

Red Sea Urchin Vessel Monitoring System Pilot

Why VMS?

The Department has received numerous complaints about the lack of monitoring for the north coast red urchin fishery since the On-Grounds Monitor program was suspended in 2007. Illegal harvest activity on the fishing grounds last season further highlighted this lack of monitoring. Due to the large coastal area and the frequency of movement of the north coast urchin fleet, vessels can be difficult to find for fishery officers. Time and money are wasted in efforts to locate vessels in the fleet. The VMS will send near real-time location information to fishery managers and fishery officers, making planning enforcement patrols more efficient.

What is VMS and how does it work?

VMS is a satellite based, near real time, positional tracking system. These devices consist of a Global Positioning System (GPS) and a satellite data transmitter that provides information on vessel name and location. Data from the VMS is sent to a satellite, relayed to a station on the ground and then sent to the designated vessel-monitoring centre in near real time. Your location data will be kept confidential by the Department. Access to your VMS location data will be made available to fishery officers and fishery managers and will be used for planning enforcement patrols and for in-season management purposes. D&D Pacific Fisheries may be given access for in-season management use.

VMS Pilot Program Requirements:

- The VMS must be the DFO approved Iridium system by ROM communications and set to transmit positional information once every hour. This system has the most reliable satellite coverage and is accepted by the DFO VMS data system.
- The vessel(s) equipped with the VMS must be a vessel actively engaged in fishing (not a live-aboard).
- Both North Coast fleets must have at least one vessel equipped with a VMS. Exception: designated Non-VMS areas; RU55, RU56A, RU56B, RU57A, RU57B, RU58.
- Vessels equipped with the VMS must check that the system is operational prior to commencing fishing activity.
- If the VMS stops working for any reason, the fleet must cease fishing activity unless there is another vessel in the fleet with a VMS. When a VMS stops transmitting, email alerts are sent to fishery managers and fishery officers.
- If a fleet does not have at least one vessel with a functioning VMS, fishing activity may be suspended by closing the area.
- The VMS unit must stay on for the entire red urchin season unless the vessel has ceased fishing for the remainder of the season.
- For the pilot program the VMS unit may be installed by the vessel owner/operator.

VMS Program Evaluation

An evaluation of the pilot program will be on-going by Fisheries & Oceans Canada. Some of the aspects that will be evaluated include:

- How well did the VMS work on open skiffs? How did you keep the system waterproof? If there were any issues, could any solutions be suggested?
- The Iridium VMS unit is equipped with a back-up battery that allows it to continue to operate in the event of a power failure or a period of vessel inactivity. Did you have any issues with the battery back up system?
- In general how reliable is the Iridium VMS unit? To your knowledge, did it cease functioning at any time during the season?

VMS West Coast Distributor Information

ROM Communications Inc.

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What is the Vessel Monitoring System (VMS)?

VMS is a satellite based, near real time, positional tracking system. These devices consist of a Global Positioning System (GPS) and a satellite data transmitter that provides information on the vessel name, locations and activity. License conditions in certain fisheries require that fishing vessels carry a VMS unit approved by Fisheries and Oceans Canada. VMS is not intended to replace existing mandatory safety equipment.

How does it work?

A VMS unit is about the size of a small radio with an antenna. Data is sent to a satellite orbiting the earth, relayed to a station on the ground, and then sent to the designated vessel-monitoring centre in near real time or at a pre-determined time intervals. VMS units are available with a backup battery that allows it to continue to operate in the event of a vessel power failure.

What are the benefits of VMS?

- VMS provides Fisheries and Oceans Canada with important information to manage fisheries resources.
- VMS improves compliance with fisheries regulations by providing regular positional information of vessel activity.
- VMS improves the cost efficiency of the observer deployments and monitoring conducted under the dockside-monitoring program.
- VMS provides fisheries and oceans Canada with additional information about the status of fish stocks and fish movement by contributing to increase accuracy and timeliness of catch and effort information. This data provides valuable information to ensure the continued to sustain a book management of fishery resources.

Data Communications:

The VMS unit has a two-way data communication port that can provide e-mail access while it is at Sea with the addition of a laptop computer. This allows the crew on board the vessel to communicate directly with their family and friends.

How much does the ROM VMS system cost?

The ROMTraX VMS-9601 unit will cost approx. \$1800.00, including backup battery module, but can be higher if additional features are chosen. Savings can be achieved with volume purchasing.

What monthly plans are available from ROM?

ROM Communications provides multiple monthly network access plans to meet your VMS requirements.

What is Satellite Messaging Service (ROM SMS)?

The ROM VMS-9601 unit includes global 2-way SMS services with all of our VMS monthly network access plans. Using ROM's free **GlobalX** SMS application or DFO ELOGi software, you can send and receive text messages from your vessel to any email address.

Please refer to ROM's current plan pricing for SMS messaging costs. Both incoming and outgoing messages are billed on a per message basis.

What you need to know before going fishing...

- contact your local Fisheries Manager to find out your fisheries VMS requirements.
- purchase an approved VMS unit, such as the ROMTraX VMS-9601 and monthly network access plan.
- fill out required the **DFO (VMS) form**, sign it and fax / mail to the appropriate office listed on the form.
- install your new VMS unit on your vessel.
- check that your unit is working before going fishing. ROM's 'Friends and Family' website allows our customers to view their vessels location.

What is Friends and Family?

ROM's 'Friends and Family' website allows loved ones to locate your vessel's last known position and display it on an interactive map using a browser. This feature requires a password, which is supplied after you purchase a ROMTraX VMS-9601 unit.

You can check out the 'Friends and Family' website by clicking on the 'Friends and Family' icon below.

Where can I get a ROM VMS-9601 unit?

You can purchase a ROM VMS-9601 by calling us at 1-877-860-3762, ext 200
Monday-Friday 8:30am - 4:30pm Pacific Time.