Five Countries, Five Programmes

Nord Stream AG is an international consortium of major companies established for the planning, construction and operation of its twin pipelines. The monitoring programmes for this extensive construction and related activities were approved by national authorities through the permitting process. An important component of the programmes was monitoring of water quality. The monitoring of sediment spreading and water quality is a key issue in Denmark during trenching (essential). Monitoring ensures that values are compliant with the permit requirements, which only allows sediment in such a small water area below the natural level of the border of the 2000 sites monitoring. Monitoring of fish and fishery is carried out to assess how construction work and the presence of the pipelines have impacted fish stocks and fishing, particularly bottom trawling. Fish quality, bird, fish and mammal populations, and seabed recovery.

Germany

Inflow

Monitoring of sediment spreading and water quality is a key issue in Germany during trenching (essential). Monitoring provides data that is necessary for a national permit. Extensive monitoring is focused on documenting any changes due to the disturbance of containments and the spreading of materials. The results from the historical surveys. Through analysing the fish quality, bird, fish and mammal populations, and seabed recovery.

Denmark

Monitoring of sediment spreading and water quality is a key issue in Denmark during trenching (essential). Monitoring ensures that values are compliant with the permit requirements, which only allows sediment in such a small water area below the natural level of the border of the 2000 sites monitoring. Monitoring of fish and fishery is carried out to assess how construction work and the presence of the pipelines have impacted fish stocks and fishing, particularly bottom trawling. Fish quality, bird, fish and mammal populations, and seabed recovery.

Finland

Monitoring of sediment spreading and water quality is a key issue in Finland during trenching (essential). Monitoring ensures that values are compliant with the permit requirements, which only allows sediment in such a small water area below the natural level of the border of the 2000 sites monitoring. Monitoring of fish and fishery is carried out to assess how construction work and the presence of the pipelines have impacted fish stocks and fishing, particularly bottom trawling. Fish quality, bird, fish and mammal populations, and seabed recovery.

Sweden

Monitoring of sediment spreading and water quality is a key issue in Sweden during trenching (essential). Monitoring ensures that values are compliant with the permit requirements, which only allows sediment in such a small water area below the natural level of the border of the 2000 sites monitoring. Monitoring of fish and fishery is carried out to assess how construction work and the presence of the pipelines have impacted fish stocks and fishing, particularly bottom trawling. Fish quality, bird, fish and mammal populations, and seabed recovery.

Russia

Monitoring of sediment spreading and water quality is a key issue in Russia during trenching (essential). Monitoring ensures that values are compliant with the permit requirements, which only allows sediment in such a small water area below the natural level of the border of the 2000 sites monitoring. Monitoring of fish and fishery is carried out to assess how construction work and the presence of the pipelines have impacted fish stocks and fishing, particularly bottom trawling. Fish quality, bird, fish and mammal populations, and seabed recovery.
Nord Stream Environmental Monitoring

In 2010, Nord Stream invested 13 million euros in its Environmental and Social Monitoring Programmes (ESMPs). More than 20 companies are conducting the surveys defined in the national ESMPs to determine just how, and if the Baltic Sea’s flora and fauna have been impacted by the construction of the Nord Stream twin pipeline system.

The pipelines could become a new habitat for fish, and therefore their numbers are monitored to determine if they, in fact, use them as an artificial reef. In areas near the landfalls, fish are counted to determine if they do, in fact, use them as an artificial reef. In areas near the landfalls, fish are counted to determine if they do, in fact, use them as an artificial reef.

Benthic Flora & Fauna

Benthos, or ‘soil’/‘fauna’, is monitored along the entirety of both pipelines. Influenza in marine water bodies of significant size disturbed the sediments in order to follow the rate of recovery. Bathymetry surveys on the pipelines are also repeated, and will be recorded. Recovery studies will be based on several years following project completion.

Marine Mammals

Marine mammals are monitored at the northern areas to determine if increased turbidity and noise activity during construction have any impact on their populations. The monitoring includes a combination of acoustic-based counts of seals and the use of hydrophones to detect harbour porpoises.

Water Flow

Water flow is an important area for birds, and the pipeline route is an important area for birds, and the pipeline route.

Water Quality

Water quality is a top priority throughout the project. Therefore, surveys of macroinvertebrates (benthic) and ichthyofauna (water) are conducted at several locations along the Nord Stream Pipeline system. The results of the monitoring will help to verify if the environmental protection measures are adequate as required by the national and international authorities. The monitoring programmes will also be used to determine any impact of pipeline construction through the end of 2016.

Fish & Fisheries

The pipelines could become a new habitat for fish, and therefore their numbers are monitored to determine if they, in fact, use them as artificial reefs. In areas near the landfalls, fish are counted to determine if they do, in fact, use them as artificial reefs.

Air, Light & Noise

At the seaward areas where construction activities that place extreme stress on the environment, noise monitoring is an essential tool to determine the impact on birds and marine mammals.

Cultural Heritage

Objects of cultural value along the route are safeguarded throughout construction. The resulting data of the surveys defines in the national ESMPs to determine just how, and if the Baltic Sea’s flora and fauna have been impacted by the construction of the Nord Stream twin pipeline system.

Munitions

Conventional Munitions found along the route are not considered a risk with regard to marine life. Air emissions from the construction activities are monitored to verify if natural values are not impacted or competed by the emissions. Water inflow to the Baltic is not a source of concern. Noise monitoring is an essential tool to determine the impact on birds and marine mammals.

Sea Birds

Seabird populations are monitored in the coastal areas of the landfall. The pipelines could become a new habitat for fish, and therefore their numbers are monitored to determine if they, in fact, use them as artificial reefs. In areas near the landfalls, fish are counted to determine if they do, in fact, use them as artificial reefs.