

# Eisbericht Nr. 60 Amtsblatt des BSH

Jahrgang 96	Nr. 60	Monday, 20.02.2023	1
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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 Nordosten bis zu 40 cm dickes zusammenhängendes, örtlich aufgepresstes Eis. Auf See treibt im Norden sehr dichtes, 10–25 cm dickes Eis. Ansonsten treibt auf See Neueis und außerhalb der östlichen Küste örtlich dichtes bis sehr dichtes, 5–25 cm dickes Eis. In Kvarken liegt bis 35 cm dickes Festeis in den Schären und Buchten und auf See treibt Neueis. 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 northeast there is up to 40 cm thick, partly ridged consolidated ice. At sea in the north, there is close, 10–25 cm thick drift ice. Else at sea, there is new ice and at places off the eastern coast close to very close, 5–25 cm thick drift ice. In the Quark, there is up to 35 cm thick fast ice in the archipelagos and bays and new ice 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 ridged and consolidated ice to about Kemi-1 – Oulu-3 – Jaakko. Further out to about a line Luleå – Hailuoto, there is 10–25 cm thick, very close ice. Off the Finnish coast west of about Nahkiainen – Ulkokalla – Kokkola, there are

areas with close to very close, 5–25 cm thick drift ice. 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 a few areas of thicker drift ice off the eastern coast.

Ice formation and ice growth continues the coming

## 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 day and the ice will slowly drift to the north-

Nr. 60

west/west.

#### 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. On the Swedish side, there is mostly fast ice up to 35 cm thick in inner bays. At sea from coast to coast, there is new ice and new ice formation.

Ice growth and ice formation continues the coming day. The ice will slightly drift to the northwest/west.

#### Sea of Bothnia

In the archipelagos along the eastern coast, there is 10-20 cm thick fast ice and further out some new ice in the northern part. 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 inner bays in the north. On Ångermanälven, there is 20-40 cm thick fast or level ice.

Some ice growth and ice formation in sheltered areas is expected the coming day.

# 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. No major changes are expected the coming day.

#### **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. New ice occurs in sheltered places along the outer coast.

No major changes are expected the coming day.

#### **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 north of Seskar and along the coast to Kotlin, there is very close, 15-25 cm thick ice. East and north of Seskar is an area with close drift ice. Further west to

about 27°40', there is new ice and new ice formation. 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.

New ice formation and ice growth is expected the coming day in the eastern part and in coastal areas in the west. The ice will drift westwards.

# **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

Cape Suurna. In the western part, there is open

With dropping temperatures, some ice formation is expected the coming day in sheltered areas.

## 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.

Some ice melt is expected the coming day.

## **Swedish Lakes**

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

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

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 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**

First number:	Second number:
A <sub>B</sub> Amount and arrangements of sea ice	S <sub>B</sub> Stage of ice development
0 Ice free	0 New ice or dark nilas (less
1 Open water – concentration less than 1/10	1 Light nilas (5 - 10 cm thick
2 Very open ice - concentration 1/10 to 3/10	2 Grey ice (10 - 15 cm thick
3 Open ice – concentration 4/10 to 6/10	3 Grey-white ice (15 - 30 cm
4 Close ice – concentration 7/10 to 8/10	4 White ice, first stage (30 -
5 Very close ice – concentration 9/10 to 9+/10	5 White ice, second stage (
6 Compact ice, including consolidated ice –	6 Medium first year ice (70
concentration 10/10	7 Ice predominantly thinner
7 Fast ice with drift ice outside	ice
8 Fast ice	8 Ice predominantly grey-wl
9 Lead in very close or compact drift ice or along the fast	thicker ice
l ce edge	9 Ice predominantly thicker ice
/ Unable to report	No information or unable
	/ No inionnation of unable
Third number:	Fourth number:
	K <sub>B</sub> Navigation conditions i
T <sub>B</sub> Topography or form of ice  O Pancake ice, ice cakes, brash ice – less than 20 m	
across	Navigation unobscured     Navigation difficult or dans
1 Small ice floes – 20 to 100 m across	1 Navigation difficult or dang without ice sheathing
2 Medium ice floes – 20 to 100 m	
	2 Navigation difficult for uns vessels built of iron or ste
3 Big ice foes – 500 to 2000 m across	
4 Vast or giant ice floes –	even with ice sheathing no
more than 2000 m across – or level ice  5 Rafted ice	3 Navigation without icebres
	high-powered vessels of s
6 Compact slush or shuga, or compacted brash ice	for navigation in ice
7 Hummocked or ridged ice	4 Navigation proceeds in le
8 Thaw holes or many puddles on the ice	the assistance of an icebr
9 Rotten ice	5 Icebreaker assistance car
/ No information or unable to report	suitable for navigation in i
	6 Icebreaker assistance car
	special ice class and of sp
	7 Icebreaker assistance car

s than 5 cm thick)

k) or ice rind

k) m thick) - 50 cm thick) (50 - 70 cm thick) - 120 cm thick) r than 15 cm with some thicker

hite ice (15 – 30 cm) with some

than 30 cm with some thinner

to report

#### in ice

gerous for wooden vessels

strengthened or low-powered el. Navigation for wooden vessels ot advisable

aker assistance possible only for strong construction and suitable

ad or broken ice-channel without

reaker
n only be given to vessels
ice and of special size
n only be given to vessels of
pecial size

n only be given to vessels after after special permission Navigation temporarily closed Navigation has ceased Unknown

Estonia, 20.02.2023		Sea lat. Pietarsaari – NE Nordvalen	4046
Shipping route from Narva-Jõssuu	3000	Sea area ENE of Nordvalen	4046
Paernu, port and bay	3//5	Sea area Nordvalen to W of Norrskär	4046
Moonsund	1//0	Vaskiluoto – Ensten	7756
		Ensten – Vaasa lighthouse	4246
Finland, 20.02.2023		Vaasa lighthouse – Norrskär	4246
Röyttä – Etukari	8446	Uusikaupunki harbour – Kirsta	8142
Etukari – Ristinmatala	6456	Inkoo a. Kantvik – sea area Porkkala	8145
Ajos – Ristinmatala	6456	Helsinki harbours – Harmaja	2005
Ristinmatala – Kemi 2	5876	Valko Harbour – Täktarn	3005
Kemi 2 – Kemi 1	5876	Archipelago fairway Boistö – Glosholm	3005
Sea area SW of Kemi 1	5876	Kotka – Viikari	3005
Kemi 2 – Ulkokrunni – Virpiniemi	6456	Viikari – Orrengrund	3005
Oulu harbours – Kattilankalla	6456	Orrengrund – Tiiskeri	3005
Kattilankalla – Oulu 1	6456	Hamina – Suurmusta	8345
Sea area SW of Oulu 1	5856	Suurmusta – Merikari	3005
High Sea N of the latitude of Marjaniemi	5756	Merikari – Kaunissaari	3005
Raahe harbour – Heikinkari	8346		
Heikinkari – Raahe lighthouse	8346	Norway, 20.02.2023	
Raahe lighthouse – Nahkiainen	4756	Svinesund – Halden	31//
Latitude Marjaniemi – Ulkokalla, Sea	4756	Drammensfjord	2111
Rahja harbour – Välimatala	3006	Husøysund – Tønsberg channel	8345
Vaelimatala to line Ulkokalla – Ykskivi	4046	Tønsberg, inner harbour	8353
Sea betw. lat. of Ulkokalla -Pietarsaari	5756	Vestfjord (Tønsberg)	8555
Ykspihlaja – Repskär	7756	Langårsund (Kragerø)	8144
Repskär – Kokkola lighthouse	4046		
Sea area off Kokkola lighthouse	4046	Russian Federation, 20.02.2023	
Pietarsaari – Kallan	7756	Vyborg, port and bay	83/3
Sea area off Kallan	2006	Island Vichrevoj – Island Sommers	42/3

Strait Bjerkesund E-point Bol'šoj Ber'ozovyj – Šepelevskij Luga bay Appr. Luga bay – line MošŠepel.	83/3 32/2 22/2 2//1
Sweden, 20.02.2023 Karlsborg – Malören Sea area off Malören	6456 5356
Luleå – Björnklack	8546
Björnklack – Farstugrunden	5356
E and SE of Farstugrunden	3126
Sandgrönn fairway	5356
Rödkallen – Norströmsgrund	4046
Haraholmen – Nygrån	5236
Sea area off Nygrån	4046
Skelleftehamn – Gåsören	5236
Sea area off Gåsören	4046
Sea area off Bjuröklubb	4046
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	4046
Örnsköldsvik – Hörnskaten	8446
Hörnskaten – Skagsudde	5146 8444
Ångermanälven north Sandö Bridge 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 – Kvicksund	8244
Västerås – Grönsö	8244
Stockholm – Södertälje	4044
Södertälje – Fifong	2024
Fairway to Karlstad	5142

Fairway to Kristinehamn

5142