



WORLD FIRST

In 2006, Canada and Russia completed a world first in transporting two fuelled nuclear submarines as dry cargo on the deck of a specialized heavy lift ship. A Dutch maritime company, Dockwise, was contracted to transport the submarines.

Because of the submarines' poor technical state, a normal tow was considered unsafe and could have been a threat to the environment. The transportation as dry cargo eliminated the potential environmental risks associated with a tow. The submarines were embarked at a naval base near Murmansk, in northern Russia, 850 kilometres away from the Zvezdochka shipyard in Severodvinsk, northern Russia, where they are being dismantled.

Addressing these risks is neither a simple nor an inexpensive process. Dismantling a nuclear submarine involves 13 stages, including extensive preparations, transportation, defuelling, dismantlement, on-site handling of highly radioactive materials, safe storage of reactor compartments and transfer of spent nuclear fuel (SNF) to final storage. Canada, Germany, Italy, Japan, Korea, Norway, the U.K. and the U.S. are all currently engaged in helping Russia tackle this problem.

Progress made in 2006-2007

Dismantlement of nuclear submarines: Canada initially committed to the dismantlement of 12 decommissioned NPS by 2008 and committed up to \$120 million to this task. Canada has focused on Russia's northern fleet, and its commitment represents a significant contribution to addressing the problem. The Canadian Submarine Dismantlement Program is being implemented in cooperation with the Federal State Unitary Engineering Enterprise Ship Repair Center (FSUE SC)—known as the Zvezdochka Shipyard—at Severodvinsk, in the Arkhangelsk region.

Canada completed work under its second implementing arrangement with the Zvezdochka Shipyard on September 30, 2006 and is currently engaged within a third implementing arrangement. To date, eight submarines have been defuelled and six submarines dismantled. Canada negotiated a fourth agreement that includes work on an additional submarine, a Typhoon Class strategic submarine, in partnership with the United States. Work under this arrangement will be undertaken during 2007 and 2008.



Victor III being dismantled in dry dock