

FOR IMMEDIATE RELEASE

Aker Arctic designs next generation Swedish and Finnish icebreakers

Aker Arctic Technology Inc, the Swedish Maritime Administration (SMA) and the Finnish Transport Infrastructure Agency (FTIA) have signed a contract for the development of new icebreakers for demanding Baltic Sea escort operations. Aker Arctic will develop a next generation icebreaker design that is capable of assisting larger merchant ships, incorporates latest environmental technologies, and is ready for a future fossil-free fuels.

In the process to design a new generation of icebreakers, the emphasis is to find solutions to maintain the service level as the operating environment changes. The size of merchant vessels entering Finnish and Swedish ports is growing, and increasing environmental requirements gradually limit the engine power of the vessels. The growing size of vessels that need assistance and the weakening of their abilities to handle ice-covered waters make it difficult for vessels to pass through ice masses in challenging ice conditions in the Baltic Sea, which increases the need for icebreaker assistance.

"Our foreign trade and competitiveness are based on year-round security of supply. The stocks of import and export logistics are largely located in moving ships. An adequate level of assistance available from icebreakers is a prerequisite for ensuring that the raw materials and different products are in the right place at the right time. New types of solutions are expected from this design project to respond to changes in the operating environment as well as to maintain an adequate level of service also in the future", says **Kari Wahlman**, Director-General of the Finnish Transport Infrastructure Agency.

"The Swedish industry is dependent on icebreaking in the Baltic Sea up to 130 days a year. Our current fleet is old with increasing needs of repairs. Therefore we very much look forward to the design of the next generation of icebreakers to service larger ships in a fossil free environment", says **Katarina Norén**, Director-General of the Swedish Maritime Administration.

Solution to the future icebreaking needs

The design process starts with research and evaluation on alternative icebreaker concepts. The new icebreaker is required to be able to assist ships with 32 m beam. Cost-effective operation, low life-cycle costs, the transition to fossil-free fuel by 2030 and the reduction of CO2 emissions are also important goals.

"This new ship will represent a completely new generation of icebreakers. It will incorporate design, construction and operational experience from existing Baltic assistance icebreakers as well as our other icebreaker designs. As the operational requirements and environmental conditions are changing in the Bothnian Bay, we will work closely with the Finnish and Swedish operators to jointly develop a solution that best answers to the future icebreaking needs. With an operational lifetime spanning half a century, the new icebreaker must be designed to comply with future emission goals. Responding to this major technological challenge today will require us to apply the full extent of our icebreaker design expertise as well as to utilize the latest environmental technologies developed by the maritime industry", says **Reko-Antti Suojanen**, Managing Director of Aker Arctic.

Press Release

3.11.2020

"The design goals of this project are ambitious, and even though we have just designed icebreakers capable of reaching the North Pole, we consider this new icebreaker to be the most challenging design task we have ever faced."

A concept will be selected in March when the first cost estimate for the construction of the icebreaker is available. After this, the focus will be on the design details and construction specification, which will form the basis of the shipyard tendering process once a decision to build the icebreakers is made.

For more information:

Reko-Antti Suojanen
Managing Director
reko-antti.suojanen@akerarctic.fi
+358 400 738 123

Aker Arctic Technology Inc is a private company specializing in the technology development, design, engineering, special products, consulting and testing services for ice-going vessels and icebreakers. Based on our vast experience in icebreaking vessel design, we have acquired a sound understanding of the solutions and designing icebreakers. This knowledge enables us to offer ship designs that improve efficiencies and reduce costs, while providing safe, reliable, and efficient operation for the users. www.akerarctic.fi