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FOR IMMEDIATE RELEASE

Joint development results in new design for Arc7 LNG Carrier

Aker Arctic, Daewoo Shipbuilding & Marine Engineering (DSME) and Novatek have jointly developed a state-of-the-art icebreaking LNG carrier to transport liquefied natural gas (LNG) year-round along the Northern Sea Route. DSME has now signed shipbuilding contracts with Sovcomflot and Mitsui O.S.K. Lines for the construction of six Arc7 LNG carriers based on the new design.

The new icebreaking LNG carriers are tailored to the transportation needs of Novatek's new Arctic LNG 2 project, with special emphasis on year-round operation in the eastern sector of the Northern Sea Route. Located in the Gydan Peninsula and across the Gulf of Ob from the fully operational Yamal LNG, Arctic LNG 2 will have a total production capacity of 19.8 million tons per year. A fleet of new Arc7 LNG carriers will be used to transport natural gas from Utrenny LNG terminal primarily to Asian markets.

The initial development of the second-generation icebreaking LNG carriers began already in late 2018 with a transit study focusing on improving the overall efficiency of the year-round transportation system consisting of Arctic terminals, icebreaking LNG carriers, and transshipment hubs in Murmansk and Kamchatka. Based on the results of this study, Aker Arctic and Novatek jointly developed a new Arc7 LNG carrier concept with the focus on making improvements such as increased average transit speeds in ice-covered waters. Throughout the development phase, the concept design was evaluated, improved, and finalized together with DSME, the world's most experienced builder of icebreaking LNG carriers with whom Aker Arctic had already co-operated in the previous Yamal LNG project, to ensure that the new icebreaking LNG carriers are the most efficient solution for transporting natural gas year-round on the Northern Sea Route.

The design of the new Arc7 LNG carriers ensures safe and efficient year-round eastbound transportation of LNG along the Northern Sea route. To enable this, the vessels will feature a completely new icebreaking hull form and increased propulsion power compared to their predecessors. Before the construction begins, this improved operational capability in ice-covered waters will be verified with ice model tests in Aker Arctic's ice laboratory in Helsinki, Finland.

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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 vessel design, we have acquired a sound understanding of the solutions and products required for ice going vessels. This knowledge enables us to offer ship designs that improve efficiencies and reduce costs, while providing safe, reliable, and efficient transportation for the arctic region. www.akerarctic.fi