



NEWS from the **Radio Technical Commission for Maritime Services (RTCM)**

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The Radio Technical Commission for Maritime Services (RTCM) Publishes Revised Standard for Electronic Chart Systems (ECS)

Summary: Special Committee 109 of the Radio Technical Commission for Maritime Services (RTCM) has just published the latest edition of its standard for Electronic Chart Systems (ECS). Intended primarily for smaller vessels and as back-up arrangements for Electronic Chart Display and Information Systems (ECDIS), these Electronic Chart Systems have many of the features found in ECDIS used on large oceangoing ships on international voyages. RTCM's new standard incorporates a number of advances developed since 2002 when the previous edition of the ECS standard was published. Designated as RTCM 10900.4, the new standard is available from RTCM at its secure online publication store. Visit www.rtcn.org and click on "Publications."

RTCM 10900.4 for Electronic Chart Systems (ECS) specifies the minimum operational and performance requirements and methods of testing for ECS. ECS does not meet the chart carriage requirements for merchant ships on international voyages under the International Convention for the Safety of Life at Sea (SOLAS). An Electronic Chart Display and Information Systems (ECDIS) must be used by SOLAS ships in order to meet the international requirements for nautical charts and publications. Nevertheless, the RTCM 10900.4 ECS provides many of the same features. A government may choose to accept ECS as a primary means of navigation for vessels that are subject to their regulation, and particularly for vessels not required to meet SOLAS requirements.

When used with a modern Electronic Navigation Chart (ENC) database, now widely available for much of the world, a mariner has a wide choice of scales and display features that let them customize the display in the most appropriate way for each task or navigating condition. ECS's can be used to plan voyages, and some can be integrated with the rest of the vessel's navigational systems to provide fully or partially automated

navigation. When an ECS serves as a primary means of navigation, adequate back-up arrangements may be required to ensure safe navigation in the event of an ECS failure.

Three classes of ECS are defined:

Class “A” ECS are designed or adapted for use as a primary means of navigation on non-SOLAS vessels where ECDIS is not specified for that purpose. They may also be designed to meet the SOLAS requirements for adequate independent back-up arrangements for ECDIS.

Class “B” ECS are designed or adapted for use as a primary means of navigation on non-SOLAS vessels where ECDIS or Class “A” ECS are not specified for that purpose.

Class “C” ECS are designed or adapted for use as a navigational aid intended to plot and monitor a vessel’s position.

This standard supersedes RTCM 10900.3 (RTCM Paper 100-2002/SC109-STD). RTCM may replace requirements of this standard with references to IEC 62376 when that standard is published.

About RTCM:

RTCM is a non-profit organization whose objectives include studying and preparing reports on maritime electronic navigation and telecommunications practices. Our focus is on needs and technologies with a view toward improving efficiency and capabilities of maritime electronic navigation and telecommunications services, suggesting ways to keep rules and regulations to the minimum essential for effectiveness, and making recommendations on important issues. Established by the U.S. government in 1947 to support technical decision-making in the area of maritime radiocommunications, RTCM is now a membership organization with over 120 organizational members, including private sector entities from 14 countries, and government agencies from 7 countries.