

TECHNICAL SPECIFICATIONS

Supply, Delivery, Installation, and/or Configuration of Various ICT Requirements for BAFE Personnel for CY 2025 (Second Posting)

I. RATIONALE/PURPOSE/OBJECTIVE

The acquisition of ICT goods under this procurement will establish high-end technology devices that will provide a good-quality media output necessary to deliver the daily office operations of the Bureau. This will also ensure continuous upgrades to the BAFE ICT infrastructure. With this, the Bureau of Agricultural and Fisheries Engineering (BAFE) intends to procure the following:

- 1) **IP Phone with License.** This ensures continued connectivity through communication with other DA Offices.
- 2) **Interchangeable-lens Camera with Dry Cabinet and Various Lenses and Equipped with Cleaning Tools.** An interchangeable lens camera is critical for capturing high-quality images and videos for presentations, marketing materials, and internal documentation. Switching lenses provides flexibility for different shooting conditions and requirements, such as wide-angle shots for office setups or zoom lenses for detailed product images. The dry cabinet ensures the camera and lenses are stored in optimal conditions, protecting them from moisture and dust, thus prolonging their lifespan. Also, with cleaning tools it helps keeping the devices like cameras, projectors, and other sensitive equipment clean is crucial to maintaining their performance and longevity. Cleaning tools ensure that lenses and surfaces remain free of dust and smudges, which can affect image quality. This contributes to professional-grade visual outputs and helps prevent frequent repairs or replacements due to neglect.
- 3) **Hand-held Action Camera.** A Hand-held Action Camera is a versatile tool for capturing dynamic office content, such as team events, tutorials, or fieldwork documentation. Its compact, durable design makes it ideal for on-the-go filming, while high-resolution video ensures professional quality.
- 4) **Body Camera.** Body cameras are important for enhancing accountability, transparency, and safety, providing objective evidence of interactions, promoting trust, and supporting fair and accurate documentation specially on field validation, monitoring and evaluating projects.
- 5) **Group Video Conference Bundled with Microphone and Speaker.** In today's highly interconnected work environment, communication between teams, clients, and stakeholders across different locations is essential. A group video conference bundle ensures high-quality virtual meetings, facilitating collaboration and decision-making. With integrated microphones and speakers, everyone can participate clearly, ensuring that ideas are

effectively communicated. This reduces miscommunication, improves teamwork, and enhances productivity.

- 6) **Lapel Microphone.** A Lapel Microphone is an excellent tool for clear, hands-free audio capture during presentations or virtual meetings in the office. Its discreet design allows for natural movement and minimizes background noise, making it perfect for professional-quality sound. This microphone is especially valuable for training videos or webinars, where clear, consistent audio is key. Compact and easy to use, it's a practical, versatile choice for enhancing communication and engagement across various office activities.
- 7) **Conference Microphone and Speaker.** A Conference Microphone and Speaker provides seamless, high-quality audio for meetings, ensuring all participants are heard clearly without the need to crowd around a single device. It captures voices from multiple directions and delivers clear sound, enhancing virtual and in-person collaboration.
- 8) **Portable Speaker with Microphones (Wireless).** Clear, hands-free conversations during meetings and presentations are made possible by a portable speaker equipped with wireless mics, which improves office communication. Additionally, it's a perfect piece of equipment to utilize in an area without electricity.
- 9) **Studio Sound Card (Set).** A Studio Sound Card enhances office audio quality, making virtual meetings clearer. It supports multiple devices, reducing setup hassle and improving productivity.
- 10) **Digital Audio Recorder.** A digital audio recorder captures high-quality sound, making it ideal for recording interviews, meetings, lectures, or events. It ensures accurate documentation of important conversations and often includes a digital panel display for easy operation and playback management.
- 11) **Audio Recorder.** It enables capturing high-quality audio for recording interviews, meetings, or events, making it easier to document important conversations accurately for future reference.

II. APPROVED BUDGET FOR THE CONTRACT (ABC)

The ABC for the **Supply, Delivery, Installation, and/or Configuration of Various ICT Equipment for BAFE Personnel for CY 2025** is **Two Million Sixty-Seven Thousand Pesos Only (Php 2,067,000.00)** inclusive of all applicable government taxes and charges, professional fees, and all other costs.

III. PROJECT/DELIVERY SITE

- The project shall cover the **supply, delivery, installation and/or configuration of various ICT Equipment.**
- All items shall be supplied and delivered at **BAFE, Sugar Center, Annex II Building Extension, North Avenue, Diliman, Quezon City.**

IV. PRODUCTION AND/OR DELIVERY SCHEDULE

Goods and services shall be delivered within **Ninety (90) calendar days** from the conforme of the Notice to Proceed (NTP).

V. SUMMARY OF ITEMS BY LOT

LOT NO.	ITEM/PARTICULAR	APPROVED BUDGET FOR THE CONTRACT
1	1. Hand-held Action Camera with Stabilizer 2. IP Phone with Licenses 3. Interchangeable-lens Camera with Dry Cabinet and Various Lenses, Equip with Cleaning Tools 4. Body Camera	1,180,000.00
2	1. Lapel Microphone 2. Conference Microphone and Speaker 3. Portable Speaker with Microphones (Wireless) 4. Studio Sound Card (Set) 5. Audio Recorder 6. Group Video Conference bundled with Microphone and Speaker 7. Digital Audio Recorder	887,000.00
TOTAL		2,067,000.00

VI. ITEM SPECIFICATIONS AND COST ESTIMATES

PARTICULAR	QTY	UNIT COST (Php)	TOTAL AMOUNT (Php)
LOT NO. 1			
1.) HAND-HELD ACTION CAMERA WITH STABILIZER <ul style="list-style-type: none"> Image Resolution: At least 72 MP (11904x5952) 18MP (5888x2944) Video Resolution: At least 360-8K/30fps, 5.7K/60fps, 4K/100fps Audio Format: At least 48 kHz, 16bits, AAC ISO Range: At least 100-64000 Battery: At least 2290 mAh, longer battery life Lightweight and Waterproof With Bluetooth, Wifi With flow-state stabilization With wind noise reduction Accessories: <ul style="list-style-type: none"> With 2 extra battery With fast charger With screen protector With lens cap With standard lens guard With case With multi function tripod handle With camera stick With Bendable camera mount Warranty <ul style="list-style-type: none"> At least 1-year warranty 	5	52,000.00	260,000.00
2.) IP PHONE WITH LICENSES <ul style="list-style-type: none"> Unit, power adapter, and licenses Multiple VoIP protocol Support, Integrated Ethernet Switch VoIP Compatible Flat forms 3.7-Inch Graphical Display Speakerphone: Yes Line Features: Caller ID, Call Waiting, Call Forwarding, Call Transfer, Call Hold Programmable: Yes Plug and Play Ready Additional Function: Intercom, Call Timer, Music on hold, Hands-Free Profile 	9	70,000.00	630,000.00



PARTICULAR	QTY	UNIT COST (Php)	TOTAL AMOUNT (Php)
<ul style="list-style-type: none">at least 1-year warranty			
3.) INTERCHANGEABLE-LENS CAMERA WITH DRY CABINET AND VARIOUS LENSES, EQUIPPED WITH CLEANING TOOLS Body: At least 33.0 MP full-frame Zoom lens: At least 150mm-500mm <ul style="list-style-type: none">At least ISO 100 - 51200At least 4K up to 60p, 10-bit video recordingAt least Full HD 120 fps for slow-motion captureTouchscreen LCDWi-Fi, Bluetooth, USB-C 3.2, and Ethernet connectivityUSB streaming up to 4KWith extra battery and battery chargerWith memory card 128 gbWith camera bagWith advanced image resolution, stabilization, and autofocusWith Gimbal Stabilizer (lightweight, Bluetooth shutter control, and 3rd-Gen stabilization algorithm)Accessories: camera bag, dry cabinet and equipped with cleaning toolsAt least 1-year warranty	1	215,000.00	215,000.00
4.) BODY CAMERA <ul style="list-style-type: none">Resolution: At least 1080p HD recordingStorage: At least 128 GB internal storageBattery Life: 8-10 hours of continuous recordingField of View: At least 140° wide angleNight Vision: With infrared LEDs for night recordingWi-Fi: with mobile transferAccessories: mounting clips, charging cable, and body camera holderAdditional Features: Loop recording, motion detection, built-in speaker, microphone, and water resistanceAt least 1-year warranty	5	15,000.00	75,000.00
LOT NO. 2			
1.) LAPEL MICROPHONE Power Source: Built-in Li-ion Battery	11	6,000.00	66,000.00

PARTICULAR	QTY	UNIT COST (Php)	TOTAL AMOUNT (Php)
Battery Details: at least 1 CR2 battery required Battery Features: Battery Indicator Light Audio Specifications: <ul style="list-style-type: none"> • Signal-to-Noise Ratio: at least 80 dB • Frequency Range: at least 2.4G • Frequency Response: at least 80 KHz • Audio Sensitivity: at least 90 dB Microphone Specifications: <ul style="list-style-type: none"> • Form Factor: Lavalier • Polar Pattern: Omnidirectional • Number of Channels: at least 1 Connectivity: <ul style="list-style-type: none"> • Connectivity Technology: at least 2.4G wireless technology • Connector Type: at least 3.5 mm Jack Compatible Devices: Camcorder, Camera, Smartphone <ul style="list-style-type: none"> • Warranty: at least 1-year 			
2.) CONFERENCE MICROPHONE AND SPEAKER System Parameters: <ul style="list-style-type: none"> • Working Frequency: at least 640-790 MHz (U+Z compatible) • Modulation Method: FM (digital compression interleaving) • Frequency Stability: at least $\pm 0.005\%$ • Maximum Deviation: at least ± 45 kHz • Dynamic Range: at least 96 dB • Operating Distance: at least 100 m (open area) • Intermediate Frequency: Digital compression ratio expansion • Sensitivity: at least 12 dBuV Transmitter Parameters: <ol style="list-style-type: none"> 1. Built-in antenna 2. Output Power: at least 10 mW (adjustable) 3. Spurious Suppression: at least -60 dB 4. Power Supply: at least 2 x AA 1.5V alkaline batteries 5. Battery Capacity: at least 5000mAh Package Includes: <ul style="list-style-type: none"> • 4 pcs Gooseneck Microphones • 1 pc Receiver System • 1 pc Aluminum Carrying Case Warranty: at least 1-year	5	26,000.00	130,000.00



PARTICULAR	QTY	UNIT COST (Php)	TOTAL AMOUNT (Php)
3.) PORTABLE SPEAKER WITH MICROPHONES (WIRELESS) SPEAKER <ul style="list-style-type: none">• Sound and Audio Output• Total RMS Stereo Mode Power: at least 2000W RMS (Stereo Mode)• Front Channel (30% THD): at least 500W per channel (2 Ohm, 1kHz, 30% THD)• Subwoofer Channel (30% THD): at least 500W per channel (2 Ohm, 100Hz, 30% THD)• PMPO Output Power: at least 22,000W• Amplifier Type: at least 2.1 Channel Digital Amp• Compatible Connectivity: wireless connectivity, android, Bluetooth and iOS• Playback and Formats:• Disc Playback: CD-R / RW<ul style="list-style-type: none">◦ Format: CD-DA / MP3• USB Support:<ul style="list-style-type: none">◦ Port: Double USB (Play + Rec / Play)◦ USB Standard: USB 2.0 (Full Speed)◦ Media File Format Support: MP3◦ Battery Charge: No promote (500mA)• Playback Capacity: at least 4GB• Power and Consumption• Power Supply: at least AC 220 - 240V, 50Hz• Power Consumption:<ul style="list-style-type: none">◦ Normal Use: at least 200W◦ Standby: at least 0.5W◦ Bluetooth Standby: at least 0.6W• Timer Functions: Sleep, Clock, Play Timer, Rec Timer• Auto Power Off: Yes• Warranty: at least 1-year MICROPHONE <ul style="list-style-type: none">• Wireless Frequency: at least 1920 MHz to 1930 MHz• Battery Type Required: Rechargeable: at least 1 x AA Ni-MH Dry cell: at least 1 x AA alkaline• Battery Life: at least 8 hours (Ni-MH) at least 6 hours (alkaline)• Microphone Frequency Response: at least 100 Hz to 15kHz• Warranty: at least 1-year	3	49,000.00	147,000.00



PARTICULAR	QTY	UNIT COST (Php)	TOTAL AMOUNT (Php)
4.) STUDIO SOUND CARD (SET) <ul style="list-style-type: none">• Built-in Microphone: at least 1• Audio Crossover: Full-Range• Output Rate: at least 48KHz, 16-bit audio resolution• Compatible Devices: Desktop, Laptop, iOS, and Android phones.• Output adoption rate: at least 48KHz• Number of digits: at least 16 digits• Multi-speaker mode: at least 30• Audio interface: at least 35mm• Power supply: at least DC5V 1A• Battery capacity: at least 1200 mAh• Package Includes:<ul style="list-style-type: none">X 1 Live Sound CardX 1 USB CableX 2 Audio CablesX 1 User Manual• Warranty: at least 1 year	2	15,000.00	30,000.00
5.) AUDIO RECORDER <ul style="list-style-type: none">• Storage: at least 8GB internal memory• Display: LCD screen with real-time display, including day and time settings• Special Functions: A-B repeat, music playback, key lock, low battery indicator• Recording Format: MP3, at least 192 Kbps bit rate• Recording Time: at least 48 hours (high quality) / 68 hours (normal quality)• Recording Sources: Built-in microphone, telephone recording• Battery: at least 220mAh built-in lithium battery• Compatibility: Supports Windows 2000, XP, 7, Vista• Package Contents:<ul style="list-style-type: none">• 1 x Recorder / MP3 Player• 1 x USB Cable• 1 x External Microphone• 1 x RJ45 Cable• 1 x 3.5mm Audio Cable• 1 x Earphone• 1 x Telephone Adapter	4	1,000.00	4,000.00



PARTICULAR	QTY	UNIT COST (Php)	TOTAL AMOUNT (Php)
<ul style="list-style-type: none">1 x English User ManualWarranty: at least 1-year			
6.) GROUP VIDEO CONFERENCE BUNDLED WITH MICROPHONE AND SPEAKER <ul style="list-style-type: none">High Definition 1080 Pixel at 30 FPSat least 1/2.8 inch high quality, 2.38MP (16:9) aspect ratio CMOS sensorResolution: at least 20 megapixelPan: 340° Tilt: 160°25x Optical zoomUSB HDMI SDI RJ45 Video OutputPlug & Play USB ConnectivityCrystal clear HD1080P and 1080i image quality69.5° Wide field of view with no video distortionWith Mounting : Yes2D and 3D NR for best video quality in different lighting conditionsUser's ManualAt least 1-year warranty	7	60,000.00	420,000.00
7.) DIGITAL AUDIO RECORDER <ul style="list-style-type: none">Audio Recording Format: must have MP3LPCM for high-quality audio captureMicrophone: with High Sensitivity S-Microphone for clear voice pickupInternal Storage: at least 4GB of built-in memoryExpandable Storage: must be compatible with MicroSD (SDHC/SDXC) cardsNoise Reduction: with Auto Voice Recording to background noiseConnectivity: should be direct USB built-in for PC connectionBattery: must have rechargeable lithium battery with quick charge (3 minutes for 1-hour recording)Playback Features: must have user-friendly playback interface for easy navigationRecording Capacity: with over 159 hours of storage for extended useWarranty: at least 1-year	10	9,000.00	90,000.00

PARTICULAR	QTY	UNIT COST (Php)	TOTAL AMOUNT (Php)
GRAND TOTAL			2,067,000.00

III. INSPECTION AND TESTS PROCEDURE

- Inspector and/or Supply Officer can reject any unit or part thereof that fails to pass any test and/or inspection or does not conform to specifications.
- Inspector and/or Supply Officer will issue an Inspection and Acceptance Report (IAR) upon determining that the delivered Various ICT Equipment are usable and in good working condition.

IV. AFTER-SALES SERVICE

A. ORIENTATION/TRAINING REQUIREMENTS

The Winning Bidder shall provide at least **one (1) day** of in-person training/technical updates on all various ICT requirements. This shall include orientation on the operation, repair, maintenance, and basic troubleshooting of devices in the BAFE conference room.

B. TECHNICAL SUPPORT

The technical support is available via telephone and email for 8 hours a day (8:00 am - 5:00 pm) 5 days a week (Monday - Friday) for problem resolution. The support response time will be by the next business day.

V. PAYMENT TERMS AND CONDITIONS

One-time payment shall be made upon completion and acceptance for the supply, delivery, installation, and/or configuration of Various ICT Equipment subject to submission of the following documents:

- Certificate of Warranty for all equipment;
- Certificate of Replacement for defective items/parts; and
- Sales Invoice/Delivery Receipt.

VI. MODE OF PROCUREMENT / AWARDING

The supply, delivery, installation and/or configuration of various ICT equipment will be procured through **Competitive Bidding**. The awarding of this project shall be done by **LOT**.



VII. ADDITIONAL TECHNICAL DOCUMENTS

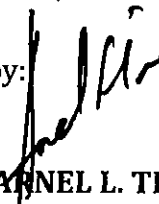
Bidders are required to submit a minimum of two (2) satisfactory performance certificates to demonstrate the quality and reliability of their offered ICT equipment. These certificates must be verifiable and may be sourced from either:

- The Bureau of Agricultural and Fisheries Engineering (BAFE), or
- Previous clients for completed ICT equipment contracts.

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