. b. If a tenderer is to be awarded several Lots, the staff number must exceed the cumulative staff number for all those Lots. We request more detailed information on how to fill in the information requested (sample form, if available)

# ANSWER-71:

Please refer to Part D - Tender Form For A Supply Contract

# **QUESTION-72:**

Instructions to tenderers, 11. Content of tenders, 3. Documentation,

#### Existing version of article:

For Lot 3; the SORT-2 test report of the batteries approved by an independent accredited organization; Proposed version of article:

For Lot 3; the SORT-2 test report of the batteries approved by an independent accredited organization whose accreditation should be valid both Republic of Türkiye and EU countries. A document showing that this accreditation is valid in Türkiye and EU countries will be submitted in the bid.

<u>Reason:</u> It is in the interest of the Administration to ensure the accuracy and reliability of the test reports to the maximum extent. In the recent past, there have been discussions on the accreditation of approval organizations and test results in some tenders. The aim is to prevent such possible inconsistencies.

# **QUESTION-73:**

Lot 3- Electric bus and charging station, I. Technical documentation to be provided by the tenderer / the contractor

# Specification Text

The tenderer shall provide the SORT-2 test report of the batteries approved by an independent accredited organization along with their offers.

# Requested Change Notes

We request that the SORT-2 test report of the batteries, certified by an independent accredited organization, be presented at the delivery of the vehicles or this article be removed.

# ANSWER-72 and 73:

Please refer to Changes to the Tender Dossier No.1.

SORT 2 Test report will be submitted by the tenderer along with its offer.

# **QUESTION-74:**

ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER, 3.1.30 Passenger seats, 3.1.30.2

# Existing version of article:

Passenger carrying capacity: The bus shall have a total passenger capacity of at least 65 including minimum of 27 seated, and 1 disabled.

#### Proposed version of article:

Passenger carrying capacity; the bus shall have a total passenger capacity of at least 58 including minimum of 27 seated, and 1 disabled.

<u>Reason</u>: The total passenger capacity is directly affected by the weight of the batteries and number of batteries assembled on the vehicle. Due to requested battery capacity in tender book, requested total passenger capacity can not be met in the frame of maximum gross vehicle weight regulation.

# ANSWER-74:

Specification 3.1.30.2 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

# **QUESTION-75:**

ANNEX II + III: TECHNICAL SPECIFICATIONS + TECHNICAL OFFER, LOT 3 – Electric bus and charging station, V. Operation / Detection of type defect and sanctions

# Existing version of article:

The faulty products that fall under type defects shall be replaced with improved parts. In cases where the parts have been improved or undergone version changes, even if they are not considered type defects by the manufacturer, replacement shall be carried out with the approval of MMM.

# Proposed version of article:

Cancellation.

<u>Reason:</u> The clause should be removed, as the decision-making authority regarding the technical issues of the vehicle is the manufacturer.

# ANSWER-75:

The relevant statement remains unchanged as defined in the section of V. Operation / Detection of type defect and sanctions for LOT 3 – Electric bus and charging station in the ANNEX II + III: Technical Specifications + Technical Offer

# **QUESTION-76:**

Question: Regarding CCTV cameras, only infrastructure cable preparation can be provided, according to 2021 /1341 DDAW & 2021/1958 ISA regulations, any parts related CCTV like camera recording system etc. can not be provided within the GSR.

# ANSWER-76:

The relevant statement remains unchanged as defined in the section of II. Design and manufacture: for LOT 3 – Electric bus and charging station in the ANNEX II + III: Technical Specifications + Technical Offer

# FOR LOT 1

# **QUESTION-77:**

For Lot-1, Item 1.1- Server / 1.1.10

There is a confusion about article 1.1.10 .What is the disk capacity requested? 8 x 2.5" SAS/SATA and mainboard support with SAS/SATA and NVMe or 22x 2.5" hot-swap hybrid NVMe/ SATA / SAS drive bays and 2x2.5" hot-swap SATA/SAS drive bays ? Please clarify us.

# **QUESTION-78:**

For Lot-1, Item 1.1- Server / 1.1.10

There is a confusion about article 1.1.10 .What is the disk bay requested? 8x2.5" SAS/SATA, The mainboard shall have SAS/SATA and NVMe support or 22x 2.5" hot-swap hybrid NVMe/ SATA / SAS drive bays and 2x2.5" hot-swap SATA/SAS drive bays, As there is no server with both supporting .Moreover There is no server with 22x 2.5" hot-swap hybrid NVMe/ SATA / SAS drive bays and 2x2.5" hot-swap SATA/SAS drive bays (according to CPU, RAM, SSD requested). Please clarify us.

# **QUESTION-79:**

For Lot-1, Item 1.1- Server / 1.1.11

There is an also confusion about article 1.1.11 in addition to article 1.1.10. Both of article (1.1.10 and 1.1.11) should be evaluated with together .What is the disk type 2.5" SSD 480 GB SATA or NVME? And please evaluate this point (" NVME (Non-Volatile Memory Express) disks shall be hot-swappable) with 1.1.10.

# **QUESTION-80:**

For Lot-1, Item 1.1- Server / 1.1.11

There is an also confusion about article 1.1.11 in addition to article 1.1.10. Both of article (1.1.10 and 1.1.11) should be evaluated with together .What is the disk type 2.5" SSD 480 GB SATA or NVME? We think that this is 480 gb Sata SSD.

# ANSWER- 77 to 80:

Please refer to Changes to the Tender Dossier No.1.

# **QUESTION-81:**

I would like to present the details regarding the technical changes we have requested as follows:

For Advanced Load Balancing (Load Balancer), Advanced Web Application Firewall (WAF);

- 1.8.8 The system shall have 8 x 10G/1G RJ45 ports as minimum.
- 1.8.5 The system shall have throughput is 70 Gbps L7.
- 1.1.13 The server shall have 2x1Gbit RJ45 ethernet ports as minimum. Ethernet cards shall be onboard.

We request that the above specifications be changed as follows;

- 1.8.8 The system shall have 8 x 25G/10G SFP ports as minimum.
- 1.8.5 The system shall have throughput is 60 Gbps L7.
- 1.1.13 The server shall have 2x1Gbit RJ45 ethernet ports as minimum. Ethernet cards shall be onboard/OCP.

Additionally, we request to add the following two clauses:

- The Application Firewall should be able to perform behavioural analysis using machine learning and data analysis. As a result of this analysis, it should automatically detect and activate protection mechanisms for DDoS attacks occurring at the application level. It should be able to generate dynamic signatures within the scope of the attack, which can be activated automatically or manually.
- The Application Firewall should have the capability to create security policies automatically, with administrator approval, or fully automatically without administrator approval, based on the Learning Score.

# ANSWER- 81:

Specifications 1.8.5 - 1.8.8 - 1.1.13 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.

No additional specifications request will be granted.

# **QUESTION-82:**

We have noticed that the EPS (Events Per Second) value for the Siem side has not been specified. To ensure we meet all requirements accurately, could you please provide the necessary values for device, node, and EPS? Additionally, could you share the details of the existing inventory relevant to this project? We appreciate your assistance and look forward to your prompt response.

# ANSWER- 82:

Please refer to Changes to the Tender Dossier No.1.

No additional information request will be granted.

# **QUESTION-83:**

Question: For 1.6.17 The system shall be able to collect logs from an unlimited number of log sources. ; Please clarify us about this point. If licenses for the desired number of resources are purchased, the system will be able to collect logs as long as desired. It means the system will support collect logs from an unlimited number of log sources. (as long as the desired number of resources are purchased). Can we think such that? If it is not, please remove this point. Otherwise, there is no any software, which be able to collect logs from an unlimited number of log sources. All SIEM solutions have two-licence model, according to the number of EPS or Server. One is what is requested EPS value? Second is what is the number of server be collected log?

# ANSWER- 83:

Please refer to Changes to the Tender Dossier No.1.

The rest remain unchanged.

#### **QUESTION-84:**

Question: For 1.6.9, The SIEM shall allow to add a full-range packet capture and case analysis feature by adding licenses/devices. ; The system, which we offer, has not such feature. We will capture full-range packet with third party software and analysis this packets adding to our SIEM software. Is it acceptable?

# **QUESTION-85:**

Question: For 1.6.15, the system shall maintain a database of all assets discovered on the network. We can add all assets or sources as a manually. Is this acceptable?

# **QUESTION-86:**

Question: 1.1.4 The server shall have 2 Intel Gold or equivalent processors with minimum working speed of 2.2 GHz. This specification is for older generation processors, a global company like HP can't bid for this tender as they don't use older generation processors on newer products. We kindly request to change this specification to ensure more competition as below: The server shall have 2 Intel Gold or equivalent processors with minimum working speed of 2.1 GHz. 1.1.6 Each processor shall have at least 39MB L3 cache memory. This specification is for older products, new generation processors are being used on newer products. We kindly request to change this specification to ensure more competition for price as below: Each processor shall have at least 60MB L3 cache memory.

# **QUESTION-87:**

Question: 1.1.7 The server shall have minimum 1024 GB DDR4 or RAM, with minimum 3200MT/s speed. This specification is for older products, new generation RAMs are being used on newer products.

We kindly request to change this specification to ensure more competition for price below: The server shall have minimum 1024 GB DDR5 or RAM, with minimum 5600MT/s speed

# **QUESTION-88:**

Question: 1.1.12 The server shall have SAS RAID controller with minimum 8 GB cache memory and 12Gb/s speed with flash protection as minimum. RAID controller shall support RAID1/10/5/6/60 and able to control the highest number of disks the main board supports. To ensure more encrypted security for the disks, we would like to add the below specification as new-gen servers have this specification: The server RAID controller will have encryption support. The server RAID controller will be able to perform the encryption process itself and will not use the central processor unit resources. If a license is required for this feature, it will not be included in the offer at this time. If central processing unit resources will be used for encryption, the server will be offered with the highest supported processor model and maximum supported capacity.

# **QUESTION-89:**

Question: 1.1.18 The server shall have n+1 redundant power supply, each with a capacity of 1400W as minimum, which must be hot-swappable during operation. The power supplies shall have 80 PLUS Titanium certifications. This specification prevents a global company like HP from bidding as it only can be met by one manufacturer. We kindly request to change this specification as below: The server shall have n+1 redundant power supply, each with a capacity of 1000W as minimum, which must be hot-swappable during operation. The power supplies shall have 80 PLUS Titanium certifications.

# **QUESTION-90:**

Question: 1.1.18 The server shall have n+1 redundant power supply, each with a capacity of 1400W as minimum, which must be hot-swappable during operation. The power supplies shall have 80 PLUS Titanium certifications. This specification prevents a global company like HP from bidding as it only can be met by one manufacturer and 1000W is already enough for the other specifications. We kindly request to change this specification as below: The server shall have n+1 redundant power supply, each with a capacity of 1000W as minimum, which must be hot-swappable during operation. The power supplies shall have 80 PLUS Titanium certifications.

# ANSWER- 89 and 90:

Please refer to Changes to Tender Dossier No.1

# **QUESTION-91:**

Question: 1.2.2 The storage unit shall have minimum 32 GB of DRAM-based cache. This specification prevents a global company like HP from bidding as it only can be met by one manufacturer. We kindly request to change this specification as below: The storage unit shall have minimum 24 GB of DRAM-based cache . 1.2.8 The storage unit shall support the installation of at least 260 disks in the size of 2.5" and 3.5". Supported disk types shall include SSD, SAS, NL-SAS and their SED options . This

specification prevents many companies from bidding and limits a global company like HP from bidding as only one manufacturer can meet this specification, we would like to change this specification as below: The storage unit shall support the installation of at least 240 disks in the size of 2.5" or 120 disks in the size 3.5". Supported disk types shall include SSD, SAS, NL-SAS and their SED options .

# **QUESTION-92:**

Question: 1.2.9 The storage unit shall support 5 PB of gross capacity as minimum. This specification prevents many companies including a global company like HP from bidding as only one manufacturer can meet this specification, we would like to change this specification as below: The storage unit shall support 2 PB of gross capacity as minimum. 1.2.10 The storage unit shall support 700TB of available space as minimum. Could you kindly clarify this specification? Is the unit supposed to have 700TB support or do you want it to have 700TB space in addition to the 45 NL-SAS disks that are 20TB?

# **QUESTION-93:**

Question: 1.2.12 The storage unit shall have 8 server connection ports, each of which supports at least 32 Gbps bandwidth and allows fiber channel connection as minimum, or 8 at least 25 Gb SFP+ server connection ports that can be used for iSCSI as minimum. This specification prevents many companies including a global company like HP from bidding as only one manufacturer can meet this specification, we would like to change this specification as below: The storage unit shall have 8 server connection ports, each of which supports at least 16 Gbps bandwidth and allows fiber channel connection as minimum, or 8 at least 25 Gb SFP+ server connection ports that can be used for iSCSI as minimum. 1.2.13. The storage unit shall support asynchronous, replication. Does the product have to have these specifications or is it enough if it only supports these specifications?

# **QUESTION-94:**

Question: 1.2.21 The storage unit shall have 1000 LUNs as minimum and shall be able to be created in the data storage unit. This specification prevents many companies including a global company like HP from bidding as only one manufacturer can meet this specification, we would like to change this specification as below: The storage unit shall have 512 LUNs as minimum and shall be able to be created in the data storage unit.

# **QUESTION-95:**

Question: 1.3.5 There shall be a protocol support such as Multi Chassis Link aggregation, which is required for two switches of the same type to work active-active at the layer 2. This specification prevents competition as only one manufacturer has this specification, we kindly request you to change this specification as below: There shall be a protocol support such as Multi Chassis Link aggregation or Virtual Chassis (VC). 1.3.6 The spine switch shall support IEEE 802.1Q (4,000 VLAN ID) VLAN ID marking and 4000 port based VLANs. This specification prevents competition as only one manufacturer and one product can meet this specification, we would like to change this specification as below: The

spine switch shall support IEEE 802.1Q (4,000 VLAN ID) VLAN ID marking and 1000 port based VLANs.

# **QUESTION-96:**

Question: 1.3.9 The spine switch shall support Remote Span. This specification prevents competition as only one manufacturer and one product can meet this specification, we would like to change this specification as below: The spine switch shall support Remote Span or ERSPAN. 1.5.6 The Tor switch shall support for IEEE 802.1Q (4,000 VLAN ID) VLAN ID marking and 4000 port based VLANs shall be supported. This specification prevents competition as only one manufacturer and one product can meet this specification, we would like to change this specification as below: The spine switch shall support IEEE 802.1Q (4,000 VLAN ID) VLAN ID marking and 1000 port based VLANs.

# **QUESTION-97:**

Question: 1.5.8 The switch shall support Remote Span. This specification prevents competition as only one manufacturer and one product can meet this specification, we would like to change this specification as below: The spine switch shall support Remote Span or ERSPAN. 1.7.2 The firewall shall have 8 (eight) 10/100/1000 Mbps Copper ports, the ports required for redundancy (HA) and management on the device will be located on the device separately from the data (network) ports that are requested to be given on the firewall as minimum. To ensure more competition, we kindly request you to change this specification as below: The firewall shall have 8 (eight) 10/100/1000 Mbps Copper ports, the ports required for redundancy (HA) and management on the device on the firewall as minimum.

# ANSWER-84 to 97:

The Specifications 1.1.4 - 1.1.6 - 1.1.7 - 1.1.12 - 1.2.2 - 1.2.8 - 1.2.9 - 1.2.10 - 1.2.12 - 1.2.13 - 1.2.21 - 1.3.5 - 1.3.6 - 1.3.9 - 1.5.6 - 1.5.8 - 1.6.9 - 1.6.15 - 1.7.2 of Annex II+III Technical Specifications + Technical Offer remains unchanged as stated in the Tender Dossier.