

Nordstream incident, Sept 2022

2023-08-14

BSHC28, 19 - 21 September 2023, Helsinki Finland

Items to be reported

- **What is Nordstream?**
- **Scenario in September 2022**
- **Actions and coordination by SMA and DMA**
- **Lessons learned**

Nordstream pipeline

Four pipelines in total
Four leaks



Instructions to operators at Sweden traffic



Prepared in 2012 during pipeline construction

List of scenarios

Clear instructions who to contact

Example of Navigational warning to broadcast

Instructions matched reality

Text from the company emergency response plan

Safety Information

Natural gas composition

Component	Typical gas composition
Methane	Typically 98 %
Nitrogen	max 5 %
Carbon Dioxide	max 2 %
Higher hydrocarbons (Ethane – Butane)	1 - 14 %
Oxygen and Total Sulphur	Traces

Gas properties

Flammability: A gas concentration between 4% (Lower Explosive Limit) and 16 % (Upper Explosive Limit) will result in the formation of an explosive mixture

Odor: Odorless

Color: Colorless

Toxicity: Non toxic

Density: Lighter than air; gas will rise and disperse in atmosphere

Leak location

The leak location may be identified by visual observation of gas bubbles at the water surface. A large leak might cause significant disturbance of the water surface.



Timeline summary Sep 26, 2022

- **08:36 Call from company in Switzerland. Pressure drop in pipeline. No information about location at this time.**
- **08:45 – 09:45 Information to JRCC, Coast guard, NtM. Preparation of e-mail to be sent to Germany, Poland and Denmark. Waiting for position.**
- **Further dialog with company and other authorities.**
- **12:27 First warning broadcast without position**
- **13:20 Position confirmed. "Important" warning transmitted.**
- **Coordination with Denmark.**
- **Information sent to UK for EGC warning.**
- **15:30 Navtex warning changed to "vital".**
- **20:20 Two new positions reported. New warning issued.**
- **Continued dialog with vessels in the area. Denmark with northbound vessels and Sweden with southbound.**

First warning

260900 UTC SEP

BALTIC SEA NAV WARN 021/22

WESTERN- SOUTHERN AND SOUTH-EASTERN BALTIC

POTENTIAL LEAKAGE ALONG THE NORD STREAM 2 GAS PIPELINE OBSERVED.

ALL VESSELS ARE ASKED TO KEEP A SHARP LOOKOUT AND REPORT ANY ABNORMALITIES TO SWEDEN TRAFFIC.

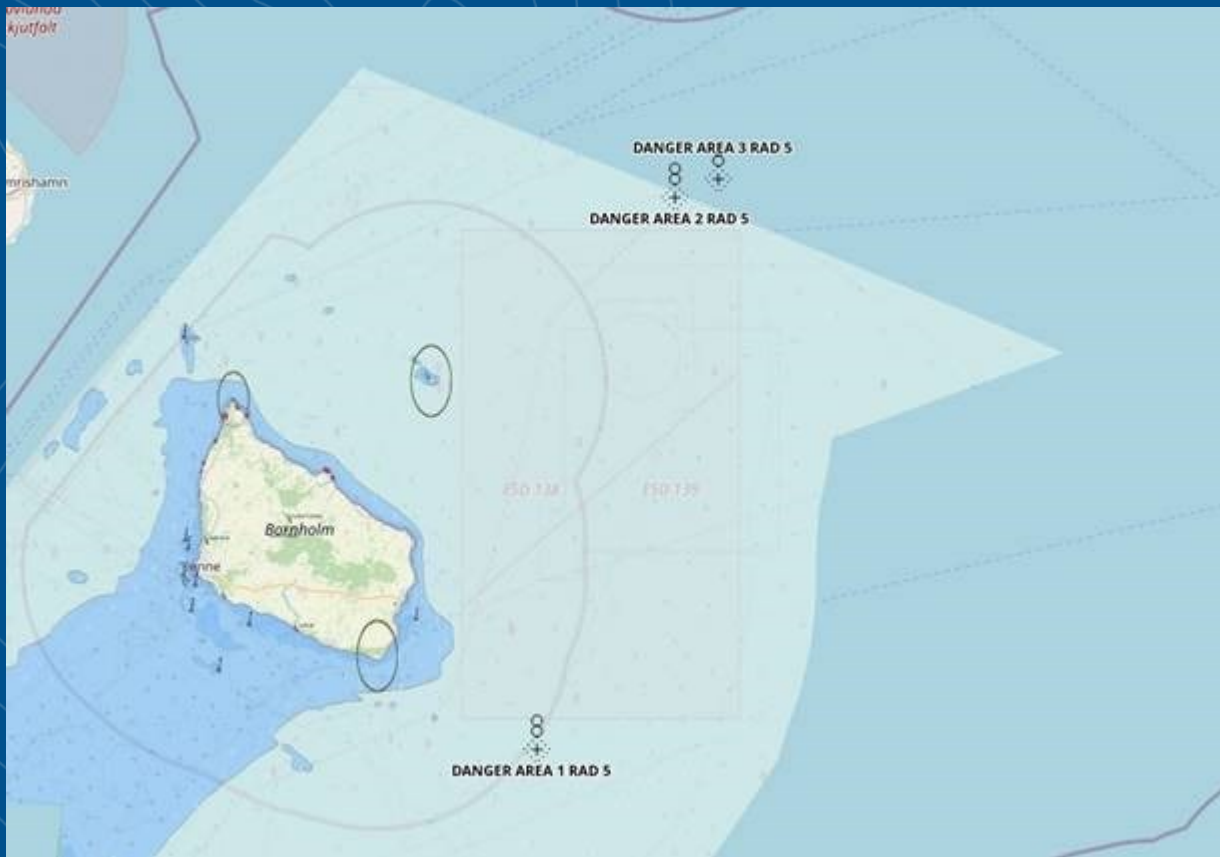
VHF 16/TRAFFIC CHANNELS OR SWEDENTRAFFIC(AT)SJOFARTSVERKET.SE



Reports from vessels in the area,
helped pinpoint the location



Further actions taken



**Virtual AIS and "Watch dogs"
deployed to mark positions.**

Lessons learnt

- **Importance of short and clear instructions, decision support for operator**
- **Operator time log**
- **Importance of good communications both within agencies and different counties**
- **Difficulties with different agencies in charge in different countries. Prohibition zone varied.**

Thank you