



FISKERIDIREKTORATET

The Norwegian Directorate of Fisheries



KYSTVERKET

The Norwegian Coastal Administration

GUIDANCE AND SUMMARY

REPORTS CONCERNING

VESSELS BELONGING TO THE LATVIAN COMPANY

SIA NORTH STAR

by

THE SECTION OF ANALYSIS IN VARDØ

*This report has been prepared by the Section of Analysis in Vardø¹,
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Executive officer(s): 2001, 2002 and 2007

Phone: + 47 789 89 898

¹ The Section of Analysis in Vardø is a joint unit of The Norwegian Directorate of Fisheries and the Norwegian Coastal Administration aimed at analyzing available information on movement and activities of vessels and at revealing illegal fisheries and transport of goods.

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1. Introduction

At the request of the Norwegian Ministry of Foreign Affairs, the Section of Analysis, a joint unit of the Norwegian Directorate of Fisheries and the Norwegian Coastal Administration, has analysed movements and activities of SIA North Star's vessels *Saldus*, *Solveiga*, *Solvita* and *Senator* (the "**Vessels**") related to snow crab harvesting activities in the Barents Sea. The results of the analyses are presented in separate reports on each of the four vessels (the "**Vessel Reports**").

This Summary Report serves as a summary of the Vessel Reports and explains the common methodology, abbreviations within the Vessel Reports.

2. Summary of findings regarding the vessels

The table below presents a summary of key information relating to each of the Vessels, presented in more detail in each of the Vessel Reports.

	Saldus	Solveiga	Solvita	Senator	Totals
Date arrived in Norway	27 March 2015	20 March 2015	17 January 2014	19 May 2015	N/A
Dates Operational	8 April 2015 until 4 September 2016	31 March 2015 until 5 September 2016	26 July 2014 until 9 September 2016	20 May 2015 until 8 September 2016	N/A
Number of Inspections (Norwegian)	4	0	0	5	N/A
Total harvest of snow crab	653 897	1 388 075	1 357 796	1 956 214	5 355 982
Percentage of snow crab caught on Russian CS in the Loop Hole	99.76	100	99.73	99.87	99.84 (average)
Percentage of snow crab caught on Norwegian CS in the Loop Hole	0.24	0	0.27	0.13	0.16 (average)
Percentage of Snow Crab Caught in the Fisheries Protection Zone around Svalbard	0	0	0	0	0
Percentage of snow crab caught in other Norwegian maritime areas	0	0	0	0	0

3. Abbreviations, terms and sources of information in the Vessel Reports

3.1 Abbreviations

- **AIS** – *Automatic Identification System* – anti-collision system within shipping. Vessels equipped with AIS send out and exchange information about their identity, position, speed and course through radio signals. This information is received by land based stations and satellites.
- **CS** – *Call Sign* – number identifying the sender of a radio message.
- **EEZ** – *Exclusive Economic Zone*
- **IMO** - *International Maritime Organization*
- **IMO NUMBER** – *International Maritime Organization number* - this number is a part of the International Maritime Organization's identification system for vessels and it consists of seven numbers unique for the vessel.
- **KNOTS** - 1 knot is 1 852 kilometres (or 1 NM) per hour.
- **MMSI** – *Maritime Mobility Service Identity* – Code of nine numbers identifying the vessel whereas the first three numbers indicates which country the vessel is registered.
- **NEAFC** – *North East Atlantic Fisheries Commission* - the Regional Fisheries Management Organisation (RFMO) for the North East Atlantic.
- **NM** – *Nautical Mile* – Maritime measuring for distance. One nautical mile equals to 1 852 meters.
- **UTC** – *Coordinated Universal time* - Specification of time zone. One hour before Norwegian time during winter and two hours before Norwegian time during summer.
- **Vessels** – “Saldus” YL2888, “Solveiga” YL2982, “Solvita” YL2843 and “Senator” YLAC, the four vessels under analysis in these reports.

3.2 Technical terms used in the Vessel Reports

- **Geometry** – defined geographical area either officially recognized or created by us especially for the purposes of analysis in the Vessel Reports.
- **Conversion factor** – international standards require that official fisheries statistics are given in live weight. The conversion factor in this case reflects the relationship between the live weight of the crab and the weight of the end product, in this case crab clusters (crab legs without crab body). The crab clusters have a conversion factor ranging from 1.61 to 1.66, i.e. the live crab weighs 1.61 to 1.66 times as much as the crab clusters.
- **Landing notes** (In Norwegian: *Landings- og sluttseddel*) – landing notes are issued by the Norwegian Fishermen's Sales Organization. The landing note gives information about the harvest: the amount, size and gender of the harvest. It also gives information about the vessel that has harvested the crab and the recipient of the harvested crab. In the Vessel Reports, we have not distinguished between when the crab is sold upon landing and crab which is landed and not sold.

- **Polar Map** – in the Vessel Reports polar maps are used. The polar map projection is an azimuthal projection drawn to show Arctic and Antarctic areas. It is based on a plane perpendicular to the earth's axis in contact with the North or South Pole.
- **Reefer** – refrigerated cargo ship used for transport of frozen products.
- **Time** – all AIS trackings are done in Central European time (Norwegian local time).
- **Transshipment** – when cargo (crab in this case) is moved from one vessel to another whilst afloat before transit to its final destination.
- **Voyage** – in the Vessel Reports, a voyage starts when the vessel leaves port. The voyage ends when the vessel returns to port.

3.3 Sources of data and information in the Vessel Reports

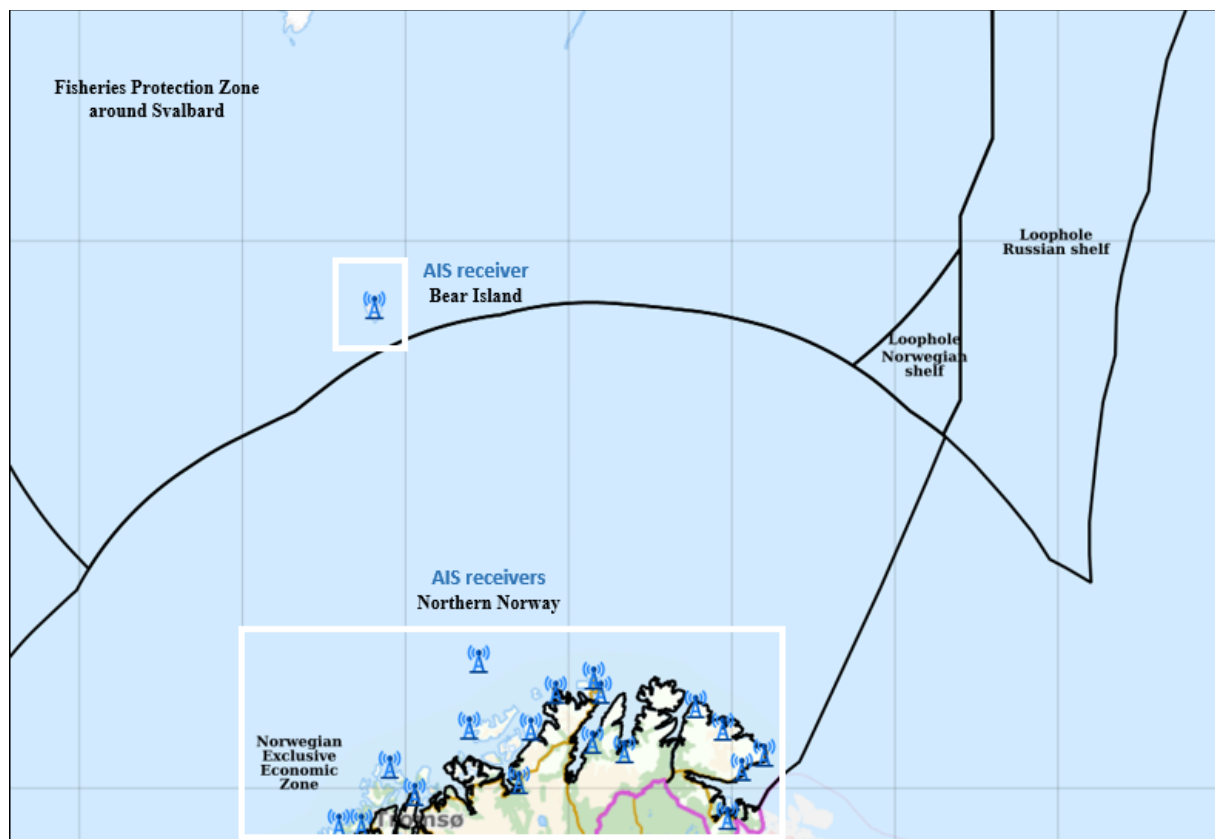
The following sources of data and information have been used to compile the Vessel Reports.

3.3.1 AIS data (position of the Vessels)

Automatic Identification System (AIS) data for the Vessels have been collected from the Norwegian Coastal Administration in order to track their movements. As the Vessels in question all have gross tonnages over 300, they are required under IMO rules to have an AIS antenna installed, and AIS turned on at all times.

The Norwegian Coastal Administration has established several base stations along the Norwegian coastline which receive and can download AIS signals. The coverage area for the land based AIS receivers are limited to reach 40 to 50 nautical miles off the coastline.

Figure 1 Base stations for receiving AIS signals in Northern Norway and Bear Island



The screen shot in the map above shows the land-based AIS- receivers in Northern Norway and on Bjørnøya (Bear Island). The land-based base stations do not have long enough reach to collect AIS signals from the Loop Hole.

Since 2010, the Norwegian Coastal Administration had access to AIS signals received by satellites, so that AIS signals beyond 40 to 50 nautical miles off the coast are picked up by AIS satellites. This means that all AIS positions for the Vessels in the Loop Hole or in the Fisheries Protection Zone around Svalbard have been downloaded from AIS satellites. The AIS positions is received from the Vessels' own GPS receiver. The accuracy of AIS positions is normally between 0 to 30 meters.

3.3.2 Landing notes (for the quantity of snow crab harvested)

Landing notes from all Vessels' landings and landings after transhipments have been received from the Norwegian Fishermen's Sales Organization. The Norwegian Fishermen's Sales Organization (Norges Råfisklag) was established in 1938 and aims through organized turnover to secure the fishermen's income and contribute to a sustainable and profitable value in the Norwegian industry.

The organization's activity is regulated by Norwegian law. (Act on First-Hand Sale of Wild Marine Resources)² and, in particular, the Organisation's responsibility for the production and accuracy of landing notes is regulated by law.³

² <https://lovdata.no/dokument/NL/lov/2013-06-21-75>

³ "Regulations on landing and endnotes" <https://lovdata.no/dokument/SF/forskrift/2014-05-06-607>

We have received all landing notes related to the Vessels in excel format.

3.3.3 Inspection reports and databases

Each of the Vessel Reports includes information about inspections conducted by the Norwegian Coast Guard. Inspection reports and results of inspections done by the Norwegian Coast Guard have been received from the Norwegian Coast Guard and from databases of the Norwegian Directorate of Fisheries.

3.3.4 Lloyd's List intelligence

Ownership and other vessel information has been obtained from Lloyd's List Intelligence.

3.3.6 Marine Traffic

Photographs of the Vessels have been obtained from the Marine Traffic website.

3.3.6 NEAFC Port State Control Scheme

North-East Atlantic Fisheries Commission (NEAFC). NEAFC Port State Control procedures apply to the use of ports of NEAFC Contracting Parties by foreign fishing vessels (including fish processing vessels and vessels engaged in transshipment), with catch on board of fisheries resources that have been harvested in the NEAFC Convention Area by foreign fishing vessels and that have not been previously landed or transhipped at a port. PSC procedures apply to both fresh, frozen resources and other resources.

Also, with reference to "Regulations on foreigners fishing and catch e.t.c in Norway's economic zone and landings or other use of Norwegian ports".⁴

From NEAFC we have obtained information about landings and transhipments made by the vessels covered by these reports.

4. Method used in the reports

The Section of Analysis has produced one report for each of the Vessels. Three of the executive officers at the Section of Analysis have been writing the reports regarding the vessels.

⁴ <https://www.fiskeridir.no/Yrkesfiske/Regelverk-og-reguleringer/J-meldinger/Gjeldende-J-meldinger/JJ-15-2021>

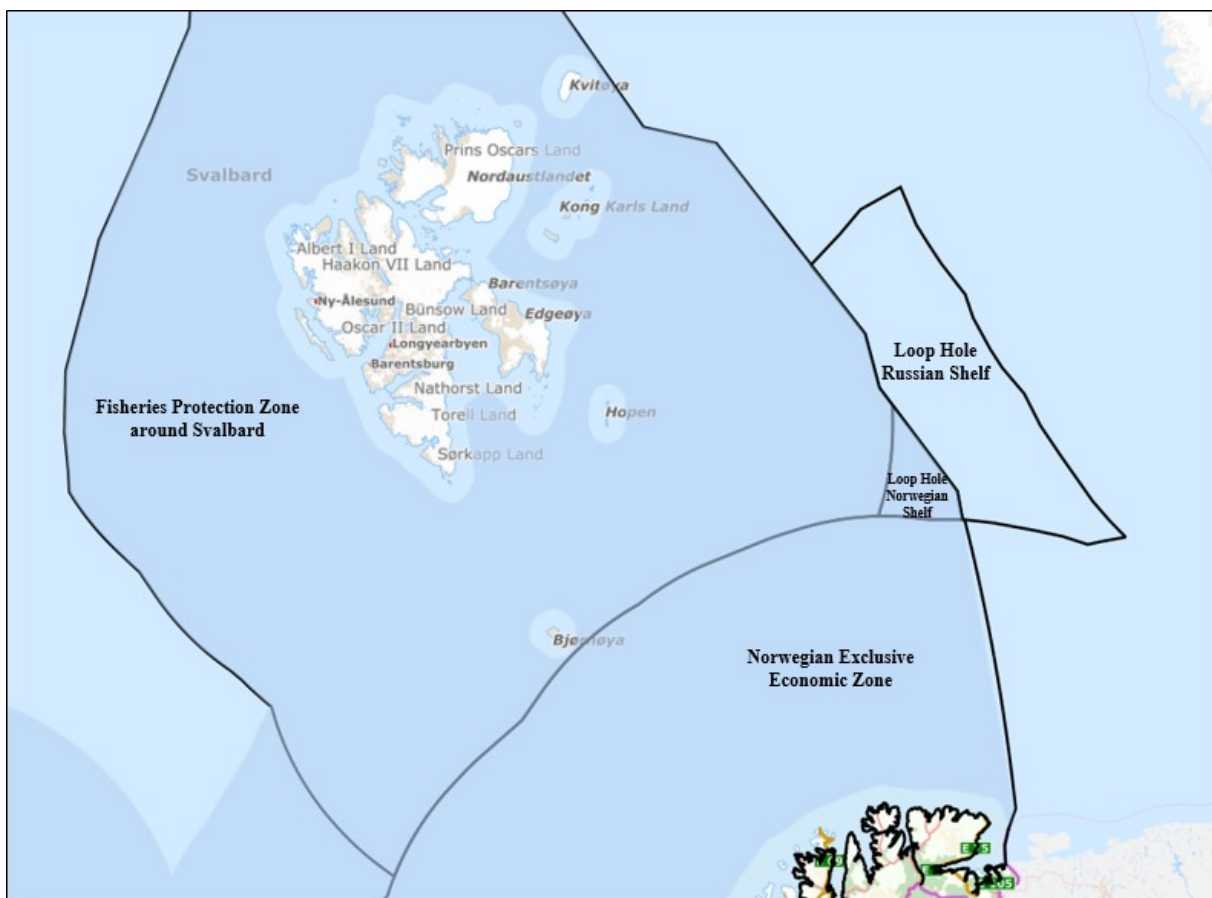
4.1 The vessels

Each of the Vessel Reports discusses the activities on one Vessel. They are:

- “Saldus”, IMO 8423155, MMSI 275460000 and call sign YL2888;
- “Solveiga”, IMO 8520173, MMSI 273377520 and call sign YL2982;
- “Solvita”, IMO 8721765, MMSI 275444000 and call sign YL2843; and
- “Senator”, IMO 6812986, MMSI 275171000 and call sign YLAC.

4.2 Geographical areas for the reports

Figure 2 The geographical areas for the reports



The areas covered in the reports are: the Norwegian Economic Zone, the Fisheries Protection Zone around Svalbard, the Loop Hole in the Barents Sea.

Figure 3 The Loop Hole



The Loop Hole is the area of the Barents Sea that lies beyond 200 nautical miles from the baselines of Norway and the Russian Federation respectively. The water column is thus beyond national jurisdiction. The seabed, however, is continental shelf under the national jurisdiction of Norway and the Russian Federation respectively. Norway and the Russian Federation agreed the delimitation of the continental shelf in a treaty of 2010. Approximately 90 % of the continental shelf in the Loop Hole is under Russian jurisdiction.

There are two different shades of blue in the polar map. The slightly darker blue on the left side of the map covers the Norwegian Economic Zone, the Fisheries Protection Zone around Svalbard and the Norwegian continental shelf in the Loop Hole.

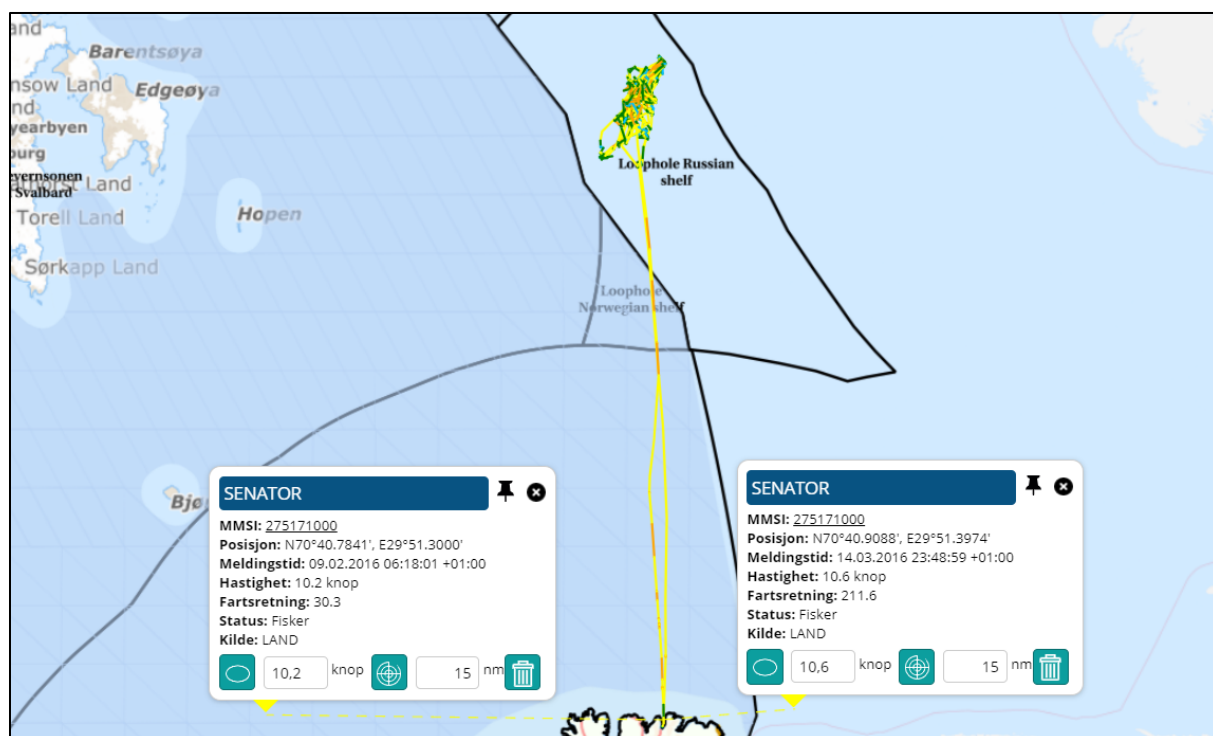
The slightly lighter blue on the right side of the map covers the Russian Exclusive Economic Zone and the Russian continental shelf in the Loop Hole.

4.3 Voyages and how to view voyage data in the Vessel Reports

The bulk of each of the Vessel Reports are analyses of the voyages of each of the Vessels. The start and end point of each voyage was determined by reference to the landing notes, which set out (1) when and from which port each voyage began; and (2) in which port the voyage ended.

All of the voyages, with the exception of one, went to the Loop Hole in the Barents Sea. The one voyage that did not go to the Loop Hole was the voyage of *Senator* to the Fisheries Protection Zone around Svalbard in January 2017.

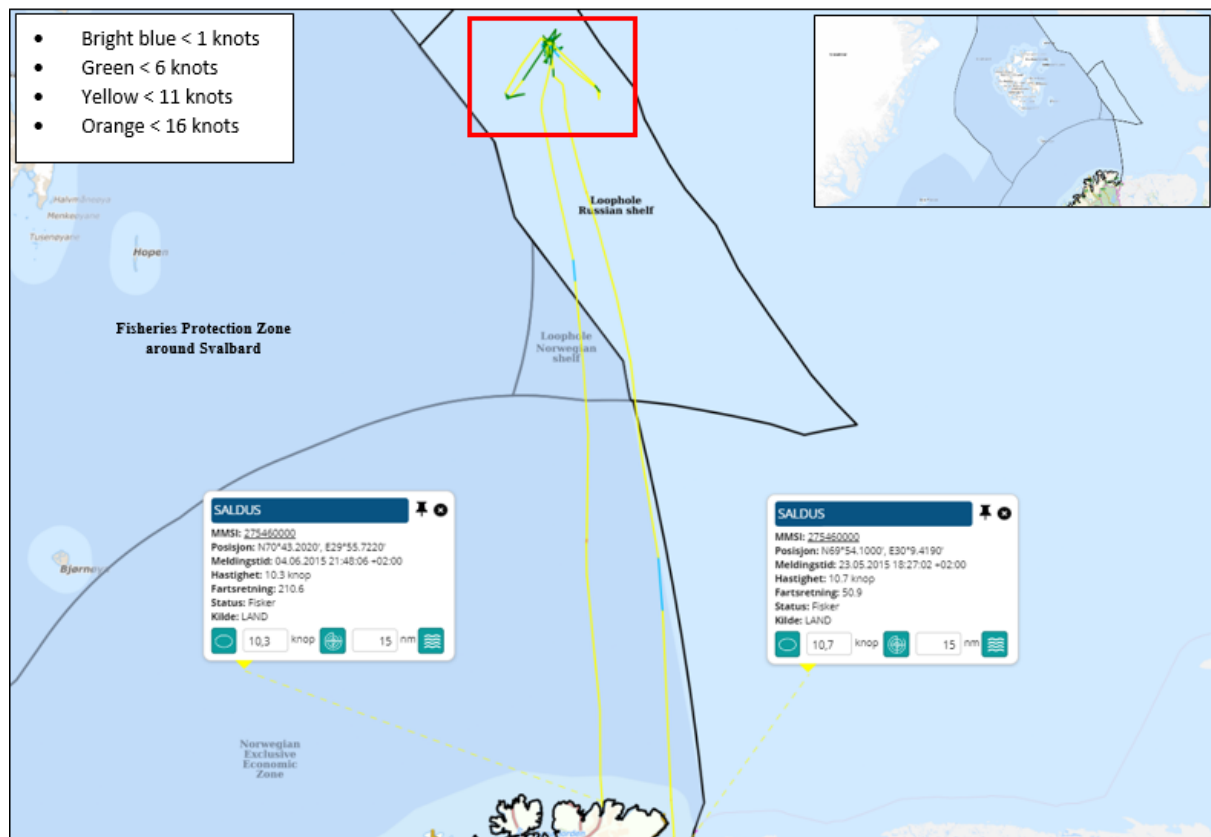
Figure 4 Example of a voyage to the Loop Hole



The screen shot in the map above gives an example of one of the voyages to the Loop Hole. On this voyage *Senator* left Båtsfjord port on 9 February 2016 for the Loop Hole and returned to Båtsfjord Port on 14 March 2016. This is also an example of a voyage starting and ending in the same port.

4.4 Colour coding of the tracks

Figure 5 screenshot of a voyage with colour-coded tracks



The screen shot above is an example of a typical screenshot included in the Vessel Reports which sets out the “tracks” or pathway of a single voyage. In this screenshot there is a small map of the reference area in the box in the upper right corner. The reference area stretches from Greenland to the Kara Sea.

The box included in the upper left corner gives the colour coding of the AIS tracking. These colours indicate the speed the vessel at various points during its voyage. Blue colour indicates speed less than 1 knot, green colour indicates speed less than 6 knots, yellow colour indicates speed less than 11 knots and orange colour indicates speed less than 16 knots. As mentioned below, speeds of below 6 knots suggest that there has been snow crab harvesting activity.

The red square in the upper middle gives the reference area for the next screen shot included in the report. This red square focuses on the harvesting activity the vessel has had, or the possible harvesting activity the vessel might have had in the area marked.

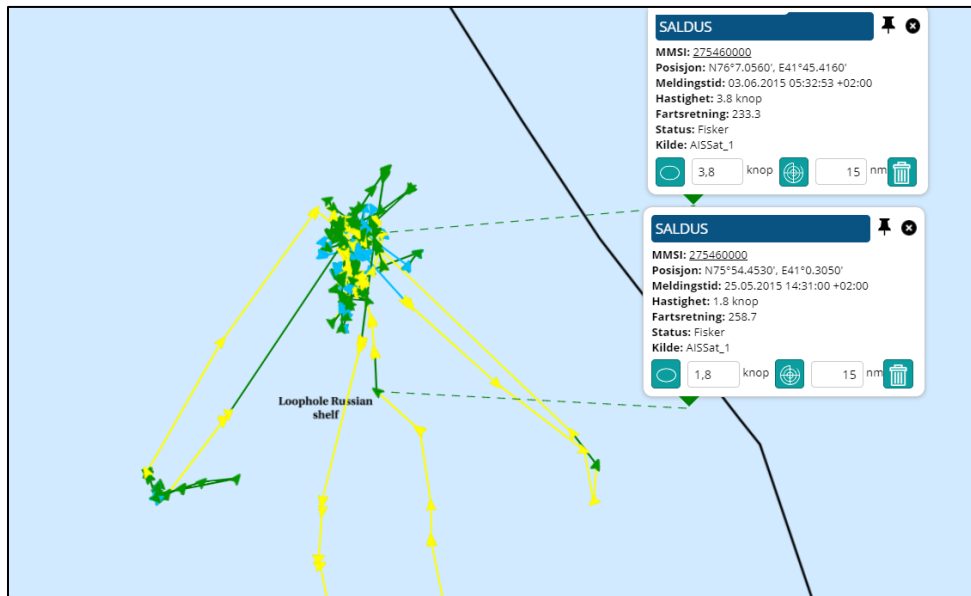
4.5 Tracking of the voyages

Each voyage the Vessels undertook is documented by screen shots in the reports. Each voyage is normally shown in two screen shots. The first screen shot is an overviewing shot of the entire voyage, from the vessel left port to the vessel was back in port (see figure 5, above). The next screen shot shows the harvesting activity. If the vessel’s track indicates harvesting activity on the Norwegian continental shelf, this is also included in a separate screen shot. The screenshots are all shown in a polar map.

The screen shot Figure 5 above is an example of an overview screenshot of one of the voyages. The example shows *Saldus*'s voyage leaving Kirkenes port 23 May 2015 and returning to Båtsfjord port 4 June 2015. The departure and arrival information are given in the pop ups included. The information provided in those pop ups is discussed further below.

The second screen shot for the voyage shows the vessel's movements in the harvesting operation, or the possible harvesting operation the vessel has had based on the vessel's movements. This screenshot will focus on that particular part of the overall voyage which indicates snow crab harvesting activity. This screen shot is also shown in a polar map.

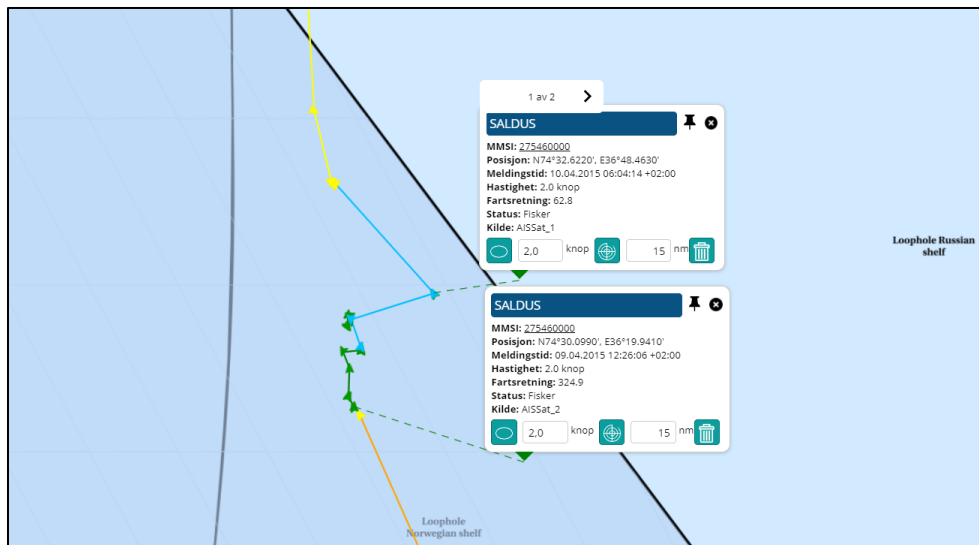
Figure 6 Example of vessel movements in the Russian continental shelf in the Loop Hole



The screen shot in the map above is an example of one of *Saldus*'s harvesting operations on the Russian continental shelf in the Loop Hole. Information about the times and dates for when the vessel was speeding 6 knots and less in the area is given in the pop ups (see below for the relevance of the speed of 6 knots). Since most of the harvesting activity for the Vessels took place on the Russian continental shelf in the Loop Hole, most voyages are shown in two screenshots: (1) the overall voyage; and (2) the harvesting activity on the Russian continental shelf.

On some voyages the speed and manoeuvres of the vessel could indicate harvesting operations, or possible harvesting operations, on the Norwegian continental shelf in the Loop Hole. For these voyages the reports also include a screenshot of the vessel's movements over the Norwegian continental shelf in the Loop Hole. On voyages where the vessel had fishing operations, or possible fishing operations on both the Russian continental shelf and the Norwegian continental shelf in the Loop Hole, the report will contain three screen shots of the voyage, the first two indicated above and (3) the possible harvesting activity on the Norwegian continental shelf.

Figure 7 Example of vessel movements in the Norwegian continental shelf in the Loop Hole



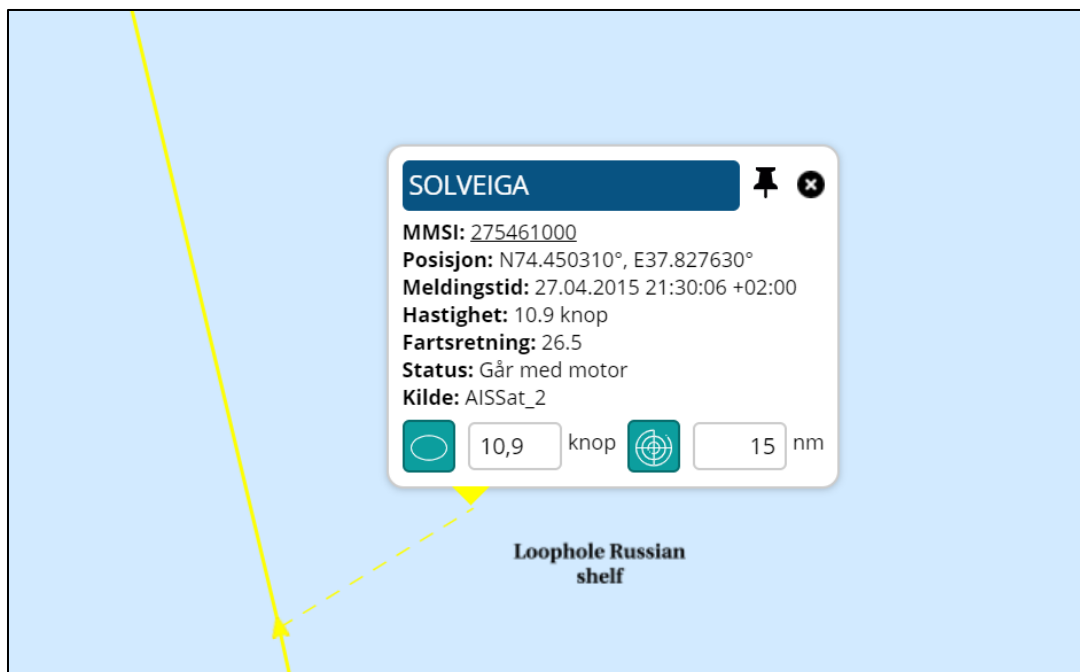
The screenshot in the map above is an example of one of the harvesting operations of *Saldus*, or possible harvesting operations on the Norwegian continental shelf in the Loop Hole. Pop-ups are also included in this screenshot to give information about the times and dates when the vessel was speeding 6 knots or less in the area.

4.6 Information contained in each of the pop-ups

When an AIS position for each of the Vessels is registered, it records certain information about the Vessel's movements. For the purposes of the analysis in the Vessel Reports, certain AIS-positions are singled out and information on speed etc is given in the pop-up.

A pop-up with information for one of *Solveiga's* AIS positions is included in the tracking image below. This AIS position is registered over the Russian continental shelf in the Loop Hole.

Figure 8 Example of a pop up



The information in this pop tells us that this AIS position belongs to the vessel “**Solveiga**”. *Solveiga* has **MMSI** number 275461000. The name and MMSI number identify the vessel.

The next information in the pop up establishes the **posisjon** (position) of the vessel at the time of the registration. In this case, the position is given in decimal degrees.

“**Meldingstid**”, the time for the registration of the AIS position, establishes when the AIS position was registered, the date and time. In this specific case, the AIS position was registered 27 April 2015 at 21:30:06 +02:00. The “+02:00” indicates that the time is given in Central European time (Norwegian time), 2 hours before UTC time.

“**Hastighet**”, the speed “*Solveiga*” was travelling at the time of the registration of the AIS-position was 10.9 knots (or knop, in Norwegian).

“**Fartsretning**”, the direction of speed, provides the direction of the vessel at the time when the AIS position was registered given in compass coordinates. In this case, *Solveiga* sailed 26.5 degrees northeast. The reason that the line does not appear to be going to the top-right, but the top-left, is because of the use of the polar map projection.

“**Status**” as described above shows that *Solveiga* was underway using engine at the time of the registration of the AIS-position.

“**Kilde**”, source, shows which AIS satellite (AISat_2) received the information.

4.7 Speed less than 6 knots and length of “harvesting operations”

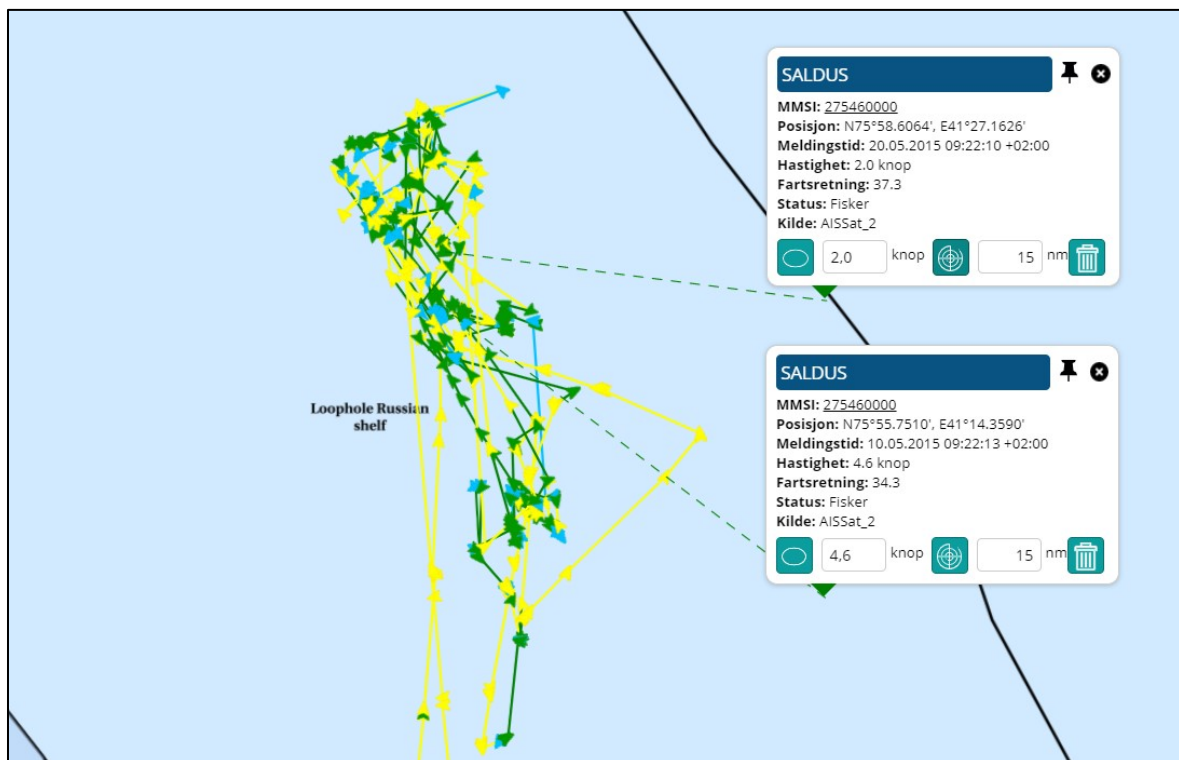
The reason that the Vessel Reports focus on the Vessels’ movements at under 6 knots is because the harvesting method for snow crabs involves setting out and collecting pots from the seafloor, and thus vessels cannot conduct snow crab harvesting activities at speeds higher than 6 knots. Based on the

time the vessels have had speed of 6 knots and less in the Loop Hole, we have estimated the time that the vessels have been engaged in harvesting operations, or possible harvesting operations in the area.

Where the vessel has (in the same voyage) had periods of time above both the Russian and Norwegian continental shelves at under 6 knots, both time estimates are given separately.

The times the vessels have had a speed of 6 knots and less is calculated from the first AIS position the vessel has had in the area with speed 6 knots and less to the last AIS position the vessel has had in the same area with speed 6 knots and less. If the vessel has moved with speed higher than 6 knots in the area in between sessions of harvesting operation (speed less than 6 knots) the entire period is calculated as the total time of harvesting operations because in these cases a speed of over 6 knots is likely to be transit between locations where the pots are set or will be set and is therefore still counted as time that the vessel was engaged in “harvesting operations”. The total time of harvesting operations will therefore in some cases also include some speed higher than 6 knots.

Figure 9 Harvesting operation speed <6 knots and > 6 knots.



The screenshot above shows the harvesting operation of *Saldus* on the Russian continental shelf in the Loop Hole in the period from 10 May 2015 time 09:22 until 20 May 2015 time 09:22. The pop ups include information about the first AIS position *Saldus* had in the area with speed 6 knots and less and information about the last AIS position *Saldus* had in the same area with speed 6 knots and less.

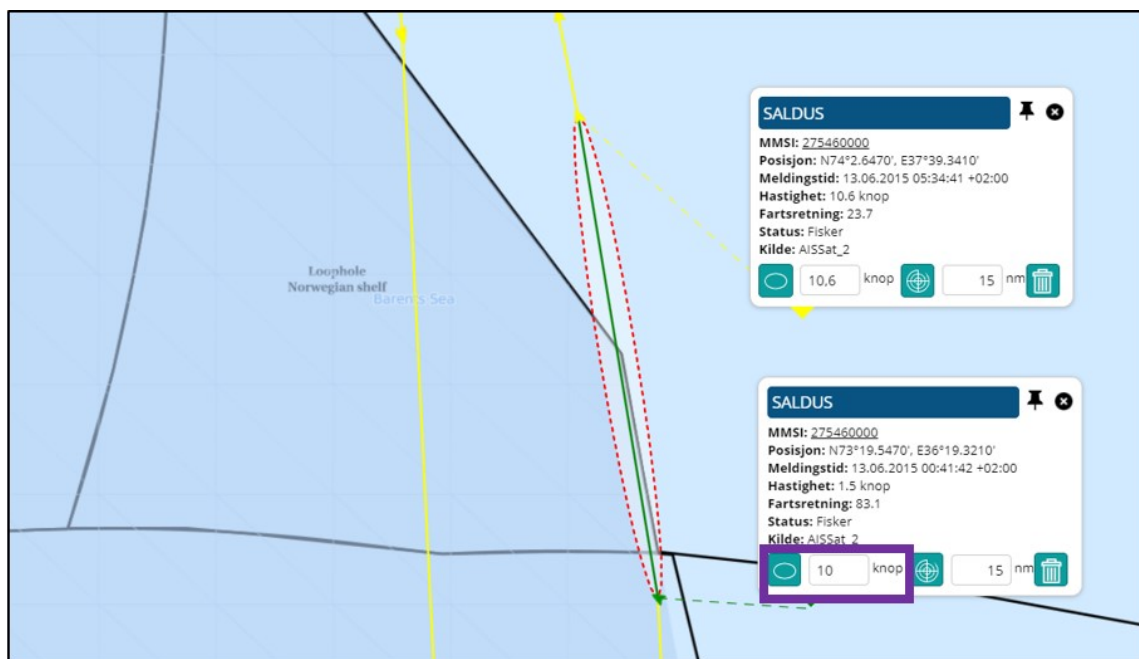
The color of the track indicates that *Saldus* also has had speed higher than 6 knots during this harvesting operation. During the harvesting operation *Saldus* had movements with speed both <6 knots and > 6 knots.

4.7.1 Speed less than 6 knots during transit

On some voyages the tracking of the vessel shows that the vessel has moved with speed < 6 knots during transit to or from harvesting areas (but not otherwise during a “harvesting operation”). This may be due to weather conditions, technical conditions or other conditions on board the vessel.

In cases where the vessel’s tracking shows speed < 6 knots over the Norwegian continental shelf in the Loop Hole, these positions will be shown in separate screen shots in the report. In the cases where the vessel has been moving at low speed in the Norwegian Economic Zone (i.e. not above the Loop Hole), this will not be shown in the reports as no harvesting of snow crab in this zone has been reported.

Figure 10 Transit speed < 6 knots



The example in the screen shot in the map above shows that *Saldus* had one AIS position <6 knots in the Norwegian Economic Zone (in the bottom-middle of the screenshot). *Saldus* next AIS position was registered on the Russian continental shelf in the Loop Hole (in the top-middle of the screenshot). *Saldus* had no AIS positions on the Norwegian continental shelf in the Loop Hole. The green colour of the tracking may seem to indicate that *Saldus* was having a transit through the Norwegian continental shelf in the Loop Hole with speed less than 6 knots, but the reason for this is that it is the speed at the registration time which decides the colour of the line (here green) until the next AIS registration. It therefore cannot be discerned as a matter of certainty that the *Saldus* was travelling below 6 knots for the entirety of the length of the green line.

In fact, the time and distance between the two AIS registrations in the Norwegian Economic Zone and over the Russian continental shelf shown above indicates that *Saldus* had an average speed of 10 knots between those points. The speed of 10 knots is shown in the purple rectangle in the lowermost pop-up. The red dotted circle round the green tracking shows the theoretical area *Saldus* may have moved in during this period.

4.8 Enter and leave area

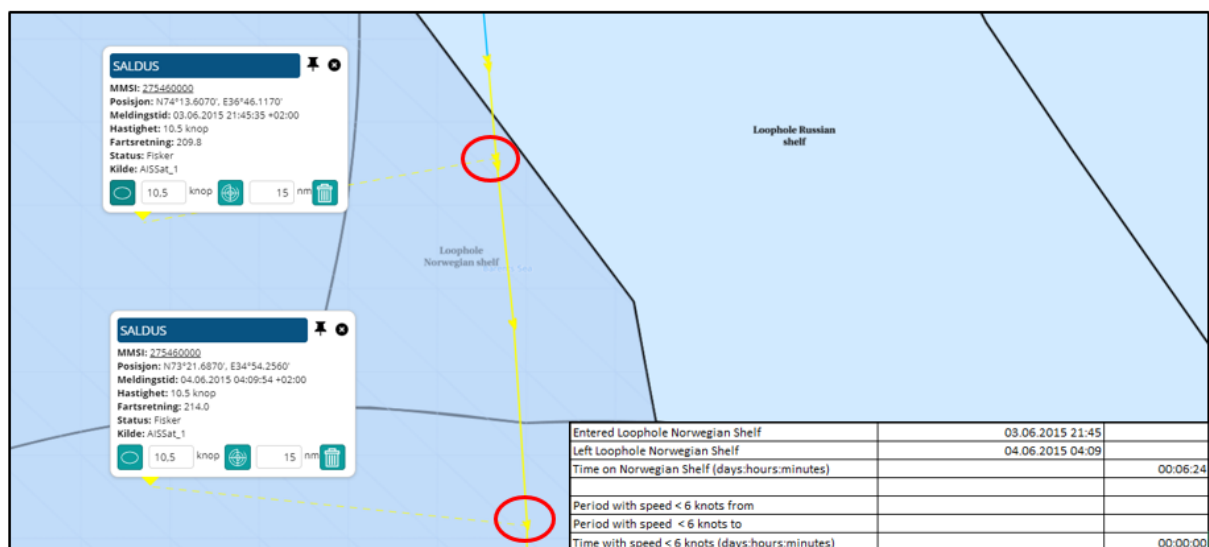
The Vessel Reports use the terms “enter” and “leave” to describe when a vessel has come into or gone out of a certain area.

The time for the vessel’s entrance in the area is based on the first registered AIS position for the vessel in the specific area. The time for the vessel’s exit of the area is based on the first registered AIS position the vessel has outside of the specific area. Thus, the positions are correct, but the satellites are not able to register the exact time that the vessel entered or left the relevant zone (given that the AIS satellites only record data at a specific point in time when the position is registered).

On some voyages, there can be some time in between the registered AIS positions for the vessel. The result of that can be that the first AIS position the vessel has in the specific area might be registered when the vessel is quite far into the area. The first AIS position for the vessel after its departure from the area might also not be registered until quite long after the vessel has left the area. The registration of the vessels AIS positions can therefore cause the time the vessel has had in the area to be calculated with a degree of inaccuracy.

The issue with AIS positions registered far apart in time is especially visible for voyages where the vessel has had a rapid transit through an area, as shown in the example below:

Figure 11 Enter and exit area



The screen shot in the map above shows the first AIS- position for *Saldus* on 3 June 2015 time 21:45 over the Norwegian continental shelf in the Loop Hole, southbound. This AIS position is registered some time after *Saldus* entered the area. The first AIS position for *Saldus* after the vessel left the waters above the Norwegian continental shelf in the Loop Hole is registered on 4 June 2015 time 04:09 in the Norwegian Economic Zone. This AIS position is registered some time after the vessel left the area. For this voyage, the time *Saldus* has been over the Norwegian continental shelf in the Loop Hole will not be entirely accurate due to the registration apart in time for the AIS positions.

5. Explaining the tables used in the Vessel Reports

In the Vessel Reports, tables are used to sum up the voyage information at the end of each voyage. There is one table for each of the Vessels' voyages. The structure of the tables used are all the same, but the data naturally varies.

5.1 Information about the Norwegian continental shelf, northbound

Figure 12 Norwegian continental shelf, northbound

Entered Loophole Norwegian Shelf	09.04.2015 07:38	
Left Loophole Norwegian Shelf	10.04.2015 11:08	
Time on Norwegian Shelf (days:hours:minutes)		01:03:30
Period with speed < 6 knots from	09.04.2015 12:26	
Period with speed <6 knots to	10.04.2015 06:05	
Time with speed < 6 knots (days:hours:minutes)		00:17:38

The table gives information about the date and time for when the vessel entered the waters above the Norwegian continental shelf in the Loop Hole, northbound. It also gives information about the date and time for the vessel's exit. Then, the time the vessel has had over the Norwegian continental shelf in the Loop Hole is shown in the format days:hours:minutes. On this voyage the vessel has been over the Norwegian continental shelf in the Loop Hole for 1 day, 3 hours and 30 minutes.

This section also gives information about the date and time the vessel was travelling < 6 knots over the Norwegian continental shelf in the Loop Hole. The period the vessel has had with speed less than 6 knots also appears in the format days:hours:minutes. On this voyage the vessel has had speed less than 6 knots in the area for a total of 17 hours and 38 minutes.

If the vessel has no AIS tracking over the Norwegian continental shelf in the Loop Hole northbound, the text NO TRACKS IN ZONE will appear in this section. If the vessel has tracks over the area, but no registered AIS positions here, the text NO AIS POSITIONS will appear.

5.2 Information about the Russian continental shelf, northbound

Figure 13 Russian Continental Shelf, northbound

Entered Loophole Russian Shelf	10.04.2015 11:08	
Left Loophole Russian Shelf	12.04.2015 09:48	
Time on Russian Shelf (days:hours:minutes)		01:22:40
Period with speed < 6 knots from	10.04.2015 19:04	
Period with speed < 6 knots to	11.04.2015 22:31	
Time with speed < 6.knots (days:hours:minutes)		01:03:27

The same information is also given in respect of the Russian continental shelf.

5.3 Information about the Norwegian continental shelf, southbound

Figure 14 Norwegian continental shelf, southbound

Entered Loophole Norwegian Shelf	12.04.2015 09:48	
Left Loophole Norwegian Shelf	12.04.2015 18:19	
Time on Norwegian Shelf (days:hours:minutes)		00:08:31
Period with speed < 6 knots from		
Period with speed < 6 knots to		
Time with speed < 6 knots (days:hours:minutes)		00:00:00

The table above gives information about the date and time for when the vessel entered the Norwegian continental shelf in the Loop Hole, southbound. This is normally when the vessel returns from harvesting operations on the Russian continental shelf in the Loop Hole, going back to port. Otherwise, this section has the same information as set out above.

5.4 Periods <6 knots in the areas

Figure 15 Periods <6 knots in the areas

Hours on Norwegian Shelf < 6 knots	0,00
Hours on Russian Shelf < 6 knots	104,12
Total hours < 6 knots	104,12
Percent time on Russian Shelf < 6 knots	100,00 %
Percent time on Norwegian Shelf < 6 knots	0,00 %

The next table gives information about the number of hours the vessel has been travelling < 6 knots over the Norwegian continental shelf in the Loop Hole and over the Russian continental shelf in the Loop Hole. As stated above, the speed of < 6 knots is consistent with harvesting operations the vessel has had, or possible harvesting operations the vessel has had in the area.

The last two rows give information about the percentage of the total time the vessel has had over the Russian continental shelf in the Loop Hole and over the Norwegian continental shelf in the Loop Hole.

To calculate the percentage on Norwegian shelf and Russian shelf we have changed from colon (:) to comma (,).

5.5 Landing information

The owner or user of a harvesting or transport vessel and the receipt of a catch are both required to complete a landing note with information about the catch. This applies regardless of whether the catch is transferred to a land-based facility or to another vessel.

Figure 16 Landing information

Snow crab landed live in kg	50 000	
Factory (crab receiver)	Seagourmet Norway AS, Båtsfjord	
Landingnote number and date	10428779	11.06.2015

The table above gives information about how many kilos of snow crab in live weight the vessel landed on this voyage according to those landing notes. It also gives information about the receiver of the

crab. The landingnote is identified with a unique number and the date is given for when the landingnote from the Norwegian Fishermen's Sales Organization was issued. The date given on the landing note is the date for the ending of the landing of the catch. The landing note is issued by the Norwegian receiver of the catch, either the buyer of the catch or the cold storage in port.

Attachments

- NEAFC port state control forms (PSC 1 and PSC 2)
- All AIS-positions for the vessels "Saldus", "Solveiga", "Solvita" and "Senator"