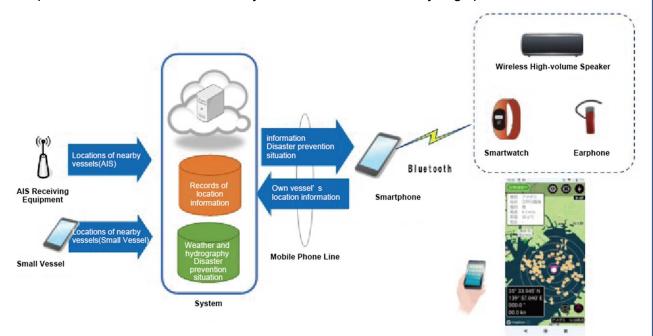


Verification of Effectiveness of Alerts for Collision Avoidance Using a Smartphone Application

The Fisheries Agency, as part of its FY 2020 project to promote the spread of safety measures for small fishing vessels, conducted a demonstration test using an on-board smartphone application in the fishing vessels operating in the Seto Inland Sea, as a model sea area, an area with particularly heavy vessel traffic, in order to prevent collision accidents involving small fishing vessels, etc. The following is a description of the test.

Overview of Device Used

Using smartphones, which are becoming dissemination, the surrounding information was monitored and warning notifications (screen display, warning sound/vibration) were made based on the location information of the smartphone, location information of nearby vessels, and weather and hydrographic information.



Demonstration Method

Fishermen bring smartphones (in their possession and with the project eligible apps installed) on board the vessel during operations, activate them at all times, and use the functions provided by the smartphones.

Demonstration Result

- "Smartphone apps can contribute to collision avoidance as much as AIS devices."
- It is required that the base station be able to reliably receive AIS vessels and be within range of the smartphone's signal.
- · Just like AIS devices, it is important to understand that not all vessels are displayed and not to neglect the visual lookout.
- Smartphone apps are effective for collision avoidance, especially for fishing vessels not equipped with radar.

Report on the Commissioned Project in 2020 for Dissemination and Promotion of Safety Measures for Small Fishing Vessels, etc. in the Promotion of Measures to Strengthen Occupational Safety in the Agriculture, Forestry, Fisheries, and Food Industries

https://www.jfa.maff.go.jp/j/kenkyu/pdf/attach/pdf/130515gizyutsukaihatsu a-34.pdf