



MarinTrust Standard V2

Whole fish Fishery Assessment

*Capelin (*Mallotus vilosus*) in ICES Subareas 1 & 2, excluding Division 2a west of 5°W (Barents Sea Capelin)*

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Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name(s): TripleNine Vedde AS, Pelagia Egersund Sildoljefabrikk, Pelagia Karmsund Protein AS, Pelagia Karmsund Fiskemel, Pelagia Bodø Sildoljefabrikk, Pelagia Måløy Sildoljefabrikk			
Country:			
Email address:		Applicant Code	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor Name	CB Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Vineetha Aravind	Sam Dignan	4.5	Surveillance 1
Assessment Period	November 2024-November 2025		
Scope Details			
Management Authority (Country/State)	Norway; Russia		
Main Species	Capelin (<i>Mallotus villosus</i>)		
Fishery Location	ICES Subareas 1 and 2 (Northeast Arctic), excluding Division 2a west of 5°W		
Gear Type(s)	Pelagic trawl, purse seine		
Outcome of Assessment			
Overall Outcome	Pass		
Clauses Failed	None		
CB Peer Review Evaluation	Pass		
Fishery Assessment Peer Review Group Evaluation	Pass		
Recommendation	Pass		

Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on the international Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as Marin Trust raw material. Capelin (<i>Mallotus villosus</i>) is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, Capelin (<i>Mallotus villosus</i>) is eligible for approval for use as Marin Trust whole fish material.</p>
<p>The Capelin fishery by pelagic trawls and purse seines is estimated to catch exclusively capelin (99.9%), therefore it is the only species covered by this assessment.</p>
<p>The management of fisheries in Norwegian waters is the responsibility of the Directorate of Fisheries (DoF) within the Ministry of Trade, Industry and Fisheries. Since 1979, the Barents Sea capelin fishery has been regulated by a bilateral fishery management agreement between Russia (former USSR) and Norway. The latest advice on fishing opportunities for Barents Sea capelin in ICES subareas 1 and 2, excluding Division 2.a west of 5°W, was published in October 2023 by a Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN- AFWG). Due to the temporary suspension of Russian scientists from ICES, the capelin stock assessment and catch advice was not provided by ICES since October 2021. Instead, the Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG) was convened to produce the relevant information according to the established ICES benchmark and procedures.</p>
<p>The Marine Resources Act of 6 June 2008 (no. 37), lays down the management of Norwegian fisheries. This stipulates that the Norwegian fisheries management be guided by the precautionary approach, in line with international treaties and guidelines, and by an ecosystem approach that takes into account habitats and biodiversity. Norwegian fisheries policy and management are based on the principles of sustainable harvest of the marine living resources. nearly all stocks with commercial value are regulated through quotas and licensing.</p>
<p>Monitoring compliance in Norwegian fisheries is the responsibility of the DoF, with the support of the Coast Guard (at sea) and sales organisations (in port). Compliance is monitored through a combination of at-sea and portside inspections, observer programmes, and Video Management System – VMS. The main organisation responsible for the collection and collation of fisheries data in Norway is the Institute of Marine Research (IMR).</p>
<p>Landings in the targeted capelin fishery are almost exclusively capelin. Catches continue to be recorded and collated, including bycatch of capelin in other fisheries, and stock assessments have been conducted annually. Norway implements a landing obligation and so all catch is landed, therefore discards are negligible in the Norwegian fleet. There is no target reference point established for this stock. Currently there is less than 95% probability that the spawning stock size will be above $B_{\text{escapement}}$ (200,000 tonnes) in 2025. Therefore, the advice for 2025 is zero catch.</p>
<p>Total international catch of Barents Sea capelin is restricted through a Total Allowable Catch - TAC set and allocated by the Joint Russian-Norwegian Fishery Commission (JNRFC). This TAC appears to have been effective at limiting total fishery removals, as annual catches have been at or below the TAC in every year since 2009.</p>
<p>Purse seine and pelagic trawl gears are generally considered not to have significant negative impacts on physical habitats and purse seine not usually have direct interaction with Endangered, Threatened and Protected – ETP species. The interactions of the fishery with the ecosystem are usually related to potential food web impacts, but models used in the stock assessment includes multispecies elements and the fishery has not impacted negatively the overall ecosystem recently.</p>
<p>In conclusion, the assessor recommends the approval of Capelin (<i>Mallotus villosus</i>) in ICES Subareas 1 & 2, excluding Division 2a west of 5°W (Barents Sea Capelin) for the production of fishmeal and/or fish oil under the current MarinTrust Whole fish Standard (v 2.0).</p>

Fishery Assessment Peer Review Comments

I generally concur with the Assessor’s findings. While the stock is not in great shape, the harvest control mechanism is evidently working, and the fishery is closed. Furthermore, as a pelagic purse seine and trawl fishery, the fishery is highly targeted and comparatively ‘clean’. The fishery management regime has also found a way to adapt in response to the suspension of Russian Fishery Scientists from ICES. Overall, I agree with the Assessor’s recommendation for continuing approval.

Notes for On-site Auditor

Table 3 General Results

General Clause	Outcome (Pass/Fail)
M1 - Management Framework	Pass
M2 - Surveillance, Control and Enforcement	Pass
F1 - Impacts on ETP Species	Pass
F2 - Impacts on Habitats	Pass
F3 - Ecosystem Impacts	Pass

Table 4 Species- Specific Results

List all Category A and B species. List approximate total percentage (%) of landings which are Category C and D species; these do not need to be individually named here

Category	Species	% landings	Outcome (Pass/Fail)	
Category A	Capelin (<i>Mallotus villosus</i>)	99.9	A1	Pass
			A2	Pass
			A3	Pass
			A4	Pass
Category B	No Category B Species			
Category C	No Category C Species			
Category D	No Category D Species			

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category ¹	% of landings	Management	Category
Capelin	<i>Mallotus villosus</i>	Capelin (<i>Mallotus villosus</i>) in subareas 1 and 2 (Northeast Arctic), excluding Division 2.a west of 5°W (Barents Sea capelin)	LC	99.9%	Joint Norwegian-Russian Fishery Commission (JNRFC)	A
Species categorisation rationale						
<p>The previous MT assessments of 2021, 2022 & 2023 have considered that the landings of the targeted capelin fishery are almost exclusively capelin. This reflects the information submitted by the client during application, and also the catch composition in the Icelandic capelin fishery, which is MSC certified and uses equivalent fishing methods. Alternative sources for catch composition in the Norwegian capelin fishery remain elusive. The present audit was off-site.</p> <p>Capelin in ICES Subareas 1 & 2 excluding Division 2a west of 5°W (Barents Sea) is subject to an international management plan put in place by the Joint Russian-Norwegian Fisheries Commission (JRNFC) in 2002. Due to the temporary suspension of Russian scientists from ICES, the capelin stock assessment and catch advice was not provided by ICES since October 2021. Instead, the Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG) was convened to produce the relevant information according to the established ICES benchmark and procedures. Scientific advice is usually provided annually and a TAC is set in line with this advice.</p> <p>For this reason, the capelin stock is managed, and was assessed under Category A.</p>						

¹ <https://www.iucnredlist.org/>

MANAGEMENT

The two clauses in this section (M1, M2) relate to the general management regime applied to the fishery under assessment. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. A fishery must meet all the minimum requirements in every clause before it can be recommended for approval.

M1	Management Framework – Minimum Requirements		
	M1.1	There is an organisation responsible for managing the fishery.	Yes
	M1.2	There is an organisation responsible for collecting data and assessing the fishery.	Yes
	M1.3	Fishery management organisations are publicly committed to sustainability.	Yes
	M1.4	Fishery management organisations are legally empowered to take management actions.	Yes
	M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making.	Yes
	M1.6	The decision-making process is transparent, with processes and results publicly available.	Yes
Clause outcome:			Pass

As such there have been no substantial changes in the aspects of the fishery relevant to Section M1 since the 2021 MarinTrust – MT assessment. The exception to this is a change in the organisation responsible for the provision of scientific advice that was explained in 2022 MT assessment; this is given in detail in M1.2. All other clauses provide a summary of the conclusions of the 2021 MT assessment, which were given in the 2022 & 2023 assessments. Please refer to the 2021 assessment for more details.

M1.1 There is an organisation responsible for managing the fishery.

Fisheries in the Norwegian waters is managed by the Directorate of Fisheries (DoF) within the Ministry of Trade, Industry and Fisheries (Regjeringen.no 2022). The Joint Russian-Norwegian Fisheries Commission (JRNFC) involving Norway and Russia coordinates the international management of the capelin resource. The JRNFC deals with a wide range of fisheries management issues, including the setting of an annual quota for the capelin fishery (JRNFC, 2022).

There is an organisation responsible for managing the fishery. M.1.1 is met.

M1.2 There is an organisation responsible for collecting data and assessing the fishery.

As identified in the 2021 MT surveillance report, the main organisation responsible for the collection and collation of fisheries data in Norway is the Institute of Marine Research (IMR). The IMR collects a range of fishery-dependent and -independent data and engages extensively with international fisheries science through membership of the International Council for the Exploration of the Sea (ICES).

The primary body usually responsible for carrying out stock assessments and providing management advice for the international capelin fishery is the Arctic Fisheries Working Group (AFWG) within ICES. However, in March 2022 all Russian participation in ICES was temporarily suspended, meaning the AFWG was only able to provide stock assessments and management advice for a limited number of stocks. Thus, instead of the capelin fishery being informed by ICES advice, from 2023 onwards, recommendations rely on the information from the newly constituted JRN-AFWG. The work conducted by the JRN-AFWG was carried out independently of ICES, but continued to adhere to the established ICES methodologies, benchmarks and harvest control rules (JRN-AFWG 2022).

There is an organisation responsible for collecting data and assessing the fishery. M1.2 is met.

M1.3 Fishery management organisations are publicly committed to sustainability.

Fisheries management in Norway follows the Marine Resources Act of 6 June 2008 (no. 37). Its purpose is to “ensure sustainable and economically profitable management of wild living marine resources and genetic material derived from them, and to promote employment and settlement in coastal communities” (MRA, 2008/Fiskeridir No.2022). The JRNFC states that it “provides efficient joint management of the most important fish stocks of both countries, in the Barents Sea and the Norwegian Sea”, and that “in line with the international trend for a more comprehensive, eco-based strategy, and since the turn of the century, the Fisheries Commission has been working towards a more long-term, precautionary approach to harvesting strategies for the live marine resources in the Barents Sea and the Norwegian Sea” (JRNFC 2022a).

Fishery management organisations are publicly committed to sustainability. M1.3 is met.

M1.4 Fishery management organisations are legally empowered to take management actions.

As stated above, fisheries management in Norway follows the Marine Resources Act of 6 June 2008 (no. 37). The MRA (2008) institutes the structure of the fisheries management system, along with an obligation to adhere to a sustainable, science-based management approach. The Act empowers the Directorate of Fisheries to conduct vessel and catch inspections at sea and in port. There is a compulsory landing obligation.

Fishery management organisations are legally empowered to take management actions. M.1.4 is met.

M1.5 There is a consultation process through which fishery stakeholders are engaged in decision-making.

The Advisory Meetings for Fisheries Regulations facilitates consultation with various stakeholders and engages them in decision-making. After the Directorate of Fisheries proposes regulations, fishery stakeholders including fishermen, industry, trade unions, local authorities, non-governmental organizations - NGOs and the Sami Parliament are consulted through the Advisory Meetings (FAO 2022).

There is a consultation process through which fishery stakeholders are engaged in decision-making. M.1.5 is met.

M1.6 The decision-making process is transparent, with processes and results publicly available.

All reports are published online by the decision-making bodies. The current assessment was completed entirely using freely available information.

The decision-making process is transparent, with processes and results publicly available. M.1.6 is met

References

- FAO (2022). Fishery and Aquaculture Country Profiles. Norway. Country Profile Fact Sheets. Fisheries and Aquaculture Division. https://www.oecd.org/agriculture/topics/fisheries-and-aquaculture/documents/report_cn_fish_nor.pdf
- JRN-AFWG (2022). Report of the Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG) 2022. <https://imr.braze.unit.no/imr-xmlui/handle/11250/3016193>
- JRNFC (2022). Working Groups. <https://www.jointfish.com/eng/THE-FISHERIES-COMMISSION/WORKING-GROUPS.html>
- JRNFC (2022a). The Fisheries Commission. <https://www.jointfish.com/index.php/eng/THE-FISHERIES-COMMISSION.html>
- MRA (2008). Marine Resources Act, English translation. <https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act>
- Regjeringen.no (2022). About the Ministry. <https://www.regjeringen.no/en/dep/nfd/about-the-ministry/id714/>

Links

MarinTrust Standard clause	1.3.1.1, 1.3.1.2
FAO CCRF	7.2, 7.3.1, 7.4.4, 12.3
GSSI	D.1.01, D.4.01, D2.01, D1.07, D1.04

M2 Surveillance, Control and Enforcement - Minimum Requirements			
M2.1	There is an organisation responsible for monitoring compliance with fishery laws and regulations.		Yes
M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.		Yes
M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.		Yes
M2.4	Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.		Yes
Clause outcome:			Pass

There have been no substantial changes to those aspects of fishery management relevant to Section M2 since the time of the 2021 MT assessment. A summary of the conclusions of that assessment made on 2022 and 2023 MT assessments are provided below for convenience; please refer to the full report for more details.

M2.1 There is an organisation responsible for monitoring compliance with fishery laws and regulations.

The Department of Fisheries (DoF) monitors compliance in Norwegian fisheries. They are supported in this by the Coast Guard (at sea) and sales organisations (in port). The MRA has defined the role of the DoF in fisheries control and enforcement, and states that the DoF must “ensure that those to whom this Act applies comply with provisions laid down in or under the Act and with other legislation on participation in the harvesting, marketing, production, import and export of wild living marine resources”. Section 46 of the MRA sets out the process for inspections of vessels, catch, and products, and Section 47 empowers the Ministry to place inspectors and observers on board harvesting fishing vessels (MRA 2008).

There is an organisation responsible for monitoring compliance with fishery laws and regulations. M.2.1 is met.

M2.2 There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.

Potential sanctions for breaches of fishery laws and regulations is set out in MRA. This include coercive fines, infringement fines, imprisonment, and confiscation of gear, property, facilities or vessels used in the breach irrespective of who the owner is (MRA 2008).

According to the annual report of Norwegian Coast Guard, 1162 inspections at sea were carried out in 2023 (Kystvaktens årsrapport, 2023). The Table 1 shows the number of inspections by area and the number of reactions from 2019 – 2023 in Norway and Figure 1 shows the activities by control type.

Total number of inspections and reactions divided by area in 2023								
Area	No Remarks	Warning	Police report	Arrest	Infringements	Other reactions	Total inspections	Total reactions
NØS N65	484	38	11	2	0	0	530	51
NØS S65	322	32	12	1	0	0	362	45
Fishing protection zone	162	16	3	0	0	0	181	19
Svalbard	23	0	0	0	0	0	23	0
Jan Mayen	0	0	0	0	0	0	0	0
Skagerrak	30	2	1	0	0	0	33	3
NEAFC	23	0	0	0	0	0	23	0
2023	1,044	88	27	3	0	0	1,162	118
2022	884	91	41	12	0	2	1,034	146
2021	955	81	45	4	0	2	1,087	132
2020	955	136	49	11	2	2	1,155	200
2019	897	189	48	8	0	1	1,138	241

Table 1. Number of inspections by area in Norway and the number of reactions from 2019 – 2023 [Translated from Kystvaktens årsrapport (2023)].

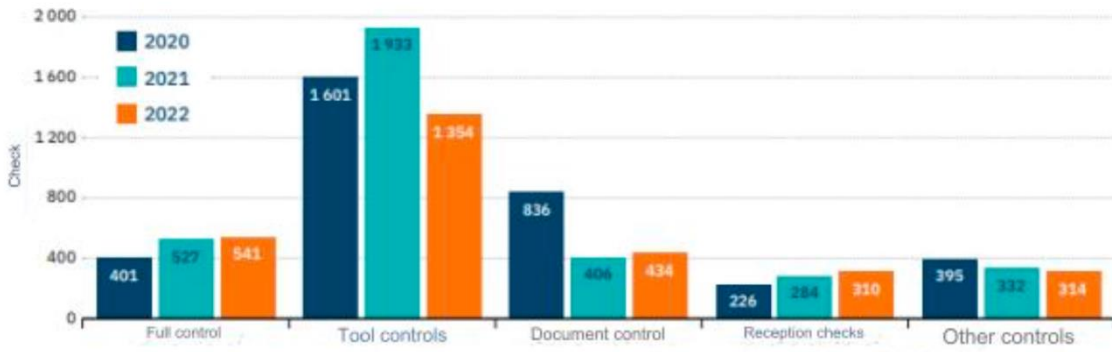


Figure 15: All controls 2020-2022. The category "other controls" includes catch control, control of tracking equipment, stock control, lock installation control, turnover control and weight control.

Figure 1. Activities of the Directorate of Fisheries by control type (Translated from MSC, 2023).

There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken. M.2.2 is met.

M2.3 There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.

No evidence was encountered to indicate widespread non-compliance in the capelin fishery, or in Norwegian fisheries in general (for details refer previous MT assessments of Barents Sea Capelin).

Illegal, unreported, and unregulated (IUU) fishing poses a significant transnational challenge, necessitating collaborative efforts on an international scale for effective mitigation. Norway has actively pursued cooperation in addressing this issue, forging agreements and implementing anti-IUU measures with various nations and entities. Partnerships have been established with the European Commission, Russia, Iceland, the UK, Lithuania, Sweden, Denmark, Faroe Islands, the Netherlands, Germany, Portugal, Canada, Poland, Estonia, and Morocco (Sherloc 2023). Both Norwegian and foreign fishing vessels are subject to stringent controls in all Norwegian waters. Norway pioneered in adopting a blacklist of vessels that had been engaged in IUU activities in North East Atlantic waters in 1994, and banned such vessels from fishing in Norwegian waters. The concept of a blacklist has since been adopted by several regional fisheries management organisations where Norway is a member.

A summary of fishery inspections on Norwegian waters from 2018-2019 is shown in Figure 2.

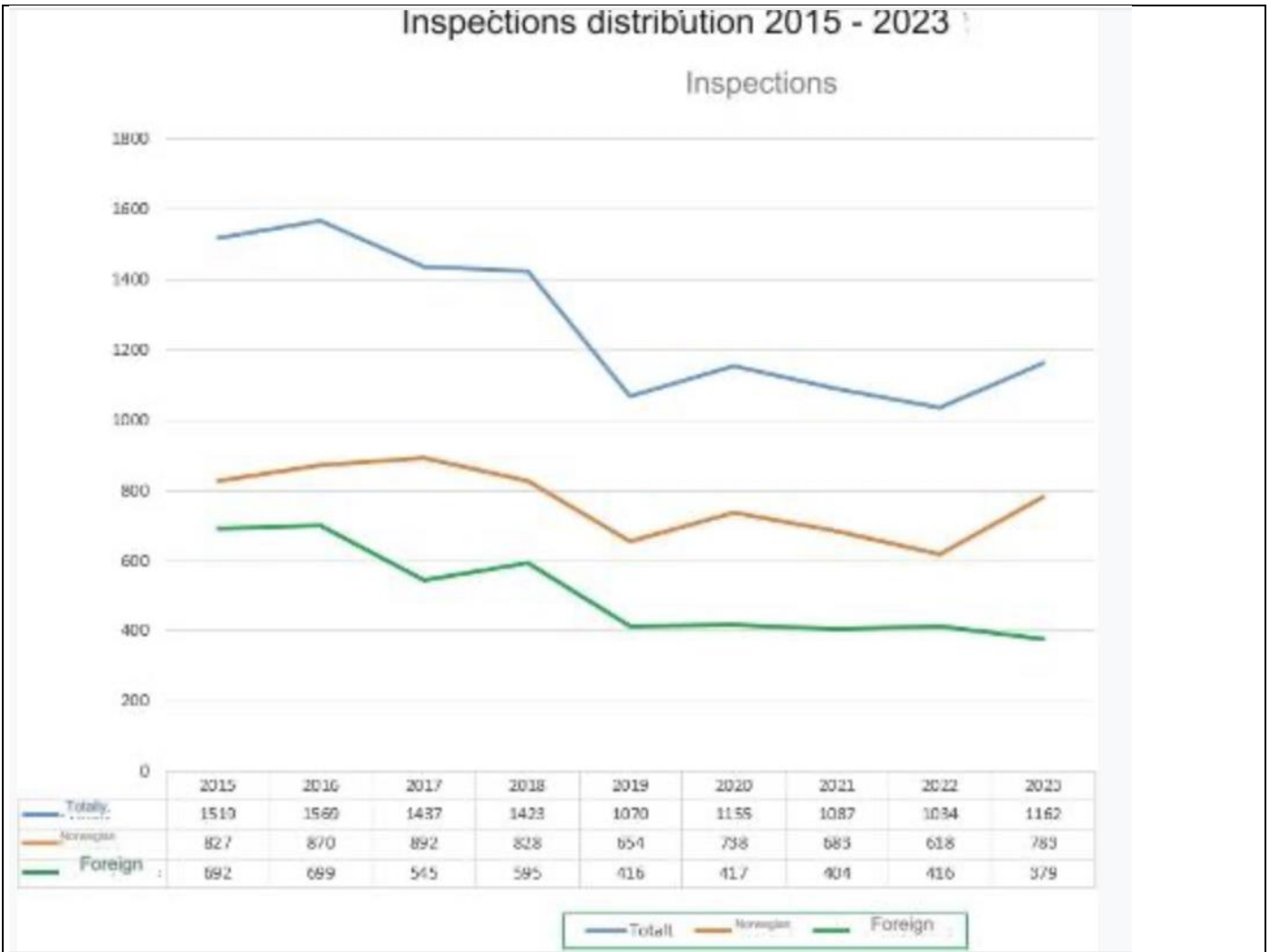


Figure 2. Fishery inspections at Norwegian and Non-Norwegian vessels 2018-2022 [Translated from Kystvaktens årsrapport (2023)]

According to MSC (2023): “Coast Guard inspectors board fishing vessels and control the catch (e.g. catch composition and fish size) and fishing gear (e.g. mesh size) on deck and the volume of fish in the holds. Using the established conversion factors for the relevant fish product, the inspectors calculate the volume of the fish in round weight and compare this with the catches reported to the Directorate through the logbooks [...] There are a number of possibilities for enforcement authorities to physically check whether the data provided by fishers through self-reporting are correct. In addition, VMS data enables control of whether area restrictions are observed, among other things. Ten of the in total 15 vessels operate offshore (Ytre kystvakt YKV). Four carry helicopters. The other five vessels operate inshore (Indre kystvakt IKV). In addition, the Coast Guard has access to airplanes and drones.”

Norway tends to perform well in independent assessments of IUU risk rating, such as the IUU Fishing Index (IUUFI 2023). It can be noted here that the performance of Norway is much better in 2023 compared to 2021.

There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing. M.2.3 is met.

M2.4 Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.

Compliance monitoring is through a combination of at-sea and portside inspections, observer programmes, and VMS.

DoF identifies high-risk areas and activities and focusses inspection in these areas. All vessels over 24m are required to operate VMS 24 hours a day, which is monitored by the Fisheries Monitoring Centre (MRA 2008).

Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS. M.2.4 is met.

References

IUUF (2023). Country profile, Norway. <https://iuufishingindex.net/profile/norway>
 Kystvaktens årsrapport (2023). https://www.forsvaret.no/om-forsvaret/organisasjon/sjoforsvaret/kystvakten/om-kv/Årsrapport%20Kystvakten%202023.pdf/_attachment/inline/4f8641df-83d7-4a00-9eb0-9afb7bf704a6:7b7835a806ba0163766bf89a7552ba7782d53986/Årsrapport%20Kystvakten%202023.pdf
 MRA (2008). Marine Resources Act, English translation. <https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act>
 MSC (2023). Announcement Comment Draft Report. Norway north-sea herring. <https://fisheries.msc.org/en/fisheries/norway-north-sea-herring/@@view>
 Sherlock (2023). Norwegian fisheries management. https://sherloc.unodc.org/cld/uploads/res//treaties/strategies/norway/nor0001s_html/Norway.pdf

Links

MarinTrust Standard clause	1.3.1.3
FAO CCRF	7.7.2
GSSI	D1.09

CATEGORY A SPECIES

The four clauses in this section apply to Category A species. Clauses A1 - A4 should be completed for **each** Category A species. If there are no Category A species in the fishery under assessment, this section can be deleted. A Category A species must meet the minimum requirements of all four clauses before it can be recommended for approval. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. The species must achieve a pass rating against all requirements to be awarded a pass overall. **If the species fails any of these clauses it should be re-assessed as a Category B species.**

Species Name		
A1	Data Collection - Minimum Requirements	
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known. Yes
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated. Yes
		Clause outcome: Pass

A1.1 Landings data are collected such that the fishery-wide removals of this species are known.
 There is regular recording of catch including bycatch of capelin in other fisheries. Norway has strictly enforces landing of all catch. Therefore, discards are negligible in the Norwegian fleet, and capelin bycatch is relatively easy to monitor. The assessment includes target catch and bycatch data, and are usually collated by the ICES Arctic Fisheries Working Group (AFWG). Following the temporary suspension of Russian scientists from ICES in March 2022, the data collection is now conducted by the Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG 2024). [Figure 3].

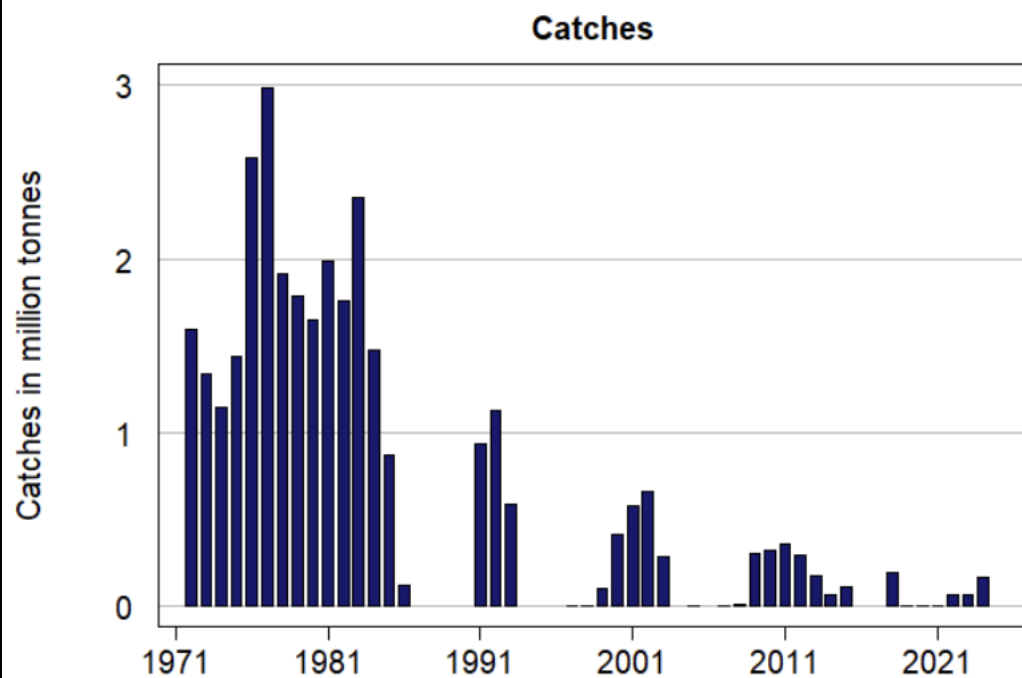


Figure 3: Catches of Barents Sea Capelin from 1971 – 2022 (JRN-AFWG 2024)

Landings data are collected such that the fishery-wide removals of this species are known. A1.1 is met.

A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.

The benchmark workshop on capelin (WKCAPELIN) in ICES subareas 1 and 2 was conducted to develop benchmark assessments for the Barents Sea capelin. The existing model approach was modified to include multispecies elements (predation by cod). Despite the changes, the model results were considered relatively consistent with the previous assessment (ICES, 2023). According to ICES (2023): “The workshop evaluated that the approach taken by Barents Sea and IGJM [Iceland-East Greenland-Jan Mayen CAPELIN] represents best available science following ICES procedures. The two existing HCRs are considered as precautionary as is typical for any ICES escapement strategy. Furthermore, the HCRs have functioned successfully for a number of years (since 1991 for Barents Sea, and since 2015 for IGJM).”

The annual stock assessment collects and utilises fishery-dependent and -independent information. The 2024 assessment used a model based on acoustic survey data to predict spawning biomass 6 months in advance. The model estimates maturation based on survey data and natural mortality rates based on a multispecies model of predation, primarily by immature cod on pre-spawning capelin based on information on cod distribution, abundance and stomach content data (JRN-AFWG 2024).

The geographical survey coverage of the Barents Sea capelin stock during the BESS in 2024 was close to complete (Figure 4). In the main distribution area, the degree of coverage was very good. The areas west of Svalbard and west of Frans Josef Land were not covered, but in previous years only minor concentrations have been found there.

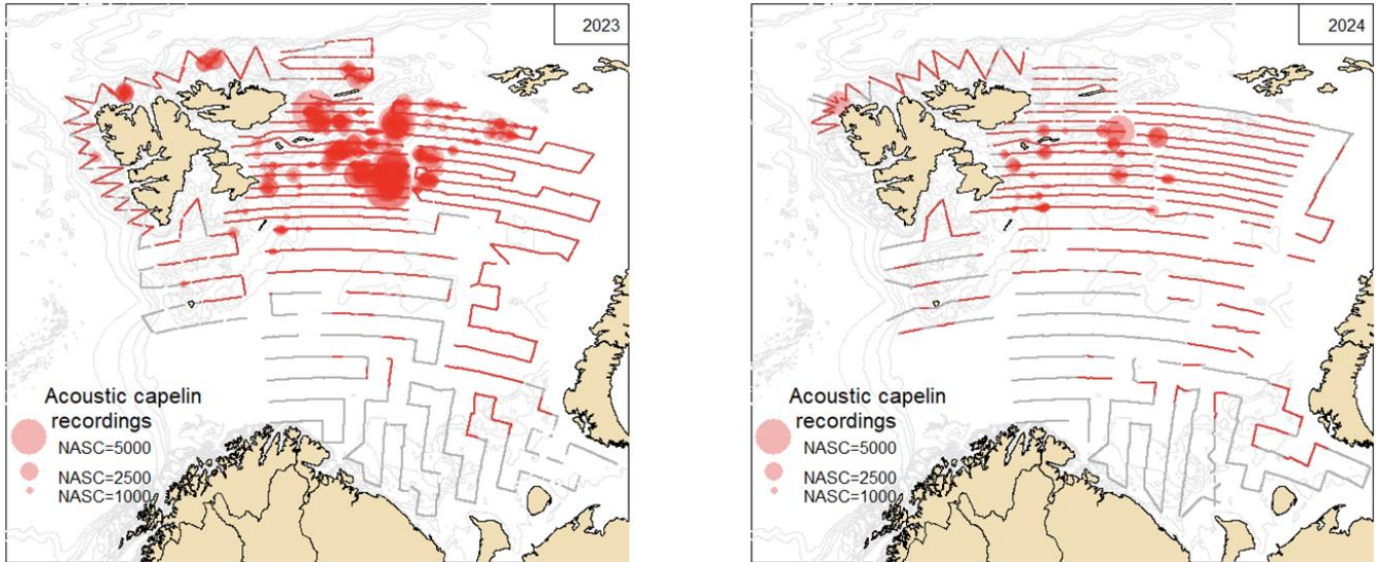


Figure 4: Survey coverage (transects included in estimation) and geographical distribution of acoustic recordings of capelin in autumn 2023 and 2024. The size of the circles corresponds to nautical acoustic scattering coefficient (NASC; m^2/nmi^2) per 1 nautical mile. Grey lines mark transect sections with no acoustic recordings of capelin. The south western strata were also covered in both years, but there were no capelin recordings there so it was excluded from the estimate and the map. (JRN-AFWG. 2024)

Sufficient additional information is collected to enable an indication of stock status to be estimated. A1.2 is met.

References

ICES (2023). Benchmark workshop on capelin (WKCAPELIN). ICES Scientific Reports. 5:62. 282 pp.
<https://doi.org/10.17895/ices.pub.23260388>

JRN-AFWG (2024). Advice on fishing opportunities for Barents Sea capelin in 2025 — ICES subareas 1 and 2 excluding Division 2.a west of 5°W. Report series: [IMR-PINRO 2024-11](https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2024-11) Published: 18.10.2024. <https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2024-11>

Links

MarinTrust Standard clause	1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	7.3.1, 12.3
GSSI	D.4.01, D.5.01, D.6.02, D.3.14

A2 Stock Assessment - Minimum Requirements		
A2.1	A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.	Yes
A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	Yes
A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	Yes
A2.4	The assessment is subject to internal or external peer review.	Yes
A2.5	The assessment is made publicly available.	Yes

Clause outcome: Pass

A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.

ICES used to conduct annual stock assessment of Barents Sea Capelin, but noted in section M1, Russian scientists have been temporarily suspended from ICES, and since 2022, stock assessment and management advice are provided by the newly-convened JRN- AFWG, independent of ICES and considers all fishery removals and the biological characteristics of the species. The JRN-AFWG assessment and advice follow the methodology and benchmarks established by ICES, providing continuity in the advice provision (JRN-AFWG 2024). It seems stock assessments will continue to be conducted annually.

A stock assessment is conducted annually and considers all fishery removals and the biological characteristics of the species. A.2.1 is met.

A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

As JRN-AFWG assessment and advice provision follows the ICES methodology, the catch advice report includes an indication of the current status of the capelin stock relative to limit reference point – Blim (Figure 5). The JRN-AFWG (2024) advice states that “spawning-stock size is at Blim”. Blim is the only reference point established for Barents Sea capelin, and is set at 200,000t. according to the 2024 JRN-AFWG advice, there is less than 95% probability that the spawning stock size will be above $B_{escapement}$ (200 000 tonnes) in 2025. No reference points for fishing pressure have been defined for this stock.

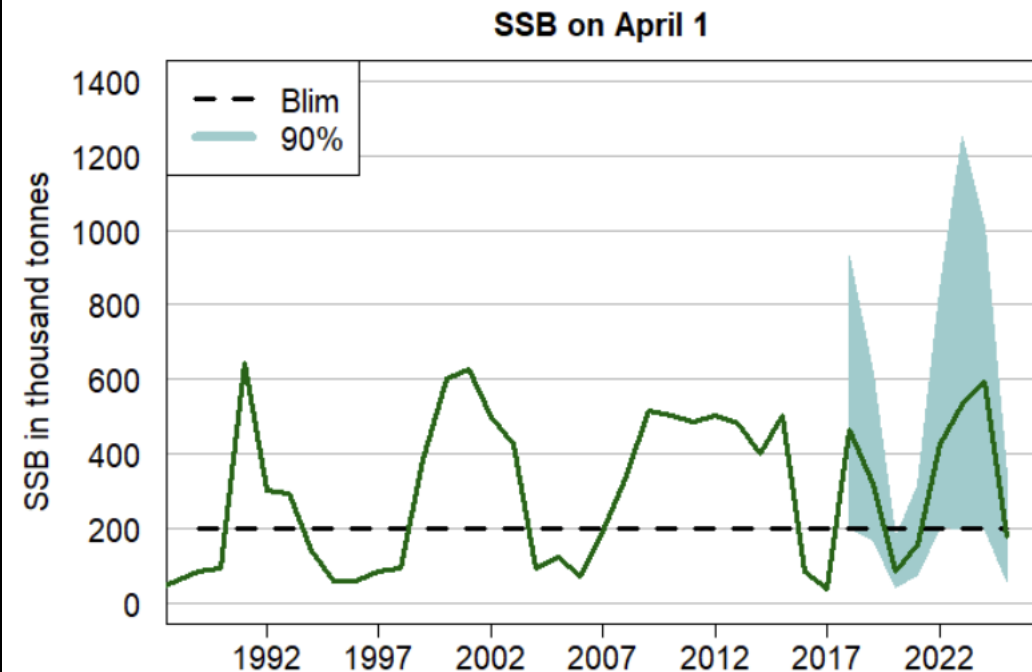


Figure 5. Barents Sea capelin, spawning stock biomass - SSB relative to current Blim, 1989 – 2023. Green area indicates 95% confidence limits. SSB estimates prior to 1989 used a different model and are not shown. Confidence limits only available for years since 2018 (JRN-AFWG 2024).

The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy. A.2.2 is met.

A2.3 The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.

Annual catch advice is issued based on JRNFC management plan. The plan aims at ensuring a minimum of 95% probability that SSB in the following year will be 200,000t or greater. The management plan harvest control rule was evaluated by ICES in 2016 and found to be precautionary (ICES 2020). According to JRN-AFWG (2024): “There is less than 95% probability that the spawning stock size will be above $B_{\text{escapement}}$ (200 000 tonnes) in 2025. No reference points for fishing pressure have been defined for this stock.”

The advice of the Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG) is that when the Joint Norwegian–Russian Fisheries Commission management plan is applied, there should be zero catches of Barents Sea capelin in 2025.

The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status. A.2.3 is met.

A2.4 The assessment is subject to internal or external peer review.

The JRN-AFWG adheres to the same peer-review protocols applied by ICES, as identified in the 2021 MT Assessment. The 2023 Benchmark workshop on capelin was submitted for external peer review and approved (ICES, 2023).

The assessment is subject to internal or external peer review. A.2.4 is met.

A2.5 The assessment is made publicly available.

The JRN-AFWG stock assessment follows the methodologies and benchmark previously established by ICES, the documentation for which is made available online and is also referenced in the JRN-AFWG capelin management advice report (JRN-AFWG 2024). The 2023 benchmark report (ICES 2023) and the stock assessment are both freely available online.

The assessment is made publicly available. A.2.5 is met.

References

ICES (2020). Capelin (*Mallotus villosus*) in subareas 1 and 2 (Northeast Arctic), excluding Division 2.a west of 5°W (Barents Sea capelin). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cap.27.1-2

<https://doi.org/10.17895/ices.advice.5889>

ICES (2023). Benchmark workshop on capelin (WKCAPELIN). ICES Scientific Reports. 5:62. 282 pp.

<https://doi.org/10.17895/ices.pub.23260388>

JRN-AFWG (2024). Advice on fishing opportunities for Barents Sea capelin in 2025 — ICES subareas 1 and 2 excluding Division 2.a west of 5°W. Report series: [IMR-PINRO 2024-11](https://www.hi.no/en/hi/nettrapper/imr-pinro-en-2024-11) Published: 18.10.2024. <https://www.hi.no/en/hi/nettrapper/imr-pinro-en-2024-11>

Links

MarinTrust Standard clause	1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	12.3
GSSI	D.5.01, D.6.02, D.3.14

A3 Harvest Strategy - Minimum Requirements		
A3.1	There is a mechanism in place by which total fishing mortality of this species is restricted.	Yes
A3.2	Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.	Yes
A3.3	Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).	Yes
Clause outcome:		Pass

A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.

Total international catch of Barents Sea capelin is restricted through a TAC set and allocated by the Joint Russian-Norwegian Fishery Commission (JNRF). This TAC appears to have been effective at limiting total fishery removals, as annual catches have been at or below the TAC in every year since 2009. There have been no changes to the TAC-setting or allocation processes since the 2021 MT (the source of the TAC advice notwithstanding).

There is a mechanism in place by which total fishing mortality of this species is restricted. A.3.1 is met.

A3.2 Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.

Except in 2015, the international TAC has been set in line with the scientific advice in every year since 2000, and in the majority of years prior to that. Additionally, landings have been at or slightly below the TAC in every year since 2009 (Recognising that some catch was taken for research purposes and as bycatch in other fisheries while the capelin quota was 0t in 2019-2022). As noted in the 2021 MT surveillance, total fishery removals of capelin did not regularly exceed the scientific advice at that time (Table 2).

Since then, the TAC was set in line with the ICES advice, being a TAC of 62,000t in 2023, of which 60,692t was caught. Catch advice for 2024 was provided by the JRN-AFWG, and recommended a TAC of 196,000t and caught 168680t. Despite international tensions due to the war in Ukraine, Norway and Russia have agreed fishing quotas for 2024 in line with the scientific advice (FF 2023). For 2025 zero catch is advised.

Year	ICES/JRN-AFWG advice	Catch corresponding to advice	Agreed TAC	ICES catch
1988	No catch	0	0	0
1989	No catch	0	0	0
1990	No catch	0	0	0
1991	TAC	1,000,000	900,000	933,000
1992	SSB > 400,000 – 500,000 t	834,000	1,100,000	1,123,000
1993	A cautious approach, SSB > 400 000–500 000 t	600,000	630,000	586,000
1994	No fishing	0	0	0
1995	No fishing	0	0	0
1996	No fishing	0	0	0
1997	No fishing	0	0	1,000
1998	No fishing	0	0	3,000
1999	SSB > 500 000 t	79,000	80,000	101,000
2000	5% probability of SSB < 200 000 t	435,000	435,000	414,000
2001	5% probability of SSB < 200 000 t	630,000	630,000	568,000
2002	5% probability of SSB < 200 000 t	650,000	650,000	651,000
2003	5% probability of SSB < 200 000 t	310,000	310,000	282,000
2004	No fishing	0	0	0
2005	No fishing	0	0	1,000*
2006	No fishing	0	0	0
2007	No fishing	0	0	4,000*
2008	No fishing	0	0	12,000*
2009	5% probability of SSB < 200 000 t	390,000	390,000	307,000
2010	5% probability of SSB < 200 000 t	360,000	360,000	323,000
2011	5% probability of SSB < 200 000 t	380,000	380,000	360,000

2012	5% probability of SSB < 200 000 t	320,000	320,000	296,000
2013	5% probability of SSB < 200 000 t	200,000	200,000	177,000
2014	5% probability of SSB < 200 000 t	65,000	65,000	66,000
2015	5% probability of SSB < 200 000 t	6,000	120,000	115,000
2016	Zero catch	0	0	0
2017	Zero catch	0	0	0
2018	5% probability of SSB < 200 000 t	205,000	205,000	194,520
2019	Zero catch	0	0**	53*
2020	Management plan	0	0**	31*
2021	Management plan	0	0**	10*
2022	Management plan	≤ 70,000	70,000	65,246***
2023	Management plan***	≤ 62,000***	62,000	60,692***
2024	Management plan***	≤ 196,000***	196,000	168,680***
2025	Management plan***	0***		

* Research catch and bycatches in other fisheries.

** Up to 500 tonnes was allowed for research survey catches.

*** As noted in Section M1, 2022-2024 assessment and advice was carried out by the Joint Russian-Norwegian working group on Arctic Fisheries (JRN-AFWG) which compiled catches and gave advice.

Table 2. Barents Sea Capelin, ICES advice, agreed TAC, and catch, since 2012. All weights in tonnes (JRN-AFWG 2024).

Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. A.3.2 is met.

A3.3 Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).

Until 2022 catch advice was provided by ICES and from 2022 - 2024, the JRN-AFWG is providing the same on the basis of the JNRFC management plan. This management plan includes a harvest control rule that indicates catches must lead to a 95% probability that SSB is above Blim (i.e. 200,000t) on April 1st of the TAC year. When SSB is estimated to be below Blim, the scientific advice is for the TAC to be set at 0t; this has occurred several times in the past (for example from 2019 – 2022, ICES 2020). As in other years, the TAC was set in line with the advice and the commercial fishery was closed. The TAC for next year, 2025 is set at zero again. (JRN-AFWG 2024). As such there is a management plan in place and is followed.

Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy. A.3.3 is met.

References

FF (2023). "Norway and Russia strike 2024 fisheries agreement". https://fiskerforum.dk/#google_vignette

ICES (2020). Capelin (*Mallotus villosus*) in subareas 1 and 2 (Northeast Arctic), excluding Division 2.a west of 5°W (Barents Sea capelin). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, cap.27.1-2, <https://doi.org/10.17895/ices.advice.5889>

JRN-AFWG (2024). Advice on fishing opportunities for Barents Sea capelin in 2025 — ICES subareas 1 and 2 excluding Division 2.a west of 5°W. Report series: [IMR-PINRO 2024-11](https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2024-11) Published: 18.10.2024. <https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2024-11>

Standard clause 1.3.2.1.3

Links

MarinTrust Standard clause	1.3.2.1.3, 1.3.2.1.4
FAO CCRF	7.2.1, 7.22 (e), 7.5.3
GSSI	D3.04, D6.01

A4	Stock Status - Minimum Requirements	
	A4.1	<p>The stock is at or above the target reference point, OR IF NOT:</p> <p>The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT:</p> <p>The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.</p>
Clause outcome:		Pass
<p>A4.1 The stock is at or above the target reference point, OR IF NOT:</p> <p>The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT:</p> <p>The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.</p> <p>Under A4.1 the first statement is not met as the target reference points are not established for the Barents Sea capelin stock.</p> <p>During 2023 (JRN-AFWG 2023) the stock biomass was estimated to be above the limit reference point, B_{lim}. During 2024 stock assessment it was estimated that there is less than 95% probability that the spawning stock size will be above $B_{escapement}$ (200,000 tonnes) in 2025. Therefore, the management plan advises zero catch in 2025.</p> <p>In the previous years too, when stock biomass has fallen below B_{lim}, the fishery has been closed to commercial landings. Thus, it is evident that the harvest control rule set out in the JRNFC management plan manages the fishery effectively and helps in stock rebuilding.</p> <p>The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited. A4.1 is met.</p>		
<p>References</p> <p>JRN-AFWG (2024). Advice on fishing opportunities for Barents Sea capelin in 2025 — ICES subareas 1 and 2 excluding Division 2.a west of 5°W. Report series: IMR-PINRO 2024-11 Published: 18.10.2024. https://www.hi.no/en/hi/nettrappporter/imr-pinro-en-2024-11</p>		
Links		
MarinTrust Standard clause	1.3.2.1.4	
FAO CCRF	7.2.1, 7.2.2 (e)	
GSSI	D6 01	

FURTHER IMPACTS

The three clauses in this section relate to impacts the fishery may have in other areas. A fishery must meet the minimum requirements of all three clauses before it can be recommended for approval.

F1	Impacts on ETP Species - Minimum Requirements		
	F1.1	Interactions with ETP species are recorded.	Yes
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	Yes
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	Yes
Clause outcome:			Pass
<p>F1.1 Interactions with ETP species are recorded. As per MRA 2008, sea bird and sea mammal catches must be recorded in logbook data and all catch has to be landed unless it can be released alive. All Norwegian vessels and foreign vessels fishing in Norwegian areas has to follow the discard ban and it is strictly enforced. The Norwegian Reference Fleet collects additional information on interactions with ETP species. The Norwegian Reference Fleet is a group of active fishing vessels, selected as an approximate stratified random sample of vessels from the Norwegian fishing fleet, and tasked with providing information about catches and general fishing activity to the Institute of Marine Research. Fisheries data is collected by the crew members themselves, an approach commonly known as self-sampling of catches. (Clegg & Williams, 2020).</p> <p>Interactions with ETP species are recorded. F.1.1 is met.</p> <p>F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species. There are no direct interactions of the gears used, purse seine and pelagic trawls with ETP species. The major interaction is due to prey-predator dynamics between the target and ETP species (MSC, 2023a, b).</p> <p>Decline in the seabird populations including black-legged kittiwakes, Atlantic puffins, and thick-billed murre, was reported by WGIBAR (2022). This is attributed to changes in the availability and abundance of prey. The collapse of the capelin stock in the 1980s is thought to have played a role in the decline of seabird populations, but the stocks have since recovered and have been at sustainable levels for years, thus the fishery might not have a great effect on the status of these seabirds.</p> <p>A variety of cetacean species, including minke whales, fin whales, humpback whales, and white-beaked dolphins are found in the Barents Sea. The WGIBAR (2022) report correlates the presence of cetaceans to capelin abundance: “The northern boundary of cetacean observations within the Barents Sea varies from year to year; this is probably due to the capelin abundance and capelin distribution”. Nevertheless, studies have shown that cetacean populations in the Barents Sea are generally stable or increasing.</p> <p>There is no substantial evidence that the fishery has a significant negative effect on ETP species. F.1.2 is met.</p> <p>F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality. Many measures to minimise the impact of fishing on ETP species is stipulated in MRA (2008), including Chapter 1 Section 7f which states that managers should ensure “that harvesting methods and the way gear is used take into account the need to reduce possible negative impacts on living marine resources”. Measures include creation of Marine Protected Areas - MPAs and the implementation of restrictions on gear types, fishing locations, and fishing seasons. At the same time, it is to be noted that the fishery is highly unlikely to interact with ETP species.</p> <p>The fishery is not known to interact much with ETP species, but measures are in place to minimise mortality. F.1.3 is met.</p> <p>References Clegg, T., & Williams, T. (2020). Monitoring bycatch in Norwegian fisheries: Species registered by the Norwegian Reference Fleet 2015-2018. https://www.hi.no/templates/reporteditor/report-pdf?id=31549&63955120</p> <p>MRA (2008). Marine Resources Act, English translation. https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act</p> <p>MSC (2023a). 3rd Surveillance Norway North sea herring. Marine Stewardship Council fisheries assessments. https://fisheries.msc.org/en/fisheries/norway-north-sea-herring/@assessments</p>			

MSC (2023b). Public Comment Draft Report (PCDR) Norway sandeel and north sea sprat fisheries. Marine Stewardship Council fisheries assessments. <https://fisheries.msc.org/en/fisheries/norway-sandeel-pout-and-north-sea-sprat/@assessments>

WGIBAR (2022). working group on the integrated assessments of the Barents sea. Volume 4 | issue 50. https://ices-library.figshare.com/articles/report/Working_Group_on_the_Integrated_Assessments_of_the_Barents_Sea_WGIBAR_/20051438

Links

MarinTrust Standard clause	1.3.3.1
FAO CCRF	7.2.2 (d)
GSSI	D4.04, D.3.08

F2 Impacts on Habitats - Minimum Requirements		
F2.1	Potential habitat interactions are considered in the management decision-making process.	Yes
F2.2	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.	Yes
F2.3	If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.	Yes
Clause outcome:		Pass
<p>There have been no substantial changes to those aspects of fishery management relevant to Section F1 since the time of the 2021 MT assessment. A summary of the conclusions of that surveillance assessment are provided in 2022 and 2023 MT assessment and it is written below for convenience; please refer to the full 2021 report for more details.</p> <p>F2.1 Potential habitat interactions are considered in the management decision-making process. The MRA (2008) states that importance should be attached to implementing “an ecosystem approach that takes into account habitats and biodiversity”. Thus it is clear that the Norwegian fishery management process does consider potential habitat interactions. Nevertheless the interaction of Capelin fishery with seabed habitat is almost nil. In addition, the impacts of human activities are considered in the ICES stock annex for Capelin (ICES 2015).</p> <p>Potential habitat interactions are considered in the management decision-making process. F.2.1 is met.</p> <p>F2.2 There is no substantial evidence that the fishery has a significant negative impact on physical habitats. The gears used, purse seine and pelagic trawls do not interact with the physical habitat and are considered not to have any significant negative impacts. These gears might get damaged by contact with the seabed and the fishers tend to avoid it as much as possible. MSC certified fisheries (MSC 2023a, b MSC 2022) have reported very low to zero impact on physical habitats while using pelagic trawl and purse seine gears in Norway and Iceland capelin fishery. The previous MT reports too have reported that there is no evidence that the Norwegian capelin fishery has a significant negative impact on physical habitats.</p> <p>There is no substantial evidence that the fishery has a significant negative impact on physical habitats. F.2.2 is met.</p> <p>F2.3 If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts. As the fishery does not interact with physical habitats to any significant degree, measures to mitigate potential impacts are not required. However, some management measures are cited in 2021 MT assessment.</p> <p>The fishery is known to interact with physical habitats. F.2.3 is met.</p> <p>References ICES (2015). Stock Annex: Capelin (<i>Mallotus villosus</i>) in subareas 1 and 2 (Northeast Arctic), excluding Division 2.a west of 5°W (Barents Sea capelin). https://doi.org/10.17895/ices.pub.18622163 MRA (2008). Marine Resources Act, English translation. https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act MSC (2023a). 3rd Surveillance Norway North sea herring. Marine Stewardship Council fisheries assessments. https://fisheries.msc.org/en/fisheries/norway-north-sea-herring/@assessments MSC (2023b). Public Comment Draft Report (PCDR) Norway sandeel and north sea sprat fisheries. Marine Stewardship Council fisheries assessments. https://fisheries.msc.org/en/fisheries/norway-sandeel-pout-and-north-sea-sprat/@assessments MSC (2022). Public Certification Report. ISF Iceland capelin. Marine Stewardship Council fisheries assessments. https://fisheries.msc.org/en/fisheries/isf-iceland-capelin/@assessments</p>		
Links		
MarinTrust Standard clause	1.3.3.2	
FAO CCRF	6.8	
GSSI	D.2.07, D.6.07, D3.09	

Ecosystem Impacts - Minimum Requirements		
F3	F3.1	The broader ecosystem within which the fishery occurs is considered during the management decision-making process.
	F3.2	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.
	F3.3	If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.
		Clause outcome: Pass

F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.
 The MRA (2008) requires that Norwegian fisheries management be guided by the precautionary approach, in line with international treaties and guidelines, and by an ecosystem approach that takes into account habitats and biodiversity.

A range of measures are in place which act together to restrain the impacts of the UoAs on the ecosystem, including TACs, quotas, landings obligations and requirements for reporting and monitoring.

The broader ecosystem within which the fishery occurs is considered during the management decision-making process. F.3.1 is met.

F3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.
 A fishery impacts the natural food web and the fishery of capelin also creates such impacts. This is studied widely and is monitored.

Decline in the seabird populations including black-legged kittiwakes, Atlantic puffins, and thick-billed murre, was reported by WGIBAR (2022). This is attributed to changes in the availability and abundance of prey. The collapse of the capelin stock in the 1980s is thought to have played a role in the decline of seabird populations, but the stocks have since recovered and have been at sustainable levels for years, thus the fishery might not have a great effect on the status of these seabirds.

A variety of cetacean species, including minke whales, fin whales, humpback whales, and white-beaked dolphins are found in the Barents Sea. The WGIBAR (2022) report correlates the presence of cetaceans to capelin abundance: “The northern boundary of cetacean observations within the Barents Sea varies from year to year; this is probably due to the capelin abundance and capelin distribution”. Nevertheless, studies have shown that cetacean populations in the Barents Sea are generally stable or increasing

It is to be noted that even in cases where potential food web impacts have been identified, these impacts have multiple drivers, including climate change, which is a much larger perturbation to the system (WGBAR, 2022). As such, it is unlikely that the fishery will have a detectable impact on the overall ecosystem.

Pelagic trawling, one of the gears of this assessment is very selective, and tends to catch only one species at a time (ICES, 2021), producing low bycatches and discards. In addition, purse seine and pelagic trawl gears are generally considered not to have significant negative impacts on physical habitats.

There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem. F.3.2 is met.

F3.3 If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.

According to MSC (2022): “Capelin promotes an important energy transfer into the ecosystem and has a key role in the food chain between animal plankton and larger fish. Most groundfish species, feed on capelin at some stage in their life and it is estimated that capelin may be 40% of the total food of cod. Capelin is an important prey for other ETPs species such as whales, black legged kittiwake and Atlantic puffin. They are prey to several species of marine mammals and seabirds and are also important as food for several other commercial fish species (Vilhjálmsón, 2002; ICES, 2015; ICES 2020 Fisheries overview).”

The stock assessment models consider multispecies elements, such as predation by cod (ICES, 2023). Therefore, when ICES (and, in 2022, the JRN-AFWG) calculates a TAC recommendation which will lead to spawning biomass remaining above B_{lim} with a 95% probability, this includes an assumption that part of the capelin stock will be subject to natural mortality as a result of predation.

Also there is a comprehensive data collection on the fishery, including catch quantity, species composition, gear type, and spatiotemporal distribution of fishing operations. This allows the scientists to estimate ecosystem impacts.

One species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals. F.3.3 is met.

References

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ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2015/WKICE%202015/wkice_2015_final.pdf
 [This report includes a Stock Annex for IGJM capelin defining the stock assessment model in some detail and how the acoustic surveys are analysed, the stock annex also includes a description of the predation model used in projecting stock development]

MSC (2022). Public Certification Report. ISF Iceland capelin. Marine Stewardship Council fisheries assessments.
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Vilhjálmsón, H. 2002 January. Capelin (*Mallotus villosus*) in the Iceland–East Greenland–Jan Mayen ecosystem. ICES Journal of Marine Science: Journal du Conseil 59 (5), 870–8

Links

MarinTrust Standard clause	1.3.3.3
FAO CCRF	7.2.2 (d)
GSSI	D.2.09, D3.10, D.6.09

SOCIAL CRITERION

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.

Appendix A - Determining Resilience Ratings

The assessment of Category B species described in this assessment report template utilises a resilience rating system suggested by the American Fisheries Society. This approach was chosen because it is also used by FishBase, and so the resilience ratings for many thousands of species are freely available online. As described by FishBase, the following is the process used to arrive at the resilience ratings:

“The American Fisheries Society (AFS) has suggested values for several biological parameters that allow classification of a fish population or species into categories of high, medium, low and very low resilience or productivity (Musick 1999). If no reliable estimate of r_m (see below) is available, the assignment is to the lowest category for which any of the available parameters fits. For each of these categories, AFS has suggested thresholds for decline over the longer of 10 years or three generations. If an observed decline measured in biomass or numbers of mature individuals exceeds the indicated threshold value, the population or species is considered vulnerable to extinction unless explicitly shown otherwise. If one sex strongly limits the reproductive capacity of the species or population, then only the decline in the limiting sex should be considered. We decided to restrict the automatic assignment of resilience categories in the Key Facts page to values of K , t_m and t_{max} and those records of fecundity estimates that referred to minimum number of eggs or pups per female per year, assuming that these were equivalent to average fecundity at first maturity (Musick 1999). Note that many small fishes may spawn several times per year (we exclude these for the time being) and large live bearers such as the coelacanth may have gestation periods of more than one year (we corrected fecundity estimates for those cases reported in the literature). Also, we excluded resilience estimates based on r_m (see below) as we are not yet confident with the reliability of the current method for estimating r_m . If users have independent r_m or fecundity estimates, they can refer to Table 1 for using this information.”

Parameter	High	Medium	Low	Very low
Threshold	0.99	0.95	0.85	0.70
r_{max} (1/year)	> 0.5	0.16 - 0.50	0.05 - 0.15	< 0.05
K (1/year)	> 0.3	0.16 - 0.30	0.05 - 0.15	< 0.05
Fecundity (1/year)	> 10,000	100 - 1000	10 - 100	< 10
t_m (years)	< 1	2 - 4	5 - 10	> 10
t_{max} (years)	1 - 3	4 - 10	11 - 30	> 30

[Taken from the FishBase manual, “Estimation of Life-History Key Facts”, <http://www.fishbase.us/manual/English/key%20facts.htm#resilience>]

Glossary

Non-target: Species for which the gear is not specifically set, although they may have immediate commercial value and be a desirable component of the catch. OECD (1996), Synthesis report for the study on the economic aspects of the management of marine living resources. AGR/FI(96)12

Target: In the context of fishery certification, the target catch is the catch of stock under consideration by the unit of certification – i.e. the fish that are being assessed for certification and ecolabelling. (GSSI)



Fishery Assessment Peer Review Report

Document TEM-013 – Version 1.1

Issued August 2024 – Effective August 2024

*Capelin (Mallotus vilosus) in ICES
Subareas 1 & 2, excluding Division 2a west of 5°W (Barents
Sea Capelin)*

Assessment and determination summary

Fishery name	Capelin (<i>Mallotus villosus</i>) in ICES Subareas 1 & 2, excluding Division 2a west of 5°W (Barents Sea Capelin)
MarinTrust report code	Surveillance 1
Type 1 species (common name, Latin name)	Capelin (<i>Mallotus villosus</i>)
Fishery location	ICES Subareas 1 and 2 (Northeast Arctic), excluding Division 2a west of 5°W
Gear type(s)	Pelagic trawl, purse seine
Management authority (country/state)	Norway; Russia
Certification Body recommendation	Approved
FAPRG reviewer recommendation	Agree with CB determination

Summary of peer review outcomes

Summary
<i>Provide any information about the fishery that the reviewers feel is significant to their decision. This summary is used by the Certification Body in the Fishery Assessment Report.</i>
The country of reference is missing on the Applicant details section. To avoid any doubt (since section M is specific to Norway alone), this could be added to confirm.
General comments on the draft report provided to the peer reviewer

Peer reviewers should review the fishery assessment report with the primary objective of answering the key questions listed in the table below. When the situation is more complicated, reviewers may answer “See Notes” instead.

1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	Yes
2. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	Yes
3. Are the scores in the following sections accurate (i.e. do the scores reflect the evidence provided)?	Yes
Section M - Management	Yes
Category A Species	Yes
Category B Species	n/a
Category C Species	n/a
Category D Species	n/a
Section E – Ecosystem Impacts	Yes

Detailed Peer Review Justification

Peer reviewers should provide support for their answers in the boxes provided, by referring to specific scoring issues and any relevant documentation as appropriate.

Detailed justifications are only required where answers given are one of the 'No' options. In other (Yes) cases, either confirm 'scoring agreed' or identify any places where weak rationales could be strengthened (without any implications for the scores).

Boxes may be extended if more space is required.

1. Is the scoring of the fishery consistent with the MarinTrust requirements, and clearly based on the evidence presented in the assessment report?	Yes
This is a surveillance report and assesses relevant clauses with the new scientific advice, management decisions in 2024 and advice for 2025. The scoring is consistent with MarinTrust requirements and clearly based on the evidence provided which is also the most recent available.	
Certification Body response	
Thank you.	

2. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	Yes
Report content confirms consistency with methodology and guidance. The external peer reviewer suggests that a clarification is made that the approval is specific to Norwegian catches of capelin. The scientific advice is per a Joint Working Group (Norwegian/Russian) but the report does not evaluate the Russian fishery management system.	
Certification Body response	
Clarification made.	

3. Does the species categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	Yes
Extract from assessment report: The capelin fishery is noted as being exclusively capelin (99.9%) with no other species recorded. Evidence of this is from the applicant and the assessor also refers to 'the catch composition in the Icelandic capelin fishery, which is MSC certified and uses equivalent fishing methods. The external peer reviewer recommends the inclusion of a reference to confirm this statement.	

The assessor notes that 'Alternative sources for catch composition in the Norwegian capelin fishery remain elusive'. In the 2022 re-assessment the assessor advised that the on-site assessor should ensure that landings are almost exclusively capelin. The 2023 MT re-approval report assessor states 'Alternative sources for catch composition in the Norwegian capelin fishery remain elusive, and the on-site assessor should ensure that landings are almost exclusively capelin. In this current surveillance 1 report being peer reviewed, the assessor states ' the present audit was offsite'. It is unclear here whether they are referring to the fishery assessment or factory audit being remote. Hence the suggestion from the peer reviewer that the assessor should be adding this as a prompt for the next factory auditor to follow this up at next audit.

Certification Body response

Reference added.

3a. Are the “Category A Species” scores clearly justified?	Yes
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Capelin is the sole Cat A species. Scores are clearly justified with reference to the scientific evaluation (Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG) and noting that the website is underdeveloped, and dysfunctional (<https://www.jointfish.com/index.php/eng/THE-FISHERIES-COMMISSION/WORKING-GROUPS.html>), however, the advice is published via IMR at <https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2024-11>

Certification Body response

3b. Are the “Category B Species” scores clearly justified?	n/a
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There were no Cat B species identified. Peer Reviewer agrees with the analysis.

Certification Body response

3c. Are the “Category C Species” scores clearly justified?	n/a
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There were no Cat C species identified. Peer Reviewer agrees with the analysis.

Certification Body response

3d. Are the “Category D Species” scores clearly justified?	Yes
There were no Cat D species identified. Peer Reviewer agrees with the analysis.	
Certification Body response	

Are the scores in “Section E – Ecosystem Impacts” clearly justified?	Yes
The assessor makes reference to the Norwegian reporting system for ETP's and to the 2022 Working Group Report WGIBAR (2022) on the integrated assessments of the Barents sea. Volume 4 issue 50. Population trends in bird and cetacean species are considered and capelin is managed to an escapement threshold which the assessment has determined not met, hence the catch advice for 2025 of zero. The gears do not interact with the physical habitat and the overall ecosystem interaction are considered. The scores in Section E are justified.	
Certification Body response	

Optional: General peer reviewer comments on the draft report	
Overall, concise and thorough report with most recent evidence cited. Three items noted:	
<ul style="list-style-type: none"> - Applicant country- propose that Norway is added - Species composition- is there a reference other than the client information to substantiate that capelin represents 99.9% of composition. - Leading from this, the factory auditor could be prompted to make further enquiries with applicants on composition of landings at the next on site or remote audit. 	
Certification Body response	
Noted, thank you.	