MEPNN Supplier Scouting Opportunity Synopsis

Section 1: General Information

Scouting Number	2025-067
Item to be Scouted	Acoustic Receiver
Days to be scouted	15
Response Due By	03/20/2025
Description	The National Oceanic and Atmospheric Administration (NOAA) Great Lakes Environmental Research Lab (GLERL) are a multidisciplinary environmental research laboratory that provides scientific understanding to inform the use and management of Great Lakes and coastal marine environments, such as tag deployments. The necessary components for these tag deployments include products equivalant in form, fit, and function to 48 Innovasea acoustic release receivers (VR2AR-69khz) and 1 live acoustic receiver (RX-LIVE 69 kHz) and the necessary supplies (e.g. cable, VR100 Surface Transponder). These receivers will record pings from tagged fishes within range of a given receiver in the Lake, recording the time and information from any other sensors with which the tag is equipped, which is one of their core missions in the lab. Taken together, the receivers will detect nearby tagged fishes in Lake Michigan. This will include fishes tagged by other research projects as well as from planned NOAA tag deployments. These data will provide new information regarding the habitat preferences and movement patterns of the fish community in Lake Michigan. The GLERL requires receivers like the Innovasea VR2AR-69khz and RX-LIVE 69 kHz to support their data collection in the Great Lakes.
Notify Requester Immediately	
State item to be used in	

Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Unknown except as provided in attached specs sheet.

Provide dimensions / size / tolerances / performance specifications for the item	Frequency 69 kHz
	Depth 500 m
	Weight VR2AR: 2350 g (air); 500 g (water) VR2AR-X: 2746 g (air); 812 g (water)
	Dimensions VR2AR: Length 401 mm VR2AR-X: Length 465 mm
	Diameter: 81 mm
	Mooring bracket width: 170 mm
	Storage Capacity 32 MBytes non-volatile flash memory (~3-million detections)
	Power VR2AR: One 3.6 V Lithium D VR2AR-X: One 3.6 V Lithium DD
	Release: One 4 V Lithium AA
	Battery Life VR2AR: Approx. 14 months VR2AR-X: Approx. 26 months
	Release: 5-6 years
	Max Test Load 1000 lbs Max Safe Working Load 250 lbs Max Release Load 250 lbs
	Magnetic Activation Probe for acoustic receivers RX-LIVE 69 kHz Cabled Acoustic Receiver with External Connector ASCII output enabled, RS485 cable not included, Requires external power High Speed RS-485 Communication Interface for HR2 and HR3 receivers Includes Fathom software, USB interface box and 10m of cable (software requires Windows 7 or higher) VR100 – Surface Transponder and Manual Tracking Acoustic Receiver. (Model VR100-300) Supports 8 channels and detection of 69kHz and 180kHz PPM transmitter platforms.
	VHTx 69kHz Transponding Hydrophone 25 meter waterproof cable for VR100
	For additional information, see attached forms
List required materials needed to make the product, including materials of product components	Various as needed to support production of a quality product with comparative lifespan
Are there applicable certification requirements?	No
Are there applicable regulations?	No

Are there any other stndards, requirements, etc.?	No
NAICS 1	334513 Instruments and related products manufacturing for measuring, displaying, and controlling industrial process variables
NAICS 2	
Additional Technical Comments	Any offered product must be completely compatible (form, fit, and function) with the existing system, without the need for modification to the product or system.

Section 4: Business Information

Estimated potential business volume	One-time purchase Quantity of 48 VR2AR-69khz Coded Acoustic Receivers with Acoustic Release \$4,840.00 each Quantity of 3 Magnetic Activation Probe for acoustic receivers \$38.00 each Quantity of 1 RX-LIVE 69 kHz Cabled Acoustic Receiver with External Connector \$7,880.00 each Quantity of 1 High Speed RS-485 Communication Interface for HR2 and HR3 receivers \$1,280.00 each Quantity of 1 VR100 – Surface Transponder and Manual Tracking Acoustic Receiver (Model VR100-300) \$6,840.00 each
	Quantity of 1 VHTx 69kHz Transponding Hydrophone 25 meter waterproof cable for VR100 \$2,525.00
Estimated target price / unit cost information (if unavailable explain)	approximately \$251,000.00 total
When is it needed by?	Anticipate contract award by 07/01/2025, with delivery by 08/01/2025
Describe packaging requirements	Best available. Delivered undamaged. Specifics discussed in negotiation.
Where will this item be shipped?	Ann Arbor, MI

Additional Comments

Is there other information you would like to include?	Funding Agency: Commerce, U.S. Department of / National Oceanic and Atmospheric Administration (NOAA) / Great Lakes Environmental Research Lab (GLERL)
	This is a Simplified Acquisition, which has a shorter lead time to completion than an action over \$250,000.00. It is expected that this requirement will be awarded within the next 30-60 days, and any timely scouting (requested completed within 15 days from submission) would be appreciated to align with Simplified Acquisition requirements for posting and the Buy American Act Waiver process. Department of Commerce Point of Contact: Marcelle Loveday, Director, Acquisition Policy & Workforce, Office of Acquisition Management, 202-941-7641, MLoveday@doc.gov.

VR2AR Receiver

Built-in tag and acoustic release enables communication from the surface with deployed receivers to obtain status and remotely release the unit

The VR2AR receiver comes with a built-in transmitter that enables remote communications from the surface with deployed receivers, and also allows remote retrieval of the unit using an integrated acoustic release - typically within one minute. The VR2AR-X is a longer-life version capable of deployments up to 26 months.

The built in transmitter can be used as a sync tag for improved finescale positioning results and also provides a means to obtain receiver status using a VR100 receiver and a transponding hydrophone.

Researchers can get essential information such as unit health, number of detections, tilt, range, temperature, noise, signal strength, data watch tables, and estimated remaining battery life and memory.



VR2AR Float Collar sold separately. Floats not included with Float Collar assembly.

Use Cases

- » Study behaviour and migration of animals
- » Conduct large scale coastal migration studies
- » Understand spawning behaviour
- » Study MPA effectiveness as it relates to population sustainability
- » Monitor survival and mortality
- » Assess climate change impacts
- » Conduct fine-scale positioning studies
- » Understand species distribution and habitat preferences
- Monitor predation events and study predator-prey interactions

Benefits

Programmable Watch Table

- » Sets a list of tag ID's and monitors the number of detections received
- » Verifies sync tag and range test tag performance without retrieving receivers
- » Range Detection between VR2AR and VR100
 - » Estimates distance between the VR2AR and the VR100 and locates potentially lost units
- » Unit Discovery Mode
 - » Detects which receivers are within range of the VR100
- » Programmable Self Transmitter
 - » Logs its own transmissions
 - Four programmable power levels (142 dB, 148 dB, 154 dB, 160 dB)



Pair With

The VR2AR-69 kHz receiver is used as a system with:

- » All 69 kHz Coded Tags
- » V9AP, V13AP 69 kHz Accelerometer Tags
- » V7D/DT, V9D/DT 69 kHz Predation Tags
- » VR100 Deckbox and VHTx-69 kHz Transponding Hydrophone for communication with deployed units
- » VUE Software for data offload and analysis



PRODUCT SPECIFICATIONS



Frequency

69 kHz

Depth 500 m

Weight

VR2AR: 2350 g (air); 500 g (water) VR2AR-X: 2746 g (air); 812 g (water)

Dimensions

VR2AR: Length 401 mm VR2AR-X: Length 465 mm Diameter: 81 mm Mooring bracket width: 170 mm

Storage Capacity 32 MBytes non-volatile flash memory (~3-million detections)

Power

VR2AR: One 3.6 V Lithium D VR2AR-X: One 3.6 V Lithium DD Release: One 4 V Lithium AA

Battery Life

VR2AR: Approx. 14 months VR2AR-X: Approx. 26 months Release: 5-6 years

Max Test Load 1000 lbs

Max Safe Working Load 250 lbs

Max Release Load 250 lbs

Ready to Get Started? Contact us today.

About Innovasea

Innovasea designs the world's most technologically advanced aquatic solutions for fish tracking and builds them to withstand the toughest conditions. It's all driven by a commitment to make our ocean and freshwater ecosystems sustainable for future generations. Today. Tomorrow. For life.



SPECIFICATIONS AND DESCRIPTIONS

145025 -

The following specifications must be met in order to fulfill this bona fide need, justified by this procurement request.

Specifications are as follows:

VR2AR Frequency 69 kHz Depth 500 m Weight VR2AR: 2350 g (air); 500 g (water) VR2AR-X: 2746 g (air); 812 g (water) Dimensions VR2AR: Length 401 mm, VR2AR-X: Length 465 mm, Diameter: 81 mm Mooring bracket width: 170 mm Storage Capacity 32 MBytes non-volatile flash memory (~3-million detections) Power VR2AR: VR2AR-X: One 3.6 V Lithium DD Release: One 4 V Lithium AA Battery Life VR2AR-X: Approx. 26 months Release: 5-6 years Max Test Load 1000 lbs Max Safe Working Load 250 lbs Max Release Load 250 lbs

Magnetic Activation Probe for acoustic receivers

RX-LIVE 69 kHz Cabled Acoustic Receiver with External Connector ASCII output enabled, RS485 cable not included, Requires external power

High Speed RS-485 Communication Interface for HR2 and HR3 receivers Includes Fathom software, USB interface box and 10m of cable (software requires Windows 7 or higher)

VR100 – Surface Transponder and Manual Tracking Acoustic Receiver. (Model VR100-300) Supports 8 channels and detection of 69kHz and 180kHz PPM transmitter platforms. VHTx 69kHz Transponding Hydrophone 25 meter waterproof cable for VR100 Shipping and Handling Included.

Mike Ryan – COR II

DATE