

# Eisbericht Nr. 40 Amtsblatt des BSH

Jahrgang 96	Nr. 40	Monday, 23.01.2023	1
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#### Übersicht

In den Schären der Bottenwiek befindet sich bis 45 cm dickes Festeis. Weiter außerhalb treibt im Norden 10–30 cm dickes, sehr dichtes Eis mit festgestampften Eis entlang 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. Auf See im Osten kommt Neueis oder dünnes Treibeis vor. 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 45 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. At sea in the east, there is new ice or thin drifting ice. 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 25–45 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 a brash ice barrier has formed along the entire ice edge.

New ice is present along the eastern and western ice edge. In the southern Bay of Bothnia, there is 5–20 cm thick level or fast ice in the archipelagos. Further out, there is thin drifting ice in places. No major changes are expected and the ice will drift to the northeast.

#### The Quark

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

chipelago out to Storhästen. Further out, there is

#### Herstellung und Vertrieb

Bundesamt für Seeschifffahrt und Hydrographie (BSH) www.bsh.de/eis www.bsh.de/ice

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© BSH - All rights reserved Reproduction in whole or in part prohibited very open ice in places. On the Swedish side, there is mostly fast ice in inner bays along the coast. West of Holmöarna, there is very open drift

## 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 or new ice in sheltered bays in the south and fast ice in inner bays in the north. Further out in the north,

## Archipelago Sea and Aland Sea

At the eastern coast, there is 3–10 cm fast or level ice in the inner bays and new ice somewhat further

#### **Northern Baltic**

In Lake Mälaren, 3–10 cm thick level ice is present in the western part and mostly open water in the eastern part. New ice occurs in sheltered places

#### **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. Further out to the lighthouse Šepelevskij, there is close new ice. In the Bay of Vyborg, there is 15–25 cm thick fast ice. Further out, there is 5–15 cm thick, close ice to about the line Kotka – Kotlin. In the Bjerkesund,

## **Gulf of Riga**

In Väinameri, there is 10–25 cm thick fast ice in sheltered bays and open water or very open drift ice 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 – island Sorgu – Suurna Nina,

## Southeastern Baltic

In the Curonian Lagoon, there is thin ice at a few places.

#### Skagerrak and Kattegat

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

No major changes are expected the coming day

#### **Swedish Lakes**

Thin level ice is present in few sheltered bays in the north of Lake Vänern.

ice.

No major changes are expected the coming day and the ice will drift to the northeast.

there is new ice or very open thin ice. On Ångermanälven, there is 10–20 cm thick fast or level ice. No major changes are expected but some ice formation may occur along the north western coast. The ice will slightly drift to the east to northeast.

ice. In the western part new ice along the coast. No major changes are expected the coming day.

and along the coast.

No major changes are expected the coming day.

there is 10–20 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. New ice is present further out and in places along the southern coast.

Some ice will form the coming day and the ice drifts to the northeast.

there is 10-20 cm thick, very close ice. On the fairway from Riga to Irbe Strait, there is open water

No major changes are expected the coming day and the ice drifts to the northeast.

No major changes are expected the coming day.

with. Some ice formation may occur in the northern Oslofjord.

No major changes are expected the coming day.

Dr. W. Aldenhoff

## **Restrictions to Navigation**

	Harbour/District	At least dwt/hp/kW	Ice Class	Begin
Estonia	Pärnu	1600 kW	1 C	23.12.
Finland	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	I	24.12.
Sweden	Karlsborg and Lulea	2000 dwt	IB	08.01.
	Haraholmen and Skelleftehamn	2000 dwt	IC	25.12.
	Holmsund, Rundvik, Husum and Örnsköldvik	2000 dwt	II	21.12.
	Angermanälven	2000 dwt	IB	07.01.
	Köping	2000 dwt	IC	07.01.
	Västeras	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 4th 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.

0716

## **Baltic Sea Ice Code**

## First number: AB Amount and arrangements of sea ice 0 Ice free Open water – concentration less than 1/10 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 Fast ice with drift ice outside Fast ice Lead in very close or compact drift ice or along the fast Ice edge Unable to report Third number: T<sub>B</sub> Topography or form of ice 0 Pancake ice, ice cakes, brash ice – less than 20 m across 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 Rafted ice

Second number:

S<sub>B</sub> Stage of ice development

New ice or dark nilas (less than 5 cm thick)
Light nilas (5 - 10 cm thick) or ice rind
Grey ice (10 - 15 cm thick)
Grey-white ice (15 - 30 cm thick)
White ice, first stage (30 - 50 cm thick)
White ice, second stage (50 - 70 cm thick)
Medium first year ice (70 - 120 cm with second stage)

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

Fourth number:

### K<sub>B</sub> Navigation conditions in ice

Navigation unobscured

Navigation difficult or dangerous for wooden vessels

without ice sheathing

Navigation difficult for unstrengthened or low-powered vessels built of iron or steel. Navigation for wooden vessels even with ice sheathing not advisable

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

Icebreaker assistance can only be given to vessels

suitable for navigation in ice and of special size
lcebreaker assistance can only be given to vessels of
special ice class and of special size

Icebreaker assistance can only be given to vessels after

after special permission Navigation temporarily closed Navigation has ceased

Vackiluota Enotan

Unknown

Ectonia 22 04 2022

Compact slush or shuga, or compacted brash ice

Thaw holes or many puddles on the ice

No information or unable to report

Hummocked or ridged ice

Rotten ice

Estonia, 23.01.2023		Vaskiluoto – Ensten	8746
Shipping route from Narva-Jõssuu	1000	Ensten – Vaasa lighthouse	1116
Paernu, port and bay	7385	Vaasa lighthouse – Norrskär	0//6
Moonsund	1//0	Kaskinen – Sälgrund	8745
		Sea area off Sälgrund	5145
Finland, 23.01.2023		Pori harb. to line Pori lighth. – Säppi	2001
Röyttä – Etukari	8446	Uusikaupunki harbour – Kirsta	8142
Etukari – Ristinmatala	7356	Naantali and Turku – Rajakari	4041
Ajos – Ristinmatala	7356	Koverhar – Hästö Busö	4041
Ristinmatala – Kemi 2	5356	Inkoo a. Kantvik – sea area Porkkala	8145
Kemi 2 – Kemi 1	5356	Helsinki harbours – Harmaja	4045
Sea area SW of Kemi 1	0//6	Harmaja – Helsinki lighthouse	0//5
Kemi 2 – Ulkokrunni – Virpiniemi	7356	Fairway Helsinki – Porkkala – Rönnskär	0//5
Oulu harbours – Kattilankalla	8446	Vuosaari harbour – Eestiluoto	5145
Kattilankalla – Oulu 1	5146	Eestiluoto – Helsinki lighthouse	0//5
Sea area SW of Oulu 1	3016	Porvoo harbours – Varlax	5045
High Sea N of the latitude of Marjaniemi	0//6	Varlax – Porvoo lighthouse	2005
Raahe harbour – Heikinkari	4046	Porvoo lighthouse – Kalbådagrund	0//5
Heikinkari – Raahe lighthouse	4046	Valko Harbour – Täktarn	8745
Raahe lighthouse – Nahkiainen	4046	Archipelago fairway Boistö – Glosholm	5045
Rahja harbour – Välimatala	5146	Archipelago fairway Glosholm-Helsinki	5045
Ykspihlaja – Repskär	5146	Kotka – Viikari	8745
Repskär – Kokkola lighthouse	2116	Viikari – Orrengrund	5045
Sea area off Kokkola lighthouse	2116	Orrengrund – Tiiskeri	5045
Pietarsaari – Kallan	3116	Tiiskeri – Kalbådagrund	2001
Sea area off Kallan	1006	Hamina – Suurmusta	8745
Sea lat. Pietarsaari – NE Nordvalen	1006	Suurmusta – Merikari	8745
Sea area ENE of Nordvalen	1106	Merikari – Kaunissaari	5045
Sea area Nordvalen to W of Norrskär	0//6		

#### Latvia, 23.01.2023 Port of Riga 1000 1000 Riga to the Cape of Mersrags, fairway Mersrags to Irben Strait, fairway 1000 Russian Federation, 23.01.2023 Port of St. Petersburg 83/3 St. Petersburg – E-point island Kotlin 53/2 E-point Kotlin – long. lighth. Tolbuhkin 2202 Lighth. Tolbuhkin – lighth. –Šepelevskij 2201 Lighthouse Šepelevskij – island Sescar 11/1 Island Sescar - Island Sommers 31/2 Vyborg, port and bay 83/3 Island Vichrevoj - Island Sommers 42/2 Strait Bjerkesund 82/2 E-point Bol'šoj Ber'ozovyj – Šepelevskij 51/2 Sweden, 23.01.2023 Karlsborg – Malören 8446 Sea area off Malören 5366 Luleå – Björnklack 8446 Björnklack - Farstugrunden 4376 E and SE of Farstugrunden 4046 8446 Sandgrönn fairway Rödkallen – Norströmsgrund 4376 8346 Haraholmen – Nygrån Sea area off Nygrån 4046 Skelleftehamn – Gåsören 5236 Sea area off Gåsören 2026 Sea area off Bjuröklubb 2026 Western Quark (W of Holmöarna) 2026 Umeå – Väktaren 8346 SE of Väktaren 2026 Fairway to Husum 2026 Örnsköldsvik – Hörnskaten 8246 Hörnskaten - Skagsudde 2026 Sea area off Skagsudde 2026 Fairway W of Ulvöarna 2026 Sea area E of Ulvöarna 2026 Ångermanälven north Sandö Bridge 8344 Ångermanälven south Sandö Bridge 8344 Härnösand – Härnön 2024 Sea area off Härnö 2024 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 Öregrundsgrepen 4041 Hallstavik - Svartklubben 5142 Köping – Kvicksund 5144 Västerås – Grönsö 5144 1004 Grönsö – Södertälje

Stockholm - Södertälje

Fairway to Karlstad

1004

5142