



## 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)

**MarinTrust Programme**

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**Table 1 Application details and summary of the assessment outcome**

Application details and summary of the assessment outcome			
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<b>Country:</b> Norway			
<b>Email address:</b>		<b>Applicant Code</b>	
Certification Body Details			
<b>Name of Certification Body:</b>		Global Trust Certification/NSF	
<b>Assessor Name</b>	<b>CB Peer Reviewer</b>	<b>Assessment Days</b>	<b>Initial/Surveillance/ Re-approval</b>
Ana Elisa Almeida Ayres	Matthew Jew	2	Re-approval
<b>Assessment Period</b>	November 2023 – November 2024		
Scope Details			
<b>Management Authority (Country/State)</b>		Norway; Russia	
<b>Main Species</b>		Capelin ( <i>Mallotus villosus</i> )	
<b>Fishery Location</b>		ICES Subareas 1 and 2 (Northeast Arctic), excluding Division 2a west of 5°W	
<b>Gear Type(s)</b>		Pelagic trawl, purse seine	
Outcome of Assessment			
<b>Overall Outcome</b>		Pass	
<b>Clauses Failed</b>		None	
<b>CB Peer Review Evaluation</b>		PASS	
<b>Fishery Assessment Peer Review Group Evaluation</b>		PASS	
<b>Recommendation</b>		APPROVED	

**Table 2. Assessment Determination**

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on 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 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>Norwegian fisheries management is underpinned by the Marine Resources Act of 6 June 2008 (no. 37), which 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. 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, but the stock biomass is currently estimated to be above the limit reference. 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 &amp; 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
<p><b>Minor findings:</b>            The opening table is missing the client email and application code.</p> <p>The CAB peer review comments box has not been filled out.</p> <p>Notes for onsite auditors should be clearly explained in the appropriate box on pg. 3, under the CAB Peer Review box. On page 6 regarding catch composition, it states "Alternative sources for catch composition in the</p>

Norwegian capelin fishery remain elusive, and the on-site assessor should ensure that landings are almost exclusively capelin.” This could have been copied to the box above to ensure it is not missed.

Was this recommendation made at the last audit? Is the system in place for monitoring recommendations year on year?

\*Please see Appendix B for full peer review comments.

**Notes for On-site Auditor**

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## 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

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category <sup>1</sup>	% of landings	Management	Category
Capelin	<i>Mallotus villosus</i>	Capelin ( <i>Mallotus villosus</i> ) in ICES Subareas 1 & 2, excluding Division 2a west of 5°W (Barents Sea Capelin)	LC	99.9	Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG)	A

**Species categorisation rationale**

As at the time of the 2021 and 2022 MarinTrust - MT assessments, it is considered that landings in 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, and the on-site assessor should ensure that landings are almost exclusively capelin.

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. For this reason, the capelin stock is managed, and was assessed under Category A.

<sup>1</sup> <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
<b>Clause outcome:</b>		Pass	

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 change is explained again in M1.2. All other clauses provide a summary of the conclusions of the 2021 MT assessment, which were provided by the 2022 assessment. Please refer to the 2021 assessment for more details.

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

The management of fisheries in Norwegian waters is the responsibility of the Directorate of Fisheries (DoF) within the Ministry of Trade, Industry and Fisheries (Regjeringen.no 2022). International management of the capelin resource is coordinated by Norway and Russia via the Joint Russian-Norwegian Fisheries Commission (JRNFC). 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 carries out a range of fishery-dependent and -independent data collection efforts, 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, in 2023 recommendations relied 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. M.1.2 is met.**

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

Norwegian fisheries management is underpinned by the Marine Resources Act of 6 June 2008 (no. 37), which has the stated purpose 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). 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. M.1.3 is met.**

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

As noted above, Norwegian fisheries management is underpinned by the Marine Resources Act of 6 June 2008 (no. 37). The MRA (2008) establishes the structure of the fisheries management system, along with an obligation to adhere to a sustainable, science-based management approach. Other important components of the legislation include a landing obligation and the empowerment of the Directorate of Fisheries to conduct vessel and catch inspections at sea and in port.

**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.**

Consultation occurs in Norwegian fisheries management through Advisory Meetings for Fisheries Regulations. 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.**

Decision-making organisations continue to publish reports covering the management process online. This 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](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.brage.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**

<b>MarinTrust Standard clause</b>	1.3.1.1, 1.3.1.2
<b>FAO CCRF</b>	7.2, 7.3.1, 7.4.4, 12.3
<b>GSSI</b>	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
<b>Clause outcome:</b>		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 MT assessment 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.**

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). The role of the DoF in fisheries control and enforcement is set out in the MRA, which 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.**

The MRA sets out the potential sanctions for breaches of fishery laws and regulations. These may 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). There are also examples available of these sanctions being applied.

According to the annual report of Norwegian Coast Guard, 1,030 inspections at sea were carried out in 2022 (Kystvaktens årsrapport, 2022). The Figure 1 shows the number of inspections by area and the number of reactions from 2018 – 2022 in Norway and Figure 2 shows the activities by control type.

Total number of inspections and reactions, divided by area in 2022								
Area	No remarks	Warning	Police report	Arrest	Infringements	Other reactions	Number of inspections	Number of reactions
NOSE N65	377	50	16	3	0	0	446	69
NOSE S65	296	15	17	7	0	1	336	40
The fishing protection zone	156	24	3	2	0	1	186	30
Svalbard	12	1	1	0	0	0	14	2
Jan Mayen	0	0	0	0	0	0	0	0
Skagerrak	21	1	4	0	0	0	26	5
NEAFC	22	0	0	0	0	0	22	0
<b>2022</b>	<b>884</b>	<b>91</b>	<b>41</b>	<b>12</b>	<b>0</b>	<b>2</b>	<b>1030</b>	<b>146</b>
2021	955	81	45	4	0	2	1087	132
2020	955	136	49	11	2	2	1155	200
2019	897	189	48	8	0	1	1138	241
2018	1114	258	50	7	0	4	1423	309

**Figure 1. Number of inspections by area in Norway and the number of reactions from 2018 – 2022 [Translated from Kystvaktens årsrapport (2022)].**

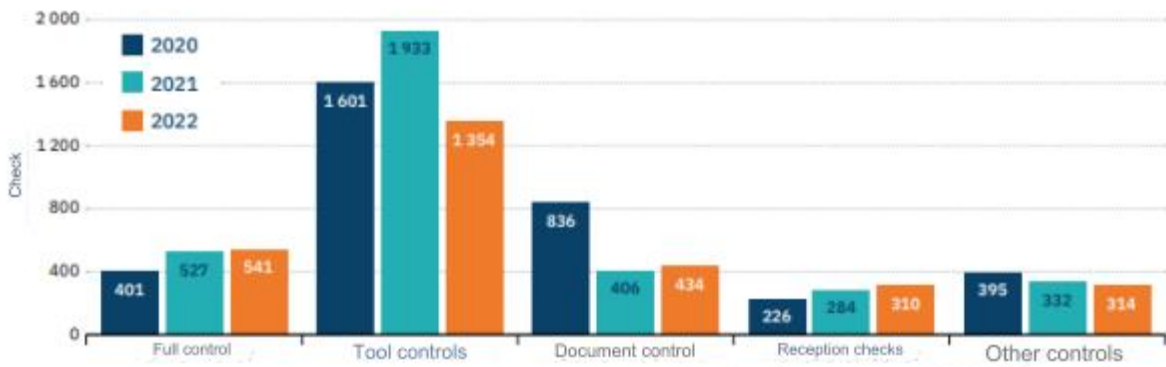


Figure 15: All controls 2020-2022. The category "other controls" includes catch control, control of tracking equipment, stock control, lock installation control, turnover control and weight control.

Figure 2. 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.

As at the time of the 2022 MT surveillance assessment, no evidence was encountered to indicate widespread non-compliance in the capelin fishery, or in Norwegian fisheries in general.

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. A summary of fishery inspections on Norwegian waters from 2018-2019 is shown in Figure 3.

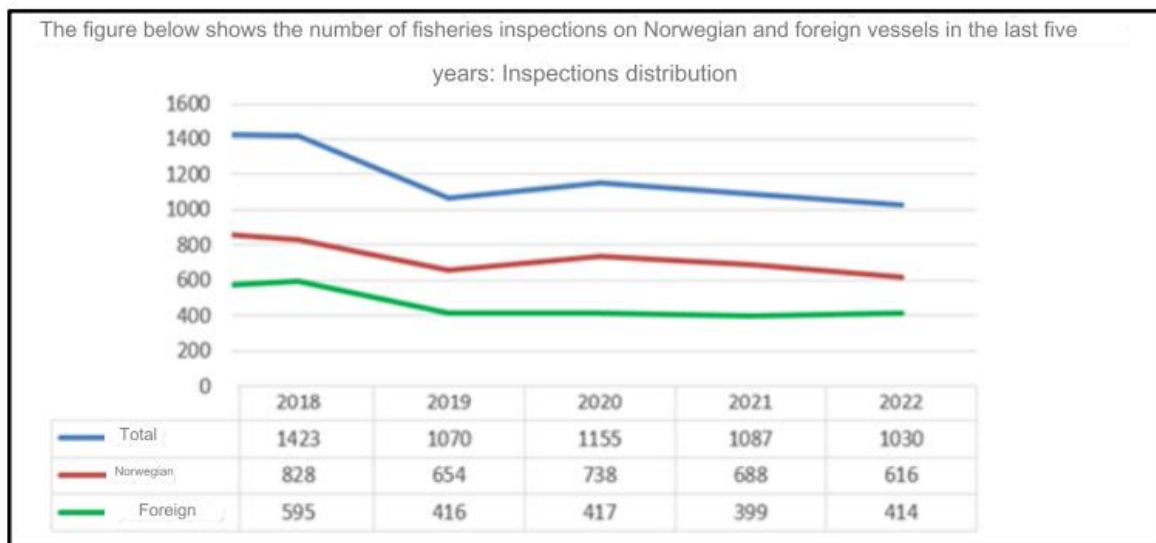


Figure 3. Fishery inspections at Norwegian and Non-Norwegian vessels 2018-2022 [Translated from Kystvaktens årsrapport (2022)]

Remarkably, Norway took a pioneering step in combatting IUU fishing by creating the first-ever IUU vessel list. In 1994, Norway introduced a blacklist that identified vessels involved in IUU activities in northeast Atlantic waters, subsequently prohibiting these vessels from engaging in fishing activities within Norwegian waters (Sherloc, 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.”

Additionally, Norway tends to perform well in independent assessments of IUU risk rating, such as the IUU Fishing Index (IUUFI 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 is monitored through a combination of at-sea and portside inspections, observer programmes, and VMS. Inspection activities are focussed through the use of a risk assessment conducted by the DoF to identify high-risk areas and activities. 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**

IUUFI (2021). Country profile, Norway. <https://iuufishingindex.net/profile/norway>

Kystvaktens årsrapport (2022). [https://www.forsvaret.no/om-forsvaret/organisasjon/sjoforsvaret/kystvakten/om-kv/KV-aarsrapport-2021.pdf-copy/\\_/attachment/inline/2e100afd-0b07-4179-b4d3-7f67188fe75e:f3cd51e273ba1e0848a1630cc4c7488652d8194c/%C3%85rsrapport\\_Kystvakten\\_2022\\_PDF.pdf](https://www.forsvaret.no/om-forsvaret/organisasjon/sjoforsvaret/kystvakten/om-kv/KV-aarsrapport-2021.pdf-copy/_/attachment/inline/2e100afd-0b07-4179-b4d3-7f67188fe75e:f3cd51e273ba1e0848a1630cc4c7488652d8194c/%C3%85rsrapport_Kystvakten_2022_PDF.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](https://sherloc.unodc.org/cld/uploads/res//treaties/strategies/norway/nor0001s_html/Norway.pdf)

**Links**

<b>MarinTrust Standard clause</b>	1.3.1.3
<b>FAO CCRF</b>	7.7.2
<b>GSSI</b>	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.**

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

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

Catches continue to be recorded and collated, including bycatch of capelin in other fisheries. Norway implements a landing obligation and so all catch is landed, therefore discards are negligible in the Norwegian fleet, and capelin bycatch is relatively easy to monitor. Catches and bycatch are utilised in the assessment process, and are usually collated by the ICES Arctic Fisheries Working Group (AFWG). In March 2022, Russian scientists were temporarily suspended from ICES and so the collection was conducted by the newly-convened Joint Russian-Norwegian Working Group on Arctic Fisheries since then (JRN-AFWG 2023). [Figure 4].

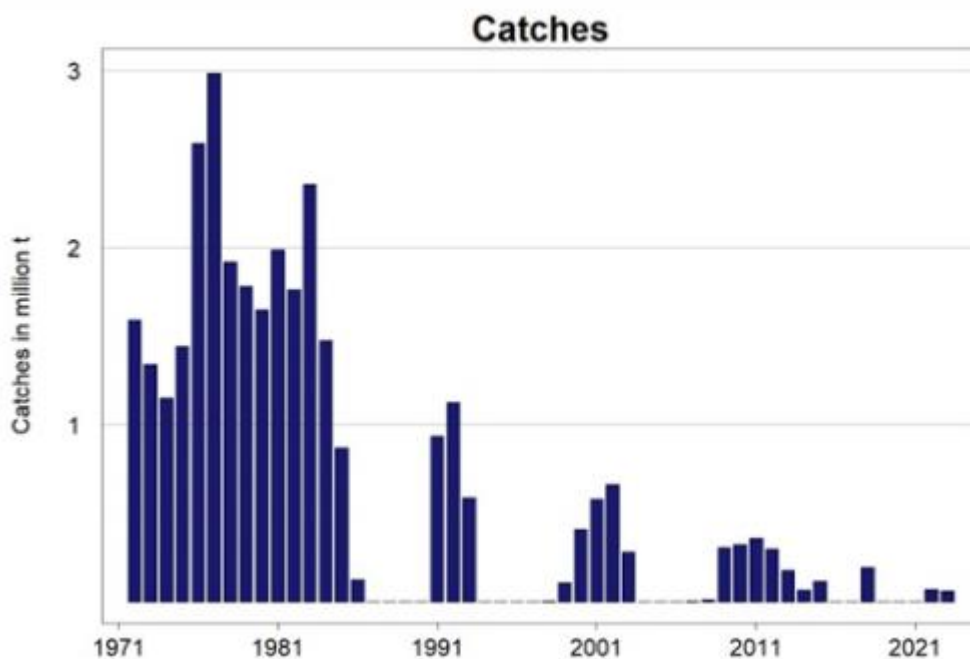


Figure 4. Catches of Barents Sea Capelin from 1971 – 2022 (JRN-AFWG 2023).

**Landings data are collected such that the fishery-wide removals of this species are known. A.1.1 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 set up to develop benchmark assessments for the Barents Sea capelin and a modification of the existing model approach, which includes multispecies elements (predation by

cod), was generally endorsed. 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).”

Additional fishery-dependent and -independent information is collected and utilised in the annual stock assessment. The 2023 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 prespawning capelin based on information on cod distribution, abundance and stomach content data (JRN-AFWG 2023).

The capelin acoustic survey was conducted in 2023 and covered most of the area, although the capelin distribution might have continued a little bit further northwards in the north-east (Figure 5) [JRN-AFWG 2023].

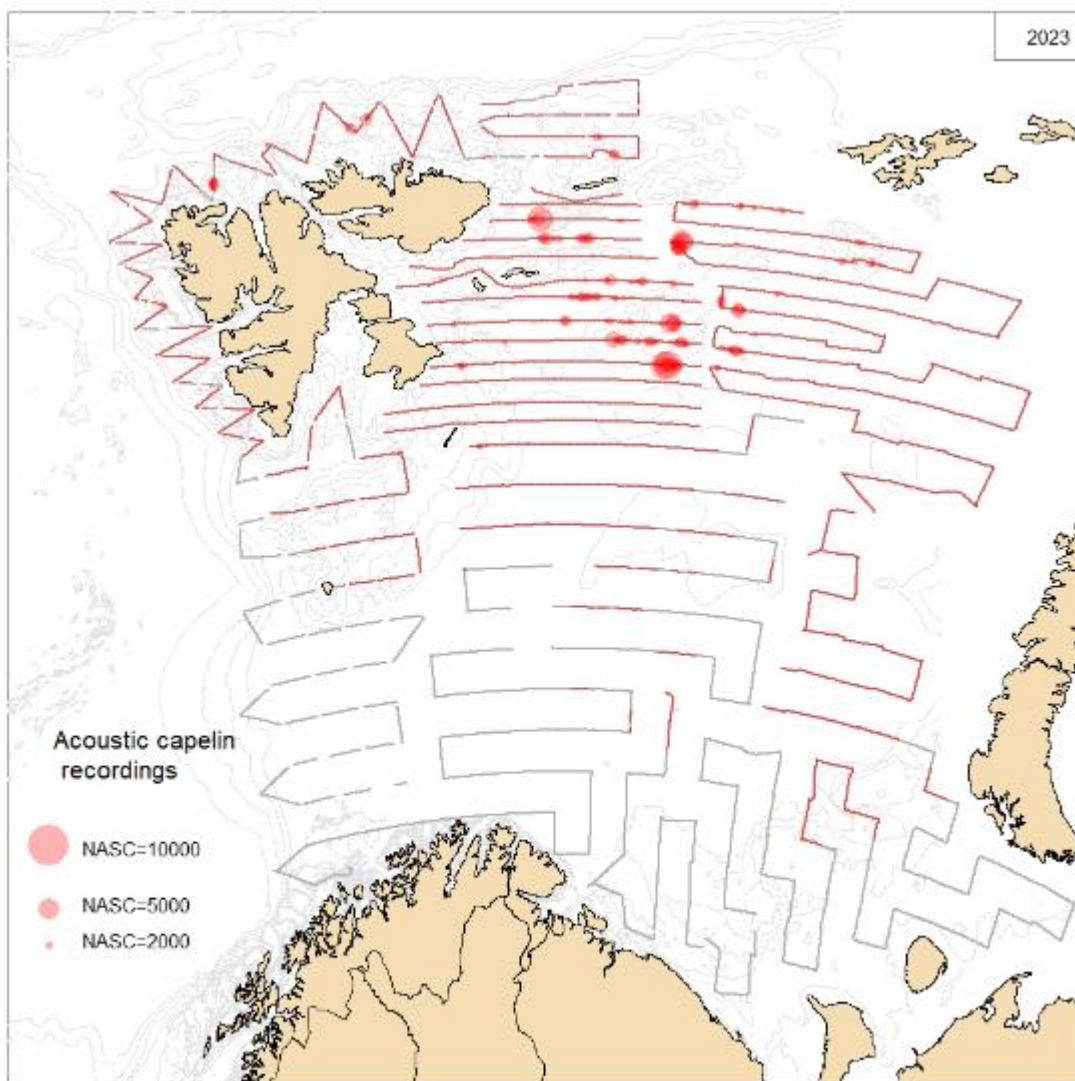


Figure 3. Survey coverage and geographical distribution of acoustic recordings of capelin in autumn 2023. The size of the circles corresponds to nautical acoustic scattering coefficient (NASC;  $m^2/nmi^2$ ) per 1 nautical mile. Gray dots mark transects or transect sections without capelin recordings.

Figure 5. Source (JRN-AFWG 2023).

Sufficient additional information is collected to enable an indication of stock status to be estimated. A.1.2 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 (2023). Advice on fishing opportunities for Barents Sea capelin in 2024. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). <https://www.hi.no/hi/nettrapper/imr-pinro-en-2023-8>

#### Links

<b>MarinTrust Standard clause</b>	1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
<b>FAO CCRF</b>	7.3.1, 12.3
<b>GSSI</b>	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
<b>Clause outcome:</b>			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.**

Stock assessments are usually conducted annually by ICES. As noted in section M1, Russian scientists have been temporarily suspended from ICES, and in the 2022 stock assessment and management advice was provided by the newly-convened JRN-AFWG independent of ICES and considered all fishery removals and the biological characteristics of the species. The JRN-AFWG assessment and advice followed the methodology and benchmarks established by ICES, providing continuity in the advice provision (JRN-AFWG 2023). 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 6). The JRN-AFWG (2023) advice states clearly that “spawning-stock size is above Blim”. Blim is the only reference point established for Barents Sea capelin, and is set at 200,000t. The 2023 JRN-AFWG advice estimates that, with no fishing pressure, spawning biomass - SSB would be 785,000t on April 2024; under the recommended fishery removals of 196,000 t, SSB on that date was projected to be 590,000t. No reference points relating to fishing pressure have been established for the stock.

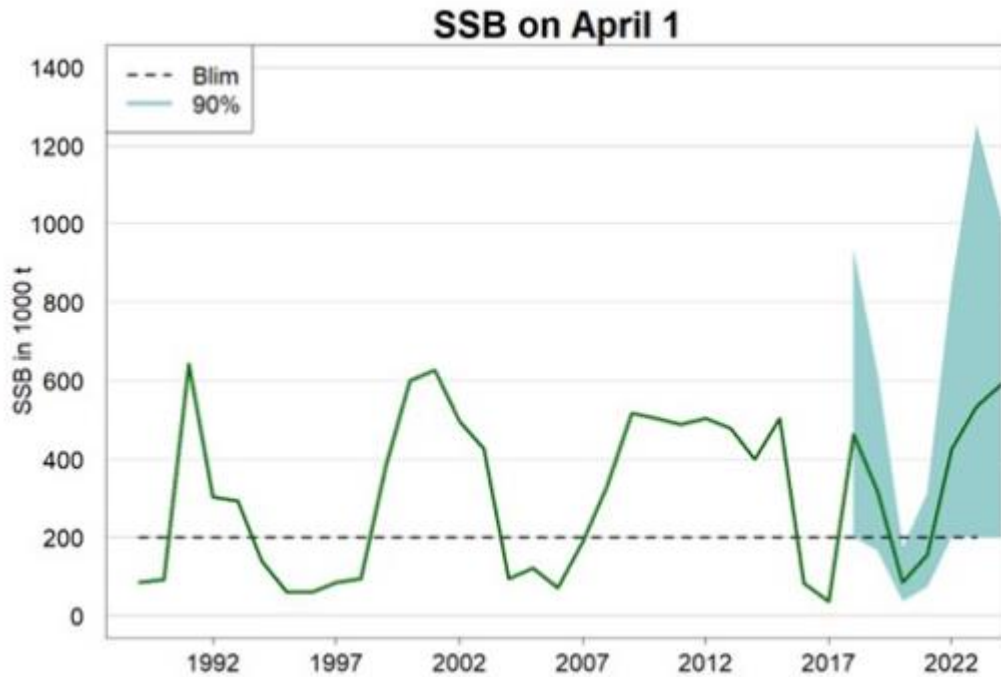


Figure 6. Barents Sea capelin, spawning stock biomass - SSB relative to current Blim, 1989 – 2023. Green area indicates 95% confidence limits. SSB estimates prior to 1989 used a different model and are not shown. Confidence limits only available for years since 2018 (JRN-AFWG 2023).

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

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

Catch advice is based on the JRNFC management plan, which aims to ensure 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 (2023): “Spawning-stock size is above Blim . No reference points for fishing pressure have been defined for this stock.”.

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

**A.2.4 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 by external peer review and approved (ICES, 2023).

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

**A.2.5 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 2023). 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 (2023). Advice on fishing opportunities for Barents Sea capelin in 2024. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). <https://www.hi.no/hi/nettrapper/imr-pinro-en-2023-8>

**Links**

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

A3	Harvest Strategy – Minimum Requirements	
	<b>A3.1</b> There is a mechanism in place by which total fishing mortality of this species is restricted.	Yes
	<b>A3.2</b> 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
	<b>A3.3</b> 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 (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. 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.**

With the exception of 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), and so as noted in the 2021 MT surveillance, total fishery removals of capelin did not regularly exceed the scientific advice at that time (Figure 7).

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. 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). This includes setting the capelin TAC at 196,000t, in line with the JRN-AFWG recommendation.



Year	ICES advice	Catch corresponding to advice	Agreed TAC	ICES catch
2012	5% probability of SSB < 200 000 t	320000	320000	296000
2013	5% probability of SSB < 200 000 t	200000	200000	177000
2014	5% probability of SSB < 200 000 t	65000	65000	66000
2015	5% probability of SSB < 200 000 t	6000	120000	115000
2016	Zero catch	0	0	0
2017	Zero catch	0	0	0
2018	5% probability of SSB < 200 000 t	205000	205000	194520
2019	Zero catch	0	0 **	53*
2020	Management plan	0	0**	31*
2021	Management plan	0	0**	10*
2022	Management plan	≤ 70000	70000	65246***
2023	Management plan ***	≤ 62000***	62000	60692***
2024	Management plan ***	≤ 196000***		

**Figure 7. Barents Sea Capelin, ICES advice, agreed TAC, and catch, since 2012. All weights in tonnes. \*Research catch and bycatches in other fisheries. \*\*Up to 500t was allowed for research survey catches. \*\*\*As noted in section M1, the 2022 and 2023 stock assessment and advice was provided by the JRN-AFWG; all other assessments and advice provided by ICES (JRN-AFWG 2023).**

**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).**

Catch advice for the fishery is provided by ICES (and, in 2022 and 2023, by the JRN-AFWG) on the basis of the JNRF management plan. This management plan includes a harvest control rule that catches must lead to a 95% probability that SSB is above Blim (i.e. 200,000t) on April 1<sup>st</sup> 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, most recently from 2019 – 2022 (for example, ICES 2020). As in other years, the TAC was set in line with the advice and the commercial fishery was closed. As the management plan remains in place and 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.com/norway-and-russia-strike-2024-fisheries-agreement/#google\\_vignette](https://fiskerforum.com/norway-and-russia-strike-2024-fisheries-agreement/#google_vignette)

ICES (2020). Capelin ( <i>Mallotus villosus</i> ) 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, <a href="https://doi.org/10.17895/ices.advice.5889">https://doi.org/10.17895/ices.advice.5889</a>	
JRN-AFWG (2023). Advice on fishing opportunities for Barents Sea capelin in 2024. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). <a href="https://www.hi.no/hi/nettrappporter/imr-pinro-en-2023-8">https://www.hi.no/hi/nettrappporter/imr-pinro-en-2023-8</a>	
<i>Standard clause 1.3.2.1.3</i>	
<b>Links</b>	
<b>MarinTrust Standard clause</b>	1.3.2.1.3, 1.3.2.1.4
<b>FAO CCRF</b>	7.2.1, 7.22, 7.5.3
<b>GSSI</b>	D3.04, D6.01

<b>A4</b>	<b>Stock Stat-s - Minimum Requirements</b>	
	<b>A4.1</b>	The stock is at or above the target reference point, OR IF NOT:  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:  The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.
		<b>Clause outcome:</b> Pass
<p><b>A4.1 The stock is at or above the target reference point, OR IF NOT:</b></p> <p><b>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:</b></p> <p><b>The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.</b></p> <p>There is no target reference point established for this stock, and therefore it is not possible for Barents Sea capelin to meet the first statement of A4.1.</p> <p>As noted in the 2023 JRN-AFWG catch advice report, the stock biomass is currently estimated to be above the limit reference point, Blim (JRN-AFWG 2023). Additionally, in previous years when stock biomass has fallen below Blim, the fishery has been closed to commercial landings. This is built into the harvest control rule set out in the JRNFC management plan, representing strong evidence that such a closure would occur again in the future should biomass fall below the limit reference point.</p> <p><b>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. A.4.1 is met.</b></p>		
<b>References</b>		
JRN-AFWG (2023). Advice on fishing opportunities for Barents Sea capelin in 2024. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). <a href="https://www.hi.no/hi/nettrappporter/imr-pinro-en-2023-8">https://www.hi.no/hi/nettrappporter/imr-pinro-en-2023-8</a>		
<b>Links</b>		
<b>MarinTrust Standard clause</b>	1.3.2.1.4	
<b>FAO CCRF</b>	7.2.1, 7.2.2 (e)	
<b>GSSI</b>	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.

<b>F1</b>	<b>Impacts on ETP Species - Minimum Requirements</b>		
	<b>F1.1</b>	Interactions with ETP species are recorded.	Yes
	<b>F1.2</b>	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	Yes
	<b>F1.3</b>	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	Yes
			<b>Clause outcome:</b> Pass
<p><b>F1.1 Interactions with ETP species are recorded.</b></p> <p>Sea mammal and seabird bycatch must be recorded in logbook data, and all catch must be landed unless it can be released alive (MRA 2008). There is rigorously enforced discard ban on all Norwegian vessels regardless of the area jurisdiction and on all foreign vessels fishing within Norwegian waters. Additional information on interactions with ETP species is collected by the Norwegian Reference Fleet, a group of active fishing vessels selected to be indicative of Norwegian vessels in general. Data from the reference fleet is made publicly available (Clegg &amp; Williams, 2020).</p> <p><b>Interactions with ETP species are recorded. F.1.1 is met.</b></p>			
<p><b>F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species.</b></p> <p>Purse seine and pelagic trawl fisheries in Norway do not usually have direct interaction with ETP species (MSC, 2023a, b). The interactions are usually related to competition by prey between the target and ETP species.</p> <p>The WGIBAR (2022) reports that several seabird populations in the Barents Sea have declined in recent decades, including black-legged kittiwakes, Atlantic puffins, and thick-billed murres, mostly likely due 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>The Barents Sea is home to a variety of cetacean species, including minke whales, fin whales, humpback whales, and white-beaked dolphins. WGIBAR (2022) also relates 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 and capelin has been in a health status.</p> <p><b>There is no substantial evidence that the fishery has a significant negative effect on ETP species. F.1.2 is met.</b></p>			
<p><b>F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality.</b></p> <p>The MRA (2008) includes a number of requirements relating to the minimisation of impacts on ETP species, 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”. The MRA also allows the creation of Marine Protected Areas - MPAs and the implementation of restrictions on gear types, fishing locations, and fishing seasons. Nevertheless, the fishery is highly unlikely to interact with ETP species.</p> <p><b>The fishery is not known to interact much with ETP species, but measures are in place to minimise mortality. F.1.3 is met.</b></p>			
<b>References</b>			

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>

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>

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](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

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 MT assessment and it is written below for convenience; please refer to the full 2021 report for more details.

**F2.1 Potential habitat interactions are considered in the management decision-making process.**

Although the capelin fishery is unlikely to interact with seabed habitats, in general terms the Norwegian fishery management process does consider potential habitat interactions. The MRA (2008) states that importance should be attached to implementing “an ecosystem approach that takes into account habitats and biodiversity”. Additionally, impacts of human activities are considered in the ICES stock annex for capelin (ICES 2015).

**Potential habitat interactions are considered in the management decision-making process. F.2.1 is met.**

**F2.2 There is no substantial evidence that the fishery has a significant negative impact on physical habitats.**

Purse seine and pelagic trawl gears are generally considered not to have significant negative impacts on physical habitats; they are damaged by contact with the seabed and fishers will avoid this wherever possible. Low to zero impact in physical habitats were identified by other fisheries using pelagic trawl and purse seine gears in Norway and Iceland capelin fishery (MSC 2023a, b MSC 2022). As at the time of the previous MT report, there is no evidence to suggest that the Norwegian capelin fishery differs in this regard and therefore it is considered very unlikely that this fishery has a significant negative impact on physical habitats.

**There is no substantial evidence that the fishery has a significant negative impact on physical habitats. F.2.2 is met.**

**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.

**The fishery is known to interact with physical habitats. F.2.3 is met.**

**References**

ICES (2015). Stock Annex: Capelin (*Mallotus villosus*) 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>

**Links**

<b>MarinTrust Standard clause</b>	1.3.3.2
<b>FAO CCRF</b>	6.8
<b>GSSI</b>	D.2.07, D.6.07, D3.09

<b>F3</b>	<b>Ecosystem Impacts - Minimum Requirements</b>		
	<b>F3.1</b>	The broader ecosystem within which the fishery occurs is considered during the management decision-making process.	Yes
	<b>F3.2</b>	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.	Yes
	<b>F3.3</b>	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.	Yes
			<b>Clause outcome:</b> 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.

There is a large range of measures in place which together act to restrain the impacts of the UoAs on the ecosystem. These include 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.**

The WGIBAR (2022) reports that several seabird populations in the Barents Sea have declined in recent decades, including black-legged kittiwakes, Atlantic puffins, and thick-billed murres, mostly likely due 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.

The Barents Sea is home to a variety of cetacean species, including minke whales, fin whales, humpback whales, and white-beaked dolphins. WGIBAR (2022) also relates 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 and capelin has been in a health status.

Even in cases where potential food web impacts have been identified, it is important to note that 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 models used in the stock assessment includes multispecies elements, such as predation by cod (ICES, 2023). This means that when ICES (and, in 2022, the JRN-AFWG) calculates a TAC recommendation which will lead to spawning biomass remaining above

Blim 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.

By collecting comprehensive data on the fishery, such as catch quantity, species composition, gear type, and spatiotemporal distribution of fishing operations, scientists can identify any 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**

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

ICES. 2021. Barents Sea ecosystem – Fisheries overview. In Report of the ICES Advisory Committee, 2021. ICES Advice 2021, section 5.2. <https://doi.org/10.17895/ices.advice.9166ferences>

ICES. 2020. Fisheries Overviews Icelandic Waters ecoregion Published 30 November 2020 ICES Advice 2020 – <https://doi.org/10.17895/ices.advice.7602>

ICES. 2015. Report of the Benchmark Workshop on Icelandic Stocks (WKICE), 26– 30 January 2015, Copenhagen, Denmark. ICES CM 2015/ACOM:31. 325 pp. [http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2015/WKICE%202015/wkice\\_2015\\_final.pdf](http://www.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. <https://fisheries.msc.org/en/fisheries/isf-iceland-capelin/@@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](https://ices-library.figshare.com/articles/report/Working_Group_on_the_Integrated_Assessments_of_the_Barents_Sea_WGIBAR_/20051438)

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**

<b>MarinTrust Standard clause</b>	1.3.3.3
<b>FAO CCRF</b>	7.2.2 (d)
<b>GSSI</b>	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)

## Appendix B - MarinTrust Fishery Assessment Peer Review Template

This section comprises a summary of the fishery being assessed against version 2 of the MarinTrust Standard.

<b>Fishery under assessment</b>	<i>WF18 Capelin in ICES Subareas 1 &amp; 2, excluding Division 2a west of 5°W</i>
<b>Management authority (Country/State)</b>	Norway & Russia
<b>Main species</b>	Capelin ( <i>Mallotus villosus</i> )
<b>Fishery location</b>	ICES 1 and 2, excluding division 2a west of 5°W
<b>Gear type(s)</b>	Pelagic trawl and purse seine
<b>Overall recommendation. (Approve/ Fail)</b>	PASS

**Summary: in this section, provide any additional information about the fishery that the reviewers feel is significant to their decision.**

The report is well-written and follows the MT guidance. A few recommendations are made to strengthen some scoring justifications.

**General Comments on the Draft Report provided to the peer reviewer**

Minor findings:

The opening table is missing the client email and application code.

The CAB peer review comments box has not been filled out.

Notes for onsite auditors should be clearly explained in the appropriate box on pg. 3, under the CAB Peer Review box. On page 6 regarding catch composition, it 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."

This could have been copied to the box above to ensure it is not missed.

Was this recommendation made at the last audit? Is the system in place for monitoring recommendations year on year?

## Summary of Peer Review Outcomes

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

	YES	NO	See Notes
<b>A – Fishery Assessment</b>			
1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	X		
2. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	X		
3. Are the scores in the following sections accurate (i.e. do the scores reflect the evidence provided)?	X		
Section M - Management	X		
Category A Species			X
Category B Species	N.A.		
Category C Species	N.A.		
Category D Species	N.A.		
Section F – Further Impacts	X		X

## 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 standard, and clearly based on the evidence presented in the assessment report?
The peer reviewer agrees with all the scoring which has been clearly evidenced throughout, there are some concerns regarding fleet-specific data on catch composition & ETP interactions. These are queried in the appropriate sections below.
Certification body response
ok

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?
All sections of the report have been completed with sufficient information and evidence to justify the scoring given.
Certification body response
ok

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?
The species categorisation looks accurate and based on the available evidence, the CAB should ensure that more up-to-date information is used at the next audit though.
Certification body response
ok

3M. Are the scores in “Section M – Management” clearly justified?	YES
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
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.	Partially
M2.3 There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.	Partially
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
<p>M2.2 – Says “There are also examples available of these sanctions being applied” – can you provide references to the information checked? Is it relevant to the fishery being assessed or general to Norway?</p> <p>This comment could also apply to M2.3 where it would be good to see what sources have been checked by the auditor to confirm non-compliance.</p>	
Certification body response	
<p>It is general for Norway as there is no specific information for this fishery. I have added these to complement M2.2:</p> <p>“According to the annual report of Norwegian Coast Guard, 1,030 inspections at sea were carried out in 2022 (Kystvaktens årsrapport, 2022). The figure 1 shows the number of inspections by area and the number of reactions from 2018 – 2022 in Norway and figure 2 shows the activities by control type.</p>	

Total number of inspections and reactions, divided by area in 2022								
Area	No remarks	Warning	Police report	Arrest	Infringements	Other reactions	Number of inspections	Number of reactions
NOSE N65	377	50	16	3	0	0	446	69
NOSE S65	296	15	17	7	0	1	336	40
The fishing protection zone	156	24	3	2	0	1	186	30
Svalbard	12	1	1	0	0	0	14	2
Jan Mayen	0	0	0	0	0	0	0	0
Skagerrak	21	1	4	0	0	0	26	5
NEAFC	22	0	0	0	0	0	22	0
<b>2022</b>	<b>884</b>	<b>91</b>	<b>41</b>	<b>12</b>	<b>0</b>	<b>2</b>	<b>1030</b>	<b>146</b>
2021	955	81	45	4	0	2	1087	132
2020	955	136	49	11	2	2	1155	200
2019	897	189	48	8	0	1	1138	241
2018	1114	258	50	7	0	4	1423	309

Figure 8. Number of inspections by area in Norway and the number of reactions from 2018 – 2022 (Translated from Kystvaktens årsrapport (2022)).

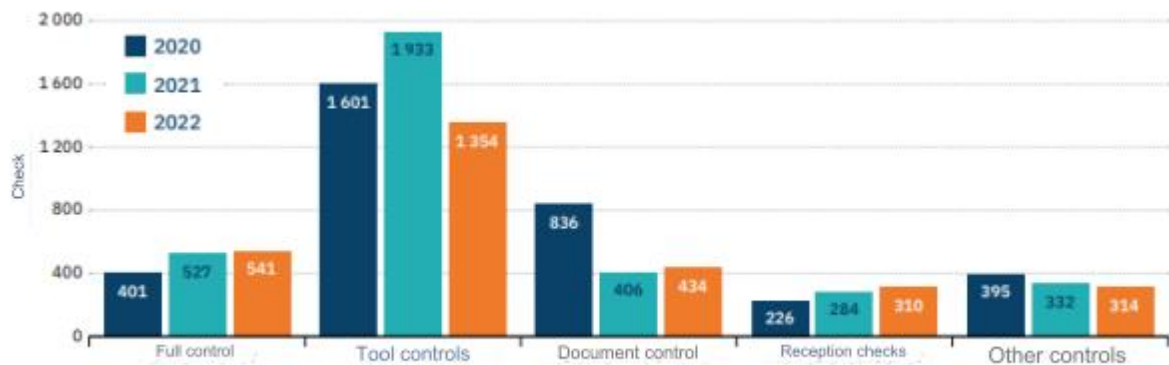
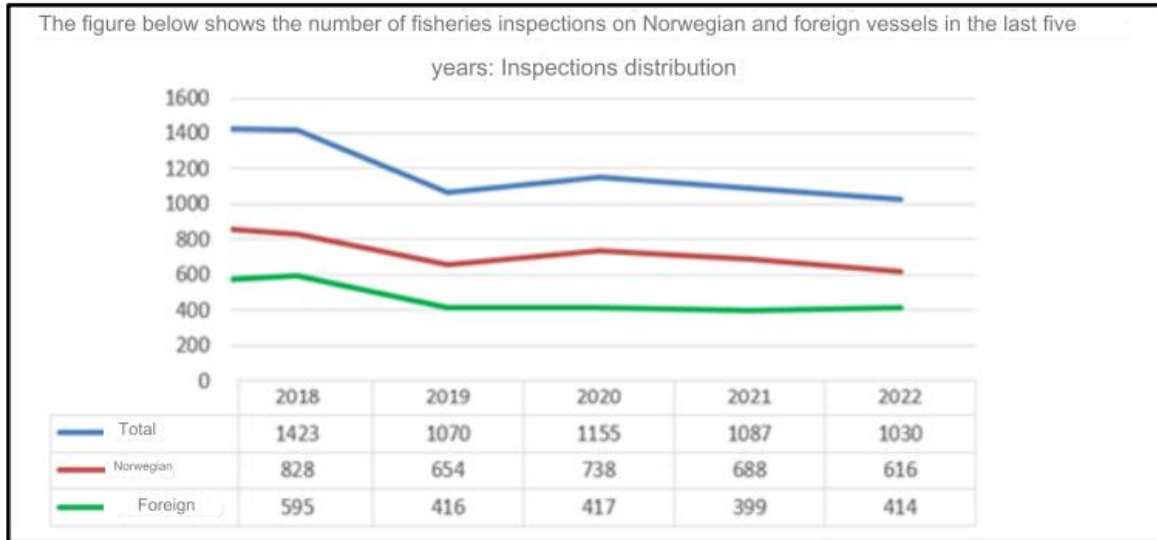


Figure 15: All controls 2020-2022. The category "other controls" includes catch control, control of tracking equipment, stock control, lock installation control, turnover control and weight control.

FIGURE 9. Activities of the Fishery Directorate by control type (Translated from MSC, 2023).

And this information was added to M.2.3:

“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. A summary of fishery inspections on Norwegian waters from 2018-2019 is shown in figure 3.



**Figure 10. Fishery inspections at Norwegian and Non-Norwegian vessels 2018-2022 [Translated from Kystvaktens årsrapport (2022)].**

Remarkably, Norway took a pioneering step in combatting IUU fishing by creating the first-ever IUU vessel list. In 1994, Norway introduced a blacklist that identified vessels involved in IUU activities in northeast Atlantic waters, subsequently prohibiting these vessels from engaging in fishing activities within Norwegian waters (Sherloc, 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.”

#### References

- Kystvaktens årsrapport (2022). [https://www.forsvaret.no/om-forsvaret/organisasjon/sjoforsvaret/kystvakten/om-kv/KV-aarsrapport-2021.pdf-copy/\\_attachment/inline/2e100afd-0b07-4179-b4d3-7f67188fe75e:f3cd51e273ba1e0848a1630cc4c7488652d8194c/%C3%85rsrapport\\_Kystvakten\\_2022\\_PDF.pdf](https://www.forsvaret.no/om-forsvaret/organisasjon/sjoforsvaret/kystvakten/om-kv/KV-aarsrapport-2021.pdf-copy/_attachment/inline/2e100afd-0b07-4179-b4d3-7f67188fe75e:f3cd51e273ba1e0848a1630cc4c7488652d8194c/%C3%85rsrapport_Kystvakten_2022_PDF.pdf)
- 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](https://sherloc.unodc.org/cld/uploads/res//treaties/strategies/norway/nor0001s_html/Norway.pdf)

3A. Are the “Category A Species” scores clearly justified? Partially.

A2.3 the clause wording is wrong, it just repeats A2.2, maybe check the template? It should be A2.3 The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.

A4.1 in what years did the stock fall below BLim?

Certification body response

Thanks, I have corrected the state for A.2.3 now.

The stock fell below Blim in a few years between 1993-1997, 2004-2007, 2015-2017 and 2020-2021 as shown in graph on A.2.2 section.

3B. Are the “Category B Species” scores clearly justified? N.A

Certification body response

3C. Are the “Category C Species” scores clearly justified? N.A

Certification body response

3D. Are the “Category D Species” scores clearly justified? N.A

Certification body response

3F. Are the scores in “Section F – Further Impacts” clearly justified? Partially

F1.1 I couldn’t find any fleet-specific information regarding interactions with ETP species in the WGIBAR report. The WGIBAR report has information on fluctuating stock size and general trends. If you could point to the relevant page when referencing, it’ll make Peer review easier.

Data relevant to the fleet under assessment is needed, the reference fleet could just be the ‘best actors’ from the Norwegian fleet-wide and not representative of the vessels under assessment here.

Certification body response

Sorry, you are right. WGIBAR does not report ETP interactions with the fishery, I removed the reference on F.1.1 Information provided by WGIBAR is more related to F.1.2. It was not provided information of the vessels for this fishery by the client, but there is an landing obligation to record all catches.

Optional: General comments on the Peer Review Draft Report

No further comments.

Certification body response

There has been a confusing regarding who would fill the “Fishery Assessment Peer Review Group Evaluation” and “Fishery Assessment Peer Review Comments”, whether is the internal or external peer reviewer. The client email, application code and vessel information were not provided for this assessment. I will see if I can get this information with MarinTrust.