

Connected ECDIS Secure Navigation Data Transfer

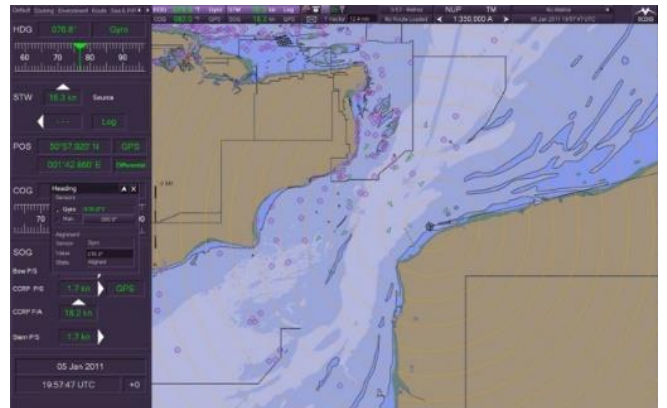
Overview

Sperry Marine's **Connected ECDIS** supports your cyber risk management strategy by avoiding the need for USB memory devices when transferring charts from the ENC Service to the ECDIS.

Connected ECDIS allows secure transfer of chart updates from any compliant chart provider

Automatic Chart Update (Optional)

NAVTOR Charts are automatically updated in Sperry Marine Connected ECDIS, which reduces the administrative burden of manual chart updates and ensures that your vessel will always be fully compliant and up-to-date wherever you are sailing.



Strong Security Onboard

Sperry Marine Connected ECDIS enhances the cyber security of your bridge network, protects your ECDIS and secures the delivery and exchange of your navigational data.

Sperry Marine Connected ECDIS includes:

- Northrop Grumann Sperry Marine's Secure Maritime Gateway
- Connected ECDIS service:
 - VisionMaster Connect
 - Secure Maritime Gateway license for security updates and maintenance
- Navtor NavBox software (optional)
- The Sperry Marine Secure Maritime Gateway is DNV certified IEC 61162-460 Gateway



Features & Benefits

Chart updates from any compliant chart provider

VisionMaster ECDIS receives chart updates securely through Sperry's Secure Maritime Gateway from any compliant chart provider.

High level of cyber secure navigation

Sperry Marine Secure Maritime Gateway exceeds the requirements for a Gateway as defined in the systems standard DNV certified IEC 61162- 460.

Fully automated solution for Navtor navigation data (optional with Navtor)

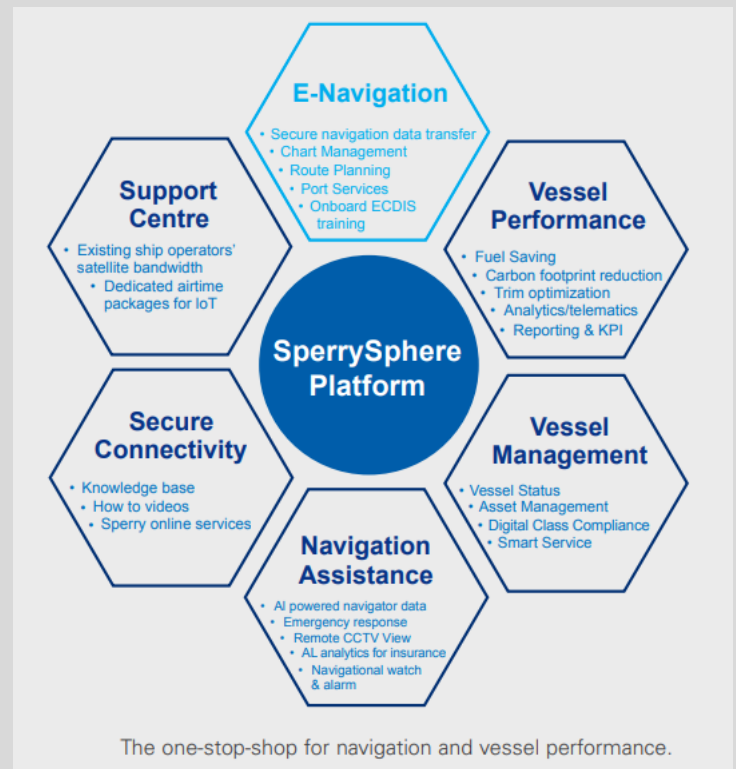
- Eliminate administrative workload and reduce risk of human error with automatic delivery of all types of navigational data such as: ENC, ADP, AENP, AIO, NavArea Warnings, Weather Data, e-Publication Reader and MARPOL
- Vessel is always compliant and up-to-date
- Reduced administrative workload for navigator
- Avoids Port State Control deficiencies and risk of vessel detention
- By connecting SperrySphere to the vessel's AIS signal, nearby AIS targets around the vessel will be visible in Navtor NavTracker® for shore-based teams

SperrySphere – The intelligent navigation platform for ships and shore

Sperry Marine has introduced SperrySphere to offer a suite of smart navigation services securely connected to the navigation systems and shore. SperrySphere will be continuously developed and enriched with new features and applications in six categories based on feedback from users to mature the solution over time.

SperrySphere platform benefits:

- Improved fleet performance
- Improved cyber security
- Increased vessel availability
- Increased flexibility
- Future proof navigation
- It gives the crew on board, as well as teams ashore, the operational information they need.



Navigation at your fingertips

Contact us to discuss your Intelligent Navigation requirements

sales@sperry.ngc.com

A division of the Northrop Grumman Corporation, Sperry Marine provides a range of sophisticated navigation solutions for mariners around the world: autopilot and steering control systems, compass systems, integrated navigation and bridge systems, integrated platform management systems, speed logs, navigation radar and ECDIS. Working with mariners around the globe for over 100 years.

