



# Eisbericht Nr. 36

## Amtsblatt des BSH

Jahrgang 96

Nr. 36

Tuesday, 17.01.2023

1

### Übersicht

In den Schären der Bottenwiek befindet sich bis 40 cm dickes Festeis. Weiter außerhalb treibt im Norden 10–30 cm dickes, sehr dichtes Eis mit festgestampften Eis an der Eiskante. In der südlichen Bottenwiek befindet sich in den Buchten dünnes ebenes Eis oder Festeis. In Norra Kvarken liegt bei Vaasa bis 25 cm dickes Festeis. Ansonsten kommt an den Küsten dünnes ebenes Eis vor. In der Bottensee und dem Schärenmeer kommt dünnes, ebenes Eis oder Festeis entlang der Küsten vor. Im Mälarsee liegt dünnes, ebenes Eis oder Neueis. Im Finnischen Meerbusen liegt in den östlichsten Buchten bis 40 cm dickes Festeis oder sehr dichtes Eis. In den Schären und Buchten entlang der Küsten kommt im Norden Festeis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–25 cm dickes Festeis in geschützten Buchten und etwas weiter außerhalb Treibeis verschiedener Konzentration.

### Overview

In the archipelagos of the Bay of Bothnia, there is up to 40 cm thick fast ice. Further out in the north, there is 10–30 cm thick, very close ice with a brash ice barrier along the ice edge. In the southern Bay of Bothnia, there is thin level ice or fast ice in the inner bays. In the Quark, there is up to 25 cm thick fast ice near Vaasa and else thin level ice along the coasts. In the Sea of Bothnia and the Archipelago Sea, there is fast ice or thin level ice along the coasts. In Lake Mälaren, there is thin level ice and new ice. In the Gulf of Finland, there is up to 40 cm thick fast ice or very close ice in the easternmost bays. In the archipelagos and bays along the coasts, there is fast ice in the north. In the northeastern Gulf of Riga, there is 10–25 cm thick fast ice in sheltered bays and drifting ice of varying concentration somewhat further out.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 20–40 cm thick fast ice. Further out there is a region of 15–30 cm thick, very close ice to about the line Rödkallen – Malören – Oulu5. In the north the ice is partly rafted or ridged and there is a brash ice barrier at the edge. On the Swedish side follows a band of open to close ice that is up to 20 cm thick. Thin very open ice drifts in places from

Löyhä to Oulun portti and also off Raahe. In the southern Bay of Bothnia, there is 5–20 cm thick level or fast ice in the archipelagos and open water somewhat further out.

Some ice formation is possible in the western part but else no larger changes. The ice will drift to the northwest.

### The Quark

There is 10–25 cm thick fast ice in the Vaasa ar-

chipelago out to Nygrund. Further out, there is very

#### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

[www.bsh.de/eis](http://www.bsh.de/eis)

[www.bsh.de/ice](http://www.bsh.de/ice)

© BSH - Alle Rechte vorbehalten

Nachdruck, auch auszugsweise, verboten

#### Eisankünfte / Ice Information

Telefon: +49 (0) 381 4563 -780

Telefax: +49 (0) 381 4563 -949

E-Mail: [ice@bsh.de](mailto:ice@bsh.de)

© BSH - All rights reserved

Reproduction in whole or in part prohibited

open ice in places. On the Swedish side, there is mostly fast ice in inner bays along the coast and thin close ice further out. At sea, there is open

### Sea of Bothnia

In the archipelagos along the eastern coast, there is 5–20 cm thick fast ice and in places shuga. Along the western coast there is thin level ice in sheltered bays. On Ångermanälven, there is 10–20

### Archipelago Sea

At the eastern coast, there is 3–10 cm fast or level ice in the inner bays.

### Northern Baltic

In Lake Mälaren, 3–10 cm thick level ice is present in the western part. New ice occurs in sheltered

### Gulf of Finland

From St. Petersburg out to Kotlin there is 20–40 cm thick fast ice, with 10–25 cm thick, very close ice on the fairway. In the bay north of Kotlin there is 20–30 cm thick fast ice at the coast and 10–20 cm thick very close ice outside. In the Bay of Vyborg, there is 15–25 cm thick fast ice. Further out, there is level ice followed by 5–15 cm thick, close ice to about Nerva. In the Bjerkesund, there is 5–

### Gulf of Riga

In Väinameri, there is 10–25 cm thick fast ice in sheltered bays open water on the fairways. In the Bay of Pärnu, there is 10–20 cm thick fast ice and further out to the line south tip of Manilaid – Pikla

### Southeastern Baltic

In the Curonian Lagoon, there is 3–10 cm thick, very close drift ice in the western part.

### Skagerrak and Kattegat

Up to 10 cm thick ice or new ice is present in some Norwegian Fjords.

### Swedish Lakes

New ice and thin level ice is present in some sheltered bays of Lake Vänern.

water with stripes and patches of shuga at places. No major changes with a westerly/northwesterly ice drift are expected.

cm thick fast or level ice. New ice has formed along the Swedish coast north of 61°N. New ice formation will cease and the ice will drift to the west/northwest.

No major changes are expected.

places and along the coast. No major changes are expected.

15 cm thick fast ice with 5–15 cm thick, very close ice at the entrance. Along the northern coast, there is 5–20 cm thick fast ice in the eastern archipelagos with shuga in places at the edge. In the western archipelagos thin ice. The general ice situation will not change much the coming day.

Nina, there is 10–20 cm thick, very close ice. Some ice melt may occur but overall no major change is expected.

Some ice melt is expected.

No major changes are expected.

No major changes are expected the coming day.

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Estonia</b>	Pärnu	1600 kW	1 C	23.12.
<b>Finland</b>	Tornio, Kemi and Oulu	2000 dwt	IB	07.01.
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	I	07.01.
	Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo	2000 dwt	II	07.01.
	Loviisa, Kotka and Hamina	2000 dwt	II	24.12.
<b>Sweden</b>	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund, Rundvik, Husum and Örnköldvik	2000 dwt	II	21.12.
	Angermanälven	2000 dwt	IB	07.01.
	Köping	2000 dwt	IC	07.01.
	Västerås	2000 dwt	IC	07.01.
	Balsta	1300/2000 dwt	IC/II	22.12.

**Estonia****Icebreakers:**

EVA-316 assists in the port of Pärnu.

**Finland/Sweden**

The Saimaa Canal is closed for traffic since 4<sup>th</sup> January.

Vessels bound for Gulf of Bothnia ports in which assistance restrictions apply, shall when passing latitude 60° 00' N report their nationality, name, destination, ETA and speed to ICE INFO on VHF channel 82. This report can also be given directly by telephone to +46 10 492 7600.

Vessels bound for Finnish or Swedish ports with assistance restrictions in the Quark or the Bay of Bothnia shall, 20 nautical miles before Nordvalen Lighthouse (63° 32.15' N 20° 46.60' E), report in accordance with the instructions for winter navigation to Bothnia VTS on VHF channel 67.

**Icebreakers:**

KONTIO, OTSO, ATLE, YMER and FREJ assist in the Bay of Bothnia. ZEUS assists in the Quark and the Sea of Bothnia. ALE assists in the Quark. CALYPSO assists in the region of Kotka and Hamina.

**Russia**

There are restrictions for small crafts going to Vysotsk, Vyborg, St. Petersburg, Ust-Luga and Primorsk.

**Icebreakers:** Several icebreakers assist vessels to the port of Vyborg, Vysotsk, Primorsk, Ust-Luga and St. Petersburg.

## Baltic Sea Ice Code

<p>First number:</p> <p><b>A<sub>B</sub> Amount and arrangements of sea ice</b></p> <p>0 Ice free</p> <p>1 Open water – concentration less than 1/10</p> <p>2 Very open ice - concentration 1/10 to 3/10</p> <p>3 Open ice – concentration 4/10 to 6/10</p> <p>4 Close ice – concentration 7/10 to 8/10</p> <p>5 Very close ice – concentration 9/10 to 9+/10</p> <p>6 Compact ice, including consolidated ice – concentration 10/10</p> <p>7 Fast ice with drift ice outside</p> <p>8 Fast ice</p> <p>9 Lead in very close or compact drift ice or along the fast ice edge</p> <p>/ Unable to report</p> <p>Third number:</p> <p><b>T<sub>B</sub> Topography or form of ice</b></p> <p>0 Pancake ice, ice cakes, brash ice – less than 20 m across</p> <p>1 Small ice floes – 20 to 100 m across</p> <p>2 Medium ice floes – 100 to 500 m</p> <p>3 Big ice floes – 500 to 2000 m across</p> <p>4 Vast or giant ice floes – more than 2000 m across – or level ice</p> <p>5 Rafted ice</p> <p>6 Compact slush or shuga, or compacted brash ice</p> <p>7 Hummocked or ridged ice</p> <p>8 Thaw holes or many puddles on the ice</p> <p>9 Rotten ice</p> <p>/ No information or unable to report</p>	<p>Second number:</p> <p><b>S<sub>B</sub> Stage of ice development</b></p> <p>0 New ice or dark nilas (less than 5 cm thick)</p> <p>1 Light nilas (5 - 10 cm thick) or ice rind</p> <p>2 Grey ice (10 - 15 cm thick)</p> <p>3 Grey-white ice (15 - 30 cm thick)</p> <p>4 White ice, first stage (30 - 50 cm thick)</p> <p>5 White ice, second stage (50 - 70 cm thick)</p> <p>6 Medium first year ice (70 - 120 cm thick)</p> <p>7 Ice predominantly thinner than 15 cm with some thicker ice</p> <p>8 Ice predominantly grey-white ice (15 – 30 cm) with some thicker ice</p> <p>9 Ice predominantly thicker than 30 cm with some thinner ice</p> <p>/ No information or unable to report</p> <p>Fourth number:</p> <p><b>K<sub>B</sub> Navigation conditions in ice</b></p> <p>0 Navigation unobscured</p> <p>1 Navigation difficult or dangerous for wooden vessels without ice sheathing</p> <p>2 Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable</p> <p>3 Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice</p> <p>4 Navigation proceeds in lead or broken ice-channel without the assistance of an icebreaker</p> <p>5 Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size</p> <p>6 Icebreaker assistance can only be given to vessels of special ice class and of special size</p> <p>7 Icebreaker assistance can only be given to vessels after special permission</p> <p>8 Navigation temporarily closed</p> <p>9 Navigation has ceased</p> <p>/ Unknown</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Estonia, 17.01.2023**

Paernu, port and bay	7385
Moonsund	1//0

**Finland, 17.01.2023**

Röyttä – Etukari	8846
Etukari – Ristinmatala	7356
Ajos – Ristinmatala	7356
Ristinmatala – Kemi 2	5356
Kemi 2 – Kemi 1	5356
Sea area SW of Kemi 1	0//6
Kemi 2 – Ulkokrunni – Virpiniemi	7356
Oulu harbours – Kattilankalla	7356
Kattilankalla – Oulu 1	5356
Sea area SW of Oulu 1	1106
High Sea N of the latitude of Marjaniemi	0//6
Raahe harbour – Heikinkari	1106
Heikinkari – Raahe lighthouse	1106
Raahe lighthouse – Nahkiainen	1106
Latitude Marjaniemi – Ulkokalla, Sea	1106
Rahja harbour – Välimatala	5146
Vaelimatala to line Ulkokalla – Ykskivi	1106
Sea betw. lat. of Ulkokalla – Pietarsaari	1106
Ykspihlaja – Repskär	5146
Repskär – Kokkola lighthouse	1106
Sea area off Kokkola lighthouse	1106
Pietarsaari – Kallan	1106
Sea area off Kallan	1106
Sea lat. Pietarsaari – NE Nordvalen	1106

Sea area ENE of Nordvalen	1106
Sea area Nordvalen to W of Norrskär	1106
Vaskiluoto – Ensten	8746
Ensten – Vaasa lighthouse	1106
Vaasa lighthouse – Norrskär	1106
Kaskinen – Sälgrund	8745
Sea area off Sälgrund	5165
Pori harb. to line Pori lighth. – Säppi	1101
Uusikaupunki harbour – Kirsta	8142
Inkoo a. Kantvik – sea area Porkkala	7105
Helsinki harbours – Harmaja	5145
Vuosaari harbour – Eestiluoto	5145
Valko Harbour – Täktarn	8745
Kotka – Viikari	5165
Hamina – Suurmusta	8745
Suurmusta – Merikari	8745

**Norway, 17.01.2023**

Svinesund – Halden	31//
Drammensfjord	3212
Tønsberg, inner harbour	8101
Langårsund (Kragerø)	8144

**Russian Federation, 17.01.2023**

Port of St. Petersburg	83/3
St. Petersburg – E-point island Kotlin	33/2
E-point Kotlin – long. lighth. Tolbuhkin	5202
Vyborg, port and bay	83/3
Island Vichrevoj – Island Sommers	4002

Strait Bjerkesund 81/2  
E-point Bol'soj Ber'ozovyj – Šepelevskij 50/2

**Sweden, 17.01.2023**

Karlsborg – Malören 8446  
Sea area off Malören 5366  
Luleå – Björnklack 8446  
Björnklack – Farstugrunden 4356  
E and SE of Farstugrunden 4356  
Sandgrönn fairway 8446  
Rödkillen – Norströmsgrund 4356  
Haraholmen – Nygrån 8346  
Sea area off Nygrån 4352  
Skelleftehamn – Gåsören 5236  
Sea area off Gåsören 3126  
Sea area off Bjuröklubb 5246  
NE of Nordvalen 1106  
SW of Nordvalen 1106  
Western Quark (W of Holmöarna) 4136  
Umeå – Väktaren 8346  
SE of Väktaren 4136  
Fairway to Husum 4136  
Örnsköldsvik – Hörnskatan 8246  
Hörnskatan – Skagsudde 4136  
Sea area off Skagsudde 4136  
Fairway W of Ulvöarna 4046  
Sea area E of Ulvöarna 4046  
Ångermanälven north Sandö Bridge 8344  
Ångermanälven south Sandö Bridge 8344  
Härnösand – Härnön 5044  
Sea area off Härnön 4041  
Sundsvall – Draghällan 8242  
Draghällan – Åstholmsudde 4041  
Off Åstholmsudde and Brämön 4041  
Hudiksvallfjärden 5242  
Iggesund – Agö 5242  
Sandarne – Hällgrund 5142  
Ljusnefjärden – Storjungfrun 5142  
Gävle – Eggegrund 5142  
Hallstavik – Svartklubben 4041  
Köping – Kvicksund 5144  
Västerås – Grönsö 5144  
Grönsö – Södertälje 1004  
Stockholm – Södertälje 1004  
Fairway to Karlstad 5142