

FACT SHEET

November 2013

Logistics

Nord Stream is a major infrastructure project. To ensure its smooth and timely construction, many materials were needed at the right place at the right time. The backbone of the project was a thoroughly planned, environmentally-friendly logistics concept. The completion of pipe laying for Line 2 of the Nord Stream Pipeline in April 2012 also marked the end of the logistics activities of the project.

Logistics Concept

- The aim of Nord Stream's logistics concept was to supply the materials needed in an efficient, timely and thereby cost efficient manner and to minimise impacts on the sensitive ecosystem of the Baltic Sea. Low-emission means of transportation such as ships and trains were used.
- The locations for Nord Stream's coating plants and stockyards were selected to limit shipping distances to the pipelay vessels to less than 100 nautical miles, thereby allowing for daily round trips of the carrier vessels as well as rail distances from the pipe mills in Mülheim (Germany) and Vyksa (Russia).
- More than 100 million euros were invested into the required infrastructure in the Baltic Sea region. Now that construction of the Nord Stream Pipeline was completed, these investments continue to provide significant benefits for the ports.

Major Logistics Partners

- Nord Stream contracted EUPEC for concrete coating and logistics services in the Baltic Sea region. EUPEC has 40 years of experience in pipe coating.
- DB Schenker Rail Deutschland AG and the Russian national railway provided services to transport steel pipes to the coating plants in Mukran and Kotka respectively.
- The total contract value for concrete coating and logistics for the Nord Stream project amounted to about 650 million euros.
- The handling and transport of pipes to the three marshalling yards in Karlskrona, Slite (both in Sweden) and Hanko (Finland) were provided by the Norwegian NorSea Group that has extensive experience with offshore projects.
- At the end of the logistics chain was the Italian company Saipem S.p.A., which was commissioned to undertake offshore pipe laying of the two pipeline strings.

Logistics Locations

- To ensure that the pipeline was laid as efficiently as possible, five ports were chosen based on comprehensive evaluation of environmental and economic criteria.
- Kotka on the coast of Finland and Mukran on the Island of Rügen (Germany) were selected as locations for the concrete weight coating and interim stockyards.
- The ports of Hanko (Finland), Karlskrona (Sweden) and Slite on the island of Gotland (Sweden) were selected as interim stockyards to ensure short transport distances to the pipeline route.
- Infrastructure investments for the Nord Stream project provided substantial support for the development of the five sites, giving a boost to the regional economy and labour

markets. This investment will also have indirect benefits for business development and employment at all these locations, as well as long-lasting benefits resulting from improvements to their infrastructure.

Logistics Chain

1. Pipe Production

- Production of the approximately 202,000 pipes included plate production, pipe milling, welding, stretching, treatment of pipe ends (chamfering and bevelling) and quality control.
- After quality control, all pipes received an internal anti-friction coating and an external anti-corrosion coating.
- Pipes for the first pipeline were produced by the German company EUROPIPE GmbH (75 percent) and Russian OMK (25 percent).
- For the supply of steel pipes for the second pipeline, Nord Stream commissioned EUROPIPE (65 percent) and OMK (25 percent) as well as Japanese Sumitomo (10 percent).

2. Transportation

- After coating, the pipes were immediately transported to the concrete weight coating plants on the Baltic Sea coast: Mukran in Germany and Kotka in Finland.
- 95 percent of the pipes from the pipe mills in Mülheim an der Ruhr and Vyksa were transported by train to Mukran and Kotka respectively. Additionally, Sumitomo's deliveries arrived by ship from Japan.

3. Concrete Weight Coating and Storage

- After concrete coating, the weight of each of the pipe segments increased to up to 25 tonnes. The additional weight ensures stability of the pipeline on the seabed and also protects the pipeline against damage in the water, such as by bottom trawling equipment.

4. Trans-shipment and Storage

- Out of Mukran, 30,000 pipes were shipped to Karlskrona and 56,500 to Slite for interim storage at the marshalling yards. Another 39,000 went directly to the pipelay vessels.
- Out of Kotka, 30,000 pipes were shipped to Hanko for interim storage while 45,500 went directly to the pipelay vessels.

5. Pipe Laying

- Special pipe carrier vessels transported the pipe segments to the pipelay vessels.
- On board the pipelay vessels, the pipes were welded onto the pipeline, which was then progressively lowered to its designated place on the seabed.

More information at www.nord-stream.com

For further information please contact:

Nord Stream press hotline: +41 41 766 91 90

E-Mail: press@nord-stream.com