



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada



# The Vessel Monitoring System



**Protecting the  
resource and those  
who harvest it.**



Canada 

# The Ves

## What is the Vessel Monitoring System (VMS)?

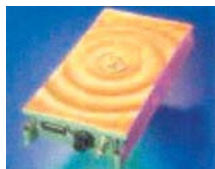
VMS is a Vessel Monitoring System that allows for the tracking of vessels by Global Positioning Satellite (GPS) and provides information on vessel name, location and activity.



## How does VMS work?

Domestic fishing vessels are equipped with a VMS device, which is about the size of a small radio with an antenna. Data 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 or at pre-determined intervals.

The VMS device is available with a backup battery that allows it to continue to operate in the event of a power failure.



# Vessel Monitoring



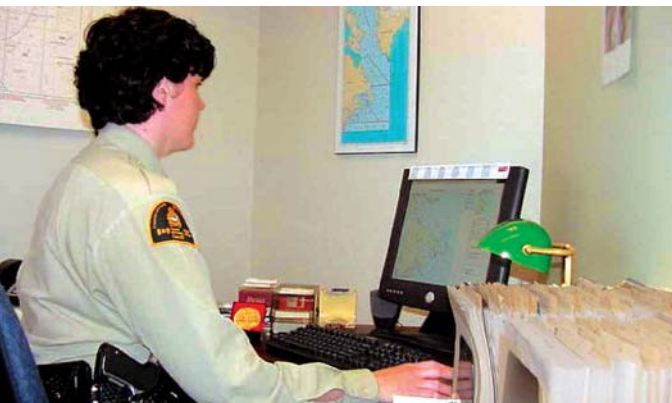
## What are the benefits of VMS?

### I. Conservation

The use of VMS has several benefits for resource management.

By providing regular positional information of vessel activity, VMS improves compliance with fisheries regulations.

VMS improves the cost-efficiency of observer deployments and monitoring conducted under the Dockside Monitoring Program.



# System

VMS improves the scientific information regarding the status of fish stocks and fish movement by contributing to increased accuracy and timeliness of catch-and-effort information.

VMS provides Fisheries and Oceans Canada with more accurate information on level of catch and effort. This will help improve policies related to maintaining the sustainability of the resource.

## **II. Data Communication**

The VMS unit has a two-way data communication port that can provide e-mail access while at sea with the addition of a laptop computer. This allows vessels to communicate directly with their family, friends or business.

## **III. Search and Rescue**

VMS is not intended to replace existing mandatory safety equipment; however, in the event of an emergency, co-ordination of rescue efforts is enhanced by knowing the exact location of the vessel in distress equipped with a VMS, as well as the position of vessels that may be available to respond to the emergency.



## **Is VMS used in other locations?**

There are many vessels in the Atlantic Region that have a mandatory requirement to be equipped with VMS devices, notably various scallop, crab, groundfish and shrimp fleets.

VMS is a technology that is widely used in many fisheries throughout the world.

All foreign and domestic vessels fishing groundfish and shrimp in the NAFO Regulatory Area (NRA), outside Canada's 200 mile limit, are required to have a VMS device onboard that transmits positional information.

## **How much does the system cost?**

Fisheries and Oceans Canada continues to review devices that are both cost-effective for fishers and meet regulatory requirements. These evaluations have identified units that may reduce the cost to fishers. Fisheries and Oceans Canada is also focused on supporting existing devices that vessel owners had already purchased.

Unit pricing starts at approximately \$1,500.00, but can be higher if additional features are chosen. Savings can be achieved with volume purchasing.



An updated list of approved units is available on the DFO Regional Web site.

<http://www.nfl.dfo-mpo.gc.ca/>

- Choose language
- Under *Publications* section
- Click on VMS link

For more information on **Vessel Monitoring System (VMS)** please contact **Fisheries and Oceans Canada** at **[vms\\_support@dfo-mpo.gc.ca](mailto:vms_support@dfo-mpo.gc.ca)** or at **1-866-266-6603**

Satellite photo: NASA/NSSDC

Published by:  
Communications Branch  
Fisheries and Oceans Canada  
P.O. Box 5667  
St. John's, NL A1C 5X1

© Her Majesty the Queen in Right of Canada  
DFO/2005-350  
Catalogue Number: Fs23-422/2005E  
ISBN: 0-662-39818-1