

Basic design agreement for French polar logistics vessel



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Aker Arctic and Chantiers Piriou have signed a contract for the basic design for a polar logistics vessel, which will be constructed at the shipyard in Concarneau, France. Aker Arctic will also provide technical support to the shipyard during the construction of the vessel in Concarneau, France

The new polar logistics vessel will be jointly owned and operated by the French Southern and Antarctic Lands (Terres australes et antarctiques françaises, TAAF) administration, the French Polar Institute (Institut Polaire Français Paul-Émile Victor, IPEV) and the French Navy. The new vessel will replace the existing patrol vessel L'Albatros and the polar logistics vessel L'Astrolabe.

Supplies to Antarctica

The new vessel will be 72 metres long overall and have a beam of 16 metres. The vessel, which will act as both a logistics ship and a patrol icebreaker, can accommodate up to 60 persons on board, carry 1,200 tonnes of cargo and accommodate one helicopter. It will also have nominal research features.

The new Polar Logistics Vessel will be built by Chantiers Piriou in Concarneau, France, and delivered in early summer 2017. It will be deployed to the Indian Ocean in autumn 2017 and carry out the first supply mission to the Dumont d'Urville Station in Adélie Land, Antarctica, in winter 2018.

The Polar Logistics Vessel is based on a concept developed by Marine Assistance (France). Aker Arctic assisted the shipyard in performance calculations prior to receiving the order and now the icebreaking capability will be verified by model tests at Aker Arctic's ice model basin in Helsinki, Finland. During basic design, Aker Arctic will be responsible for developing the hull form, open water performance, performance in ice, machinery and winterisation.

Aker Arctic will support the shipyard during the design and construction of the vessel in the special requirements of building an ice-going vessel. Fourteen weeks of on-site engineering support in Concarneau, France, is included in the contract.

National content fulfilled

"A typical requirement in governmental projects is to use local contractors as much as possible," says sales manager Arto Uuskallio from Aker Arctic. "By offering our technical support during design and construction, a vessel can be built at a local shipyard that does not necessarily have previous knowledge of ice-going vessels."

"Based on our experience of various shipbuilding projects, the most important decisions are made in the early phases of the project. Thus, it would be beneficial for the success of the project to have experienced designers involved from the beginning to get the design moving in the right direction right away. Corrections can also be made at a later stage, but they are more laborious and require more time, increasing the total cost. When we start designing a vessel, we look at the basic facts first: What are the requirements, what will the vessel be used for and what performance is expected? Then we look at the size of the vessel and from there we can give a rough estimate of the construction price. If we are approached when the budget is already fixed, there might be disappointing compromises ahead," Mr Uuskallio emphasises.