



# Eisbericht Nr. 67

## Amtsblatt des BSH

Jahrgang 96

Nr. 67

Wednesday, 01.03.2023

1

### Übersicht

In den Schären der Bottenwiek befindet sich im Norden bis 60 cm dickes Festeis und im Süden bis 35 cm dickes Festeis. Auf das Festeis folgt im Norden bis zu 40 cm dickes zusammenhängendes oder sehr dichtes, örtlich aufgepresstes oder aufgeschobenes Eis. Im Westen verläuft eine Rinne mit offenem Wasser oder sehr lockeren Eis und weiter östlich treibt auf See ansonsten meist bis 25 cm dickes, sehr dichtes Eis. In Kvarken liegt bis 35 cm dickes Festeis in den Schären und Buchten und auf See treibt im Osten sehr lockereres 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. Auf See treibt im Osten dichtes bis sehr dichtes Eis und im Norden befindet sich eine breite Meereisrinne mit Neueis. 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 und Neueis etwas weiter außerhalb.

### Overview

In the archipelagos of the Bay of Bothnia, there is up to 60 cm thick fast ice in the north and up to 35 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 further out. Along the western coast there is a lead with open water of very open ice and further east at sea, there is mostly up to 25 cm thick, very close ice. In the Quark, there is up to 35 cm thick fast ice in the archipelagos and bays and at sea, there is very open ice in the east. 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. At sea in the east, there is close to very close ice in the south and a lead with new ice in the north. 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 and new ice somewhat further out.

### Bay of Bothnia

In the archipelagos of the northern Bay of Bothnia, there is 30–60 cm thick fast ice and compact, up to 45 cm thick ice towards Malören and off the eastern fast ice. In the northwest there is a lead with very open ice running from Malören to about Rödkallen. Further out in the northeast, there is 20–40 cm thick, in places ridged very close ice to about Kemi-1 – Oulu-2 – Raahe. In the central

northern part there is 15-40cm thick very close ice with some ridges and cracks to about 65°10'N. In the southern Bay of Bothnia, there is 20–35 cm thick fast ice in the archipelagos. Off the western coast there is an open water lead running from Norströmsgrund to the Quark, further east at sea first open to close ice and later 5-25cm thick very close, partly rafted ice and then, outside the east-

#### 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

ern coast, an area of 5-20cm thick level ice. Only minor ice growth is expected the coming day. The ice will drift to the east, widening the lead in

### The Quark

There is 15–35 cm thick fast ice in the Vaasa archipelago out to Storhästen. Further out there is very close, 5–20 cm thick ice and new ice to Vaasa lighthouse. Further out there is mostly very open ice out to Norrskär and Holmöarna. On the Swe-

### Sea of Bothnia

In the archipelagos along the eastern coast, there is 10–25 cm thick fast ice. Along the western coast, there is thin level ice or new ice in sheltered bays in the south and up to 40 cm thick fast ice in

### Archipelago Sea and Åland Sea

At the eastern coast, there is 5–15 cm fast or level ice in the inner bays and new ice somewhat further out. In the western and central part new ice is pre-

### 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 sheltered bays and open water. New ice occurs in

### Gulf of Finland

From St. Petersburg out to Kotlin and in the bay north of Kotlin, there is 20–45 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. At sea further west in the south there is 5-25cm thick, rafted, very close ice to about Mosnyj and later very open ice to about 27°20'. In the eastern part of the Narva bay there is 5-20cm thick close ice. In the northern part, there is a large lead with close new ice to about Sommers in the south. Further west to a line Tiisk-

### Gulf of Riga

In Väinameri, there is 10–20 cm thick fast ice near the coasts. Somewhat further out there is very close ice and on the fairway is new ice. In the Bay of Pärnu, 5–15 cm thick, very close ice drifts along the eastern coast; else there is new ice and 5-

### 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.

the west and producing some rafting or ridging in the east.

dish side, there is mostly up to 35 cm thick fast ice in inner bays. Further out, there is a lead with open water.

Only minor ice growth is expected the coming day. The ice will drift to the east.

inner bays in the north. On Ångermanälven, there is 20–40 cm thick fast or level ice.

No major changes are expected the coming day, but some melting is possible.

sent along the coasts.

No major changes are expected the coming day.

sheltered places along the outer coast.

No larger changes are expected the coming, but some night frost is possible with melting during daytime.

eri – Rodser is new ice and open water somewhat further west. Along the northern coast, there is 15–30 cm thick fast ice in the eastern archipelagos. Further out, there is thin level ice or very close ice off Kotka and Hamina. In the western archipelagos, there is 5–15 cm thick fast ice and ice formation. In the Bay of Kunda there is new ice.

Some ice formation and ice growth may occur the coming day in the east. The ice will drift to the east.

10cm thick ice out to the line from the southern point of Kihnu to Ainazi.

No larger changes are expected the coming day, and the ice will drift to the southeast.

No major changes are expected the coming day.

No larger 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	4000 dwt	IA	22.02.
	Raahe	2000 dwt	IB	22.02.
	<b>Raahe</b>	<b>2000 dwt</b>	<b>IA</b>	<b>02.03.</b>
	Kalajoki, Kokkola, Pietarsaari and Vaasa	2000 dwt	I	07.01.
	<b>Kalajoki, Kokkola</b>	<b>2000 dwt</b>	<b>IB</b>	<b>02.03.</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	4000 dwt (2000 t)	IA	28.02.
	Lulea	4000 dwt	IA	28.02.
	Haraholmen and Skelleftehamn	2000 dwt	IB	28.02.
	<b>Haraholmen and Skelleftehamn</b>	<b>2000 dwt</b>	<b>IA</b>	<b>04.03.</b>
	Holmsund	2000 dwt	IC	07.02.
	Rundvik and Husum	2000 dwt	II	21.12.
	<b>Rundvik and Husum</b>	<b>2000 dwt</b>	<b>IC</b>	<b>04.03.</b>
	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.
	<b>Köping and Västerås</b>	<b>2000dwt</b>	<b>IC</b>	<b>06.03</b>
	Balsta	1300/2000 dwt	IC/II	22.12.
	<b>Härnösand, Stocka, Hudiksvall, Igggesund,Orrrskär, Norrsundet</b>	<b>2000dwt</b>	<b>IC</b>	<b>06.03</b>

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

**Norway**

Husøysund and Vestfjorden (Tønsberg): Icebreaker assistance can only be given to vessels suitable for navigation in ice and of special size. 31.01.23

Tønsberg indre havn (Tønsberg): Navigation without icebreaker assistance possible only for high-powered vessels of strong construction and suitable for navigation in ice. 31.01.23

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

**Estonia, 01.03.2023**

Shipping route from Narva-Jõssuu	42/2
Kunda, port and bay	3000
Paernu, port and bay	52/5
Moonsund	4001

**Finland, 01.03.2023**

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	5356
High Sea N of the latitude of Marjaniemi	5856
Raahe harbour – Heikinkari	8346
Heikinkari – Raahe lighthouse	7756
Raahe lighthouse – Nahkiainen	5756
Latitude Marjaniemi – Ulkokalla, Sea	5756
Rahja harbour – Välimatala	5756
Vaelimatala to line Ulkokalla – Ykskivi	5756
Sea betw. lat. of Ulkokalla – Pietarsaari	5756
Ykspihlaja – Repskär	7756
Repskär – Kokkola lighthouse	5756
Sea area off Kokkola lighthouse	5756

Pietarsaari – Kallan	7756	Sea area off Malören	5356
Sea area off Kallan	5756	Luleå – Björnklack	8546
Sea lat. Pietarsaari – NE Nordvalen	5756	Björnklack – Farstugrunden	2226
Sea area ENE of Nordvalen	2726	E and SE of Farstugrunden	3326
Sea area Nordvalen to W of Norrskär	2126	Sandgrönn fairway	8546
Vaskiluoto – Ensten	7756	Rödkallen – Norströmsgrund	5336
Ensten – Vaasa lighthouse	5756	Haraholmen – Nygrån	8346
Vaasa lighthouse – Norrskär	5756	Sea area off Nygrån	1106
Sea area SW of Norrskär	3136	Skelleftehamn – Gåsören	5236
Kaskinen – Sälgrund	7715	Sea area off Gåsören	5146
Sea area off Sälgrund	0//5	Sea area off Bjuröklubb	5146
Pori harb. to line Pori lighth. – Säppi	8742	NE of Nordvalen	2226
Rauma, Harbour – Kylmäpihlaja	4041	SW of Nordvalen	2226
Uusikaupunki harbour – Kirsta	8142	Western Quark (W of Holmöarna)	5246
Naantali and Turku – Rajakari	5142	Umeå – Väktaren	5146
Lövsjär – Korra	2000	SE of Väktaren	1106
Inkoo a. Kantvik – sea area Porkkala	8145	NE and SE of Sydostbrotten	1106
Helsinki harbours – Harmaja	1005	Örnsköldsvik – Hörnskatan	8446
Vuosaari harbour – Eestiluoto	0//5	Hörnskatan – Skagsudde	5146
Porvoo harbours – Varlox	0//5	Ångermanälven north Sandö Bridge	8444
Valko Harbour – Täktarn	5245	Ångermanälven south Sandö Bridge	8444
Archipelago fairway Boistö – Glosholm	3015	Härnösand – Härnön	5144
Archipelago fairway Glosholm–Helsinki	1005	Sundsvall – Draghallan	5146
Kotka – Viikari	8345	Draghallan – Åstholmsudde	1006
Viikari – Orregrund	5145	Hudiksvallfjärden	8346
Orregrund – Tiiskeri	3015	Iggesund – Agö	8346
Tiiskeri – Kalbådgrund	2005	Sandarne – Hällgrund	8346
Hamina – Suurmusta	5245	Ljusnefjärden – Storsjungfrun	8346
Suurmusta – Merikari	5245	Gävle – Eggegrund	1101
Merikari – Kaunissaari	5245	Hallstavik – Svartklubben	5142
<b>Latvia, 01.03.2023</b>		Köping – Kvikksund	8244
Port of Riga	1000	Västerås – Grönsö	8244
Riga to the Cape of Mersrags, fairway	1000	Grönsö – Södertälje	4044
<b>Norway, 27.02.2023</b>		Stockholm – Södertälje	4044
Svinesund – Halden	31//	Södertälje – Fifong	2024
Drammensfjord	1101	Fairway to Karlstad	4041
Husøysund – Tønsberg channel	8345	Fairway to Kristinehamn	5142
Tønsberg, inner harbour	8353		
Vestfjord (Tønsberg)	8555		
Langårsund (Kragerø)	8144		
<b>Russian Federation, 01.03.2023</b>			
Port of St. Petersburg	84/3		
St. Petersburg – E-point island Kotlin	54/3		
E-point Kotlin – long. lighth. Tolbukhin	4303		
Lighth. Tolbukhin – lighth. – Šepelevskij	51/2		
Lighthouse Šepelevskij – island Sescar	42/2		
Island Sescar – Island Sommers	42/2		
Island Sommers– S-point island Gogland	30/1		
Vyborg, port and bay	83/3		
Island Vichrevoj – Island Sommers	40/3		
Strait Bjerkesund	83/3		
E-point Bol'šoj Ber'ozovyj – Šepelevskij	32/2		
Luga bay	51/2		
Appr. Luga bay – line Moš.-Šepel.	51/1		
<b>Sweden, 01.03.2023</b>			
Karlsborg – Malören	6456		