

REQUEST FOR SEALED QUOTATION

**Procurement of Global Navigation Satellite System (GNSS) for Detail Survey of
Water Supply Systems (Carbon Rod/Pole for GNSS RTK/PPP)**

Date of Notice Publication: 21 March 2025
Deadline of Submission: 28 March 2025



Nepal Water for Health (NEWAH)
Headquarters, Lohasal, Kathmamndu

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1. Request for Sealed Quotation (RFQ)



Nepal Water for Health (NEWAH)

Headquarters Lohasal, Kathmandu

Phone no: 014015707

**Invitation for Submission of Sealed Quotation for Procurement of
Global Navigation Satellite System (GNSS) Equipment
for
Detail Survey of Water Supply Systems**

Date of first notice publication: 21 March 2025

Nepal Water for Health (NEWAH) is seeking competitive sealed quotation from qualified company/firm for the Procurement of Global Navigation Satellite System (GNSS) Equipment for detail survey of water supply systems along with capacity building training to NEWAH inhouse staff. The eligible company/firm are requested to submit the **SEALED QUOTATION** with a cover letter to “**The Procurement Committee**”, Nepal Water for Health (NEWAH), Headquarters, Kathmandu-4, Annapurna Marg, Lohasal, Kathmandu by **17.00 PM, 28th March 2025**.

Note: TOR and others form and required information shall be accessed from NEWAH websites Procurement Service of Global Navigation Satellite System (GNSS) Equipment, Carbon Rod/Pole.

Nepal Water for Health (NEWAH)
Headquarters, Lohasal, Kathmandu

Section 1: Terms of Reference (ToR) and Specifications

Terms of Reference (ToR) for procurement service of Global Navigation Satellite System (GNSS) Receiver, Carbon rod/pole with capacity building to NEWAH's Staff.

<p>Background:</p> <p>Nepal Water for Health (NEWAH) is a non-governmental organization (NGO) established in 1992. It specializes in ensuring access to safe drinking water, sanitation and hygiene (WASH) in the rural and semi urban areas of the country with active participation of community people. NEWAH works in sustainable WASH service delivery, capacity building of community stakeholders and local, provincial and federal level of government, policy advocacy, and research and development, addressing the cross-sectoral issues namely, Gender Equality and Social Inclusion (GESI), climate change adaptation and disaster risk reduction, agriculture, nutrition and livelihoods and integrated water resources management. For the last 32 years, NEWAH has assisted about 2.24 million people through 2,728 small, medium and large-scale WASH-related projects implemented across 52 districts. As a result, NEWAH has been able to establish itself as a credible NGO in Nepal, gaining the trust of all three tiers of Nepal Government, users' communities as well as local and international development partners.</p> <p>NEWAH has been using Abney level device for the detail survey of water supply projects which is most traditional mechanism, and such instrument is not available in the market. It takes more time and has less accuracy. Therefore, NEWAH is planning to adopt new technology Global Navigation Satellite System (GNSS) Equipment for Detail Survey of Water Supply Systems (Carbon Rod/Pole for GNSS RTK/PPP) for detailed survey of water supply projects and to conduct the capacity building training to inhouse staff for handling and operation the new equipment.</p>	
<p>Purpose of Procurement of Global Navigation Satellite System (GNSS) Receiver, Carbon rod/pole with capacity building to NEWAH's Staffs.</p>	<ol style="list-style-type: none"> 1. To reduce the time and cost for the detail survey of water supply system. 2. To reduce the paperwork and minimize the errors during data collection using Abney level in the field book. 3. To conduct 5 days (1 day additional for travel) training for the well handling of equipment and can do the survey with effectively and efficiently.
<p>Specific Responsibilities of Service Provider</p>	<ol style="list-style-type: none"> a. To provide 4 sets of GNSS RTK/PPP receiver equipment as specified in Specification. b. To provide the carbon rod/pole for GNSS RTK/PPP as specified in Specification. c. To conduct 5 days training to NEWAH staff for the survey procedures, equipment handling of survey equipment and data importing and linking to the design software.
<p>Capacity Building location and number of participants for capacity building activities</p>	<p>Practical Training/Survey Location: Molung Rural Municipality, Okhaldhunga No of participants: 10 to 15 Tentative Date: 7 to 11 April 2025</p>

Final Outputs	The successful firm/organization shall produce the followings deliverables: <ul style="list-style-type: none"> • Delivery of Global Navigation Satellite System (GNSS) receiver & Carbon rod/Pole for RTK/PPP with stipulated time as per Purchase Order issued by NEWAH. • Capacity building to NEWAH Staffs and training report submission.
Time Duration of Assignment	Total assignment duration is 15 Days of after contract sign.
Legal documents submission	The company, firm/organization needs to have the following legal documents as mentioned in section 3. Submission of below documents is must mandatory: <ul style="list-style-type: none"> • Company registration with similar works objectives • VAT Registration • Tax clearance certificate of 2080/2081.
Selection Criteria	Cover letter and legal documents as mentioned above need to be submitted mandatorily. Sealed quotation as mentioned in section 4 should be submitted as provided by NEWAH.
Confidentiality	All information, and reports under this assignment will be a property of NEWAH, which cannot be used in for any purpose without the prior permission of NEWAH.
Coordination	The external firm/organization can coordinate with NEWAH, Kathmandu for any clarification needed on specification of equipment and other details.
Rights	The NEWAH reserves the right to reject or cancel any proposal or procurement process without showing any reason.
Professional Liabilities	The firm/organization is expected to carry out the assignment with due diligence and in accordance with prevailing standard of the professionalism.
Deadline Submission of Proposal	The eligible firm/organizations are requested to submit the SEALED QUOTATION with a cover letter to “The Procurement Committee”, Nepal Water for Health (NEWAH), Headquarters, Kathmandu-4, Annapurna Marg, Lohasal, Kathmandu by 17.00 PM, 28 th March 20245

Specifications of GNSS Receiver and Carbon rod/Pole for GNS RTK/PPP

A. Specific specification of Global Navigation Satellite System (GNSS) Equipment should be

1. **High accuracy GNSS:** 1408 channel multi-band, multi-constellation RTK/PPP GNSS receiver
2. **Connectivity:** Wi-Fi and blue tooth 5.0 compatible with android and IOS built in Wi-Fi NTRIP server
3. **Satellite based PPP:** Satellite based PPP using Galileo HAS and BeiDou B2b for offline high accuracy mapping
4. **Power Option:** Battery lasts up to 20 hours and charges with any USB-C type charger
5. **APP support:** Fully integrated with the SW Maps APP for RTK/PPK survey

Details Specification of the GNSS RTK/PPP should be as tabulated below:

Receiver Module	Unicore UM980		
Signals Tracked	GPS	L1C/A, L1C, L2C, L2P(Y), L5	
	QZSS	L1C/A, L1C, L2C, L5	
	GLONASS	G1, G2, G3	
	Galileo	E1, E5a, E5b, E6	
	BeiDou	B1I, B2I, B3I, B1C, B2a, B2b	
	SBAS	L1C/A	
	NavIC	L5	
PPP	BeiDou B2b PPP, Galileo E6-HAS		
Position Accuracy (CEP)	Mode	Horizontal	Vertical
	Standalone	1.5m	2.5m
	SBAS	0.6m	1m
	PPP (B2b/E6-HAS)	5cm	10cm
	RTK	8mm + 1ppm	15mm+1ppm
	Static	3mm + 0.5 ppm	5mm + 0.5 ppm
Number of Channels	1408		
Update Rate	Up to 10Hz		
Receiver	Dimensions	ø138x90mm	
	Weight	625	
	Mounting	Standard 5/8" screw	
Internal Radio	Frequency	2.4GHz	
	Range	Up To 300m	
Connectivity	Wi-Fi	2.4GHz 802.11 b/g/n	
	Bluetooth	Bluetooth 4.0	
Ports	USB	USB-C port	
	Serial	4-pin JST-XH UART serial port	
Battery	Internal Battery	3.7V Li-Ion, 3 cells, 9000mAh	
	Running Time	Up To 20 Hours (Static), 16 Hours (RTK)	
	Charging	USB, 1A charge current	
Data Output	Rover	NMEA 4.10, Unicore	
	Base	RTCM 3.3	
Data Recording	Format	NMEA 4.10, Unicore	
	Storage	Micro-SD card slot	
RTK Correction Input	RTCM 3		
Included Accessories	SW Maps GNSS Surveyor Bag		
	Micro-SD Card		
	USB-C Battery Charger		
Mobile App	Android	GNSS Setup App for Base/Rover configuration	
		SW Maps for surveying	
	iOS	SW Maps for surveying	

B. Carbon Rod/Pole for GNSS RTK/PPP:

The supplier should provide the Carbon Rod/Pole having Two sections with fully extended length: 2.2m and Retracted Length: 1.25m for GPS GNSS RTK

Section: 2
Letter of Sealed Quotation Submission

Date:

To:

Procurement Committee,
Nepal Water for Health (NEWAH),
Headquarters, Lohasal-4, Kathmandu

Subject: Submission of Sealed Quotation

Dear Sir:

We, the undersigned, offer to provide the Global Navigation Satellite System (GNSS) receiver, Carbon rod/pole for GNSS RTK/PPP including capacity building training to NEWAH inhouse staff as mentioned in Terms of Reference (ToR) provided by NEWAH as per notice published on March 21, 2025. We hereby submitting our Sealed Quotation.

Yours sincerely,

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Firm/Company: _____

Address: _____

Contact information (phone and e-mail): _____

Official Seal: _____

Section: 3

Company/Firm's Legal Documents and Others

Provide a brief description of the company/firm and along with this attach the legal documents i.e., **Company registration, VAT Registration, Tax clearance Certificate of 2080/2081 and Relevant working experience and provide the day wise training details for in house staff of NEWAH as mentioned below.**

- Capacity building/ training details (day wise)
- Repair and Maintenance support of the equipment
- Warranty of goods / equipment

SECTION: 4

Bill of Quantities and Rates for Procurement of Global Navigation Satellite System (GNSS) Receiver, Carbon Rod/Pole for RTK/PPP including Capacity Building

SN	Items/ Description	Unit	Specification	Total Required Quantity (A)	Rate per Unit in figure (Excluding VAT) (B)	Rate per unit in words (Excluding VAT)	Total Amount (C)= AxB
1	Global Navigation Satellite System (GNSS)	Nos.	As per Specification in ToR	4			
2.	Carbon Rod/Pole for RTK/PPP	Nos	As per Specification in ToR	4			
3.	Capacity Building Training to NEWAH staff for the handling and operation of GNSS equipment	No.	Providing capacity building training to 10-15 NEWAH staff in designated location	1			
Sub-Total Amount Excluding VAT							
VAT (13%)							
Grand Total Amount Inclusive VAT							

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Firms/Company /Service Provider: _____

Address: _____

Contact information (phone and e-mail): _____

Official Seal: _____