



# Eisbericht Nr. 67

## Amtsblatt des BSH

Jahrgang 95

Nr. 67

Wednesday, 02.03.2022

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### Übersicht

In den Schären der Bottenwiek liegt im Norden 30–70 cm dickes Festeis und im Süden 20–55 cm dickes Festeis. Auf See treibt zumeist 20–50 cm dickes, sehr dichtes Eis, im Norden aufgeschoben und im Süden mit Rinnen und Rissen. Im zentralen nördlichen Teil kommt örtlich dickeres, aufgepresstes Eis vor und im Südwesten treibt meist sehr lockeres Eis. In Norra Kvarken liegt in den Schären bis zu 55 cm dickes Festeis. Auf See befindet sich meist offenes Wasser. Entlang der Küsten und in den Schären der Bottensee, dem Schärenmeer und der Ålandsee liegt Festeis oder dünnes, ebenes Eis. Im Finnischen Meerbusen liegt entlang der Nordküste und im Osten bis 45 cm dickes Festeis. Nördlich der Linie Kotka – Šepelevskij treibt auf See meist sehr dichtes, 15–30 cm dickes Eis. Weiter außerhalb kommt sehr lockeres Eis oder offenes Wasser vor. Im Rigaischen Meerbusen befindet sich bis zu 25 cm dickes Eis im Moonsund und in der Pärnubucht. Dünnes, teilweise ebenes Eis kommt örtlich in der nördlichen Ostsee und dem Vänern vor. In einigen wenigen inneren Fjorden des Skagerraks liegt Festeis oder dünnes Eis.

### Overview

In the archipelagos of the Bay of Bothnia, there is 40–70 cm thick fast ice in the north and 20–55 cm thick fast ice in the south. At sea, there is mostly 20–50 cm thick, very close ice, rafted in the north and with cracks and leads in the south. In the northern central part, there is an area of thicker and ridged ice and in the southwest mostly very open ice. In Norra Kvarken, there is up to 55 cm thick fast ice in the archipelagos; at sea there is mostly open water. Along the coasts and archipelagos of the Sea of Bothnia, the Archipelago Sea and Åland Sea, there is fast ice or thin level ice. In the Gulf of Finland, there is up to 45 cm thick fast ice along the northern and eastern coast. At sea north or the line Kotka – Šepelevskij, there is mostly very close, 15–30 cm thick ice. Further out, there is very open ice or open water. In the Gulf of Riga, there is up to 25 cm thick ice in Moonsund and Pärnu Bay. Thin ice and thin level ice occurs at places in the northern Baltic and Lake Vänern. Fast ice or thin ice is present in a few inner fjords of the Skagerrak.

### Bay of Bothnia

In and outside the northeastern archipelagos, there is 50–70 cm thick fast ice, reaching out to Kemi-3, Oulu-2 and Jaakko. In the northwestern archipelagos the fast ice is 30–60 cm thick. Off the fast ice in the east, there is 40–60 cm thick consolidated ice to Kemi-2 and Oulu-1. At sea, there is very close, 20–50 cm thick ice. The ice field is rafted and at places difficult to force. In the southern part

also cracks and leads occur. Centered at around 65°10' N 23°20' E, there is an area with very close, ridged and 30–50 cm thick ice. In the southern Bay of Bothnia, there is 20–40 cm thick fast ice along the Swedish coast; on the eastern coast there is 20–55 cm thick fast ice followed by a fringe of consolidated ice. At sea in the east, there is 20–50 cm thick, close to very close ice with cracks and in the

#### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH)

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west, there is a lead with mostly very open ice from Norra Kvarken to Nygrån.  
With the wind veering towards the northeast, light

### Norra Kvarken

In the archipelagoes off Vaasa, there is 25–55 cm thick fast ice to Ensten and then 5–25 cm thick, very close ice to Norra Glopsten. Along the Swedish coast, there is 20–40 cm thick fast ice in the archipelagos, 10–30 cm thick close or level ice to Hölmoarna and else open water further out. At sea,

### Sea of Bothnia

On Ångermanälven, there is 20–50 cm thick fast ice or very close ice in the upper part and 15–35 cm fast or very close ice in the lower part. In the bays along the western coast, there is 10–40 cm thick fast ice, further out there is, north of about

### Archipelago and Åland Sea

10–30 cm thick fast ice and level ice is present in the inner archipelagos of the coasts. On the fairways and in the outer archipelago of the eastern

### Gulf of Finland

From St. Petersburg up to the easternmost tip of Kotlin, there is 30–40 cm thick fast ice. In the Bay of Vyborg and the Bjerkesund, there is mostly 25–35 cm thick compact or fast ice. At sea north of a line from a point between Lovisa and Kotka to southwest of Šepelevskij, there is mostly very close, 15–30 cm thick ice. Further south and east of Seskar, there is open water to the west, passing

### Gulf of Riga

In Moonsund, there is 10–20 cm thick fast near the coasts and open to close ice further out; on the fairways there is open water. In Pärnu Bay, there is 15–25 cm thick fast ice near the coast and very close ridged ice out to the line Manilaid –

### Northern Baltic

In Lake Mälaren, there is 10–30 cm thick fast ice or level ice in the western part, and further east, there is mostly thin level ice. In the central part, there are areas with open water. Along the Swedish coast,

### Skagerrak and Kattegat

Near Tønsberg there is thin fast ice and in Hellefjorden near Kragerø there is 15–30 cm thick fast

### Swedish Lakes

In Lake Vänern, there is rotten fast ice in bays of the northern coast.

Dr. J.Holfort

frost is expected during the whole day tomorrow. Some ice formation will occur and the ice will drift towards the southeast..

there is open water, and very open, 5–30 cm thick ice in the far north, north of Nordvalen.  
With the wind veering towards north, the temperature will slowly drop and some ice formation may occur, while the ice will drift slowly southwards.

Hogbonden, open water. Along the eastern coast, there is 10–40 cm fast ice in the inner archipelagos, followed by a narrow belt of 10–35 cm thick, very close ice.  
No larger changes are expected.

coast, there is open water. Around the Åland Islands, there is thin level ice.  
No larger changes are expected the coming day.

Moščnyj, but not reaching Gogland. In the archipelagos of the northern coast, there is fast ice, 10–30 cm thick in the west and 20–45 cm thick in the east. Open water is present along the entire ice edge.  
In the eastern part some ice formation is expected and the ice drift will veer from northeast to south-east.

Häädemeeste.

With light winds and temperatures above 0°C during day and below 0°C during night, no larger changes are expected.

there is partly broken, thin level ice at a few sheltered places.  
Some night frost is possible in Lake Mälaren else some ice melt is expected.

ice. Else it is mostly ice free.  
Some ice melt is expected the coming day.

Some ice melt, but overall no larger changes are expected.

## Restrictions to Navigation

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
<b>Estonia</b>	Pärnu	1600 kW	1C	17.12.
<b>Finland</b>	Tornio, Kemi and Oulu	2000/4000 dwt	IA Super(5000kW)/IA	09.02.
	Raahe	2000 dwt	IA	16.01.
	Kokkola, Kalajoki, Pietarsaari and Vaasa	2000 dwt	IA	01.02.
	Kristiinankaupunki, Pori, Rauma, Uusikaupunki, Naantali, Turku, Koverhar, Lappohja, Helsinki and Sköldvik	2000 dwt	II	01.01.
	Kaskinen, Taalintehdas, Förby, Inkoo, Kantvik	2000 dwt	I	16.01.
	Loviisa and Kotka	2000 dwt	I	04.01.
	Hamina Mussalo	2000 dwt 2000 dwt	I II	01.01. 25.12.
<b>Russia</b>	Vyborg	-	Ice 1	30.12.
	Vysotsk	-	Ice 2	14.01.
	Primorsk	-	Ice 2	27.01.
	Ust-Luga	-	Ice 1	04.01.
	St. Petersburg	-	required	31.12.
<b>Sweden</b>	Karlsborg and Luleå	4000 dwt	IA	19.02.
	Haraholmen and Skelleftehamn	4000 dwt	IA	19.02.
	Holmsund, Rundvik and Husum	2000 dwt	IB	19.02.
	Örnsköldsvik	2000 dwt	IC	15.01.
	Ångermanälven	2000 dwt	IB	06.01.
	Härnösand - Skutskär	2000 dwt	II	22.12.
	<b>Köping and Västerås</b>	<b>1300/2000 dwt</b>	<b>IC/II</b>	<b>02.03.</b>
	<b>Bålsta</b>	-	<b>cancelled</b>	<b>02.03.</b>

## Information of the Icebreaker Services

**Estonia**

**Icebreaker:** EVA-316 assists to the port of Pärnu.

**Finland/Sweden**

The Saimaa Canal is closed for traffic from 30th of January.

The traffic separation schemes in the Quark are temporarily out of use from 15 January 2022.

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 78. 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:**

OTSO, KONTIO, URHO, POLARIS, SISU, FREJ, ODEN and YMER assist in the Bay of Bothnia. ATLE und ALE assist in the Quark and ZEUS in the eastern Sea of Bothnia, NORDICA in the eastern Gulf of Finland.

**Norway**

Tønsberg indre havn and Vestfjorden (Tønsberg): Navigation difficult or dangerous for wooden vessels. (28.02.2022)

Hellefjorden (Kragerø): Navigation temporarily closed. (28.02.22)

**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:  <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 floes – 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>
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**Estonia, 02.03.2022**

Paernu, port and bay	73/5
Moonsund	1//0

**Finland, 01.03.2022**

Roeyttae – Etukari	8546
Etukari – Ristinmatala	8846
Ajos – Ristinmatala	8846
Ristinmatala – Kemi 2	6876
Kemi 2 – Kemi 1	5356
Sea area SW of Kemi 1	5356
Kemi 2 – Ulkokrunni – Virpiniemi	8546
Oulu harbours – Kattilankalla	8546
Kattilankalla – Oulu 1	6876
Sea area SW of Oulu 1	5476
High Sea N of the latitude of Marjaniemi	5876
Raahe harbour – Heikinkari	8446
Heikinkari – Raahe lighthouse	7446
Raahe lighthouse – Nahkiainen	5856
Latitude Marjaniemi – Ulkokalla, Sea	5876
Rahja harbour – Välimatala	6366
Vaelimatala to line Ulkokalla – Ykskivi	4356

Sea betw. lat. of Ulkokalla –Pietarsaari	4846
Ykspihlaja – Repskaer	8846
Repskaer – Kokkola lighthouse	6366
Sea area off Kokkola lighthouse	4846
Pietarsaari – Kallan	7846
Sea area off Kallan	4846
Sea lat. Pietarsaari – NE Nordvalen	4346
Sea area ENE of Nordvalen	2716
Sea area Nordvalen to W of Norrskaer	1216
Vaskiluoto – Ensten	8446
Ensten – Vaasa lighthouse	5746
Vaasa lighthouse – Norrskaer	1716
Kaskinen – Sälgrund	5746
Sea area off Sälgrund	5746
Pori harb. to line Pori lighth. – Säppi	5245
Rauma, Harbour – Kylmäpihlaja	7745
Kylmäpihlaja – Rauma lighthouse	2115
Uusikaupunki harbour – Kirsta	8745
Kirsta – Isokari	7745
Naantali and Turku – Rajakari	7245
Rajakari – Lövskär	2115
Lövskär – Korra	2115

Korra – Isokari	2115	Fairway W of Ulvoearna	1306
Lövsjär – Berghamn	1105	Sea area E of Ulvoearna	1306
Lövsjär – Grisselborg	1105	Ångermanaelven north Sandoe Bridge	5434
Hanko – Vitgrund	1105	Ångermanaelven south Sandoe Bridge	5434
Inkoo a. Kantvik – sea area Porkkala	7206	Sundsvall – Draghaellan	8346
Sea area at Porkkala	1106	Draghaellan – Åstholsudde	2226
Helsinki harbours – Harmaja	2105	Hudiksvallfjaerden	8446
Harmaja – Helsinki lighthouse	1105	Iggesund – Agoe	8446
Fairway Helsinki – Porkkala – Rönnskär	1105	Gaeve – Eggegrund	8446
Vuosaari harbour – Eestiluoto	1105	Oeregrundsgrepen	3222
Eestiluoto – Helsinki lighthouse	0//5	Hallstavik – Svartklubben	8342
Porvoo harbours – Varlax	2145	Koeping – Kviksund	8344
Varlax – Porvoo lighthouse	1015	Västerås – Grönsö	8344
Valko Harbour – Tåktarn	7346	Grönsö – Södertälje	5244
Archipelago fairway Boistö – Glosholm	1006	Stockholm – Södertälje	5244
Archipelago fairway Glosholm–Helsinki	2115	Södertälje – Fifong	1004
Kotka – Viikari	5346	Fairway to Karlstad	8392
Viikari – Orregrund	4745	Fairway to Kristinehamn	8392
Orregrund – Tiiskeri	1115	Paernu, port and bay	73/5
Tiiskeri – Kalbådagrund	0//5	Moonsund	1//0
Hamina – Suurmusta	7846		
Suurmusta – Merikari	5346		
Merikari – Kaunissaari	5346		

**Russian Federation, 02.03.2022**

Port of St. Petersburg	84/3
St. Petersburg – E-point island Kotlin	84/3
E-point Kotlin – long. lighth. Tolbuhkin	54/3
Lighth. Tolbuhkin – lighth. –Šepelevskij	52/2
Lighthouse Šepelevskij – island Sescar	53/3
Island Sescar – Island Sommers	53/3
Vyborg, port and bay	84/3
Island Vichrevoj – Island Sommers	53/3
Strait Bjerkesund	53/3
E-point Bol'šoj Ber'ozovyj – Šepelevskij	53/3
Luga bay	1311
Appr. Luga bay – line Moš.-Šepel.	1311

**Sweden, 02.03.2022**

Karlsborg – Maloeren	6456
Sea area off Maloeren	5476
Luleå – Bjoernklack	6456
Bjoernklack – Farstugrunden	5476
E and SE of Farstugrunden	5476
Sandgroenn fairway	6456
Roedkallen – Norstroemsgrund	5476
Haraholmen – Nygrån	8546
Sea area off Nygrån	5456
Skelleftehamn – Gåsoeren	5456
Sea area off Gåsoeren	5456
Sea area off Bjuroeklubb	5456
NE of Nordvalen	1306
SW of Nordvalen	1306
Western Quark (W of Holmoearna)	8346
Umeå – Vaektaren	8446
SE of Vaektaren	1306
Fairway to Husum	1306
Oernskoeldsvik – Hoernskaten	8446
Hoernskaten – Skagsudde	8446
Sea area off Skagsudde	1306