

**Procurement for the Global Navigation Satellite System (GNSS) Base/Rover
Package with Complete GNSS Terrestrial Bundle Software**

BID BULLETIN NO. 1

This Bid Bulletin clarifies the queries raised during the Pre-bid Conference on 17 September 2024 at 10:00 AM, as well as other matters relative to the above Project.

A. QUERIES/QUESTIONS FROM THE PROSPECTIVE BIDDERS

QUERY	CLARIFICATION
<p>1. Clarification on the General Technical Specifications; Item a 2. Operating time: At least 3.7 hours for one (1) battery (Rechargeable, removable, Lithium battery : 3700 mAh or higher)</p> <p>Can we clarify if we can propose a built-in battery since some of the updated GNSS equipment have built-in batteries.</p>	<p>As per Technical Specifications, the battery should be rechargeable, removable, lithium battery with a capacity of 3700 mAh or higher.</p> <p>We will only consider removable batteries, as they offer greater convenience when being used on field and generally provide a longer lifespan compared to non-removable (built-in) batteries.</p>
<p>2. Clarification on the cost of Bidding documents.</p>	<p>The cost of Bidding Documents is Php 5,000.00 (non-refundable).</p>

B. CORRECTION TO THE BIDDING DOCUMENTS UNDER SECTION VII. TECHNICAL SPECIFICATIONS

ORIGINAL SPECIFICATION	CORRECTED SPECIFICATION
<p>1. 1.a.1. Measurements:</p> <p>Positioning Rates: 1 Hz - 20 Hz selectable</p>	<p>1.a.1 Measurements:</p> <p>Positioning Rates: 1 Hz - 20 Hz minimum range</p>
<p>2. 1.a.3. ACCURACY:</p> <p>Real-time kinematic:</p> <p>Code differential GNSS positioning: Horizontal (0.20-0.25 m) + 1 ppm Vertical (0.25-0.50 m or better) to 1 ppm</p>	<p>1.a.3. ACCURACY:</p> <p>Real-time kinematic:</p> <p>Code differential GNSS positioning: Horizontal (0.20-0.25 m) + 1 ppm Vertical (0.25-0.50 m) to 1 ppm</p>

<p>3. 1.a.4. Communications and data storage:</p> <p>Wireless Communications:</p> <p>Radio/UHF Modem: Working range minimum 3-5 km from base to rover, Cellular, Bluetooth, Wi-Fi</p>	<p>1.a.4. Communications and data storage:</p> <p>Wireless Communications:</p> <p>Radio/UHF Modem: Working range 3-5 km from base to rover, Cellular, Bluetooth, Wi-Fi</p>
<p>4. 5. OTHER REQUIREMENTS:</p> <p>f. The supplier must present a calibration certificate for the equipment.</p>	<p>5. OTHER REQUIREMENTS:</p> <p>f. The supplier must present a calibration certificate for the equipment upon delivery.</p>

C. GENERAL REMINDERS

Hereto attached as **"Annex A"** - Section VII. Terms of Reference (TOR)/Technical Specifications.

Please take note of the changes in the following schedule:

ACTIVITIES	DATE/SCHEDULE
Deadline for Request for Clarification, if any	21 September 2024, Saturday
Issuance of Bid Bulletin, if any	24 September 2024, Tuesday
Deadline for Submission of Bids	01 October 2024, 9:00 AM
Opening of Bids	01 October 2024, 10:00 AM

The above changes further amend the bidding documents accordingly. **The Submission and Opening of Bids will be conducted face-to-face** at the **BCDA Corporate Center, 2nd Floor, Bonifacio Technology Center, 31st St. corner 2nd Ave, Bonifacio Global City, Taguig City.** However, the bidders may opt to attend online via Zoom. The meeting link will be provided upon request by the bidders to the BAC-G Secretariat through the email address: bacgsecretariat@bcda.gov.ph.

For those attending in person, please consider the following guidelines:

- Attendees to the Pre-bid Conference and Opening of Bids are expected to follow the BCDA Health protocols; and
- Observers/representatives who show signs of COVID-19 related symptoms are not allowed to enter the BCDA premises.

This Bid Bulletin is being issued pursuant to Sections 22.5.2 and 22.5.3 of the 2016 Revised Implementing Rules and Regulations of Republic Act No. 9184.

Issued on **24 September 2024.**

BIDS AND AWARDS COMMITTEE FOR GOODS

By:



RICHARD BRIAN M. CEPE
Chairperson

Section VII. Technical Specifications

Technical Specifications

GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) BASE/ROVER PACKAGE WITH COMPLETE GNSS TERRESTRIAL BUNDLE SOFTWARE

TERMS OF REFERENCE / TECHNICAL SPECIFICATIONS			
LOT	UNITS	Description	Compliance
LOT 1	1 set	GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS) BASE/ROVER PACKAGE WITH COMPLETE GNSS TERRESTRIAL BUNDLE SOFTWARE	<i>Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable</i>



			<p><i>for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.</i></p>	
			Compliant	Non Compliant
		<p>1. GLOBAL NAVIGATION SATELLITE SYSTEM BASE, ROVER AND FIELD CONTROLLER</p>		
		<p>a. ONE (1) BASE AND TWO (2) ROVER SPECS AND CAPABILITIES:</p>		
		<p>1. Measurements:</p>		
		Type:	Multi-frequency	
		Number of Channels:	Minimum of 576 or higher for faster acquisition and higher sensitivity	
		Signals Tracked Simultaneously:	<ul style="list-style-type: none"> • (GPS) Global Positioning System (USA Satellite System) • GLONASS (Russian Satellite System) • Beidou (Chinese Satellite System) • Galileo (European Satellite System) • QZSS (Japan Satellite System) • NavIC, SBAS, L-Band 	
		Tilt		

	compensation:	Calibration-free and immune to magnetic disturbances		
	Positioning Rates:	1 Hz to 20Hz minimum range		
2. General:				
	LED Status Indicators:	Power, Memory, Tracking		
	Operating time:	Operating time: At least 3.7 hours for one (1) battery (Rechargeable, removable, Lithium battery : 3700 mAh or higher)		
	Environmental specifications:	with IP67 proof protection against water, sand and dust		
	Temperature:	<ul style="list-style-type: none"> • -40 to +65°C working temperature • -40 to +80°C storage • Humidity: 100%, condensing 		
	Shock / Drop:	Can withstand a 2 m. pole drop onto concrete		
3. ACCURACY:				
Real-time kinematic:				
	Single baseline	Horizontal (3-8 mm) + 1 ppm Vertical (10-15 mm) + 1 ppm		
	Network RTK	Horizontal (3-8 mm) + 0.5 ppm		

		Vertical (10-15 mm) + 0.5 ppm		
Static:				
High-Precision Static		Horizontal (0-3 mm) + 0.1 ppm Vertical (0-3.5 mm) + 0.4 ppm		
Static and Fast Static		Horizontal (0-3 mm) + 0.5 ppm Vertical (2-5 mm) + 0.5 ppm		
Code differential GNSS positioning:		Horizontal (0.20-0.25 m) + 1 ppm Vertical (0.25-0.50 m) to 1 ppm		
Tilt-compensated:		5mm +0.4mm (up to 30 deg)		
4. Communications and data storage:				
Wireless Communications:		Radio / UHF modem: Working range 3-5 km from base to rover, Cellular, Bluetooth, Wi-Fi		
I/O Ports:		Serial, USB, TCP/IP, IBSS/NTRIP, Bluetooth		
Storage:		At least 6 GB Internal Memory		
Correction Format / Data outputs:		CMR, CMRx, CMR+, RTCM / NMEA		
b. TWO (2) FIELD CONTROLLER SPECS AND CAPABILITIES				

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1. Environmental specifications:			
Temperature:	-30 to 60°C operating, -40 to 70°C storage		
	Shock and Vibration: designed to survive a 1.2m drop onto concrete		
	Waterproof and dustproof: IP67 or IP68		
2. System and Electrical specifications:			
Operating System:	Windows or Android		
With built-in SURVEYING FIELD SOFTWARE that has the following functions:	<ul style="list-style-type: none"> • Designed to Support Topographic surveys, Staking, control • Powerful COGO routines RTK and PPK capable • Graphical Staking of points, lines arcs and alignments from active maps 		
CPU:	Minimum of quad-core		
Memory:	Minimum of 4GB RAM		
Storage:	Minimum of 64 GB internal memory, with SD card slot and Mass-storage device support.		
Battery life:	Minimum 5 working hours		

		Display:	1280x720 resolution or higher , 16:10, 800 nits sunlight readable		
		Keyboard:	QWERTY with backlight		
		Speaker:	For voice broadcast of real time status		
		Connections:	WLAN / WWAN, Wi-Fi, Bluetooth, SIM minimum of 3G		
		Sensors:	3-axis accelerometer, magnetic sensor, ambient light sensor, proximity sensor		

		2. ADDITIONAL ACCESSORIES			
	2 pcs	Rover Pole			
	1 pc	Base Tripod			
	2 pcs	BiPod			
	2 pcs	Hard case for the GNSS equipment			
	9 pcs	Extra batteries			
	3 pcs	Extra charger for the main GNSS			
		3. COMPLETE GNSS TERRESTRIAL BUNDLE SOFTWARE			
		Can process basic Visual, Cleanse, Analyze and Diagnose ground surveyed data, With one (1) perpetual license one (1) unit.			

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		4. WARRANTY		
		<p>a. The product shall be covered by a warranty of a minimum of one year (1) year effective from the date of acceptance.</p> <p style="text-align: center;">Such warranty must include:</p> <ul style="list-style-type: none"> ● 24/7 on-premise or online / call service support and diagnostics ● Free Parts, Services and Labor Costs ● Free Firmware Upgrades 		
		<p>b. Full replacement of defective units should be immediately done from receipt of notice within thirty (30) days from the date of delivery and checking of items, equipment shall only be qualified for repair service center free of charge and service units will still be provided while the equipment is being repaired within the one (1) year standard warranty.</p>		
		<p>c. The obligation for the warranty shall be covered by Retention money in an amount equivalent to one percent (1%) of total contract price. The said amount shall only be released one year after the issuance of Certificate of Completion and Acceptance.</p>		
		5. OTHER REQUIREMENTS:		
		<p>a. The supplier must have at least two (2) years of experience in using the GNSS Survey Equipment.</p>		
		<p>b. The supplier must be an authorized distributor of the equipment and software. They must submit a Certification.</p>		

		c. The supplier must have a partner Authorized Local Service Center within Metro Manila or Central Luzon area and must submit a Certification.		
		d. The supplier must submit a Certification or other pertinent documents as to the availability of an in-house factory-trained Service Technician.		
		e. The supplier must conduct actual test and mock/simulation projects prior to acceptance of the equipment.		
		f. The supplier must present a calibration certificate for the equipment upon delivery.		
		g. The supplier must submit a letter or certification from the manufacturer that the supplier is an authorized dealer.		
		h. The supplier must submit a Certification of Registration and Testing from NAMRIA upon delivery under the name of BCDA.		
		i. The supplier must provide free of charge a minimum of 3-day RTK-GNSS Training Course for at least eight (8) BCDA survey technical personnel together with training materials.		

Bidder's Authorized Representative:

Name: _____

Legal capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____


