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ARICE: Arctic Research Icebreaker Consortium:

**A strategy for meeting the needs for marine-based research
in the Arctic**

Deliverable 7.7. The ARICE 3D Virtual Icebreaker

Nature: Demonstrator

Submission of Deliverable

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1. The ARICE 3D Virtual Icebreaker

ARICE has developed a 3D Virtual Icebreaker platform to allow users to explore and understand the capacities of these research platforms. The “3D Virtual Icebreaker” can be accessed through the following link: <https://vessels.arice-h2020.eu>.

To maximize the results in terms of public reachability, the platform was designed to meet the needs of both experts and the general public described within the site as “Explorers” and “Fans”. This distinction separated the website in two paths, the first more focused on the scientific information while the second one providing also educational and training material. The overall aim is to provide a unique access point gathering a coherent and standardized information on the research vessels, using multimedia new technologies, like 360° movies and 3D graphics to make the experience more involving and very close to a "virtual visit".

The platform gathers information from all the ARICE Icebreakers and provides advanced functionalities such as an interactive map with real-time ship positions and layers, interactive 3D model of the Icebreakers with their scientific equipment, a 360° photo virtual tour with precise surface measurement tool, a map with present and past cruises of the ships, a multimedia section as well as an educational and informative video section. The portal is planned to act in the future as a collector of all the other ARICE data management resources.

The ARICE 3D Virtual Icebreaker platform was presented during a hybrid event held in Bologna, Italy, on the 17th of June 2022. The platform is still under development as the information from the various ships and instruments is currently being acquired.