MarinTrust Standard V2

Whole fish Fishery Assessment

Capelin in ICES Subareas 1 & 2, excluding Division 2a west of 5ᵒW (Barents Sea Capelin)

Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name(s): Pelagia AS; TripleNine Vedde AS; Prima Protein AS; Karsmund protein AS			
Country: Norway			
Email address: souhila.dif@pelagia.com		**Applicant Code:**	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor Name	**CB Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/ Re-approval**
Sam Peacock	Sam Dignan	2	Surveillance 1
Assessment Period	December 2022 – December 2023		
Scope Details			
Management Authority (Country/State)		Norway; EU; Russia	
Main Species		Capelin (*Mallotus villosus*)	
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		Approve See appendix	
Recommendation		Maintain Approval	

Table 2. Assessment Determination

Assessment Determination

Capelin has been assessed by the IUCN as a species of Least Concern. The available evidence indicates that the capelin fishery, conducted with pelagic trawls and purse seines, is extremely clean, with 99.99% of catch being capelin by some estimates. For this reason, capelin is the only species covered by this assessment.

Capelin in ICES Subareas 1 & 2 excluding Division 2a west of 5°W (Barents Sea capelin) is primarily fished by Norway and Russia. The fishery is regulated according to a management plan put in place in 2002 by the Joint Russian-Norwegian Fisheries Commission (JRNFC), and it was therefore assessed under Category A, as in previous MT assessments.

There have been few significant changes in most aspects of the fishery since the previous MT surveillance assessment, conducted in 2021. The main point of note is that, due to the temporary suspension of Russian scientists from ICES, the capelin stock assessment and catch advice was not provided by ICES in 2022. Instead, a 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. While the most up-to-date information for this fishery is therefore not provided by ICES, it is considered to remain scientifically valid and has been used to inform the relevant sections of this surveillance report.

A second point of change is that the annual capelin hydroacoustic survey did not include any areas within the Russian EEZ in 2022, where it normally would. The stock assessment makes heavy use of the survey results, and so the JRN-AFWG implemented a compensatory estimate to produce their catch recommendations. This compensation was similar to that adapted previously in years where sea ice prevented the survey vessel reaching the main capelin grounds.

Other than those listed above, there have been no significant changes in the management, control, and enforcement aspects of the fishery relevant to sections M1 and M2. Norwegian fisheries management continues to be generally robust and effective, and there is no evidence suggesting widespread IUU activity.

Under the Category A capelin assessment, the stock continues to be monitored effectively, with much the same information collected as previously, albeit analysed by the new JRN-AFWG instead of ICES as previously. The annual TAC continues to be set in line with the scientific advice, and catches remain in line with the TAC. SSB continues to recover and remains substantially above the limit reference point.

Finally, there is little new information relevant to the Further Impacts section of this assessment, and no evidence of any significant changes since the previous surveillance. Impacts of the fishery on ETP species are considered minimal, and the gears used are very unlikely to affect seabed habitats. Capelin is known to be an important prey species in the Barents Sea, and this fact is incorporated into the quota-setting calculation by estimating the likely level of predation of capelin in the coming year.

Overall, the Barents Sea capelin fishery continues to meet the MarinTrust requirements and should remain approved for use as a source of raw material for MT-Certified marine ingredients.

Fishery Assessment Peer Review Comments

The Assessor has done a very good job of capturing and understanding recent changes to the fishery arising from Russia-related issues. As described, the outputs from the new JRN-AWFG continued to adhere to established ICES methodologies, benchmarks, and HCRs such that the change does not materially impact the overall compliance of the fishery with MarinTrust requirements. The JRN-AWFG has (cleverly) adapted an approach previously utilised to compensate for predominance of sea ice in core capelin areas to correct for a lack of coverage in Russian waters in 2022. While this introduces additional uncertainty to assessment estimates, this is accounted for by setting the eventual TAC below the maximum recommended level.

Overall, I agree with the overall outcome of the assessment as determined by the assessor.

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 (*Mallotus villosus*)	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	*Mallotus villosus*	Barents Sea Capelin	Least Concern[2]	99.9%	Yes	A
Species categorisation rationale						

As at the time of the 2021 MT surveillance assessment, 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[3] 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 capelin) is subject to an international management plan put in place by the Joint Russian-Norwegian Fisheries Commission (JRNFC) in 2002. Scientific advice is usually provided by ICES, and an annual TAC is set in line with this advice. For this reason, the capelin stock is Managed, and was assessed under Category A.

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[1] https://www.iucnredlist.org/
[2] https://www.iucnredlist.org/species/18155925/56707167
[3] See page 54 of the 2022 Icelandic capelin MSC certification report for the most recent evidence that the capelin fishery has extremely low levels of bycatch (https://fisheries.msc.org/en/fisheries/isf-iceland-capelin/@@assessments)

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

In general, there have been no substantial changes in the management of the capelin fishery since the 2021 MT surveillance. The exception to this is a change in the organisation responsible for the provision of scientific advice; this change is explained in M1.2. All other clauses provide a summary of the conclusions of the 2021 MT surveillance assessment. Please refer to the 2021 surveillance report 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).

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 it will rely on recommendations by the newly-constituted JRN-AWFG. 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).

Organisations responsible for collecting data and assessing the fishery remain in place, and M1.2 continues to be 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" (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).

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 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.

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, eNGOs and the Sami Parliament are consulted through the Advisory Meetings (FAO 2022).

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 MT assessment report was completed entirely using freely available information.

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

Fiskeridir.no (2022). The marine resources act. https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act

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

Marine Resources Act (2008). https://www.regjeringen.no/globalassets/upload/fkd/vedlegg/diverse/2010/marineresourcesact.pdf

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.	PASS
	M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.	PASS
	M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.	PASS
	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.	PASS
		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 surveillance assessment. A summary of the conclusions of that surveillance 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 (DoF 2015a).

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 (DoF 2015a). There are also examples available of these sanctions being applied.

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 2021 MT surveillance assessment, no evidence was encountered to indicate widespread non-compliance in the capelin fishery, or in Norwegian fisheries in general. Additionally, Norway tends to perform well in independent assessments of IUU risk rating, such as the IUU Fishing Index (IUUFI 2021).

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 (DoF 2022b).

References

Directorate of Fisheries (2015a). The Marine Resources Act, English translation.
https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act

Directorate of Fisheries (2015b). Fisheries Monitoring Centre Norway. https://www.fiskeridir.no/English/Fisheries/Fisheries-Monitoring-Centre

IUU Fishing Index (2021). Country profile, Norway. https://iuufishingindex.net/profile/norway

Marine Resources Act (2008).
https://www.regjeringen.no/globalassets/upload/fkd/vedlegg/diverse/2010/marineresourcesact.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		Capelin	
A1	**Data Collection - Minimum Requirements**		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	PASS
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	PASS
		Clause outcome:	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 collation was conducted by the newly-convened Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG 2022).

Landings data continue to be collected and used in the assessment process, and A1.1 is met.
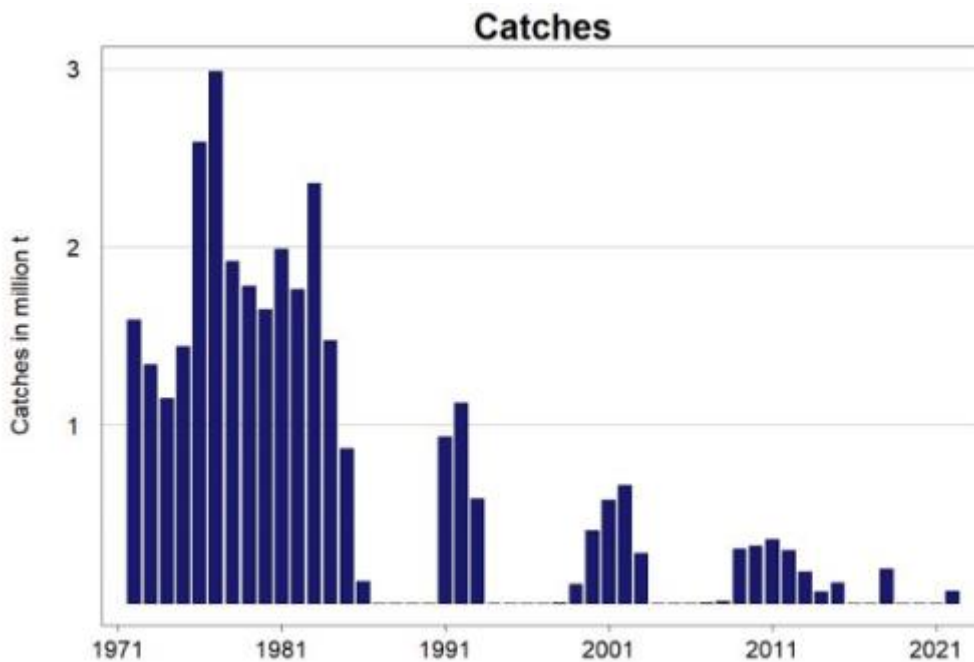

Barents Sea Capelin, Catches, 1971 – 2022 (JRN-AFWG 2022)

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

Additional fishery-dependent and -independent information is collected and utilised in the annual stock assessment. The 2022 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 (JRN-AFWG 2022).

The capelin acoustic survey is conducted every September and usually covers the Norwegian and Russian EEZs. However, the 2022 survey did not cover the Russian EEZ, and the JRN-AFWG used a compensation approach first utilised in 2014 to compensate for a large part of the core capelin area being covered in ice. For this reason there is additional uncertainty in the results of the 2022 stock assessment; however, the catch advice considers a range of recommendations based on varying potential compensation approaches, and the eventual 62,000t recommendation is not the largest possible.

Sufficient additional information continues to be collected, and A1.2 is met.
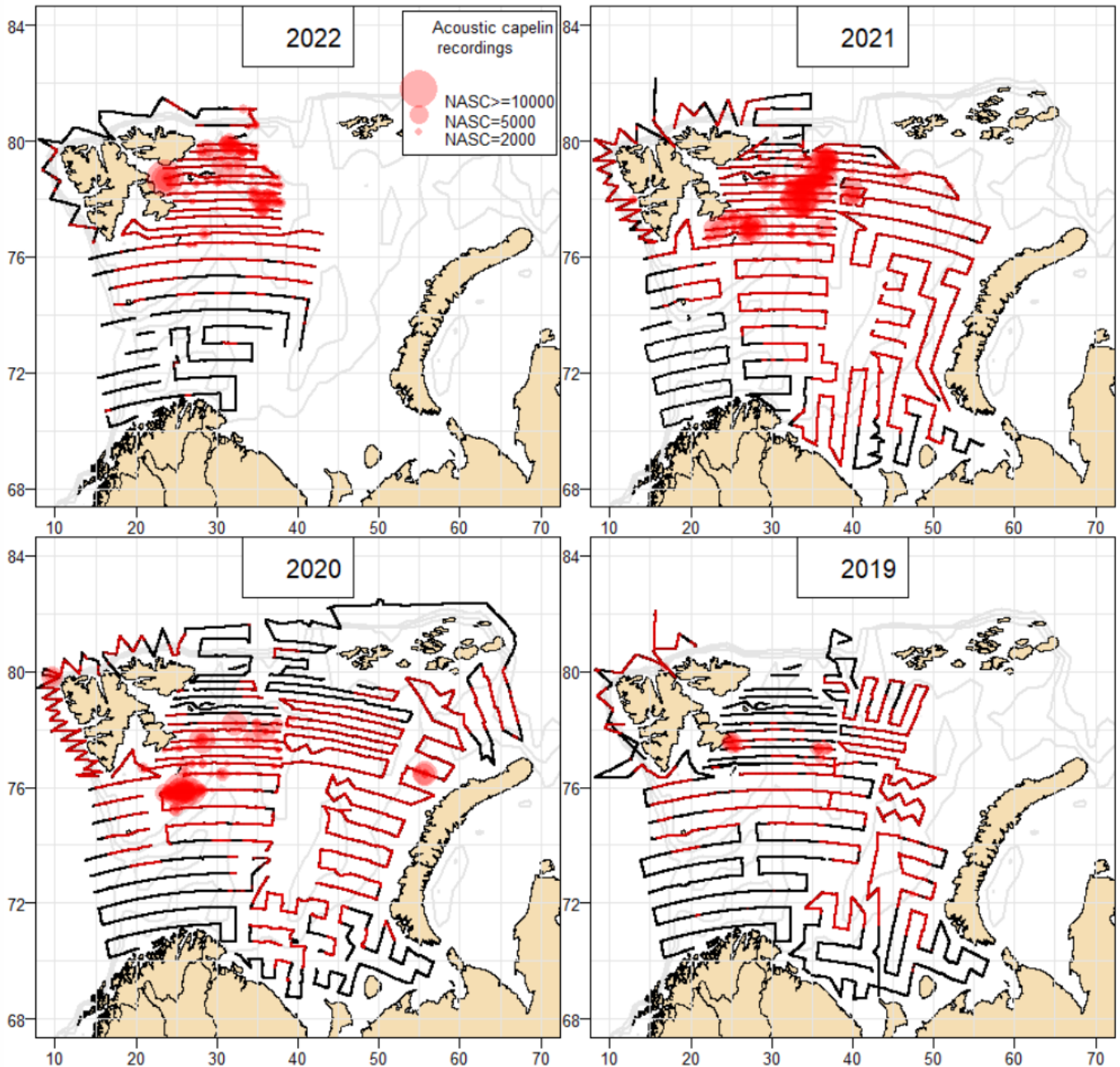
Barents Sea capelin, survey locations (black and red lines) and acoustic capelin recordings (red areas). Note the absence of coverage within the Russian EEZ in the 2022 survey (JRN-AFWG 2022).

References

JRN-AFWG (2022). Advice on fishing opportunities for Barents Sea capelin in 2023. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-7

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.	PASS
	A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	PASS
	A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	PASS
	A2.4	The assessment is subject to internal or external peer review.	PASS
	A2.5	The assessment is made publicly available.	PASS
		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.

Stock assessments are usually conducted annually by the ICES AWFG. As noted in section M1, Russian scientists have been temporarily suspended from ICES, and in 2022 stock assessment and management advice was provided by the newly-convened JRN-AFWG independently of ICES. The JRN-AFWG assessment and advice followed the methodology and benchmarks established by ICES, providing continuity in the advice provision (JRN-AFWG 2022a). Stock assessments continue to be conducted annually, and A2.1 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 B_{lim}, as in the previous ICES reports identified by the 2021 MT surveillance. The JRN-AFWG advice states clearly that "spawning-stock size is above B_{lim}". The limit reference point B_{lim} is the only reference point established for Barents Sea capelin, and is set at 200,000t. The 2022 JRN-AFWG advice estimates that with no fishing pressure SSB would be 586,000t on April 1st 2023; under the recommended fishery removals of 62,000t, SSB on that date is projected to be 534,000t. No reference points relating to fishing pressure have been established for the stock.

The stock assessment continues to provide an indication of the status of the stock relative to a reference point, and A2.2 is met.

SSB on April 1
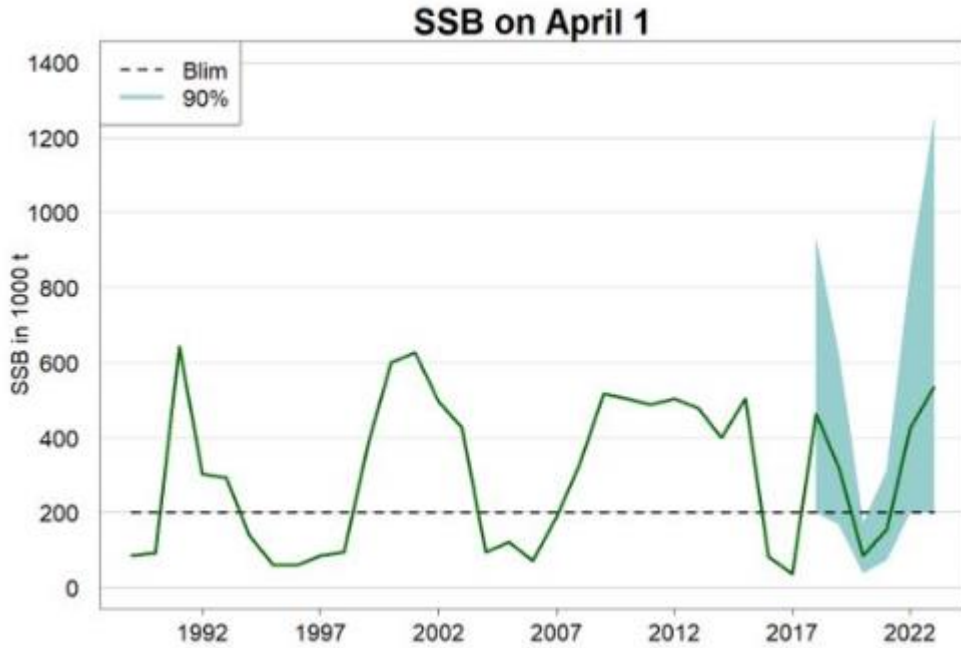
Barents Sea Capelin, Spawning Stock Biomass relative to current B_{lim}, 1989 – 2023. Green area indicates 95% confidence limits. SSB estimates prior to 1989 used a different model and are not shown. Confidence limits only available for years since 2018 (JRN-AFWG 2022)

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

The JRN-AWFG catch advice provides a range of potential catch scenarios, based on the various difference interpretations of the stock assessment model, along with a single specific catch recommendation of 62,000t for 2023. This represents a reduction of 11% compared to the 2022 quota.

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).

Stock assessments continue to provide an indication of the volume of removals which is appropriate, and A2.3 is met.

Basis	Total catch (2023)	Median SSB (2023)	P (SSB 2023 > 200 000 t) in %	% TAC change **	% advice change **
ICES advice basis					
MP harvest control rule, P (SSB > 200 000 t) = 95%	62 000	534 000	95	-11	-11
Other scenarios					
F=0	0	586 000	98	-100	-100
Other approaches for compensating for incomplete spatial coverage and applying management plan					
Area adjustment drawn from 9 (2007-2013, 2017 and 2021) instead of 5 years, i.e. including years with high biomass of maturing capelin, but different age compositions in the stock	21 000	440 000	95	-70	-70
Predicting from 2021 survey with added uncertainty buffer	31 000	439 000	95	-56	-56
Predicting from 2021 survey without added uncertainty buffer	72 000	413 000	95	+3	+3
No compensation (survey estimate from Norwegian vessels only used)	0	278 000	82	-100	-100

Barents Sea capelin, annual catch scenarios and potential catch recommendations. *TAC (2023) vs TAC (2022). **Advice (2023) vs Advice (2022) (JRN-AWFG 2022)

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, and identified in the 2021 MT surveillance assessment (JRN-AFWG 2022a).

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 2022). Examples include the 2015 benchmark report (ICES 2015) and 2002 capelin assessment methodology (Gjøsæter *et al* 2002), both freely available online.

References

Gjøsæter, H., Bogstad, B., and Tjelmeland, S. (2002). Assessment methodology for Barents Sea capelin, *Mallotus villosus* (Müller). ICES Journal of Marine Science, 59(5): 1086–1095. https://doi.org/10.1006/jmsc.2002.1238

ICES (2015). Report of the Benchmark Workshop on Arctic Stocks (WKARCT), 26–30 January 2015, Copenhagen, Denmark. ICES CM 2015/ACOM:31. 126 pp. https://doi.org/10.17895/ices.pub.5295

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 (2022). Advice on fishing opportunities for Barents Sea capelin in 2023. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-7

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.	PASS
	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.	PASS
	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).	PASS
		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 surveillance (the source of the TAC advice notwithstanding), and A3.1 continues to be 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 be 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 2019-2021), and so as noted in the 2021 MT surveillance, total fishery removals of capelin did not regularly exceed the scientific advice at that time.

Since then, the 2022 TAC was set in line with the ICES advice, at 70,000t, of which 65,246t was caught. Catch advice for 2023 was provided by the JRN-AFWG, and recommended a TAC of 62,000t. Despite international tensions due to the war in Ukraine, Norway and Russia have agreed fishing quotas for 2023 in line with the scientific advice (HNN 2022). This includes setting the capelin TAC at 62,000t, in line with the JRN-AFWG recommendation (FF 2022).

Total removals continue to be in line with the scientific advice, and A3.2 is met.

Year	ICES advice	Catch corresponding to advice	Agreed TAC	ICES catch
2010	5% probability of SSB < 200 000 t	360000	360000	323000
2011	5% probability of SSB < 200 000 t	380000	380000	360000
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	6524 6***
2023	Management plan ***	≤ 62000		

Barents Sea Capelin, ICES advice, agreed TAC, and catch, since 2010. 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 stock assessment and advice was provided by the JRN-AFWG; all other assessments and advice provided by ICES (JRN-AFWG 2022)

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, by the JRN-AFWG) on the basis of the JNRFC management plan. This management plan includes a harvest control rule that catches must lead to a 95% probability that SSB is above B_{lim} (i.e. 200,000t) on April 1st of the TAC year. When SSB is estimated to be below B_{lim}, 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, A3.3 continues to be met.

References

FF (2022). "Norway and Russia conclude 2023 fisheries agreement". FiskerForum, 31st October 2022.
https://fiskerforum.com/norway-and-russia-conclude-2023-fisheries-agreement/

HNN (2022). "Researcher on New Norwegian-Russian Fisheries Agreement: 'Shows How Important the Cooperation Is for Both Parties'". High North News, 29th October 2022. https://www.highnorthnews.com/en/researcher-new-norwegian-russian-fisheries-agreement-shows-how-important-cooperation-both-parties

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 (2022). Advice on fishing opportunities for Barents Sea capelin in 2023. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-7

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	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.	PASS
		Clause outcome:	PASS

A4.1 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.

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.

As noted in the 2022 JRN-AFWG catch advice report, the stock biomass is currently estimated to be above the limit reference point B_{lim} (JRN-AFWG 2022). Additionally, in previous years when stock biomass has fallen below B_{lim}, 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. Therefore the fishery meets the second statement of A4.1.

References

JRN-AFWG (2022). Advice on fishing opportunities for Barents Sea capelin in 2023. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-7

Links	
MarinTrust Standard clause	1.3.2.1.4
FAO CCRF	7.2.1, 7.2.2 (e)
GSSI	D6 01

CATEGORY B SPECIES

Category B species are those which make up greater than 5% of landings in the applicant raw material, but which are not subject to a species-specific research and management regime sufficient to pass all Category A clauses. If there are no Category B species in the fishery under assessment, this section can be deleted.

Category B species are assessed using a risk-based approach. The following process should be completed once for each Category B species.

If there are estimates of biomass (B), fishing mortality (F), and reference points

It is possible for a Category B species to have some biomass and fishing mortality data available. When sufficient information is present, the assessment team should use the following risk matrix to determine whether the species should be recommended for approval.

TABLE B(A) – F, B AND REFERENCE POINTS ARE AVAILABLE

Biomass is above MSY / target reference point	Pass	Pass	Pass	Fail	Fail
Biomass is below MSY / target reference point, but above limit reference point	Pass, but re-assess when fishery removals resume	Pass	Fail	Fail	Fail
Biomass is below limit reference point (stock is overfished)	Pass, but re-assess when fishery removals resume	Fail	Fail	Fail	Fail
Biomass is significantly below limit reference point (Recruitment impaired)	Fail	Fail	Fail	Fail	Fail
	Fishery removals are prohibited	**Fishing mortality is below MSY or target reference point**	**Fishing mortality is around MSY or target reference point, or below the long-term average**	**Fishing mortality is above the MSY or target reference point, or around the long-term average**	**Fishing mortality is above the limit reference point or above the long-term average (Stock is subject to overfishing)**

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If the biomass / fishing pressure risk assessment is not possible

Initially, the resilience of each Category B species to fishing pressure should be estimated using the American Fisheries Society procedure described in Musick, J.A. (1999). This approach is used as the resilience values for many species and stocks have been estimated by FishBase and are already available online. For details of the approach, please refer to Appendix A. Determining the resilience provides a basis for estimating the risk that fishing may pose to the long-term sustainability of the stock. Table B(b) should be used to determine whether the species should be recommended for approval.

TABLE B(B) – NO REFERENCE POINTS AVAILABLE. B = CURRENT BIOMASS; B_{AV} = LONG-TERM AVERAGE BIOMASS; F = CURRENT FISHING MORTALITY; F_{AV} = LONG-TERM AVERAGE FISHING MORTALITY.

B > B$_{av}$ and F < F$_{av}$	Pass	Pass	Pass	Fail
B > B$_{av}$ and F or F$_{av}$ unknown	Pass	Pass	Fail	Fail
B = B$_{av}$ and F < F$_{av}$	Pass	Pass	Fail	Fail
B = B$_{av}$ and F or F$_{av}$ unknown	Pass	Fail	Fail	Fail
B > B$_{av}$ and F > F$_{av}$	Pass	Fail	Fail	Fail
B < B$_{av}$	Fail	Fail	Fail	Fail
B unknown	Fail	Fail	Fail	Fail
Resilience	**High**	**Medium**	**Low**	**Very Low**

Assessment Results

Species Name		n/a
B1	Species Name	
	Table used (Ba, Bb)	
	Outcome	
References		
Links		
MarinTrust Standard clause		1.3.2.2, 4.1.4
FAO CCRF		7.5.1
GSSI		D.5.01

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Species Name		n/a	
C1	**Category C Stock Status - Minimum Requirements**		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	
		Clause outcome:	

C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.

C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

References	
Links	
MarinTrust Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-

D1	**Species Name**	n/a	
	Productivity Attribute	**Value**	**Score**
	Average age at maturity (years)		
	Average maximum age (years)		
	Fecundity (eggs/spawning)		
	Average maximum size (cm)		
	Average size at maturity (cm)		
	Reproductive strategy		
	Mean trophic level		
		Average Productivity Score	
	Susceptibility Attribute	**Value**	**Score**
	Availability (area overlap)		
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)		
	Selectivity of gear type		
	Post-capture mortality		
		Average Susceptibility Score	
		PSA Risk Rating (From Table D3)	
		Compliance rating	
	Further justification for susceptibility scoring (where relevant) *For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision*		
References			
Standard clauses 1.3.2.2			

assessment style approach must be taken.

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)		Medium susceptibility (medium risk, score = 2)		High susceptibility (high risk, score = 3)	
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap		10-30% overlap		>30% overlap	
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).		Medium overlap with fishing gear.		High overlap with fishing gear (high encounterability). Default score for target species	
Selectivity of gear type Potential of the gear to retain species	a	Individuals < size at maturity are rarely caught	a	Individuals < size at maturity are regularly caught.	a	Individuals < size at maturity are frequently caught
	b	Individuals < size at maturity can escape or avoid gear.	b	Individuals < half the size at maturity can escape or avoid gear.	b	Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a	Evidence of majority released post-capture and survival.		Evidence of some released post-capture and survival.		Retained species or majority dead when released.	

condition permitting subsequent survival			

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D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4

D4	Species Name		n/a
	Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements		
	D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.	
	D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.	

Outcome:	

Evidence

D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.

D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.

References

Links

MarinTrust Standard clause	1.3.2.2, 4.1.4
FAO CCRF	7.5.1
GSSI	D.5.01

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.	PASS
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	PASS
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	PASS
		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 surveillance assessment. A summary of the conclusions of that surveillance assessment are provided below for convenience; please refer to the full report for more details.

F1.1 Interactions with ETP species are recorded.

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). 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 & Williams, 2020).

Information on the interactions between the capelin fleet and ETP species is also provided in reports published by the ICES Working Group on the Integrated Assessments of the Barents Sea (WGIBAR 2021).

F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species.

As at the time of the 2021 MT surveillance assessment, there is no evidence that the capelin fishery has a significant negative impact on ETP species and evidence suggests that bycatch of any kind is minimal. No direct interactions have been reported in the data sources listed above in F1.1.

F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality.

The capelin fishery is thought not to interact with ETP species, and therefore such measures are not required. However, in general terms, the MRA 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 MPAs and the implementation of restrictions on gear types, fishing locations, and fishing seasons.

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

Marine Resources Act (2008). https://www.regjeringen.no/globalassets/upload/fkd/vedlegg/diverse/2010/marineresourcesact.pdf

WGIBAR (2021). Working Group on the Integrated Assessments of the Barents Sea (WGIBAR) 2021. https://doi.org/10.17895/ices.pub.8241

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.	PASS
	F2.2	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.	PASS
	F2.3	If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.	PASS
		Clause outcome:	PASS

As identified in previous assessments, the gears used in this fishery are very unlikely to interact with the sea bed, and therefore are considered very low risk in relation to physical habitats.

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 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).

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 sea bed and fishers will avoid this wherever possible. As at the time of the 2021 MT surveillance, 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.

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.

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

Marine Resources Act (2008).
https://www.regjeringen.no/globalassets/upload/fkd/vedlegg/diverse/2010/marineresourcesact.pdf

Links	
MarinTrust Standard clause	1.3.3.2
FAO CCRF	6.8
GSSI	D.2.07, D.6.07, D3.09

F3	**Ecosystem Impacts - Minimum Requirements**		
	F3.1	The broader ecosystem within which the fishery occurs is considered during the management decision-making process.	PASS
	F3.2	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.	PASS

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.		PASS
		Clause outcome:	PASS

There have been no substantial changes to those aspects of fishery management relevant to Section F3 since the time of the 2021 surveillance assessment. A summary of the conclusions of that surveillance assessment are provided below for convenience; please refer to the full report for more details.

F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.

The MRA includes a provision to implement an ecosystems-based approach to fisheries management, which can be seen throughout the management process. Variations in the Barents Sea ecosystem are known to be driven by changes in climate, and capelin is known to be an important prey species for Atlantic cod and herring, among other predators.

F3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.

The ICES WGIBAR report provides an indication of the role of capelin in the Barents Sea ecosystem and does not contain any indication that the fishery has a significant negative impact on the marine ecosystem. Although the role of capelin appears relatively poorly understood, sources reviewed for this MT surveillance did not reveal any new evidence that the fishery has a negative impact on the marine ecosystem and F3.2 is considered to remain 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.

The ICES WGIBAR report indicates the status of key predator species and remains the same version identified by the 2021 surveillance assessment – therefore there are no changes in the evidence available. As the main predator species, expected predation by cod is incorporated into the stock assessment model. This means that when ICES (and, in 2022, the JRN-AFWG) calculates a TAC recommendation which will lead to SSB 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. This reflects additional precaution and therefore F3.3 is met.

References

JRN-AFWG (2022). Advice on fishing opportunities for Barents Sea capelin in 2023. Joint Russian-Norwegian Working Group on Arctic Fisheries (JRN-AFWG). https://www.hi.no/en/hi/nettrapporter/imr-pinro-en-2022-7

WGIBAR (2021). Working Group on the Integrated Assessments of the Barents Sea (WGIBAR) 2021. https://doi.org/10.17895/ices.pub.8241

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 rm. 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

MarinTrust Fishery Assessment Peer Review Template

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

Fishery under assessment	Capelin (*Mallotus villosus*) fishery pursued by Norway; EU and Russia in ICES Subareas 1 and 2 (Northeast Arctic) (excluding Division 2a west of 5°W)
Management authority (Country/State)	EU & UK
Main species	Capelin (*Mallotus villosus*)
Fishery location	ICES Subareas 1 and 2 (Northeast Arctic) (excluding Division 2a west of 5°W
Gear type(s)	Pelagic trawl, purse seine
Overall recommendation. (Approve/ Fail)	Approve

Summary: in this section, provide any additional information about the fishery that the reviewers feel is significant to their decision.
A couple of comments about the scope details table. The name of the species is capelin, I think capeline is incorrect. And I have a question about the management authority. I understand that although Russia is included there, Russian vessels are not covered by this certificate and Norway vessels are no longer working in Russian waters, is that correct?   In the introduction section it is stated: "*a 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*". It is good to see that scientist from both sides are still working together despite the Russian-Ukrainian war.
General Comments on the Draft Report provided to the peer reviewer
-Capelin spelling typo has been corrected, and the approval covers the entirety of this fishery for use as raw material by MarinTrust factories.

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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
A – Fishery Assessment			
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)?			
Section M - Management	X		
Category A Species	X		
Category B Species			NA
Category C Species			NA
Category D Species			NA
Section F – Further Impacts	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 assessment report seems to be adequate and in general, it provides the information necessary to justify the scores assigned to the different categories. Only minor comments in the respective sections.
Certification body response
n/a

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?
Yes, the IFFO RS standard has been adequately and clearly applied to this assessment.
Certification body response
n/a

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?
Different catch sources (Icelandic fishery, client's data) seem to confirm that this is an extremely clean fishery, 99.9% of the catch is made of the target species. So, no category B, C or D species are identified in the catch.
Certification body response
n/a

3M. Are the scores in "Section M – Management" clearly justified?	
M1.1 There is an organisation responsible for managing the fishery.	Yes
There is an organisation responsible for collecting data and assessing the fishery.	Yes
Fishery management organisations are publicly committed to sustainability.	Yes
Fishery management organisations are legally empowered to take management actions.	Yes
There is a consultation process through which fishery stakeholders are engaged in decision-making.	Yes
The decision-making process is transparent, with processes and results publicly available.	Yes

Yes, I consider that the information provided is adequate to support the score. Except for M1.2, there have been no substantial changes in the management of the capelin fishery since the 2021 MT surveillance. Despite the Russian-Ukrainian war, an organisation responsible for collecting data and assessing the fishery remain in place.
The link included in the first reference (FA 2022) does not work, please correct it.

Certification body response
- An updated link has been inserted.

3A. Are the "Category A Species" scores clearly justified?
Catch data is collected and scientific surveys conducted. Although the Russian area was not covered in 2022, a compensation approach was used by the JRN-AFWG and a precautionary TAC recommended. The stock seems to be well above the B_{lim} (SSB_{2023} was estimated at 534,000 t > B_{lim} = 200,000 t) (the stock has recovered from a previous low biomass). No other reference points have been estimated. 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. Fishing quotas were agreed in line with the scientific advice. A1, A2, A3 and A4 are met.
Certification body response
n/a

3B. Are the "Category B Species" scores clearly justified?
No category B species identified in the fishery.
Certification body response

3C. Are the "Category C Species" scores clearly justified?
No category C species identified in the fishery.
Certification body response

3D. Are the "Category D Species" scores clearly justified?
No Category D species identified.
Certification body response

3F. Are the scores in "Section F – Further Impacts" clearly justified?
The fishery uses pelagic trawls and purse sines which have no impact on the habitat as they do not interact with the seabed. Interaction with ETP species (marine mammals and seabirds) are recorded and they seem to be low. However, for F1.2 I would recommend to check the data for the Norwegian reference fleet for the most recent year to confirm this low impact if it has not been done at this surveillance visit. The species is an important prey species for Atlantic cod and herring, among other predators and it seems to be taken into consideration in the MRA (it includes a provision to implement an ecosystems-based approach to fisheries management) and expected predation by cod is incorporated into the stock assessment model. F1, F2 and F3 are met.
Certification body response
- Reference fleet data were subject to a brief review as part of the surveillance. No new evidence of significant interactions was encountered.

Optional: General comments on the Peer Review Draft Report
The summary section is quite clear and provides a good overview of the fishery and the assessment process.
Certification body response
n/a