

Stockholm Norvik Port, the Baltic Sea freight port of the future

by

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Introduction

Ports of Stockholm is building a new port for container and ro/ro traffic, Stockholm Norvik Port. Stockholm Norvik Port is a new greenfield port in the city of Nynäshamn approximately 50 kilometers south of Stockholm. Ports of Stockholm operate an existing ro/ro- and cruiseport in the central part of Nynäshamn.

Hutchison Port Holdings will operate the Container Terminal Norvikudden (CTN), the Ports of Stockholm will operate the ro/ro terminal.

The construction of the port is divided into two Phases – Phase 1 and 2 where Phase 2 is a future development area for the container terminal with an extra 300 m quay. The new port will, when the port is completed, cover 44 hectares and the quay length is 1400 m, of which 800 m is container quay. It will have a maximum water depth of 16.5 meters. This will enable calls by the largest vessels in the Baltic Sea.

Background

Stockholm Norvik Port is needed for several reasons:

1. Stockholm is growing

The Stockholm Norvik Port will ensure the efficient supply of goods to the Stockholm region, one of Europe's fastest growing capital cities. With this type of growth, long-term investment in a well-functioning infrastructure is essential and the port is an important part of this development. When Stockholm Norvik Port starts operating the existing smaller container port in the middle of Stockholm will be closed down and the area will be used for offices and as a residential area.

2. Ships are getting bigger

Both container and ro/ro ship sizes are increasing. The shipping companies are consequently building increasingly larger vessels, which is both environmentally and economically advantageous. The Stockholm Norvik Port will meet the needs of modern ships with deeper and longer quays, larger terminal areas and short and easy approach from the fairways.

3. A modern port benefits the environment

Stockholm Norvik Port complies with the EU ambition to increase the proportion of sea transport in relation to the total amount of transported goods. A new and modern port close to the consumption area with direct motorway and railway connections, built using state-of-the-art technologies, is an efficient and sustainable transport solution.

The project

Ports of Stockholm bought the land area in 1992 and in 2007 we applied to the Swedish Environmental Court for an environmental permit. The construction works started 2016 and the inauguration will be in 2020.

To prepare the area around 3,5 million m³ of rock has been blasted and 1,2 million m³ has been filled in reclaimed areas. For stabilization of the surface overload, dry deep mixing (205,000 m), jet mixing (48,000 m) and dynamic compaction (86,000 drops) have been used.

350 m of the quays are made of precast reinforced concrete cantilever wall elements and the rest is an open berth structure with piles and pilewalls in the inner part of the construction. Totally 800 piles will be mounted.

The pavement will be mostly concrete bricks, 100 mm thick.

Buildings for offices, work shop, customs and food administration will be built.

1. PORTS OF STOCKHOLM, TECHNICAL MANAGER, MATTIAS.SANDELL@STOPOINTS.COM

The project also includes the 4 km railway that connect the port to the national railway system. The budget for the first stage is 370 million Euros. Investments in cranes and terminal equipment in the Container terminal are made by Hutchison Ports.

The traffic

Stockholm Norvik Port will be able to handle around 500,000 containers and 200,000 ro/ro vehicles annually. Container operations will be run by Hutchison Ports using straddle carriers and remote operated ship to shore cranes.

The design ships are a 240 m ro/ro ship and a “Post Suez Max” container ship.

Environment

Environmental issues are important in the Stockholm Norvik Port project. For example, all storm water will be collected and cleaned before it reaches the sea. All the quays will be prepared to OPS (onshore power supply), so the ships can connect to electrical power from land.

Sewage water can be received from the ships in all quays. An electrified railway is built to the container yard.

