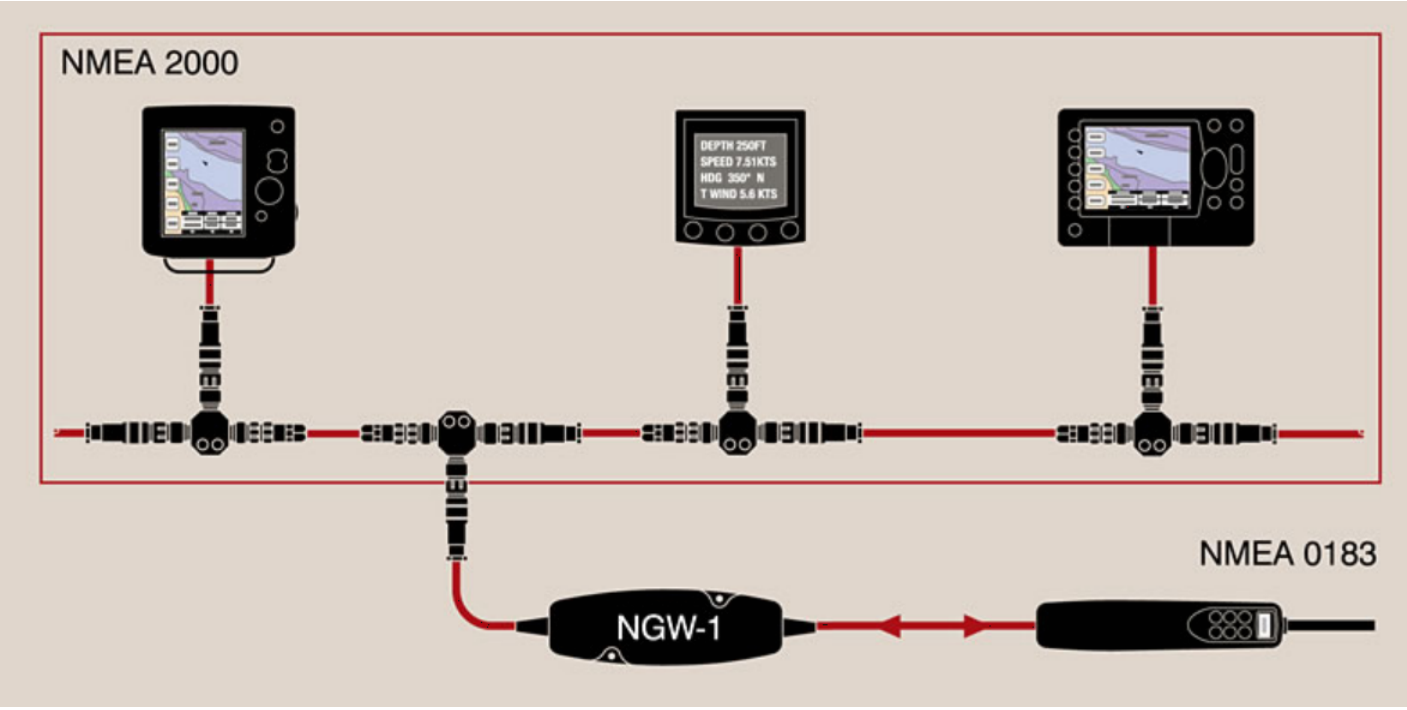
Vessel features

The suitability of a vessel for CSB depends on both its onboard hardware and the engagement of its owner or operator. A wide range of equipment brands can be used, which is important because it allows nearly any vessel to participate.

As mentioned briefly in previous sections, CSB requires vessels to be equipped with navigational equipment including a depth transducer and a GNSS unit. GNSS instruments are typically paired with a chart plotter that includes an internal timekeeping system. It is essential that the vessel's time settings are enabled and properly calibrated to ensure data are accurate.

Next, a depth transducer is required. Depth transducers, regardless of brand, are generally compatible with CSB. Transducers take measurements in a standardized digital unit that can be converted to meters, feet, or other display units, so the user's preferred display setting does not affect data collection or utility.

Each of the above tools need to be connected to one another via a backbone of some sort. Typically, this is either a NMEA2000 or a NMEA0183 backbone (pictured below), across which instruments will send messages. Each logger is built to accommodate one or both backbone types. Adaptors that convert from NMEA0183 to NMEA2000 are available, if needed. If a vessel does not already have an NMEA2000 backbone, one may be installed at the project's discretion. NMEA2000 installation generally takes 30–60 minutes.



Loggers may also be built into a system using a digital plugin for a chart plotter or a multi-function display system. Many Electronic Chart Display and Information System (ECDIS) units and/or

Electronic Chart System (ECS) software have built-in logging that allows for a digital file export. Some great examples of companies that are working to contribute data from this form of logger to the overarching Seabed2030 project include Raymarine, Rosepoint, and WASSP. To date, these companies have generally opted to become their own trusted nodes in order to handle this data; however, WASSP has established a partnership with the International SeaKeepers Society in which they contribute data through the SeaKeepers trusted node.

The final piece of this puzzle is finding a willing and engaged vessel owner. The following sections will outline some of the important considerations for a vessel to become involved in CSB, and how to find and keep participants that contribute good data.

Revision #4
Created 2026-07-17 13:18:29 UTC by Sophie Chernoch
Updated 2026-09-23 13:42:04 UTC by Sophie Chernoch