

## **AIS: Frequently Asked Questions**

### **What is AIS?**

The Automatic Identification System (AIS) is a shipboard broadcasting transponder system operating in the VHF maritime band that is capable of sending and receiving ship information such as identification, position, speed, heading, to other ships and to shore.

### **Why is it so important to the maritime community?**

AIS ship-to-ship, ship-to-shore and shore-to-ship communication capability enhance ship safety, vessel traffic management services and maritime security.

### **Where will AIS be used in the Great Lakes St. Lawrence Seaway System?**

Vessels equipped with AIS transponder are able to communicate among themselves within the broadcasting radius (20-30 miles) anywhere in the Great Lakes St. Lawrence Seaway system. However, ship-to-shore and shore-to-ship communication will be restricted in the Seaway traffic sectors from Montreal to mid-Lake Erie initially until the AIS coverage is extended upstream and downstream of Seaway areas by Canadian and U.S. Coast Guards.

### **Do all vessels need to have AIS transponders onboard? If not, which vessels will be required to carry AIS and when is the date of mandatory carriage?**

Seaway Entities stipulate that all vessels that require pre-clearance and have a 300 gross tonnage or greater, have an overall length of 20 meters, or carry more than 50 passengers be equipped with an AIS transponder onboard to transit the St. Lawrence Seaway. Dredges and floating plants and towing vessels over 8 meters in length must carry AIS. Only one of the combined and multiple units (tugs and tows) need be equipped. Mandatory AIS carriage on the Seaway began with the start of the 2003 navigation season on March 29, 2003.

### **Are the Seaway entities or the U.S. Coast Guard responsible for ensuring that ships have this equipment on board? How is this done?**

Seaway entities are responsible for ensuring that ships carry AIS transponder on board in the Seaway waters. The Seaway traffic controllers, utilizing the Seaway Traffic Management System (TMS), are scheduling the lockage based on the AIS reporting ship position/movement.

### **How much does AIS cost? Are the transponders and laptops widely available? Is there a list of companies that make this equipment available?**

The cost of AIS transponder varies with the manufacturers and the options. The basic price ranges from U.S.\$10,000 to U.S.\$20,000. Since the approval of the universal standards in November 2001, more and more manufacturers worldwide are making the product available in the marketplace. Vessels subject to AIS carriage that arrive without the required equipment onboard may rent a portable AIS unit from vendors. A list of AIS vendors is available from both Seaway entities. Simply request a list by emailing us a message at [marketing@seaway.ca](mailto:marketing@seaway.ca).

### **What is likely to be the greatest impact of AIS on shipping in the Great Lakes St. Lawrence Seaway in the next decade?**

AIS is making the Great Lakes St. Lawrence Seaway system a safer, more efficient, and more secure inland waterway.

### **How much did it cost to develop? What role did the U.S. Department of Transportation Volpe National Transportation Systems Center play in its development?**

The overall project cost for Seaway AIS development and implementation is approximately U. S. \$2 million or Cdn.\$2.8 million over the last three years. Volpe Center engineers have provided technical assistance to the Seaway entities in all aspects of software development, hardware evaluation and procurement, and the installation of AIS shore base stations and integration of AIS with the Seaway Traffic Management System.