

# Eisbericht Nr. 61

## Amtsblatt des BSH

Jahrgang 96

Nr. 61

Tuesday, 21.02.2023

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### Übersicht

In den Schären der Bottenwiek befindet sich im Norden bis 60 cm dickes Festeis und im Süden bis 30 cm dickes Festeis. Auf das Festeis folgt im Norden bis zu 40 cm dickes zusammenhängendes oder sehr dichtes, örtlich aufgepresstes oder aufgeschobenes Eis. Auf See ansonsten dünnes ebenes Eis oder Neueis mit örtlich dickeren Schollen. In Kvarken liegt bis 35 cm dickes Festeis in den Schären und Buchten und auf See treibt Neueis mit örtlich dickerem Eis. 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 und dichtes bis sehr dichtes Eis sowie Neueis auf See im Osten. In den Schären und Buchten entlang der nördlichen Küste kommt Festeis vor. Im Nordosten des Rigaischen Meerbusen befindet sich 10–20 cm dickes Festeis oder sehr dichtes Eis in geschützten Gebieten.

### Overview

In the archipelagos of the Bay of Bothnia, there is up to 60 cm thick fast ice in the north and up to 30 cm thick fast ice in the south. In the north, there is up to 40 cm thick, partly ridged and rafted consolidated or very close ice. Else at sea, there is thin level or new ice with some thicker floes at places. In the Quark, there is up to 35 cm thick fast ice in the archipelagos and bays and new ice with thicker ice at places at sea. In the Sea of Bothnia and the Archipelago Sea, fast ice or thin level ice is present along the coasts. In Lake Mälaren, there is thin level ice and new ice. In the Gulf of Finland, up to 40 cm thick fast ice is present in the easternmost bays and close to very close ice and new ice at sea in the east. In the archipelagos and bays along the northern coast, there is fast ice. In the northeastern Gulf of Riga, there is 10–20 cm thick fast ice or very close ice in sheltered bays.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 25–60 cm thick fast ice and compact, up to 45 cm thick ice towards Malören and off the eastern fast ice. Further out in the northeast, there is 20–40 cm thick, in places ridged very close ice to about Kemi-1 – Oulu-3 – Jaakko. Further out to about a line Farstugrunden – Oulu-1, there is 10–30 cm thick, very close and partly rafted ice. Further out to about Bjuröklubb – Simpgrund –

Falkensgrund – and 20–30 NM outside the Finnish coast, there is thin, 5–8 cm thick level ice and at places are some thicker ice floes. Else at sea, there is mostly new ice and new ice formation. In the southern Bay of Bothnia, there is 20–30 cm thick fast ice in the archipelagos and farther out in the east, there is a narrow band of 5–20cm thick very close ice. Else, there is new ice and new ice formation at sea with some thicker floes at places.

### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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

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Ice formation and ice growth continues the coming

#### **The Quark**

There is 10–35 cm thick fast ice in the Vaasa archipelago out to Storhästen. Further out to Ensten, there is very close, 5–20 cm thick ice followed by open, thin ice and new ice to Norrkär. On the Swedish side, there is mostly fast ice up to 35 cm thick in inner bays. At sea from coast to coast,

#### **Sea of Bothnia**

In the archipelagos along the eastern coast, there is 10–20 cm thick fast ice: Further out in the northern part, there is thin very open to open ice. Along the western coast, there is thin level ice or new ice in sheltered bays in the south and up to 40 cm

#### **Archipelago Sea and Åland Sea**

At the eastern coast, there is 5–15 cm fast or level ice in the inner bays. In the western and central part new ice is present along the coasts.

#### **Northern Baltic**

In Lake Mälaren, there is 5–15 cm thick fast ice or thin level ice in the western part, with areas of open water. In the eastern part, there is thin ice in

#### **Gulf of Finland**

From St. Petersburg out to Kotlin and in the bay north of Kotlin, there is 20–40 cm thick fast ice or compact ice. In the Bay of Vyborg, there is 15–25 cm thick fast ice and in the Bjerkesund, there is 10–20 cm thick fast ice. Further out to about Nerva, there is very close, 15–25 cm thick ice. East and north of Seskar is an area with close drift ice. East of about 27°30', there is new ice and new ice formation. Further west to the line Kotka – Silimäe

#### **Gulf of Riga**

In Väinameri, there is 5–15 cm thick very close ice or fast ice near the coasts. On the fairway is open water. In the eastern part of the Bay of Pärnu, there is mostly 5–15 cm thick, very close ice to

#### **Skagerrak and Kattegat**

Up to 15 cm thick ice or new ice is present in some inner Norwegian Fjords. At a few places thicker ice occurs.

#### **Swedish Lakes**

Thin level ice or new ice is present in some sheltered bays in the northeast of Lake Vänern.

day and the ice will slowly drift to the southwest.

there is new ice and new ice formation. In the area Sydostbrotten – Norrkär – Strömmingsbådan, there is open, 5–15 cm thick drift ice.

Ice growth and ice formation continues the coming day. The ice will slightly drift to the southwest.

thick fast ice in inner bays in the north. On Ångermanälven, there is 20–40 cm thick fast or level ice. Ice growth and ice formation is expected the coming day.

Ice formation and ice growth are expected the coming day.

sheltered bays. New ice occurs in sheltered places along the outer coast.

Some ice formation is possible in sheltered places.

is very open thin ice. Along the northern coast, there is 10–25 cm thick fast ice in the eastern archipelagos. Further out, there is new ice. In the western archipelagos, there is 5–15 cm thick fast ice.

Ice formation and ice growth continues the coming day. The ice will drift in southwesterly/southerly directions.

Cape Suurna. In the western part, there is open water.

New ice formation is expected the coming day. There will be a slight southwesterly ice drift

No major changes are expected the coming day.

No major changes are expected the coming days.

## 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	IA	01.02.
	<b>Tornio, Kemi and Oulu</b>	<b>4000 dwt</b>	<b>IA</b>	<b>22.02.</b>
	Raahe, Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	I	07.01.
	<b>Raahe</b>	<b>2000 dwt</b>	<b>IB</b>	<b>22.02.</b>
	Kaskinen, Inkoo, Kantvik, Helsinki, Sköldvik and Mussalo	2000 dwt	II	07.01.
	Loviisa, Kotka and Hamina	2000 dwt	II	24.12.
<b>Russia</b>	Vyborg and Vysotsk	-	Ice 1	08.02.
<b>Sweden</b>	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund	2000 dwt	IC	07.02.
	Rundvik and Husum	2000 dwt	II	21.12.
	Örnsköldsvik	2000 dwt	IC	13.02.
	Angermanälven	2000 dwt	IB	07.01.
	Söraker, Sundsvall and Söderhamn	2000 dwt	IC	13.02.
	Köping and Västerås	1300/2000 dwt	IC/II	25.01.
	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.

The traffic separation schemes in the Quark are temporarily out of use from 7 February due to ice conditions.

**Icebreakers:**

KONTIO, OTSO, SISU, ZEUS, ATLE, YMER and FREJ assist in the Bay 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. No sailing of barge by tug to Vyborg and Vysotsk.

**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>
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**Estonia, 21.02.2023**

Shipping route from Narva-Jõssuu	3000
Paernu, port and bay	3//5
Moonsund	1//0

**Finland, 21.02.2023**

Röyttä – Etukari	8446
Etukari – Ristinmatala	6456
Ajos – Ristinmatala	6456
Ristinmatala – Kemi 2	5876
Kemi 2 – Kemi 1	5876
Sea area SW of Kemi 1	5876
Kemi 2 – Ulkokrunni – Virpiniemi	6456
Oulu harbours – Kattilankalla	6456
Kattilankalla – Oulu 1	6456
Sea area SW of Oulu 1	5856
High Sea N of the latitude of Marjaniemi	5756
Raahe harbour – Heikinkari	8346
Heikinkari – Raahe lighthouse	8346
Raahe lighthouse – Nahkiainen	5146
Latitude Marjaniemi – Ulkokalla, Sea	4756
Rahja harbour – Välimatala	5756
Välimatala to line Ulkokalla – Ykskivi	5146
Sea betw. lat. of Ulkokalla – Pietarsaari	5146
Ykskivilaja – Repskär	7756
Repskär – Kokkola lighthouse	2126
Sea area off Kokkola lighthouse	5146
Pietarsaari – Kallan	7756
Sea area off Kallan	2126

Sea lat. Pietarsaari – NE Nordvalen	5146
Sea area ENE of Nordvalen	4046
Sea area Nordvalen to W of Norrskär	3136
Vaskiluoto – Ensten	7756
Ensten – Vaasa lighthouse	4046
Vaasa lighthouse – Norrskär	3136
Sea area SW of Norrskär	3736
Kaskinen – Sälgrund	2725
Sea area off Sälgrund	2725
High sea from N to latitude Yttergrund	3732
Pori harb. to line Pori lighth. – Säppi	1111
Uusikaupunki harbour – Kirsta	8142
Naantali and Turku – Rajakari	5142
Inkoo a. Kantvik – sea area Porkkala	8145
Helsinki harbours – Harmaja	2005
Valko Harbour – Täktarn	4045
Archipelago fairway Boistö – Glosholm	0//5
Kotka – Viikari	8345
Viikari – Orregrund	4045
Orregrund – Tiiskeri	0//5
Hamina – Suurmusta	5145
Suurmusta – Merikari	5145
Merikari – Kaunissaari	0//5

**Norway, 21.02.2023**

Svinesund – Halden	31//
Drammensfjord	1101
Husøysund – Tønsberg channel	8345
Tønsberg, inner harbour	8353

Vestfjord (Tønsberg)	8555
Langårsund (Kragerø)	8144

**Russian Federation, 21.02.2023**

Port of St. Petersburg	84/3
St. Petersburg – E-point island Kotlin	54/3
E-point Kotlin – long. lighth. Tolbuhkin	4303
Lighth. Tolbuhkin – lighth. –Šepelevskij	50/2
Lighthouse Šepelevskij – island Sescar	42/2
Island Sescar – Island Sommers	50/1
Vyborg, port and bay	83/3
Island Vichrevoj – Island Sommers	42/3
Strait Bjerkesund	83/3
E-point Bol'šoj Ber'ozovyj – Šepelevskij	32/2
Luga bay	22/2
Apr. Luga bay – line Moš.-Šepel.	2/1

**Sweden, 21.02.2023**

Karlsborg – Malören	6456
Sea area off Malören	5356
Luleå – Björnklack	8546
Björnklack – Farstugrunden	5356
E and SE of Farstugrunden	5356
Sandgrönn fairway	5356
Rödkallen – Norströmsgrund	5146
Haraholmen – Nygrån	5236
Sea area off Nygrån	5146
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	5146
Sea area off Bjuröklubb	5146
NE of Nordvalen	4046
SW of Nordvalen	4046
Western Quark (W of Holmöarna)	4046
Umeå – Väktaren	5146
SE of Väktaren	4046
NE and SE of Sydostbrotten	2026
Örnsköldsvik – Hörnskatan	8446
Hörnskatan – Skagsudde	5146
Ångermanälven north Sandö Bridge	8444
Ångermanälven south Sandö Bridge	8444
Härnösand – Härnön	1004
Sundsvall – Draghällan	2026
Draghällan – Åstholmsudde	2026
Hudiksvallfjärden	8342
Iggesund – Agö	8342
Sandarne – Hällgrund	8346
Ljusnefjärden – Storjungfrun	8346
Gävle – Eggegrund	5142
Hallstavik – Svartklubben	5142
Köping – Kviksund	8244
Västerås – Grönsö	8244
Stockholm – Södertälje	4044
Södertälje – Fifong	2024
Fairway to Kristinehamn	5142