

## PRESS RELEASE

### **Nord Stream Annual Environmental Monitoring 2010 results published in Finland**

- **Monitored impacts were in line or less than assessed**
- **Impact on water quality was minor, local and short-term**

**Zug/Helsinki, August 25, 2011.** Nord Stream has published its Annual Environmental Monitoring results for 2010 in the Finnish Exclusive Economic Zone (EEZ). Thirteen subjects were monitored which were selected based on the environmental impact assessments. The results show that the actual impacts of the construction activities in Finnish waters in 2010 were in line with or less than assessed and that the assessments were conservative. Impacts on water quality were minor or insignificant, local and short-term.

Nord Stream conducted environmental monitoring in Finnish and Estonian waters in 2010 according to the approved monitoring programmes. Possible environmental impacts of munitions clearance, rock placement and pipe-laying were monitored. The actual results<sup>1</sup> were then compared with the assessed impacts.

Water quality was the most important parameter monitored in Finland during all construction activities. The purpose was to monitor whether the sediment and harmful substances in the sediment disperse into water due to the construction activities. Prevailing currents affect the extent of sediment spreading.

Munitions clearance in Finland started in late 2009 and was completed in early summer 2010. The need for clearance and any related possible environmental impacts were minimised by using the dynamically positioned lay barge in the Gulf of Finland and by locally adjusting the pipeline route. Extensive mitigation measures during the clearance operations were also implemented. The monitoring of munitions clearance showed that:

- the total amount of sediment released was about 10 per cent of the assessed volume;
- strong currents were not detected prior to clearances;
- the turbidity values recorded were lower and the impact area significantly smaller than predicted;

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<sup>1</sup> Nord Stream gas pipeline construction in the Finnish Exclusive Economic Zone. Environmental Monitoring in 2010. Ramboll.

- clearances did not cause statistically significant changes in the concentrations of harmful substances in sediment in Finnish or Estonian waters;
- the pressure waves recorded were in general lower than predicted;
- benthos was in general scarce in the vicinity of clearance areas in Finland and Estonia due to the low oxygen concentration close to the seabed;
- the impact on fish was minor. No seabird or marine mammal casualties were reported;
- clearances did not cause impacts on cables, cultural heritage or barrels.

In 2010, clean gravel was placed on the seabed at 40 predefined locations. The monitoring results of the rock placement show that:

- the amount of the rock material placed (approximately 220 000 m<sup>3</sup>) was approximately 35 % larger than planned due to soft seabed;
- the currents recorded were slightly larger or corresponded well with the modelled values. The actual current directions correlate well with the modelled values;
- turbidity increased only in the deepest water layer and the highest peaks were recorded at the tie-in location. The values recorded were higher than assessed, but the duration of increased turbidity shorter than predicted. The impact area from the construction site was less than 1 km as assessed;
- rock placement did not cause statistically significant changes in the concentrations of harmful substances in sediment in Finland or Estonia. Metal and dioxin concentrations were generally low, but the TBT<sup>2</sup> concentrations relatively high. Several shipping lanes pass or cross the construction areas and the likely source of TBT are the antifouling paints formerly used on vessels;
- benthos was in general scarce in the vicinity of the rock placement areas in Finland and Estonia due to the low oxygen concentration near the seabed.

During 2010, 322 kilometres of pipeline was installed in the Finnish EEZ. Environmental monitoring of the pipe-laying shows that:

- pipe-laying by the dynamically positioned lay barge did not cause increase in turbidity;
- pipe-laying by the anchored lay barge caused minor, short-term suspension of sediment close to the seabed and near the pipeline route;
- pipe-laying by the anchored lay barge did not cause any impacts to cables or wrecks;

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<sup>2</sup> TBT: Tributyltin, an organic tin compound formerly used in antifouling paints on vessels. International Maritime Organisation prohibited the application of TBT in 2003 and banned completely in 2008.

- pipeline embedment is greater and the free-spans are shorter than in design due to the soft seabed.

Nord Stream's monitoring programmes in Finland are designed to monitor the implementation of the Project and to observe the actual environmental impacts of pipeline construction and operation. Monitoring activities in 2010 were conducted by six independent expert organisations. The monitoring reports are submitted to the supervising authorities overseeing the Project's compliance with local environmental requirements.

Nord Stream has also produced environmental monitoring programmes tailored to local conditions in the other countries through whose waters the pipeline crosses: Sweden, Denmark, Germany and Russia.

For more information on Nord Stream's environmental monitoring in Finland:

<http://www.nord-stream.com/en/environment/nord-streams-environmental-monitoring-in-the-finnish-eez-eng.html>

For more information on Nord Stream's overall environmental monitoring:

<http://www.nord-stream.com/en/environment/environmental-monitoring.html>

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**Notes to editors:**

**Nord Stream** is a natural gas pipeline that now links Russia and the European Union through the Baltic Sea. The European Union's annual natural gas imports in the year 2008 were approximately 320 billion cubic metres (bcm) and are projected to increase to over 500 bcm by the year 2030. By then, the EU will need additional gas imports of 188 bcm per year (Source: IEA, 2011). Nord Stream will meet almost one third of this additional gas import requirement by connecting the European gas pipeline network to some of the world's largest gas reserves. The project will be an important contribution to long-term security of supply and a milestone of the energy partnership between the European Union and Russia.

Nord Stream AG plans to have the first of two parallel pipelines operational in 2011. Each line is approximately 1,220 kilometres long, providing a transport capacity of some 27.5 bcm per year. Full capacity of about 55 bcm per year will be reached when the second line goes on stream. This is enough gas to supply more than 26 million European households.

**Construction of the Nord Stream Pipeline** started in April 2010, after completion of environmental studies and planning and an Environmental Impact Assessment (EIA) along the entire pipeline route. Three pipelay barges have been commissioned to work on the project: Saipem's Castoro Sei is carrying out the majority of the construction in the Baltic Sea. The Castoro Dieci has completed its operations in German waters, where it constructed both pipelines in the German landfall section; Allseas' Solitaire handled construction in the Gulf of Finland as a subcontractor of Saipem. The first pipeline is scheduled to be operational in 2011, the second one in 2012.

**In 2010, Nord Stream invested 13 million euros in its Environmental and Social Monitoring Programme (ESMP).** More than 20 companies are conducting the surveys defined in the ESMPs, to determine just how, and if, the Baltic Sea's flora and fauna have been impacted by the construction of the Nord Stream pipelines. Data from sixteen subjects, including water quality, bird, fish and mammal populations, as well as seabed recovery, are collected from approximately 1,000 survey locations along the route in the waters of Russia, Finland, Sweden, Denmark and Germany. These data are analysed in internationally recognised laboratories, and Nord Stream reports the results to the national environmental authorities in each country. Nord Stream plans to invest approximately 40 million euros into its ESMP to monitor any impact of the construction and operation of the pipelines through 2016.

**Nord Stream AG** is an international joint venture established for the planning, construction and subsequent operation of the new offshore gas pipeline through the Baltic Sea. Russian OAO Gazprom holds a 51 percent stake in the joint venture. The German companies BASF SE/Wintershall Holding GmbH and E.ON Ruhrgas AG hold 15.5 percent each, and the Dutch gas infrastructure company N.V. Nederlandse Gasunie and the French energy company GDF SUEZ S.A. each hold a 9 percent stake.