



The Great Lakes - St. Lawrence Seaway System
Le réseau Grands Lacs - Voie maritime du Saint-Laurent

SEAWAY NOTICE NO. 9 – 2024

Automatic Identification System (AIS) Requirements

Mariners are reminded that the computation of AIS position reports must use a **Satellite Based Augmentation System (SBAS)** as per the requirements described in 20.(2)(f) of the Seaway Handbook Practices and Procedures as the DGPS stations have been shut down.

Background Information

Global Navigation Satellite Systems (GNSS) have become the primary means of obtaining position, navigation and timing information at sea. The Global Positioning System (GPS) used for the Seaway is an example of a GNSS.

Previously, Mariners relied on the marine radio beacon DGPS (Differential GPS) augmentation service, to improve positional accuracy. However, the Coast Guards have discontinued all DGPS services in the Seaway as of December 2022. In order for an AIS to meet the Great Lakes-St. Lawrence Seaway requirements, it must now receive position information from a DGNSS (differential global navigation satellite system) that uses a SBAS.

In the Great Lakes - St. Lawrence Seaway, the available SBAS is called the Wide Area Augmentation System (WAAS). In order to transmit an augmented position via AIS, the DGNSS receiver will need to be configured to receive the correct types of messages from the SBAS (i.e. WAAS). To confirm that the AIS is transmitting the augmented position, the AIS sensor should indicate external DGNSS.

April 16, 2024