LIGHT RAIL TRANSIT AUTHORITY

BAGONG PILIPINAS

BIDS AND AWARDS COMMITTEE

Supplemental/Bid Bulletin No. 29-E

Series of 2026

Re: **Contract for the One (1) Lot Supply of Various Audio Paging System (APS) under PR No. RS2-2701-006 and ITB No. 2609-114-01 with an ABC of ₱14,314,320.00.**

TO ALL INTERESTED BIDDERS:

The following amendments/clarifications on the pertinent Bidding Documents are hereby made:

No.	Reference/Queries	Amendments/Clarifications
	A. IP Audio Switching Matrix and System Host	
1	The proposed alternative system provides IP-based audio routing, zone management, emergency broadcasting, and system backup functions. May it be considered equivalent if its internal architecture differs from the specified number of card slots and audio bus channels?	The proposed alternative system may be considered equivalent, provided that it is fully compatible with the existing APS system parameters and meets all specified functional and performance requirements, regardless of differences in the number of card slots and audio bus channels.
2	The proposed system documentation describes dual-system or server hot-backup functionality. Does LRTA require this feature in addition to physically redundant Ethernet connections, or may an alternative redundancy configuration be considered?	The dual-system or server hot-backup functionality may be considered acceptable as an alternative redundancy configuration, provided that it meets LRTA's reliability, availability, and system recovery requirements and is compatible with the existing APS system. However, whether it is required in addition to physically redundant Ethernet connections must be confirmed against the project's technical specifications.
3	For the specified supervised fire-alarm inputs, dry-contact outputs, and fail-safe relay, must the proposed equipment provide the exact number and type of physical interfaces, or may manufacturer-approved expansion modules be used to meet these requirements?	Provided that the complete system satisfies the required quantity, interface types, monitoring and fail-safe operation, and is fully compatible with the existing APS system.
4	The proposed system uses a different communication interface from the specified CAN bus. May an alternative interface be accepted if it provides the required external equipment communication and integration functions?	An alternative communication interface may be considered acceptable, provided that it supports all required communication, control, monitoring, and integration functions and is fully compatible with the existing APS system and external equipment.

5	The proposed host has a larger storage capacity than the specified 16 GB for prerecorded messages. May this be considered acceptable, provided that WAV and MP3 playback and the required emergency announcement functions are supported?	Host with storage capacity greater than the specified 16 GB may be considered acceptable, provided that it supports the required WAV and MP3 playback formats, accommodates the required prerecorded messages, and meets all emergency announcement and system performance requirements. The proposed configuration must remain fully compatible with the existing APS system and comply with the project specifications.
	B. Motherboard	
6	May alternative system be accepted if its internal architecture differs from the specified motherboard, provided that system compatibility and required functions are demonstrated?	Alternative system with a different internal architecture may be accepted, provided that it fully satisfies the required functional, operational, and interface specifications.
7	Is the specified number of card slots mandatory, or may a different slot arrangement be accepted if the required interfaces, expansion capability, and system functions are maintained?	Whether a specified number of card slots is mandatory depends entirely on whether the requirement is specified as a functional capability or a prescriptive design constraint.
8	Must the offered motherboard provide the exact specified number of audio bus channels, or may an alternative architecture be considered if it supports the required audio routing and simultaneous operations?	It may be considered if it fully supports the required audio routing, simultaneous operations, sample rates, and I/O channel counts, even if the internal bus channel topology differs.
9	Must the motherboard provide two physically redundant Ethernet interfaces (ETH A/ETH B), or may an alternative network configuration be accepted if it meets the required redundancy and recovery functions?	An alternative network configuration is acceptable depends on how "redundancy" is defined within the system's threat model: physical fault isolation (hardware-level independence) versus logical high availability (software-managed failover).
10	Must the motherboard provide the specified three dry-contact outputs and separate NO/NC system-failure relay directly, or may compatible interface modules be added to meet these requirements?	An alternative approach utilizing compatible interface modules (such as daughterboards, mezzanine cards, or isolated I/O expansion modules) may be accepted, provided they deliver identical electrical performance, isolation ratings, and fail-safe behavior as an onboard implementation.
11	Is the specified CAN bus mandatory, or may an alternative communication interface be accepted if the required external equipment integration and communication functions are demonstrated?	No, an alternative communication interface cannot typically substitute for a specified CAN (Controller Area Network) bus if the external equipment or sensors natively depend on it, unless a dedicated protocol conversion gateway is introduced and fully validated
12	Must the motherboard itself provide at least 16 GB of storage, or may compatible external or system-level storage be accepted if it meets the required capacity and playback functions?	Can be accepted depends heavily on environmental resilience, data throughput requirements, and physical security.

13	Must the motherboard independently support four simultaneous IP audio channels, or may this capacity be provided through the complete system configuration?	Providing the capacity through the complete system configuration is generally more than sufficient—especially given that four simultaneous IP audio channels represent a very modest computational and network load.
14	May the offered fire-trigger configuration be accepted if it supports the required number of inputs, trigger operation, and emergency announcement integration?	Yes, an alternative fire-trigger configuration may be accepted, provided that it fully satisfies the required number of inputs, trigger logic, and emergency announcement integration.
15	May the offered motherboard be evaluated based on its documented monitoring, fault indication, and recovery capabilities, even if its implementation differs from the specified system?	Yes, an alternative motherboard may and should be evaluated based on its documented monitoring, fault indication, and recovery capabilities, even if its internal implementation differs from the specified baseline.
	C. Single-Channel Power Amplifier – UP-247	
16	The proposed amplifier has a rated output of 250 W compared with the specified 240 W RMS. May this difference be considered acceptable, subject to confirmation of the required output performance and speaker-load compatibility?	Yes, a rated output of 250 W compared to a specified 240 W RMS is acceptable
17	The proposed amplifier's published frequency response, total harmonic distortion (THD), and signal-to-noise ratio differ from the tender specifications. Must each numerical parameter meet the stated limit exactly, or may LRTA consider the manufacturer's published performance and test conditions when evaluating equivalence?	Provided that the manufacturer's published performance meets or exceeds the operational intent, and that the differences are properly normalized against standardized test conditions.
18	The proposed amplifier provides a 100 V constant-voltage speaker output, while the tender specifies multiple output voltage and impedance options. May the proposed output configuration be accepted if it is compatible with the intended speaker installation?	Yes, the proposed 100V output configuration may be accepted, but *only if* it is verified that the entire target installation exclusively utilizes 100V distributed speaker lines and has no requirement for low-impedance (4Ω/8Ω) or multi-tap flexibility.
19	The proposed amplifier uses AC mains for its main power stage and provides 24 VDC backup for its network control board. Does the tender require the complete amplifier to operate from 24 VDC, including the audio output stage, or is backup operation of designated control functions sufficient?	Backing up only the network control board while leaving the audio power stage dependent on AC mains is typically insufficient for a transit or public address system, unless the specification explicitly limits emergency backup to non-audio control functions.
20	The tender specifies an incorporated announcement-security relay. Must the alternative amplifier provide the same relay arrangement and NO/NC contact behavior, or may an alternative interface be accepted if the required announcement override and fail-safe functions are demonstrated?	Yes, an alternative relay arrangement or interface may be accepted, *provided* that the alternative design fully demonstrates identical or superior performance regarding announcement override, priority switching, and fail-safe behavior.

	C. Two-Channel Power Amplifier – UP-247M2	
21	Must the proposed equipment provide two independent 240 W RMS channels within one amplifier unit, or may two separate single-channel amplifiers be proposed if the required channel capacity and independent operation are maintained?	Yes, two separate single-channel amplifiers can replace a single dual-channel unit, provided that the electrical, mechanical, and grounding parameters are properly engineered.
22	May other model be considered if the proposed configuration provides the required number of independent amplification channels, adequate power capacity, and compatibility with the intended speaker loads?	An alternative model may be considered, provided it fully demonstrates functional equivalence across core parameters: the required number of independent amplification channels, adequate continuous power capacity (RMS), and strict compatibility with the intended speaker loads.
23	The proposed two-channel amplifier provides the required nominal channel power but has differences in other electrical and audio parameters. For differences in frequency response, THD, signal-to-noise ratio, power consumption, and other electrical parameters. Will LRTA assess these differences individually against the tender requirements, and which parameters are considered mandatory?	Parameter differences are assessed individually against the tender requirements, typically using a line-by-line Technical Compliance Matrix.
24	The tender requires a backup-redundant configuration. Must redundancy and automatic changeover be incorporated into the amplifier itself, or may these functions be provided by a separate compatible changeover unit within the complete system?	The redundancy and automatic changeover functions do not strictly need to be integrated directly inside the amplifier chassis. They can be successfully provided by a separate, compatible changeover unit or system-level controller within the broader equipment rack, provided certain rigorous engineering conditions are met.
	D. Automatic Amplifier Changeover Unit – COU-04/0	
25	The proposed changeover equipment provides main/standby amplifier switching and monitoring functions but uses a different power supply, enclosure, and channel architecture. May this configuration be considered equivalent if the required changeover and monitoring functions are achieved?	A changeover configuration with a different power supply, enclosure, and channel architecture may be considered equivalent, *provided* that it achieves the core functional requirements of reliable fault detection, seamless main-to-standby switching, and life-safety compliance
26	Must the proposed changeover unit use the specified modular card arrangement and capacity, or may an alternative architecture be accepted if it supports the required number of amplifiers and automatic changeover operations?	An alternative architecture may be accepted even if it does not use the specified modular card arrangement, provided that it fully supports the required number of amplifier channels, executes automatic changeover reliably, and meets the system's operational and maintenance criteria.
27	If additional compatible modules or equipment are required to achieve the specified functionality, may these be included in the proposed system configuration for evaluation as a complete solution?	Additional compatible modules, interface converters, or supplementary equipment may be included to achieve the specified functionality, provided they are presented as an integrated, unified package and do not introduce unmanageable system complexity or points of failure.

28	If a separate changeover unit is required, may the bidder propose a compatible unit in addition to the five models proposed, subject to LRTA's approval and compliance with the applicable technical requirements?	As long its compatible to the existing Audio Paging System and comply the minimum technical specifications.
	E. Zone Microphone Desk – MD-30C	
29	The proposed paging station provides zone selection and announcement functions but uses a different microphone capsule type from the specified dynamic, unidirectional microphone. May an alternative microphone technology be considered if the required audio performance is demonstrated?	An alternative microphone technology may be considered, provided that it matches or exceeds the specified audio performance, frequency response, sensitivity, and speech intelligibility requirements of the transit paging system.
30	The proposed paging station has differences in operating voltage, power consumption, or interface configuration. Must these electrical parameters match the tender specifications exactly, or may an alternative configuration be considered if it is compatible with the system and satisfies the required functions?	The electrical parameters and interface configurations do not necessarily need to match the literal text of the tender specification down to the exact digit, provided that the alternative configuration is fully compatible with the existing system architecture, maintains safety margins, and satisfies all functional requirements.

This serves as an amendment to the Bidding Documents of the above stated procurements and accordingly modifies/clarifies and/or supersedes any and all provisions which are inconsistent herewith.

For further inquiries, please contact the BAC Secretariat through Tel. No. 647-3484 to 86 loc. 29872; Mobile No. 0955-6578381; Email address: bacsec@lrta.gov.ph and/or Facsimile No. 647-3484 to 86 loc. 29906.

For guidance, reference and proper compliance.

Issued this 29th day of October 2026 at Pasig City, Philippines.

[redacted]

NICOLAS G. OMBAO
Chairperson, Bids and Awards Committee (BAC)