

COSCO's M.V. Yong Sheng Completed Her Maiden Voyage through the Northeast Passage of the Arctic Waters

The arrival of COSCO's M.V. Yong Sheng at the Port of Rotterdam on September 10, 2013 marked the successful completion of her maiden voyage through the Northeast Passage of the Arctic waters. It is the first time a Chinese merchant vessel calls at Europe through the Northeast Passage of the Arctic waters.

M.V. Yong Sheng celebrated her maiden voyage at Port of Dalian on August 8, and then departed for Europe from the port of Taicang after cargo loading on August 15. On 0600 hours of August 27, she entered into the Arctic region through the Bering Straits, technically starting its journey through the Northeast Passage. The vessel sailed westbound, travelling along the Chukchee Sea, The De Long Strait, the East Siberian Sea, north of the New Siberian Islands, the Laptev Sea, the Vilkitsky Strait, the Kara Sea, north of the Novaya Zemlya and the Barents Sea. On September 5, the vessel arrived at the region near the Nordkapp, smoothly completing the routes through the Northeast Passage, after 10 days sailing of 2,936 nautical miles.

The voyage of M.V. Yong Sheng from Taicang to Rotterdam lasted 27 days and covered 7,800 nautical miles, which was 9 days and 2,800 nautical miles less than the conventional routes transiting the Strait of Malacca and the Suez Canal. Sufficient measures have been conducted by COSCO Group in order to prepare for the new navigation environment, lack of marine data, possible technical malfunction in low temperatures, and risky ice conditions on routes. These measures include the forge of a special taskforce, comprehensive collection of information, necessary risk evaluation, technical experts on board, the establishment of a 3-layer emergency response system covering COSCO Group headquarters, COSCO Shipping Company Ltd. and the vessel. 20 contingency plans were also launched to ensure the safety of the vessel.

M.V. Yong Sheng, owned by COSCO Shipping Co., Ltd. is a multi-purpose vessel, with a total capacity of 190,000 dead-weight tons. Its length is 155.95 meters; its width is 23.70 meters with a designed speed of 14 knots. The vessel is certified with Ice Class B1 by the CCS, an equivalent level of Arc4 of the Russian standard.

Affected by global warming, the melting of the Arctic icecap is accelerating. In

recent years, certain areas of the Arctic waters become navigable in summer, and the areas' unfrozen period is over 30 days. It is estimated that in the future decades, an unfrozen Arctic Ocean could be seen in summer.

For a long period, commercial opportunities in the Northeast Passage have been closely followed by international societies and maritime industry; restless efforts have been put in materializing the commercial routes. In summer of year 1997, the Finish tanker M.V. Uikku attempted its sailing in the Northeast Passage, opening the new era of commercial utilization of the water regions, with increased attempts made year by year. By summer of year 2011, there were more than 30 vessels navigated through the Northeast Passage, while in the next summer, the number hiked to over 60.

Generally speaking, the tendency for the Northeast Passage to be the new trunk route of Euro-Asia trade has already emerged. Despite of the nation's large shipping capacity, before M. V. Yong Sheng, China had only made one actual voyage in the Arctic waters by its Arctic research vessel M. V. Xue Long. The success of M.V. Xue Long, celebrated on August 3, 2012, had not only opened the Arctic routes between the Atlantic Ocean and the Pacific Ocean for China's marine research expeditions, but also had set a good example for Chinese merchant vessels.

As a transnational shipping enterprise, COSCO Group has always upheld the business ethics of *global development and harmony of win-win*. The company is committed to the trustworthy partnership with customers, employees and business partners, and to providing global customers with safer, faster, high-quality and more efficient services, yielding the maximized returns to the shareholders, environment and society.

The maiden voyage of M.V. Yong Sheng well-reflects the implementation of COSCO's business commitment. It has laid a solid foundation to better serve the economic development along the Northeast Passage and its neighboring port regions, as well as the development of Sino-Europe trade. It has also positive significance in improving our market competence.

Specifically, the significance is demonstrated in the following four areas:

Firstly, sailing through the Arctic waters can improve international trade. China's 90% international trade is conducted by shipping on 8 trunk routes. The successful utilization of the Arctic routes will add the two conventional trunk routes i.e. eastbound

and westbound, with two more routes connecting Europe and North America respectively through the Arctic. Besides, the two new routes will enable us to promote the regional trade with more convenience and shorter distance.

Secondly, it can provide value-added service. The two new routes will enlarge COSCO's service coverage, providing customers with more alternatives and value-added services.

Thirdly, it reduces shipping cost. Based on primary assessment, it is 12-15 days shorter than conventional routes if the Arctic routes are used. Enormous expenditures on fuel, canal transit, security guard, personnel and vessel wear and tear can be saved. The cost-friendly routes will be extremely significant to COSCO Group in the current difficulties of global maritime industry.

Fourthly, it promotes energy conservation and emission reduction. Less fuel consumption and carbon dioxide emission could be achieved with the commercialized Northeast Passage. According the calculation, about 35% of energy consumption per voyage can be reduced, which will largely contribute to COSCO Group's practice in corporate social responsibility.

Currently, COSCO Group controls over 740 modern merchant vessels, with a total capacity exceeding 55 million dead-weight tons and an annual cargo volume over 400 million tons. Its shipping service covers around 1,500 ports in over 160 countries and regions. In terms of the overall fleet capacity, COSCO is the second largest in the world and the largest in China. Since its inauguration in year 1961, COSCO Group has become a leading transnational group engaging in international shipping, logistics, terminal operation and investment, ship building and ship repairing. With its fully extended business in supply chain management, COSCO Group has been ranked in the Fortune Global 500 for many times. COSCO Shipping Co., Ltd., a listed unit of COSCO Group, owns and operates a versatile fleet with energy conservation, environmental protection and great cargo adaptability. The fleet's scale and comprehensive competitiveness are leading among its peers in the world. It has an outstanding crew team with excellent integrated abilities and service quality, enjoying a good reputation in the global shipping market.