



## MarinTrust Standard V2

# Whole fish Fishery Assessment Norway pout (*Trisopterus esmarkii*) in FAO 27, ICES Subarea 4 and Division 3a (North Sea, Skagerrak, and Kattegat)

**MarinTrust Programme**

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: [standards@marin-trust.com](mailto:standards@marin-trust.com)

T: +44 2039 780 819

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

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<b>Name(s):</b> TripleNine Vedde AS, Prima Protein, Pelagia AS			
<b>Country:</b> Norway			
<b>Email address:</b>		<b>Applicant Code</b>	
Certification Body Details			
<b>Name of Certification Body:</b>		Global Trust Certification	
<b>Assessor Name</b>	<b>CB Peer Reviewer</b>	<b>Assessment Days</b>	<b>Initial/Surveillance/ Re-approval</b>
Léa Lebechnech	Matthew Jew	5	Re-approval
<b>Assessment Period</b>	January 2023		
Scope Details			
<b>Management Authority (Country/State)</b>		Norway, EU (Common Fishery Policy)	
<b>Main Species</b>		Norway pout ( <i>Trisopterus esmarkii</i> )	
<b>Fishery Location</b>		FAO Area 27 (Atlantic, Northeast), ICES Subarea 4 and Division 3a (North Sea, Skagerrak, and Kattegat)	
<b>Gear Type(s)</b>		Small-meshed trawls: Bottom trawl and Mid-water trawl	
Outcome of Assessment			
<b>Overall Outcome</b>		Pass	
<b>Clauses Failed</b>		NONE	
<b>CB Peer Review Evaluation</b>		Agree with assessor's determination	
<b>Fishery Assessment Peer Review Group Evaluation</b>		Approve See <a href="#">appendix</a>	
<b>Recommendation</b>		Maintain Approval	

## Table 2. Assessment Determination

Assessment Determination
<p>This report assesses the small-meshed demersal (otter) trawl and pelagic (mid-water) trawl fishery of Norway pout (<i>Trisopterus esmarkii</i>) in ICES Subarea 4 (North Sea) and Division 3a (North Sea, Skagerrak, and Kattegat).</p> <p>This fishery is mainly performed by Norway and Danish vessels. The fishery targets Norway pout, which represents more than 95% of the catch, with relatively low catches of other species, such as Herring, Blue whiting, cod, haddock, saithe, whiting, anglerfish and greater silver smelt.</p> <p>The Norway pout fishery in the area of operation of the fishery is managed by the Norwegian Ministry of Trade, Industry and Fisheries (Department of Fisheries and Aquaculture). The Norwegian Institute of Marine Research (IMR) is the national research body in Norway responsible for collecting fishery-related data and conduct stock assessments. At the international level, this task is performed by the International Council for the Exploration of the Sea (ICES).</p> <p>In Norway, the Marine Resources Act places the overall responsibility for monitoring, control and surveillance in Norwegian fisheries with the Directorate of Fisheries. Enforcement at sea is taken care of by the Coast Guard, which is part of the Royal Norwegian Navy, but performs tasks on behalf of several ministries, including the Ministry of Trade, Industry and Fisheries. Norwegian vessels are required to have electronic catch logbooks (Electronic Reporting Systems - ERS).</p> <p>The management framework and the surveillance, control and enforcement system meet minimum requirements set by the MARINTRUST Standard, so clauses M1-M2 are passed.</p> <p>The assessment of the Norway pout stock considers all fishery removals and the biological characteristics of the target species. Commercial catches, including landings from Norway, the UK and the EU, are collected by the authorities. In addition to catch data, four survey indices are used to assess the stock (ICES advice 2022). All this data is used for assessing the stock of Norway Pout, which is conducted annually by the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). Norway pout is a short-lived species. Recruitment is highly variable and strongly influences both the spawning-stock and total biomass. ICES approach to MSY-based management for short-lived species is applied for the species in the form of an escapement strategy based on a stochastic forecast, i.e., to maintain, with 95% probability, SSB above <math>B_{lim}</math> after the fishery has taken place. This includes a restricted mortality <math>F_{cap}</math> (<math>F_{bar}(1-2)</math>) = 0.7. The spawning-stock size for Norway pout is above <math>B_{pa}</math> and <math>B_{lim}</math> but no reference points for fishing pressure or for MSY <math>B_{trigger}</math> have been defined.</p> <p>No precautionary management plan has been agreed for Norway pout in this area. A proposed management plan from Norway and EU was evaluated by ICES and the escapement strategy was found to be precautionary (with the <math>F_{cap}</math> indicated above at or below 0.7). TACs are set by the authorities based on the ICES advice and catches of the species have not surpassed the TAC in recent years. Therefore, Norway pout passes clauses A1 – A4.</p> <p>Category C species (&lt;5% of the catch) include herring (two stocks), blue whiting, cod, haddock, saithe and whiting. All species are assessed by ICES using commercial data and except the North Sea cod all the species are over the <math>B_{lim}</math>. Bycatch levels in the Norway pout fishery were estimated by Nielsen 2016, cod bycatch was estimated at 0.01% – 0.07% of total annual landings, which would correspond to an annual catch of between 10 mt and 70 mt, which is considered negligible. Therefore, clauses C are met for all the category C species.</p>

Category D species include anglerfish and greater silver smelt, which represent less than 5% of the catches and does not have a management plan in place, neither reference point. A PSA has been conducted based on the MT standard. Great silver smelt passed the analysis, but anglerfish failed it. However, the potential impacts of the fishery on anglerfish are considered during the management process, measures (such as sorting grids) are taken to minimise the bycatch and there is no substantial evidence that the fishery has a significant negative impact on them. Clauses D4 are met for the species.

In relation to the impact of the Norway pout on ETP species, this fishery has a very low impact on them. The only ETP species identified in the catch is spurdog and the contribution of this fishery to fishing mortality of the species seems to be low (49 kgs caught in 2016, no catch data since 2018 for the moment). No interactions with neither marine mammals nor seabirds have been documented for the fishery. Management measures (zero TAC) has been implemented in EU waters for spurdog. In Norway the species is protected by law and strict bycatch limits have been set, along with spurdog avoidance programme for some fisheries. Clause F1 is passed.

In regard to impacts of the fishery on habitats, pelagic trawl gears target shoals of pelagic species, they operate in the water column or near the bottom and the impact on habitats is considered to be minimal. In the case of bottom trawl, although the impact on the seabed is higher than the pelagic fishery, bottom trawls for Norway pout are small and relatively light. The fishery mainly operates on muddy and sandy bottoms where bottom trawl impact is lower, and the areas recover more readily. A number of measures introduced by the Norwegian and EU authorities to protect VMEs in North Sea and Norwegian waters. Clause F2 is passed for both methods.

Finally, in relation to ecosystem effects of the fishery, the five most important pressures on the Greater North Sea are identified as: selective extraction of species (fishing), abrasion, substrate loss and smothering, selective extraction non-living resources. Although fisheries are the main impact on the area, fishing mortality has decreased in recent years. Norway pout is a short-lived species. With present fishing mortality levels, the status of the stock is more determined by natural processes and less by the fishery. This stock is among other an important food source for the species saithe, haddock, cod, whiting, and mackerel and predation mortality is significant. Natural mortality levels by age and season used in the stock assessment do include the predation mortality levels estimated for the stock. All the other stocks affected by the fishery (except North Sea Cod) are fished at a sustainable rate. Catches of North Sea cod in the fishery are negligible. No impacts on ETP species, such as marine mammals and seabirds have been reported. Clause F3 is passed.

Norway pout is approved by the assessment team for the production of fishmeal and fish oil under the IFFO-RS v 2.0 by-products standard.

**Fishery Assessment Peer Review Comments**

No catch data was provided by the client for this report, a recommendation should be made to the onsite auditor to check the catch profile for % and species composition.  
 Some references are missing links to report: MSC report (ACDR 2022).  
 The opening few tables were missing the client email and application code but otherwise, the report is completed to a high level.

**Notes for On-site Auditor**

As no catch data was provided by the client for this report, it would be necessary to check the fishery catch profile for % and species composition.

## 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	Norway pout ( <i>Trisopterus esmarkii</i> )	>95%	A1	Pass
			A2	Pass
			A3	Pass
			A4	Pass
Category B	/	/		
Category C	Herring ( <i>Clupea harengus</i> ) in ICES Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel) Herring ( <i>C. harengus</i> ) in ICES subareas 1, 2, and 5, and in divisions 4.a and 14.a, Norwegian spring-spawning herring (the Northeast Atlantic and the Arctic Ocean) Blue whiting ( <i>Micromesistius poutassou</i> ) Cod ( <i>Gadus morhua</i> ) Haddock ( <i>Melanogrammus aeglefinus</i> ) Saithe ( <i>Pollachius virens</i> ) Whiting ( <i>Merlangius merlangus</i> )	<5%	Pass	
Category D	Anglerfish ( <i>Lophius budegassa</i> , <i>Lophius piscatorius</i> ) Greater silver smelt ( <i>Argentina silus</i> )	<5%	Pass	

**Table 5 Species Categorisation Table**

Common name	Latin name	Stock	IUCN Redlist Category <sup>1</sup>	% of landings	Management	Category
Norway Pout	<i>Trisopterus esmarkii</i>	ICES Subarea 4 and Division 3a (North Sea, Skagerrak, and Kattegat).	<a href="#">Least concern</a>	>95%	Norway, EU (Common Fishery Policy)	A
Herring	<i>Clupea harengus</i>	ICES Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel)	<a href="#">Least concern</a>	<5%		C
Herring	<i>Clupea harengus</i>	ICES subareas 1, 2, and 5, and in divisions 4.a and 14.a, Norwegian spring-spawning herring (the Northeast Atlantic and the Arctic Ocean)	<a href="#">Least concern</a>			
Blue whiting	<i>Micromesistius potassou</i>	ICES subareas 1 – 9, 12, and 14 (Northeast Atlantic and adjacent waters)	<a href="#">Least concern</a>			
Cod	<i>Gadus morhua</i>	ICES Subarea 4, Division 7d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak)	<a href="#">Least concern</a>			
Haddock	<i>Melanogrammus aeglefinus</i>	ICES Subarea 4, Division 6.a, and Subdivision 20 (North Sea, West of Scotland, Skagerrak)	<a href="#">Least concern</a>			
Saithe	<i>Pollachius virens</i>	ICES subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	<a href="#">Least concern</a>			
Whiting	<i>Merlangius merlangus</i>	ICES Subarea 4 and Division 7.d (North Sea and eastern English Channel)	<a href="#">Least concern</a>			
Anglerfish/Monkfish	<i>Lophius budegassa</i> , <i>Lophius piscatorius</i>	ICES subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat)	<a href="#">Least concern</a> / <a href="#">Least concern</a>			

<sup>1</sup> <https://www.iucnredlist.org/>

Greater silver smelt	<i>Argentina silus</i>	ICES subareas 1, 2, and 4, and in Division 3.a (Northeast Arctic, North Sea, Skagerrak and Kattegat)	<a href="#">Least concern</a>			
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**Species categorisation rationale**

No catch data was provided by the client.

The species categorisation has been based on the catch composition from the last profile used in the previous surveillance report. That list of species was taken from Johnsen et al., (2016) and Nielsen et al., (2016), in the Report of the Benchmark Workshop on Norway Pout.

No update has been published up to date.

Similarly, according to ICES 2022 and the last MSC report ([ACDR 2022](#)), a bycatch of herring, saithe, cod, haddock, whiting, and monkfish in the small, meshed fishery targeting Norway pout in the North Sea and Skagerrak has been documented (no percentages are given). Bycatches of these species have been relatively low in the recent decade, and in general, the bycatch levels of these gadoids have decreased in the Norway pout fishery over the years.

Catches of Norway pout seem to represent more than 95% of the total catch when the species is targeted. Furthermore, Norway pout is managed by a management plan and biomass reference point are defined for this species. Consequently, it has been assessed under category.

Based on the description provided in ICES 2022 and the catch profile from the previous surveillance visit, the following species have been included in addition to Norway pout:

category C species: herring (*Clupea harengus*) which includes two stocks in the area, blue whiting (*Micromesistius poutassou*), cod (*Gadus morhua*), haddock (*Melanogrammus aeglefinus*), saithe (*Pollachius virens*) and whiting (*Merlangius merlangus*). The % of the species in the total catches represent less than 5% and they are managed under a management plan, along with reference points.

category D species: anglerfish (*Lophius budegassa*, *Lophius piscatorius*) and greater silver smelt (*Argentina silus*). They represent less than 5% of the total catches and does not have a management plan in place, neither reference point.

**References**

Links to the IUCN red list are provided directly in the Species categorisation table above.

DNV Business Assurance, 2022. Norway sandeel, pout and north sea sprat fisheries Announcement Comment Draft Report: <https://fisheries.msc.org/en/fisheries/norway-sandeel-pout-and-north-sea-sprat/@assessments>

ICES. 2022. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports. 4:43. 1367 pp. Section 12 p.580 “Norway pout in ICES Subarea 4 and Division 3.a”: <http://doi.org/10.17895/ices.pub.19786285>

ICES 2021b. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports. 3:66. 1281 pp. <https://doi.org/10.17895/ices.pub.8211>

Johnsen, E., Misund, R., Palmason, S. R., and Blom, G. 2016. Norwegian industrial fishery for Norway pout in the North Sea in ICES. 2016. Report of the Benchmark Workshop on Norway Pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat), 23–25 August 2016, Copenhagen, Denmark. ICES CM 2016/ACOM:35. 396 pp. <https://doi.org/10.17895/ices.pub.5599>

Nielsen, J. R., Olsen, J., Håkonsson, K. B., Egekvist J. and Dalskov, J. 2016. Danish Norway pout fishery in the North Sea and Skagerrak in ICES. 2017. Report of the Benchmark Workshop on Norway Pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3a



(North Sea, Skagerrak, and Kattegat), 23–25 August 2016, Copenhagen, Denmark. ICES CM 2016/ACOM:35. 69 pp:  
<https://doi.org/10.17895/ices.pub.5599>

## 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.

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

The following information remains mainly the same as last year’s assessment, as no major update has been found in the management framework of the fishery.

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

The fishery is nearly exclusively performed by Danish and Norwegian vessels using small mesh trawls (< 32 mm cod end) in the north-western North Sea, especially at the Fladen Ground and along the edge of the Norwegian Trench in the north-eastern part of the North Sea (ICES 2021b). The fishery is jointly managed in EU (Greater North Sea region) and Norwegian waters.

In Norway, the management of fisheries falls under the jurisdiction of the Ministry of Trade, Industry and Fisheries (Department of Fisheries and Aquaculture). A Directorate of Fisheries and Aquaculture acts as the Ministry’s advisory and executive body. Both Ministry and Directorate develop and apply fishery laws and regulations. The role of the Directorate of



Fisheries is explained here: <https://www.regjeringen.no/en/dep/nfd/organisation/Departments/department-of-fisheries-and-aquaculture-/id706781/>.

In EU waters, the management is conducted in accordance with the EU Common Fisheries Policy (CFP) (Regulation (EU) No 1380/2013). At EU level, the Directorate-general (DG) for Maritime Affairs and Fisheries (DG Mare) is the Commission department responsible for EU policy on maritime affairs and fisheries (EC 2021).

A number of specific management measures have been implemented in the Norway pout fishery, including a Total Allowable Catch (TAC), i.e., catch quotas, effort ceilings, as well as a row of technical measures and bycatch regulations. In order to protect other species (cod, haddock, saithe, whiting, and herring as well as mackerel, monkfish, squids, flatfish, gurnards, nephrops), there is a number of technical management measures in force for the small meshed fishery in the North Sea such as area closures, minimum mesh size, selective grids/panels in the small meshed gears, as well as bycatch regulations (bycatch quotas of herring and maximum bycatch percentages for gadoids and herring) and minimum landing size regulations (Nielse et al., 2016).

**Therefore, there is an organisation responsible for managing the fishery, so sub-clause M1.1 is met.**

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

In Norway, the Institute of Marine Research (IMR), affiliated to the Ministry of Trade, Industry and Fisheries, is responsible for conducting monitoring of fisheries in Norwegian waters, research and advisory work (<https://www.hi.no/en/hi/about-us>).

At EU level, the EU's data collection framework (DCF) (Regulation (EU) 2017/1004) outlines the EU countries' obligations to collect, manage and make available a wide range of fisheries needed for scientific advice. This includes biological, environmental, economic, and social data. Member States' data collection activities are financially supported by the EU. Data collection needs to ensure accuracy, reliability and timeliness, safe storage and improved availability of data (EC 2021).

The International Council for the Exploration of the Sea (ICES), in the intergovernmental body that provides scientific advice for sustainable management of the fisheries and marine resources at the EU level (also for Norwegian stocks). ICES publications include advice on fishing opportunities, fisheries, and ecosystem overviews (EC 2021). Norway pout is assessed annually by the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK) using commercial catches (collected from logbooks) and four survey indices (ICES 2022). The last meetings took place online in September 2022.

**Therefore, there are organizations responsible for collecting data and assessing the fishery, so sub-clause M1.2 is met.**

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

The Norway's 2008 Marine Resources Act main aim is to ensure sustainable and economically profitable management of wild living marine resources and genetic material derived from them, and to promote employment and settlement in coastal communities. It 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 (<https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act>).

In EU waters, the EU 2013 Common Fisheries Policy (CFP) (Regulation (EU) No 1380/2013, consolidated in 2019) states that the aim of the CFP is to contribute to the protection of the marine environment, to the sustainable management of all commercially exploited species, and in particular to the achievement of good environmental status by 2020, as set out in Article 1(1) of Directive 2008/56/EC of the European Parliament and of the Council. The objectives of the CFP are: *“to ensure that fishing and aquaculture are environmentally sustainable in the long term, to apply the precautionary approach to fisheries management and to implement the ecosystem-based approach to fisheries management”* (Regulation (EU) No 1380/2013).

**Therefore, fishery management organisations are publicly committed to sustainability, so sub-clause M1.3 is met.**

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

In Norway, the Directorate of Fisheries operates under the Marine Resources Act, which in chapter 3 (Catch quantities and quotas): *“The Ministry may prescribe the maximum permitted quantities (national quotas) of wild living marine resources that may be harvested, expressed in terms of; weight, volume, number of individuals, the number of days harvesting is permitted, or in other terms. A national quota shall be determined for a specific period of time. When a national quota has been determined, the total quantity of group quotas, research and training quotas and other quotas issued may not exceed the national quota.*

*The Ministry may prescribe the maximum permitted harvest for each vessel group, gear group or other defined group (group quota). A group quota shall be determined for a specific period of time (<https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act>)”.*

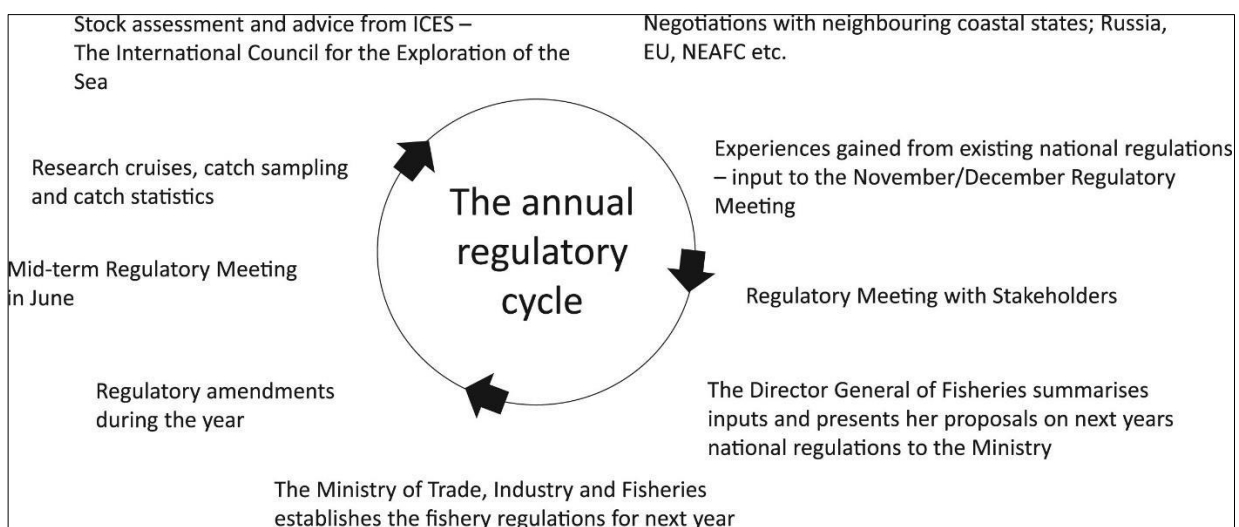
In The EU, fisheries resources are subject to the CFP’s rules (Regulation (EU) No 1380/2013). The CFP indicates that *“the Commission should only adopt conservation measures through implementing acts or delegated acts where all Member States concerned in a region agree on a joint recommendation. In the absence of a joint recommendation, the Commission should submit a proposal for the relevant measures pursuant to the Treaty”* and *“Member States are empowered to adopt conservation measures (not affecting fishing vessels of other Member States) that are applicable to waters under their sovereignty or jurisdiction and that are necessary for the purpose of complying with obligations under Union environmental legislation”*.

**Therefore, fishery management organisations are legally empowered to take management actions, so sub-clause M1.4 is met.**

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

In Norway, fishery stakeholders, including representatives of the fishing industry, scientific bodies and governmental authorities cooperate in the decision-making process for managing fisheries in the country.

According to Gullestard et al., 2017, the fisheries on the Norwegian share of these stocks are subject to comprehensive national regulations. The involvement of stakeholders is achieved through Advisory Meetings for Fisheries Regulations representing fishermen’s associations, fishing industries, trade unions, the Sami Parliament (Indigenous population), local authorities, environmental organisations and other stakeholders. At the annual Regulatory Meeting in November, discussions with stakeholders on details of next year’s regulations take place, before the Director General of Fisheries presents her final proposals for the Minister’s decision. The annual regulatory cycle (see figure below) with stakeholder participation has been in place since the 1970’s, its scope now broadened by the provisions of the new act to include ecosystem and biodiversity related issues.



**Figure 1.** The annual adaptive regulatory cycle for quota-regulated stocks – the “TAC-machine”.

Source: Gullestad et al., 2015

Furthermore, at the EU level, the CFP states that “Multiannual plans should be adopted in consultation with Advisory Councils, operators in the fishing industry, scientists and other stakeholders having an interest in fisheries management”.

**Therefore, there is a consultation process through which fishery stakeholders are engaged in decision-making, so sub-clause M1.5 is met.**

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

The Norway pout fishery is based on TAC distribution between three countries: Norway, EU and United Kingdom. Decisions in the traditional EU-Norway – now EU-Norway-UK – negotiations are transparent in publicly available meeting records. Negotiations had been ongoing for 40 years without any major disputes between the parties up until Brexit, when the established quota allocation keys were disputed.

Stock Assessments and advice for the fishery is publicly available on the ICES website (<https://www.ices.dk/advice/Pages/Latest-Advice.aspx>). Total allowable catches (TACs), or fishing opportunities are set annually for the assessed stocks based on scientific advice on the stock status from advisory bodies (ICES and STECF), agreed with non-EU countries for stocks that are shared and jointly managed and shared between EU countries in the form of national quotas (EC 2021). These quotas follow the rules of the common fisheries policy to achieve sustainable fisheries, as set in the multi-annual plans (if implemented).

In Norway, information about Norwegian fisheries and aquaculture management are made public on the Norwegian directorate’s website (<https://www.regjeringen.no/en/id4/>).

**Therefore, the decision-making process is transparent, with processes (assessments, advice, quota assignation, etc) publicly available, so sub-clause M1.6 is met.**

**References**

REGULATION (EU) No 1380/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC. Corrigendum, OJ L 122, 17.5.2018, p. 35 (1385/2013) : <http://data.europa.eu/eli/reg/2013/1385/corrigendum/2018-05-17/oj>

EC 2021: [https://ec.europa.eu/info/index\\_es](https://ec.europa.eu/info/index_es)

Gullestad, P., Abotnes, A.M., Bakke, G., Skern-Mauritzen, K., Nedreaas, K. & Sjøvik, G. 2015. Towards ecosystem-based fisheries management in Norway – Practical tools for keeping track of relevant issues and prioritizing management efforts. Marine Policy. Volume 77, March 2017, Pages 104-110: <https://www.sciencedirect.com/science/article/pii/S0308597X16305383?via%3Dihub>

DNV Business Assurance, 2022. Norway sandeel, pout and north sea sprat fisheries. Announcement Comment Draft Report: <https://fisheries.msc.org/en/fisheries/norway-sandeel-pout-and-north-sea-sprat/@assessments>

**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

**Clause outcome: PASS**

The following information remains mainly the same as last year’s assessment, as no major update has been found in the management framework of the fishery. Some updates from the DNV ACDR report 2022 have been added.

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

In Norway, the Marine Resources Act places the overall responsibility for monitoring, control and surveillance in Norwegian fisheries with the Directorate of Fisheries. Enforcement at sea is taken care of by the Coast Guard, which is part of the Royal Norwegian Navy, but performs tasks on behalf of several ministries, including the Ministry of Trade, Industry and Fisheries. The 1997 Coast Guard Act provides the Coast Guard with the authority to conduct inspections in waters under Norwegian jurisdiction, within the fields covered by the Marine Resources Act and secondary legislation given with statutory authority in that Act (§ 9).

Norwegian vessels are required to have electronic catch logbooks (Electronic Reporting Systems (ERS)). Norway has agreements in place with a number of other countries about exchange of ERS data, including the EU. The Directorate of Fisheries keeps track of how much fish is taken of the quotas of individual vessels, different vessel groups and other states at any given time, based on reports from the fishing fleet. Norwegian vessels are required to have electronic logbooks, or more specifically Electronic Reporting Systems (ERS). This implies that real-time data are forwarded to the Directorate of Fisheries, with the possibility to make corrections of data submitted each day within 12 hours into the next day. Norway has agreements in place with a number of other countries about exchange of ERS data, including the EU.

Also, the Marine Resources Act contains provisions in Chapter 6 on fishermen’s duties to contribute to an effective control (see, e.g., § 36 and § 39 on catch log and sales notes requirements, respectively); in Chapter 7 on authorities’ responsibilities for control and enforcement (including, in § 48, the sales organizations’ control obligations).

For all landings, the skipper and the representative of the landing site sign the sales note where the landing is reported by species. The sales notes form the basis of all official landing statistics. When the landing is controlled by the Directorate of Fisheries, the species composition (in weight) is recorded, and the skipper and the landing-site representative get access to this measured species-composition to use in the signed sales note. If the landings are not controlled, the species composition from the electronic logbook is given at the sales notes (ICES WGNSSK 2022). The self-reported catch data can be checked at sales operations through the sales organizations and through physical checks by the Directorate of Fisheries and the Coast Guard. This information is compared to the figures provided by the vessels to the Directorate of Fisheries through the electronic logbook. The value of any catch delivered above a vessel’s quota is retained by the sales organization and used for control purposes.

According to ICES WGNSSK 2021, about 20% of all industrial fishing landings in numbers were supposed to be controlled. However, the proportion of controlled samples has decreased in the recent years, and in some quarters no controls have been carried out at all. In addition to controls at the landing site, the Norwegian Coast guard have inspection of hauls at sea. These inspections are often done in areas known to problematic with regards to bycatch of herring and juveniles of gadoids (ICES WGNSSK 2022).

Furthermore, according to WGNSSK, from April 2020 onwards, the sampling intensity of the Danish Norway pout fishery has increased where every landing is now sampled, and the number of required samples increase with the landing weight from a minimum of 6 to a maximum of 24 per landing. This new sampling system may give more precise estimates of bycatches which

should be evaluated in future benchmark assessments. The discard level of Norway pout in the North Sea fisheries is considered to be low (Nielsen et al., 2016).

At the EU level, the aim of the EU fisheries control system is to ensure that the rules of the common fisheries policy (CFP) are applied correctly (EC 2021). The principal actors in the EU fisheries control system are:

- The EC, which controls and evaluates the application of the rules of the CFP in EU countries through audits and inspections (EC 2021),
- The European Fisheries Control Agency (EFCA) coordinates the implementation of specific control and inspection programmes (SCIP) in the EU,
- National authorities. Fisheries rules and control systems are agreed at EU level, but they are implemented by the EU countries through their national control systems (EC 2021).

**Therefore, there is an organisation responsible for monitoring compliance with fishery laws and regulations, so sub-clause 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.**

Chapters 11 and 12 of the Norwegian Marine Resources Act describe coercive and infringement fines. The Ministry may impose coercive fines and prison to ensure compliance with provisions made in or under the Act. A coercive fine is a continuous fine that becomes effective from a specified deadline for complying with an order if the deadline for compliance with the order is not met. An infringement fine may be also imposed as a fixed penalty, or the amount may be fixed in each case. Such factors as the profit or potential profit those responsible have made through the contravention, how serious the contravention was, and the extra costs of control measures and processing the case may be considered in determining the amount of the fine.

Alternatively, catch, gear, vessels or other properties can be confiscated (§ 65). The Act on First-Hand Sales of Wild Catch of Marine Resources also provides a legal foundation for sanctions, including penal liability (§ 22; same as for the Marine Resources Act) and confiscation (§ 23), and the Coast Guard Act for penal liability (§ 36; up to six months prison or two years for infringements committed under aggravating circumstances). The Norwegian enforcement agencies use a graduated sanctioning system, with sanctions ranging from oral warnings, written warnings and administrative fines to formal prosecution (<https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act>).

The Norwegian Directorate of Fisheries performs an annual risk review in which different aspects are taken into consideration, including the examination of the number and type of infringements by Norwegian vessels, the species (and quantities) affected and the alternative measures to minimize such damages in the future. According to DNV (2022), the Norwegian Coast Guard carried out 1087 inspections in waters under Norwegian jurisdiction in 2021. 51 inspections (4.7 %) resulted in a fine or prosecution. Slightly more than half of the inspections were of Norwegian vessels. Slightly less than half were carried out south of N65. In 2020, 1155 inspections were carried out, of which 49 (4.2 %) resulted in fine or prosecution. In 2019, 1070 inspections were carried out and infringements leading to a fine or prosecution were found at 52 inspections (4.9 %). (See further details in Table 46 and Table 47 below.) This is in line with a general trend over time, confirmed in previous MSC assessments and academic studies on compliance in Norwegian waters, and corroborated by the Office of the Norwegian Auditor General in management audits of Norwegian fisheries management.

Research also documents a high degree of legitimacy of the Norwegian Coast Guard in the Norwegian fishing fleet. The Coast Guard engages in extensive communication with the fishing fleet, on the fishing fields and at meetings on land, and fishers provide the information requested by the Coast Guard and Norwegian management authorities in general.

Norwegian enforcement authorities did not inform of any violations committed by the fishers in waters outside Norwegian jurisdiction (no more recent data seems to be available).

At the EU level, Regulation (EC) No 1224/2009 establishes a community system for control, inspection and enforcement to ensure compliance with the rules of the common fisheries policy. EU countries must ensure that a system of inspections and



enforcement measures is in place to identify infringements and sanction offenders (EC 2021). They are responsible for establishing their own sanctioning systems but to ensure a level playing field they must conform to the requirements of the EU laws. These requirements include the obligation for sanctions to be 'dissuasive, proportionate and effective', to consider the seriousness and potential economic benefit of the offence as well as the prejudice to fishing resources and marine environments (EC 2021).

Moreover, EU countries are required to have a point system to sanction fishing vessel masters and licence holders when they commit serious infringements. The number of points to be attributed for specific infringements is fixed in detailed rules. Any vessel that accumulates more than a certain number of points in a three-year period will have its fishing licence suspended for up to 12 months (EC 2021).

**Therefore, there is a framework of sanctions which are applied when laws and regulations are broken, so sub-clause M2.2 is met.**

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

Chapter 8 of the Norwegian Marine Resources Act indicates measures against illegal, unreported and unregulated fishing, such as prohibiting landings of fisheries resources in Norway if: a) the catch is from a fish stock of joint interest to Norway and other states that is not subject to a joint management regime; b) the catch has been taken in contravention of a desired harvesting or fishing pattern, will result in a reasonable total allowable catch being exceeded, or is in contravention of international agreements; c) the flag state cannot on request confirm that the catch has been taken during fishing activities that are in accordance with a desired harvesting or fishing pattern or that are not in contravention of rules for fishing activities that have been agreed with another country (<https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act>).

Norway and other states jointly managed of a blacklist of vessels engaged in IUU activities in Northeast Atlantic waters in 1994 and banned such vessels from fishing in Norwegian waters.

The EU Regulation (EC No 1005/2008) to prevent, deter and eliminate illegal, unreported and unregulated fishing (IUU) entered into force in 2010. The Commission is working actively with all stakeholders to ensure coherent application of the IUU Regulation. The fishery is not TAC-constrained in that total landings have been well below TACs in recent years such that there is no incentive for TAC-related offenses such as underreporting.

No illegal landings or other infringements have been reported in this fishery.

**Therefore, there is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing, so sub-clause M2.3 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.**

The Chapter 7 (Control and enforcement) of the Norway Marine Resources Act indicates that *"The Directorate of Fisheries shall 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"* (<https://www.fiskeridir.no/English/Fisheries/Regulations/The-marine-resources-act>).

The Act obliges vessel owners, when requested, to provide board and lodging at the vessel's expense and use of communication equipment without charge. The Ministry may adopt regulations relating to:

- a) the duties of an observer;
- b) which vessel groups and how many vessels are to carry an inspector or observer on board, and how these vessels are to be selected;
- c) that the costs of inspection and observation schemes, including wage and transport costs, are to be divided among all participating vessels in a specified vessel group, or in special cases are to be met partly or entirely by individual vessels;

d) that vessels that have not paid the inspection and observation costs imposed may be refused permission to take part in harvesting operations.

It is worth noting that it seems that the 20% observer coverage target level has not been reached recently, but inspections are carried out by the Norwegian coast guard in areas known to be problematic.

VMS transmitters on Norwegian vessels must be approved by the Directorate and installed only by those authorized by the Directorate. Norwegian vessels involved in fishing operations 15m and above are required to comply with position reporting. This also includes vessels of 12m (Norway and EU) when operating in the Skagerrak area. Foreign vessels of 24m or more (15m or more in the case of EU vessels) are subject to position reporting when operating in Norwegian waters outside Skagerrak. For the Norwegian fishery, an ordinance was introduced in 2010 requiring the use of sorting grids to further reduce bycatch. This is still in force for Norwegian vessels fishing in EU waters, in the directed fishery for Norway pout.

**Therefore, despite an observer coverage a bit lower than target, compliance with laws and regulations is actively monitored, through a regime which includes at-sea and portside inspections, observer programmes, and VMS, so sub-clause M2.4 is met.**

**References**

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**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.**

Species Name		Norway pout ( <i>Trisopterus esmarkii</i> )	
A1	Data Collection - Minimum Requirements		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	Yes
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	Yes
			Clause outcome: <b>PASS</b>
<p>Some of the following information remains the same as last year's assessment as no major changes occurred in the fishery.</p> <p><b>A1.1 Landings data are collected such that the fishery-wide removals of this species are known.</b></p> <p>In Norway, a landing obligation is in place and all the catch recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.</p> <p>Under the landing obligation, all catches must be recorded and landed. Therefore, landings of the fishery are known. In the Norwegian fishery, from 2010, selection grids have been used to reduce the bycatch of larger gadoids. Bycatch limits have been also set for some species (Johnsen et al., 2016). The maximum bycatch of cod, haddock and saithe in industrial trawling in the North Sea is maximum 20% in weight by haul and by landing. The bycatch of herring is maximum 10%. Any bycatch of herring is taken from the vessel quota. The bycatch of greater silver smelt is maximum 10%. Maximum bycatch of monkfish is 0.5% and landing of monkfish by trip should not exceed 500 kg. Only vessels with quota of blue whiting are allowed to conduct small meshed industrial trawling.</p> <p>The EU's data collection framework (DCF) outlines the EU countries' obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice.</p> <p>Regulation (EU) 2017/1004 on the establishment of a Union framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy aims to establish rules on the collection, management and use of biological, environmental, technical, and socioeconomic data concerning the fisheries sector. It indicates that the Commission shall establish a multiannual Union programme for the collection and management of data.</p> <p>According to ICES 2022, the catches of Norway pout are estimated on the basis of national official landing statistics of the countries targeting the species: Commercial catches (quarterly catches; catch-at-age and mean weight-at-age from catch sampling from the main Danish and Norwegian fisheries), four survey indices (IBTS Q1 [G1022], IBTS Q3 [G2829], EngGFS-IBTS-Q3 [G2829], and ScoGFS-IBTS-Q3 [G2829]), constant maturity data from survey estimates, constant natural mortality estimated from survey indices (IBTS Q1&amp;3), and constant mean weight-at-age in the stock from long-term commercial catch estimates. Discarding and bycatch of Norway pout is considered negligible and not included in the ICES assessment.</p> <p>ICES advises that when the MSY approach (escapement strategy based on stochastic projections, with an <math>F_{cap}</math> (<math>F_{bar[1-2]}</math>) = 0.7) is applied, catches from 1 November 2022 to 31 October 2023 should be no more than 116 823 tonnes.</p>			

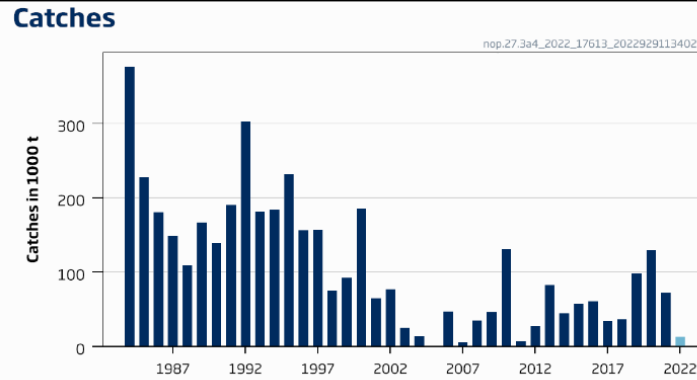


Figure 2. Norway pout in Subarea 4 and Division 3.a. Catches in 2022 (unshaded) are up to mid-September.

Source: ICES 2022.

Therefore, landings data are collected such that the fishery-wide removals of this species are known, so sub-clause A.1.1 is met.

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

According to WGNSK 2022, the stock size is highly variable from year to year, due to recruitment variability and a short life span. Spawning-stock biomass is estimated to have been fluctuating above  $B_{pa}$  for most of the time-series. Fishing pressure declined between 1985 and 1995 and has been fluctuating at a lower level since 1995. Recruitment in 2018, 2019, 2020 and 2022 was above the long-term average, but was estimated to be low in 2021. Currently, spawning stock size is above  $B_{pa}$  and  $B_{lim}$ ; no reference points for fishing pressure or for  $MSY B_{trigger}$  have been defined for this stock.

In addition to commercial catches (quarterly catches; catch-at-age and mean weight-at-age from catch sampling from the main Danish and Norwegian fisheries), input data in the assessment of the stock includes four survey indices (IBTS Q1 [G1022], IBTS Q3 [G2829], EngGFS-IBTS-Q3 [G2829], and ScoGFS-IBTS-Q3 [G2829]), constant maturity data from survey estimates, constant natural mortality estimated from survey indices (IBTS Q1&3), and constant mean weight-at-age in the stock from long-term commercial catch estimates.

ICES is not aware of any agreed precautionary management plan for Norway pout in this area.

ICES has previously evaluated a proposed management plan from Norway and EU (ICES, 2018a, 2018b, 2018c). ICES escapement strategy was found only to be precautionary with an  $F_{cap}$  at or below 0.7.

Therefore, sufficient additional information is collected to enable an indication of stock status to be estimated, so sub-clause A1.2 is met.

**References**

ICES. 2022. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSK). ICES Scientific Reports. 4:43. 1367 pp.: <http://doi.org/10.17895/ices.pub.19786285>

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**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>		<b>PASS</b>

**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.**

A stock assessment is conducted annually by the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK) using an Age-based analytical assessment (quarterly SAM model, called SESAM). In 2022, ICES used an MSY-based management for short-lived species (with recruitment highly variable and strongly influencing both the spawning-stock and total biomass) in the form of an escapement strategy based on a stochastic forecast, i.e., to maintain, with 95% probability, SSB above  $B_{lim}$  in the 4<sup>th</sup> quarter of 2023 after the fishery has taken place (in other words, probability of SSB falling below  $B_{lim}$  is less than 5%, which corresponds to 95% probability of SSB being above). This includes an  $F_{cap}$  at 0.7, which was not required this year because the advised  $F$  is below 0.7.

The assessment used commercial catches (quarterly catches; catch-at-age and mean weight-at-age from catch sampling from the main Danish and Norwegian fisheries), four survey indices (IBTS Q1 [G1022], IBTS Q3 [G2829], EngGFS-IBTS-Q3 [G2829], and ScoGFS-IBTS-Q3 [G2829]). Constant maturity data from survey estimates, constant natural mortality estimated from survey indices (IBTS Q1&3), and constant mean weight-at-age in the stock from long-term commercial catch estimates. For the implementation of the escapement strategy, SSB is calculated at the beginning of quarter 4 as a proxy for SSB at spawning time (quarter 1).

**Therefore, a stock assessment is conducted at least once every 3 years, and considers all fishery removals and the biological characteristics of the species, so sub-clause 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.**

The stock was benchmarked in 2016 (ICES 2016). In 2022, ICES continues to assess the Norway pout stock using a MSY approach and estimates the spawning-stock size in reference to  $B_{pa}$  and  $B_{lim}$ , but no reference points for fishing pressure or for MSY  $B_{trigger}$  have been defined for this stock.

ICES has previously evaluated a proposed management plan from Norway and EU (ICES, 2018a, 2018b, 2018c), but it has not been implemented for the fishery. ICES escapement strategy was found only to be precautionary with an  $F_{cap}$  (maximum fishing level) at or below 0.7.

**Table 6.** Norway pout in Subarea 4 and Division 3.a. Reference points, values, and their technical basis.

Source: ICES 2022a

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{escapement}$	Not defined*		
	$F_{MSY}$	Not defined		
	$F_{cap}$	0.70	A long-term management strategy evaluation, indicating that an escapement strategy for Norway pout is only precautionary with the addition of an upper limit on fishing mortality = $F_{cap}$ ( $F_{bar(1-2)}$ ) at 0.7	ICES (2020)
Precautionary approach	$B_{lim}$	42 573 tonnes (4th quarter)	$B_{lim} = B_{loss}$ , the lowest observed biomass in 2005 (as estimated in the updated benchmark assessment)	ICES (2020)
	$B_{pa}$	69 736 tonnes (4th quarter)	$B_{pa} = B_{lim} e^{0.3 \times 1.645}$	ICES (2020)
	$F_{lim}$	Not defined		
	$F_{pa}$	Not defined		
Management plan	SSB <sub>mgt</sub>	Not applicable		
	$F_{met}$	Not applicable		

\* MSY  $B_{escapement}$  has not been defined, as the escapement strategy uses directly the 95% probability of SSB being above  $B_{lim}$ .

Therefore, the assessment provides an estimate of the status of the biological stock relative to a reference point or proxy, so sub-clause A2.2 is met.

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

The ICES advice provides an indication of the volume of fishery removals which is appropriate for the current stock status in the form of recommended catches in the coming year.

In the latest advice, ICES advised that when the MSY approach is applied, catches from 1 November 2022 to 31 October 2023 should be no more than 116 823 tonnes.

ICES considers that this forecast sufficiently approximates the TAC period and that it can be used directly for management purposes for the period 1 November 2022–31 October 2023.

TACs are within the specified ranges set out in ICES advice and catches are within the TAC. Discarding is considered to be negligible in this fishery. The harvest strategy has been effective in maintaining the stock s above  $B_{pa}$  and  $B_{lim}$ .

Therefore, the assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status, so sub-clause A2.3 is met.

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

The ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK) performs stock assessments on the main demersal stocks in the North Sea, Skagerrak, and Eastern English Channel. The assessment of the Norway pout stock is conducted annually by the group. In 2022, at least 38 scientists participated in the WGNSSK hybrid meetings (April) and at least 9 and 6 to the online meetings in September, from fisheries research institutes and universities from the countries around the North Sea and Skagerrak area, including: United Kingdom, Norway, Denmark, Germany, Sweden, France, Belgium, Netherlands.

It is understood that the assessment for the stock was presented at the meeting, reviewed and the results agreed by the group. When the results of the assessments are agreed by the ICES groups, they are sent the ICES Advice Drafting Group, which consists of National Experts, which review them, and they are finally reviewed by the Advisory Committee (ACOM) which delivers the ICES advice. The WGNSSK is open to observers from competent authorities (ICES 2021b).

During the benchmarked process, external experts also participate. In this case, the stock was last benchmarked in 2016.

Therefore, the assessment is subject to internal and external review, so sub-clause A2.4 is met.

**A2.5 The assessment is made publicly available.**

All the stock Assessments and advice for this stock are publicly available on the ICES (latest advice) website (<https://www.ices.dk/advice/Pages/Latest-Advice.aspx>) and the ICES WGNSSK website (<https://www.ices.dk/community/groups/Pages/WGNSSK.aspx>).

Therefore, the assessment is made publicly available, so sub-clause A2.5 is met.

**References**

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**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

<b>A3</b>	<b>Harvest Strategy - Minimum Requirements</b>		
	<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
		<b>Clause outcome:</b>	<b>PASS</b>

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

ICES evaluated a proposed management plan from Norway and EU (ICES, 2018a, 2018b, 2018c) but a precautionary management plan for Norway pout in this area has not been agreed and no reference points for fishing pressure have been defined for this stock either. However, ICES escapement strategy was found to be precautionary with an  $F_{cap}$  at or below 0.7. Based on the MSY approach (escapement strategy: 95% probability of SSB being above  $B_{lim}$  in the 4<sup>th</sup> quarter of 2023), ICES gives advice, which is used by the authorities to set a TAC for the stock. In the latest advice of 2022, ICES advised that when the MSY approach is applied, catches from 1 November 2022 to 31 October 2023 should be no more than 116 823 tonnes. It would correspond to a F of 0.635, below the 0.7 limit.

Therefore, the primary mechanism by which total fishing mortality on the Norway pout stock is restricted comes in the form of Total Allowable Catches (TACs). In recent years, TAC and total catches have been below the ICES advice (see section below). Additional measures to restrict mortality include minimum mesh size, the closed Norway pout box, etc (Nielsen et al., 2016).

Therefore, there is a mechanism in place by which total fishing mortality of this species is restricted, so sub-clause A3.1 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.**

The current strategy has been effective in maintaining the Norway pout stock above to  $B_{pa}$  and  $B_{lim}$ . TACs are within the specified ranges set out in ICES advice and catches are within the TAC for recent years – see table below.

**Table 7.** Norway pout in Subarea 4 and Division 3.a. History of ICES advice, agreed TACs, official catch, and ICES catch estimate. All weights are in tonnes.

Source: ICES 2022a.

Year	ICES advice	Predicted catch corresponding to advice <sup>^^</sup>	TAC Norway	TAC EU <sup>^</sup>	TAC UK <sup>^</sup>	Official catch (including bycatch of other species)	ICES catch
2012	No fisheries	0		0			
In-year*	No fisheries	0				30148	27073
In-year**	Maintain SSB > MSY $B_{escapement}$	< 101000	25000	70683			
2013	Maintain SSB > MSY $B_{escapement}$	< 458000 (Catch <sub>2012</sub> = 0) < 393000 (Catch <sub>2012</sub> = 101)	157000	165700		84969	82100
In-year*	Maintain SSB > MSY $B_{escapement}$	< 457000					
2014	Maintain SSB > MSY $B_{escapement}$	< 216000	108000	128250		47120	44170
In-year*	Maintain SSB > MSY $B_{escapement}$	< 108000	123000				
2015	Precautionary considerations (F = 0.6)	< 326000	178000	150000		63430	63400
2016	MSY approach (escapement biomass with $F_{cap}$ )	< 390000	210000	150000		62770	63400
2017	MSY approach (escapement strategy; probability of SSB falling below $B_{lim}$ is less than 5%)	≤ 358471	204235	141950		33847	33933
2018	MSY approach (escapement strategy; probability of SSB falling below $B_{lim}$ is less than 5%)	≤ 212531	90978	85265		36060	36147
2019	MSY approach (escapement strategy; probability of SSB falling below $B_{lim}$ is less than 5%) with $F_{cap} = 0.7$	≤ 135459	82230	55000		100279	97654
2020	MSY approach (escapement strategy; probability of SSB falling below $B_{lim}$ is less than 5%) with $F_{cap} = 0.7$	≤ 167105	98053	72500		129609	129497
2021	MSY approach (escapement strategy; probability of SSB falling below $B_{lim}$ is less than 5%) with $F_{cap} = 0.7$	≤ 254038	127019	116555	11745	72479	71954
2022	MSY approach (escapement strategy; probability of SSB falling below $B_{lim}$ is less than 5%)	≤ 118273	59137	49524	10204		
2023	MSY approach (escapement strategy; probability of SSB falling below $B_{lim}$ is less than 5%)	≤ 116823					

\* Between 2008 and 2014, advice was provided in autumn, while the in-year advice was given in June on the basis of the first surveys and catches in the TAC year.

\*\* Update of in-year advice in October 2012.

<sup>^</sup> From 2018, the TAC for EU Member States and UK fishing in EU and UK waters is provided for the period 1 November of the previous year to 31 October of the current year. The EU TAC included UK up to 2020.

<sup>^^</sup> Starting with the advice for 2016, ICES advice has been provided for the period 1 November of the previous year to 31 October of the current year.

Therefore, total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment, so sub-clause A3.2 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).**

The ICES approach for managing this short-lived species is an MSY-based approach where an escapement strategy is used, with a 95% probability of SSB being above  $B_{lim}$  in the 4<sup>th</sup> quarter of the following fishing year (in this case 2023). A  $F_{cap}$  limit ( $F_{bar[1-2]}$ ) of 0.7 is also set. The directed fishery for Norway pout was closed in 2005, in the first half of 2006, and in 2007 as well as in the first half of 2011 and 2012. In the periods of closures there have in some years been set bycatch quotas for Norway pout in the Norwegian mixed blue whiting fishery around 5 kt, as well as in a small experimental fishery in 2007 (1 kt).

Therefore, it is considered that commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point history, so sub-clause A3.3 is met.

**References**

ICES. 2022. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports. 4:43. 1367 pp.: <http://doi.org/10.17895/ices.pub.19786285>

ICES. 2022a. Norway pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, nop.27.3a4: <https://doi.org/10.17895/ices.advice.19772446>

Nielsen, J. R., Olsen, J., Håkonsson, K. B., Egekvist J. and Dalskov, J. 2016. Danish Norway pout fishery in the North Sea and Skagerrak in ICES. 2017. Report of the Benchmark Workshop on Norway Pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3a (North Sea, Skagerrak, and Kattegat), 23–25 August 2016, Copenhagen, Denmark. ICES CM 2016/ACOM:35. 69 pp.: <https://doi.org/10.17895/ices.pub.5599>

Standard clause 1.3.2.1.3

**Links**

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

<b>A4</b>	<b>Stock Status - 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>		<b>PASS</b>



**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:**

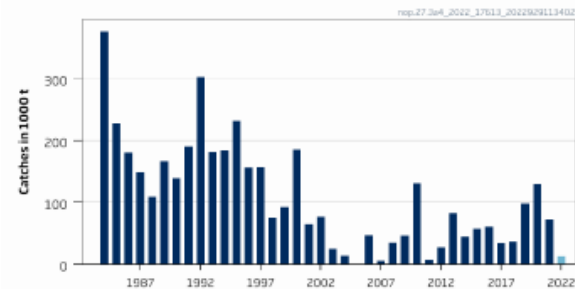
**The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.**

Spawning stock biomass (SSB) has since 2001 decreased continuously until 2005 but has in recent years increased again due to the strong 2008, 2009, 2012, 2014, 2016-, 2018-, 2019- and 2020-year classes, and the lowered fishing mortality. This past year showed a slight decline in biomass; however it still remains above the limit and target reference points. The stock biomass fell to a level well below  $B_{lim}$  in 2005 which is the lowest level ever recorded. By 1 January 2007 and 2008 the stock was at  $B_{pa}$  (=  $MSY_{B_{escapement}}$ ) (i.e., at increased risk of suffering reduced reproductive capacity), while the stock by 1 January 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017, 2018, 2019, 2020 and 2021 has been above  $B_{pa}$  (i.e., the stock show full reproductive capacity) (ICS 2021b).

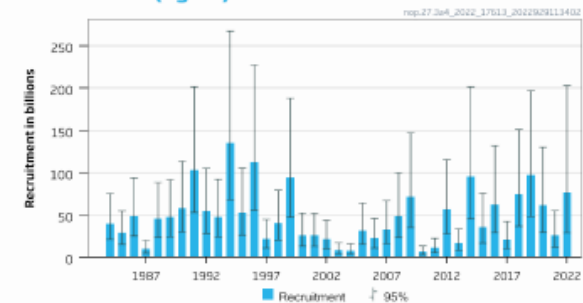
The recruitment in 2010 was very low and at the same level as the low 2003- and 2004-year classes where these three-year classes are the lowest on record since the mid-1980s. The recruitment in 2008, 2009, 2012, 2014, 2016, 2018, 2019 and 2020 was high. Recruitment in 2011 and 2013 was also very low, and the recruitment in 2015 and 2017 was slightly below long-term average (46 billion), but because of the strong 2012, 2014, 2016-, 2018-, 2019- and 2020-year classes the SSB has been well above  $B_{pa}$  (=  $MSY_{B_{escapement}}$ ) since 2014 even with a high yearly TAC in 2014–2021 (up to 3rd quarter) considering growth, high natural mortality, and 20% maturation at age 1. The 2022 recruitment (76 billion) is higher than the long-term average (48 billion) and will increase the stock biomass, so the stock is expected to remain above  $B_{pa}$  by the end of 2023.

According to the latest ICES advice of 2022 for 2023, spawning-stock size is above  $B_{pa}$  and  $B_{lim}$ ; no reference points for fishing pressure or for  $MSY_{B_{trigger}}$  have been defined for this stock.

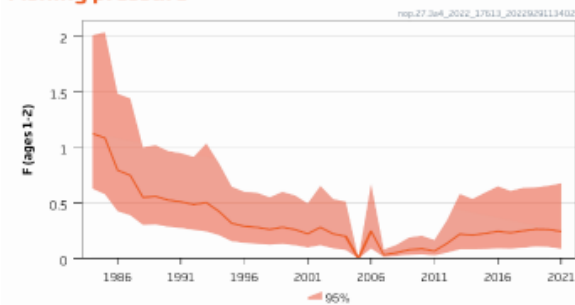
**Catches**



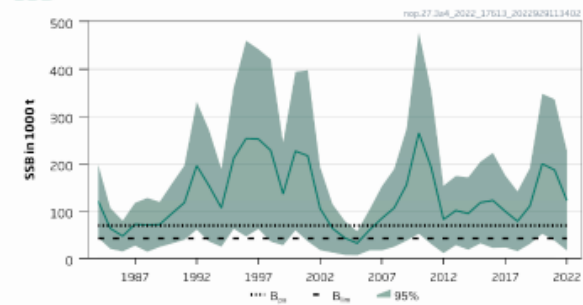
**Recruitment (age 0)**



**Fishing pressure**



**SSB**



**Figure 3.** Norway pout in Subarea 4 and Division 3.a. Summary of the stock assessment. Catches in 2022 (unshaded) are up to mid-September. SSB is estimated at the beginning of quarter 4.

Source: ICES 2022a.

**Therefore, the stock is above the target reference point, so sub-clause A4.1 is met.**

**References**

ICES. 2022. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports. 4:43. 1367 pp.: <http://doi.org/10.17895/ices.pub.19786285>

ICES. 2022a. Norway pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, nop.27.3a4: <https://doi.org/10.17895/ices.advice.19772446>

Nielsen, J. R., Olsen, J., Håkonsson, K. B., Egekvist J. and Dalskov, J. 2016. Danish Norway pout fishery in the North Sea and Skagerrak in ICES. 2017. Report of the Benchmark Workshop on Norway Pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3a (North Sea, Skagerrak, and Kattegat), 23–25 August 2016, Copenhagen, Denmark. ICES CM 2016/ACOM:35. 69 pp.: <https://doi.org/10.17895/ices.pub.5599>

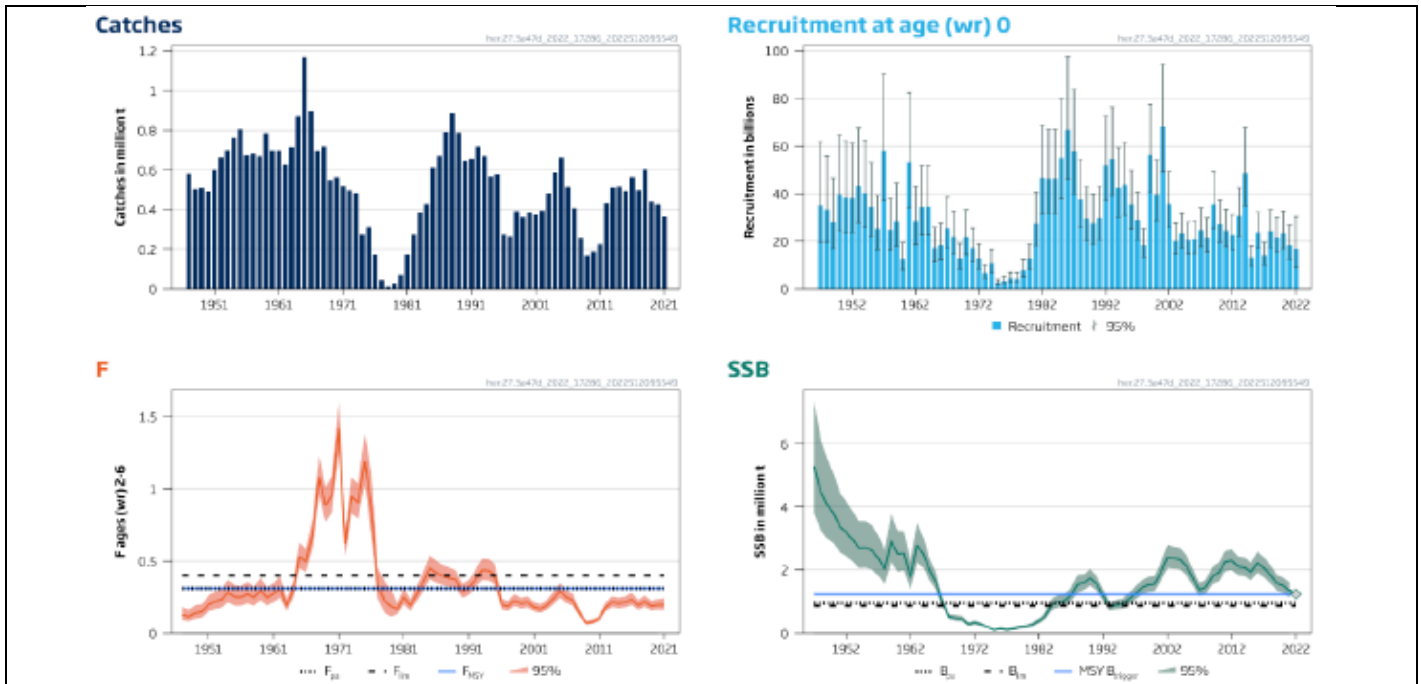
Links	
MarinTrust Standard clause	1.3.2.1.4
FAO CCRF	7.2.1, 7.2.2 (e)
GSSI	D6 01

## 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		Herring ( <i>Clupea harengus</i> ) - Autumn spawners	
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.	Yes
	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.	Yes
			Clause outcome: <b>PASS</b>
<p><b>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.</b></p> <p>The EU's data collection framework (DCF) outlines the EU countries' obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice. In Norway, a landing obligation is in place and all the catch recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.</p> <p>Herring in ICES Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel) is assessed by ICES using the following input data: Commercial catches disaggregated by fleets and split for NSAS/WBSS. Five survey indices IBTS Q1 1-ringer (G1022), IBTS0 (I8304), LAI as SSB index (I2359, I9086, I2687), HERAS 1–8 ringers (includes split for NSAS/WBSS, A5092), IBTS Q3 0–5-ringers (G2829); annual maturity data from HERAS survey, natural mortalities from SMS North Sea multispecies model.</p> <p>ICES advises that when the MSY approach is applied, catches in 2023 should be no more than 414 886 tonnes.</p> <p><b>Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process so sub-clause C1.1 is met.</b></p>			
<p><b>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.</b></p> <p>The latest stock assessment was undertaken in September 2022 by the Herring Assessment Working Group for the Area South of 62°N (HAWG). An Age-based analytical assessment, SAM assessment using catches in the model and the forecast was used to assess the status of the stock. The MSY approach is used as a basis for the advice and there is not any agreed precautionary management plan for herring in the area.</p> <p>Fishing pressure on the stock is below <math>F_{MSY}</math> and the spawning-stock size is above <math>MSY_{B_{trigger}}</math>, <math>B_{pa}</math> and <math>B_{lim}</math> (Figure 4).</p>			



**Figure 4.** Herring in Subarea 4 and divisions 3.a and 7.d, autumn spawners. Summary of the stock assessment. The grey diamond in the SSB plot is a predicted number for 2022 at spawning time. “Wr” is winter ring.  
Source: ICES 2022.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) so Clause C1.2 is met.

**References**

ICES. 2022. Herring (*Clupea harengus*) in Subarea 4 and divisions 3.a and 7.d, autumn spawners (North Sea, Skagerrak and Kattegat, eastern English Channel). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, her.27.3a47d, <https://doi.org/10.17895/ices.advice.19447985>.

ICES. 2022a. Herring Assessment Working Group for the Area South of 62 °N (HAWG). May 2022: [https://ices-library.figshare.com/articles/report/Herring Assessment Working Group for the Area South of 62 N HAWG\\_/19249010](https://ices-library.figshare.com/articles/report/Herring_Assessment_Working_Group_for_the_Area_South_of_62_N_HAWG_/19249010)

**Links**

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

<b>Species Name</b>		<b>Herring (<i>Clupea harengus</i>) – Norwegian spring-spawners</b>	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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.	Yes
	<b>C1.2</b>	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.	Yes
			<b>Clause outcome: PASS</b>
<p><b>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.</b></p> <p>The EU’s data collection framework (DCF) outlines the EU countries’ obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice. In Norway, a landing obligation is in place and all the catch recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.</p> <p>Herring in ICES subareas 1, 2, and 5, and in divisions 4.a and 14.a, (the Northeast Atlantic and the Arctic Ocean) is assessed by ICES using the following input data: assessment period 1988–2022: commercial catches-at-age (stock weight-at-age from surveys and, since 2009, from catch sampling). Three survey indices: Norwegian acoustic survey on spawning grounds in February/March (NASF [A7918]; 1988–1989, 1994–1996, 1998–2000, 2005–2008, 2015–2022); International Ecosystem Survey in the Nordic Seas (IESNS; A3675) covering the adult stock in the Nordic seas (1996–2022), and the juvenile stock in the Barents Sea (1991–2002, 2005–2007, 2009–2019, 2021). Maturity ogive variable by year-class strength. Natural mortalities are fixed values from historical analyses (age 2 = 0.9; ages greater than 2 = 0.15).</p> <p>ICES advises that when the long-term management strategy agreed by the European Union, the Faroe Islands, Iceland, Norway, and the Russian Federation is applied, catches in 2023 should be no more than 511 171 tonnes.</p> <p><b>Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process so sub-clause C1.1 is met.</b></p> <p><b>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.</b></p> <p>The latest stock assessment was undertaken in September 2022 by the Working Group on Widely Distributed Stocks (WGWISE) (ICES 2022b). A statistical assessment model (XSAM; ICES, 2016) that uses catches in the model and in the forecast and also includes uncertainty in catches and abundance indices, was used to assess the status of the stock.</p> <p>A long-term management strategy was agreed by the European Union, the Faroe Islands, Iceland, Norway, and Russian Federation in 2018 (Anon, 2018). ICES has evaluated the long-term management strategy and found it to be precautionary. ICES considers in its last stock assessment from 2022, that fishing pressure on the stock is above <math>F_{MSY}</math> and between <math>F_{pa}</math> and <math>F_{lim}</math>; the spawning-stock size is above <math>MSY B_{trigger}</math>, <math>B_{pa}</math> and <math>B_{lim}</math> (Figure 5).</p>			

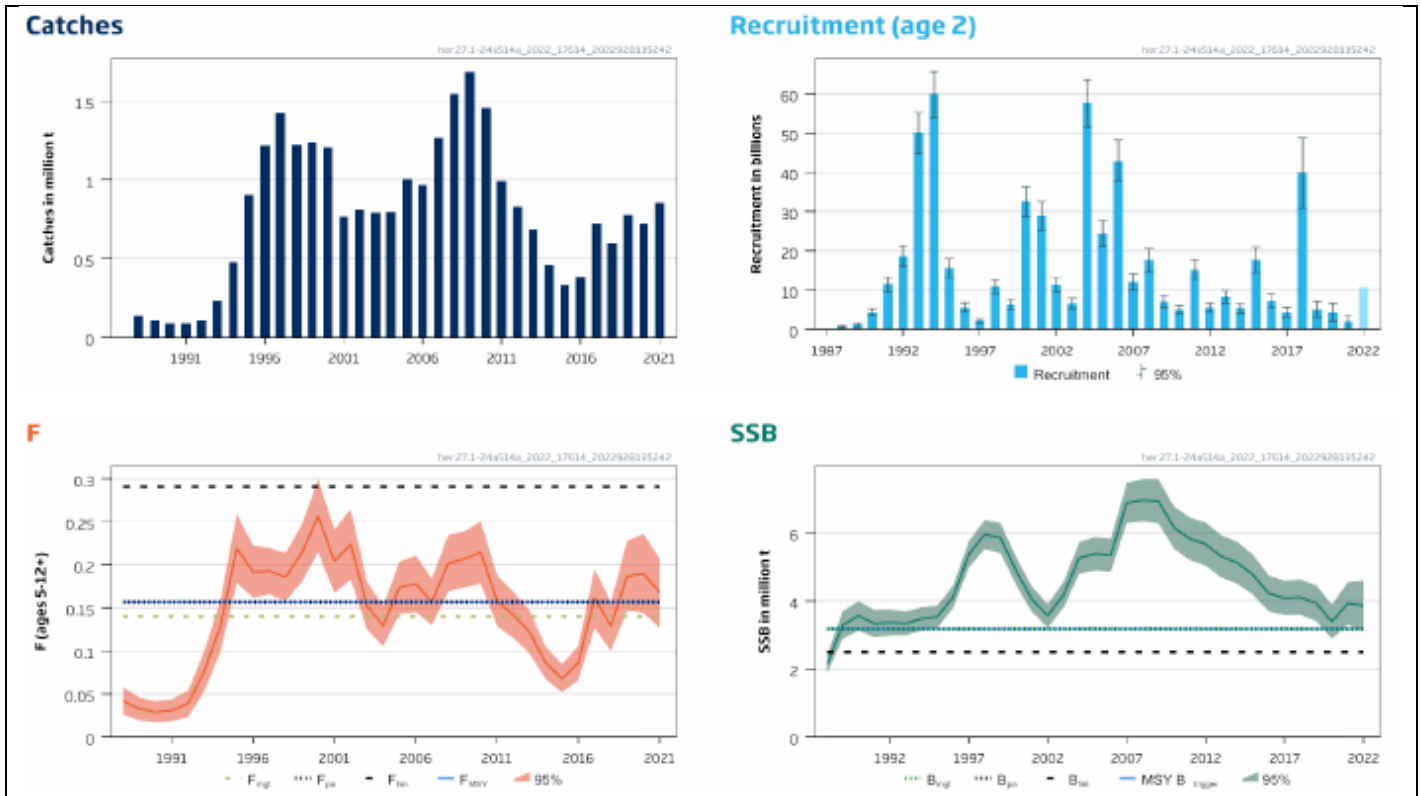


Figure 5. Herring in subareas 1, 2, and 5, and in divisions 4.a and 14.a (Norwegian spring-spawning herring). Summary of the stock assessment. The assumed recruitment value for 2022 is shaded in a lighter colour.

Source: ICES 2022a.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) so Clause C1.2 is met.

**References**

ICES. 2016. Report of the Benchmark Workshop on Pelagic Stocks (WKPELA), 29 February–4 March 2016, ICES Headquarters, Copenhagen, Denmark. ICES CM 2016/ACOM:34. 106 pp. <https://doi.org/10.17895/ices.pub.5581>

ICES. 2022a. Herring (*Clupea harengus*) in subareas 1, 2, 5 and divisions 4.a and 14.a, Norwegian spring-spawning herring (the Northeast Atlantic and Arctic Ocean). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, her.27.1-24a514a. <https://doi.org/10.17895/ices.advice.19772380>

ICES. 2022b. Working Group on Widely Distributed Stocks (WGWIDE). ICES Scientific Reports. 4:73. 922 pp. <http://doi.org/10.17895/ices.pub.21088804>

**Links**

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

<b>Species Name</b>		<b>Blue whiting (<i>Micromesistius poutassou</i>)</b>	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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.	Yes
	<b>C1.2</b>	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.	Yes
			<b>Clause outcome: PASS</b>
<p><b>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.</b></p> <p>The EU's data collection framework (DCF) outlines the EU countries' obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice. In Norway, a landing obligation is in place and all the catch recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.</p> <p>Blue whiting, subareas 1 – 9, 12, and 14 (Northeast Atlantic and adjacent waters) is assessed by ICES using the following input data: Commercial catches, preliminary estimate of catch-at-age in the year (Q1–Q2) in which the assessment is carried out. One survey index (International Blue Whiting Spawning Stock Survey [IBWSS; A1142] ages 1–8, 2004–2022, excluding 2010 and 2020). Time invariant maturity at age was estimated in 1994 by combining maturity ogives from the southern and northern areas. Time invariant natural mortality fixed at 0.2 for all ages, derived in the 1980s from age compositions before the targeted fishery started.</p> <p>ICES advises that when the long-term management strategy agreed by the European Union, the Faroe Islands, Iceland, and Norway is applied, catches in 2023 should be no more than 1 359 629 tonnes.</p> <p><b>Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process so sub-clause C1.1 is met.</b></p>			
<p><b>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.</b></p> <p>The latest stock assessment was undertaken in September 2022 by the Working Group on Widely Distributed Stocks (WGWISE) (ICES 2022b). An age-based analytical assessment (SAM; ICES, 2021a) that uses catches in the model and the forecast, was used to assess the status of the stock.</p> <p>A long-term management strategy was agreed by the European Union, the Faroe Islands, Iceland, and Norway (Anon., 2016) and subsequently by UK in 2021 (Anon., 2021). ICES has evaluated the strategy, including clause 6.b, and found it to be precautionary. ICES considers in its last stock assessment from 2022, that fishing pressure on the stock is above <math>F_{MSY}</math> and <math>F_{pa}</math> but below <math>F_{lim}</math>; the spawning-stock size is above <math>MSY B_{trigger}</math>, <math>B_{pa}</math> and <math>B_{lim}</math> (Figure 6).</p>			



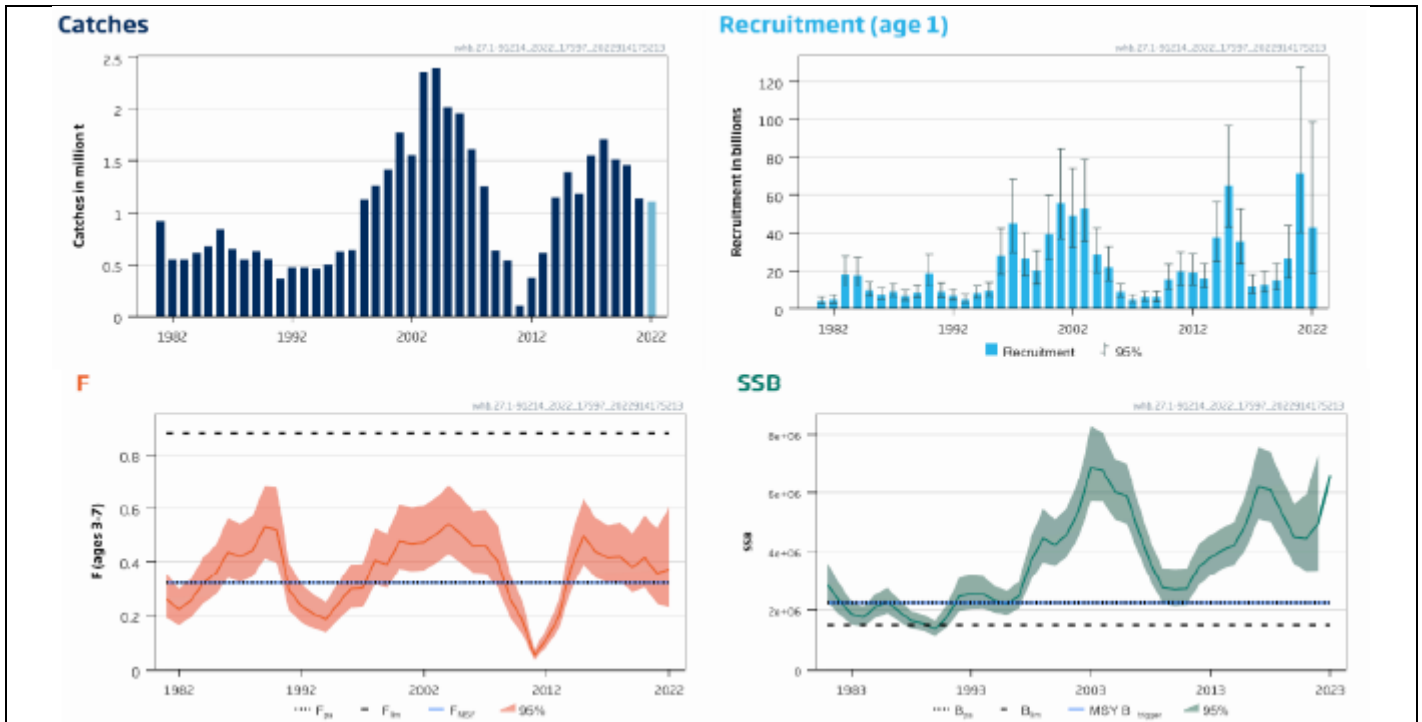


Figure 6. Blue whiting in subareas 1–9, 12, and 14. Summary of the stock assessment. The catch estimate for 2022 is preliminary. The assumed recruitment value for 2023 is shaded in a lighter colour.

Source: ICES 2022a.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) so Clause C1.2 is met.

References

ICES. 2022a. Blue whiting (*Micromesistius poulassou*) in subareas 1-9, 12, and 14 (Northeast Atlantic and adjacent waters). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, whb.27.1-91214. <https://doi.org/10.17895/ices.advice.21493974>

ICES. 2022b. Working Group on Widely Distributed Stocks (WGWIDE). ICES Scientific Reports. 4:73. 922 pp. <http://doi.org/10.17895/ices.pub.21088804>

Links

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

<b>Species Name</b>		<b>Cod (<i>Gadus morhua</i>)</b>	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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.	Yes
	<b>C1.2</b>	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.	Yes
<b>Clause outcome:</b>			<b>PASS</b>

**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.**

The EU's data collection framework (DCF) outlines the EU countries' obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice. In Norway, a landing obligation is in place and all the catch recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.

Cod (*Gadus morhua*) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak), is assessed by ICES using the following input data: Commercial catches (international catches and ages from catch sampling by métier), two survey indices (IBTS Q1 [G1022] 1983–2022 and IBTS Q3 [G2829] 1992–2022) derived by a Delta-GAM approach; a third index for recruits is derived from the same IBTS Q3 Delta-GAM approach. Annually varying maturity data from IBTS Q1 ([G1022]; 1978–2022). Annually varying natural mortalities from the North Sea multispecies model. An ad hoc adjustment of  $M$  to mimic emigration of 3+ cod out of the assessment area has been implemented for  $M$  values from 2011 and onwards.

ICES advises that when the MSY approach is applied, catches in 2023 should be no more than 26 008 tonnes.

ICES notes the existence of a precautionary management plan, developed and adopted by one of the relevant management authorities for this stock.

**Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process so sub-clause C1.1 is met.**

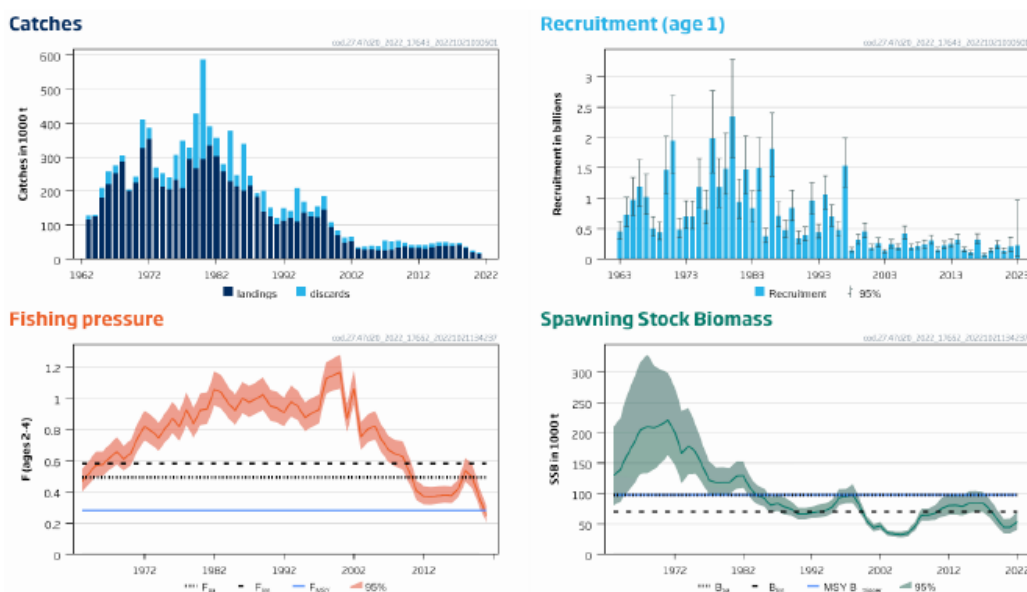
**C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.**

The latest stock assessment was undertaken in September 2022 by the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak.

An age-based analytical assessment (SAM; ICES, 2021a) that uses catches in the model and the forecast, was used to assess the status of the stock.

ICES is aware of the EU multiannual management plan (MAP) that has been agreed for this stock (EU, 2018) and considers it to be precautionary. There is no agreement with Norway and the UK regarding this plan, and it is not used as the basis of the advice for this shared stock. ICES provides catch scenarios consistent with the  $F_{MSY}$  ranges in the MAP.

ICES considers in its last stock assessment from 2022, that fishing pressure on the stock is below  $F_{MSY}$  and spawning-stock size is below  $MSY B_{trigger}$ ,  $B_{pa}$  and  $B_{lim}$  (Figure 7).



**Figure 7.** Cod in Subarea 4, Division 7.d, and Subdivision 20. Summary of the stock assessment.

Source: ICES 2022a.

However, according to the most recent review of the Norway pout fishery, bycatch of herring, saithe, cod, haddock, whiting, and anglerfish at various levels in this small-meshed fishery. Bycatches of these species have been relatively low in the recent decade, and in general, the bycatch levels of these gadoids have decreased in the Norway pout fishery over the years (ICES 2022b). Review of scientific documentation show that gear selective devices can be used in the Norway pout fishery, significantly reducing bycatches of juvenile gadoids, larger gadoids, and other non-target species. Sorting grids are at present used in the Norwegian and Danish fishery (partly implemented as management measures for the larger vessels), but modification of the selective devices and their implementation in management is still ongoing (ICES 2022b).

Nielsen et al., 2016 presents bycatch levels in the period 2002 – 2015 by species in the Danish and Norwegian small meshed industrial trawl fishery targeting Norway pout in the North Sea and Skagerrak. In that review, cod bycatch was estimated at 0.01% – 0.07% of total annual landings. Based on average annual Norway pout landings, this would suggest that cod removals by the Norway pout fishery are between 10 mt and 70 mt annually which, when considered in the context of total removals from the North Sea cod stock (17,192 mt of cod were landed in 2020), may be considered negligible.

**Therefore, although biomass levels in the most recent stock assessment are not above the limit reference point (or proxy), removals by the fishery under assessment are considered by scientific authorities to be negligible so Clause C1.2 is met.**

**References**

ICES. 2022a. Cod (*Gadus morhua*) in Subarea 4, Division 7.d, and Subdivision 20 (North Sea, eastern English Channel, Skagerrak). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, cod.27.47d20. <https://doi.org/10.17895/ices.advice.21406881>

ICES. 2022b. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports. 4:43: <http://doi.org/10.17895/ices.pub.19786285>

Nielsen, J.R., Olsen, J., Håkonsson, K.B., Egekvist, J., and Dalskov, J. 2016. Danish Norway pout fishery in the North Sea and Skagerrak. Working Document 2, ICES WKPOUT 2016. ICES CM 2016 / ACOM:35, 81 pp.: <https://doi.org/10.17895/ices.pub.5599>

**Links**

<b>MarinTrust Standard clause</b>	1.3.2.2
<b>FAO CCRF</b>	7.5.3
<b>GSSI</b>	D.3.04, D5.01

<b>Species Name</b>		<b>Haddock (<i>Melanogrammus aeglefinus</i>)</b>	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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.	Yes
	<b>C1.2</b>	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.	Yes
<b>Clause outcome:</b>			<b>PASS</b>
<b>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.</b>			
The EU’s data collection framework (DCF) outlines the EU countries’ obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice. In Norway, a landing obligation is in place and all the catch			

recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.

Haddock (*Melanogrammus aeglefinus*) in Subarea 4, Division 6.a, and Subdivision 20 (North Sea, West of Scotland, Skagerrak) is assessed by ICES using the following input data: Commercial catches (international catches, ages from catch sampling), two survey indices derived through a delta-GAM approach: "Q1" (combining NS-IBTS [G1022], SWC-IBTS [G1179], SCOWCGFS [G4748]), "Q3+Q4" (combining NS-IBTS Q3 [G2829], Q4 SWC-IBTS [G4299], Q4 SCOWCGFS [G4815], and Q4 IGFS [G7212]). Annually varying maturity data from Q1 NS-IBTS [G1022], Q1 SWC-IBTS [G1179], and Q1 SCOWCGFS [G4748] (1991–2022). Annually varying natural mortalities from the North Sea multispecies model (1974–2020).

ICES advises that when the MSY approach is applied, total catches in 2023 should be no more than 137 058 tonnes. ICES notes the existence of a precautionary management plan, developed and adopted by one of the relevant management authorities for this stock.

**Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process so sub-clause C1.1 is met.**

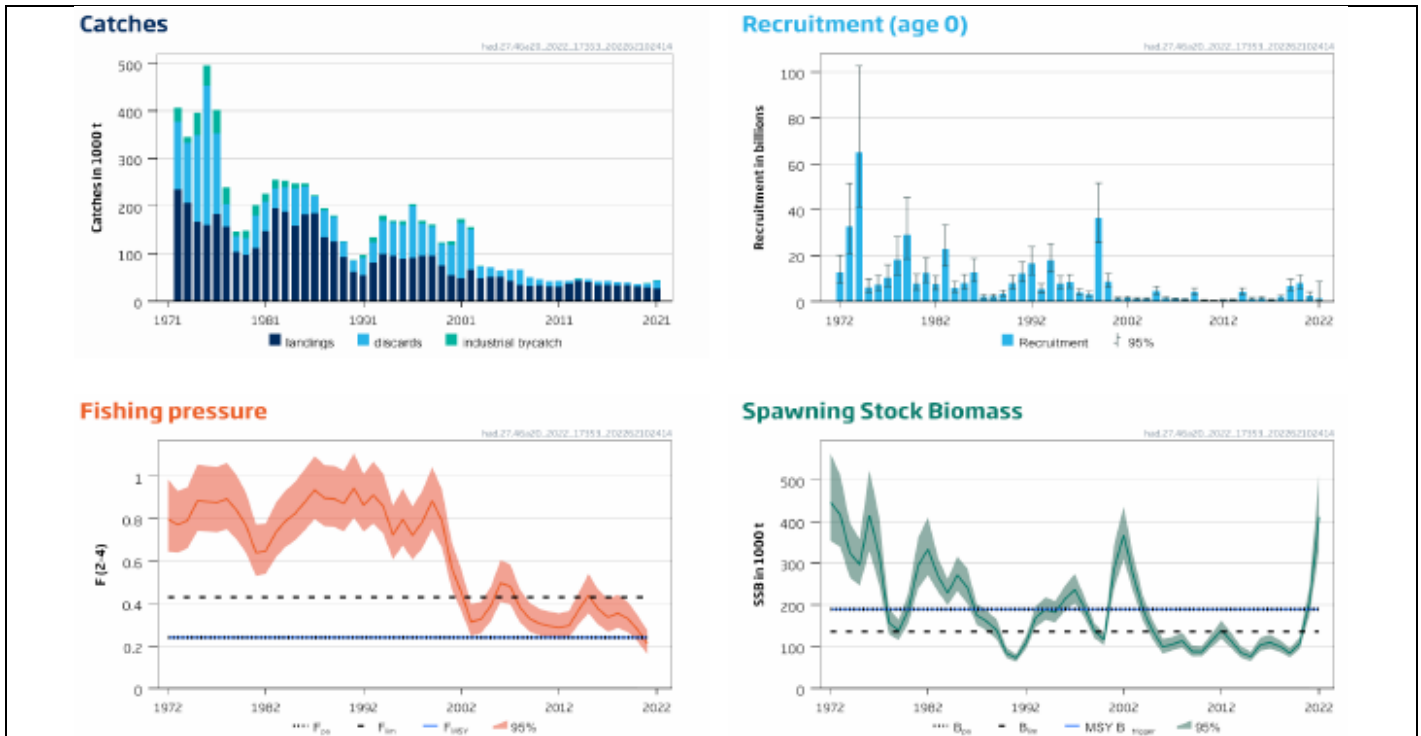
**C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.**

The latest stock assessment was undertaken in September 2022 by the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak.

An age-based analytical assessment (SAM; ICES, 2022b) that uses catches and surveys in the model and in the forecast was used to assess the status of the stock.

ICES is aware of an EU multiannual management plan (MAP) which has been agreed by the EU for this stock (EU, 2018). There is no agreement with Norway and UK regarding this plan, and it is not used as the basis of the advice for this shared stock. ICES was requested by the EC and UK to provide advice based on the MSY approach, and to include  $F_{MSY}$  ranges in the catch scenarios.

ICES considers in its last stock assessment from 2022, that fishing pressure on the stock is below  $F_{MSY}$  and spawning-stock size is above MSY  $B_{trigger}$ ,  $B_{pa}$  and  $B_{lim}$  (Figure 8).



**Figure 8.** Haddock in Subarea 4, Division 6.a, and Subdivision 20. Summary of the stock assessment. The assumed recruitment value for 2022 is shaded in a lighter colour. Discards include BMS landings.

Source: ICES 2022a.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), so Clause C1.2 is met.

**References**

EU. 2018. Regulation (EU) 2018/973 of the European Parliament and of the Council of 4 July 2018 establishing a multiannual plan for demersal stocks in the North Sea and the fisheries exploiting those stocks, specifying details of the implementation of the landing obligation in the North Sea and repealing Council Regulations (EC) No 676/2007 and (EC) No 1342/2008. Official Journal of the European Union, 179: 1–13: <http://data.europa.eu/eli/reg/2018/973/oj>

ICES. 2022a. Haddock (*Melanogrammus aeglefinus*) in Subarea 4, Division 6.a, and Subdivision 20 (North Sea, West of Scotland, Skagerrak). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, had.27.46a20: <https://doi.org/10.17895/ices.advice.19447943>

ICES. 2022b. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports. 4:43: <http://doi.org/10.17895/ices.pub.19786285>

**Links**

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

<b>Species Name</b>		<b>Saithe (<i>Pollachius virens</i>)</b>	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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.	Yes

	<b>C1.2</b> 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.	Yes
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**Clause outcome: PASS**

**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.**

The EU’s data collection framework (DCF) outlines the EU countries’ obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice. In Norway, a landing obligation is in place and all the catch recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.

Saithe (*Pollachius virens*) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat), is assessed by ICES using the following input data: Commercial catches (international landings, BMS landings, discards, and age frequencies from catch sampling); survey index (IBTS Q3 [G2829], ages 3–8); combined commercial index scaled to the exploitable biomass (French, German, and Norwegian trawler fleets). Maturity-at-age and natural mortality are assumed to be constant. Stock weights are equal to catch weights.

ICES advises that when the MSY approach is applied, catches in 2023 should be no more than 58 912 tonnes. ICES notes the existence of a precautionary management plan, developed and adopted by one of the relevant management authorities for this stock.

**Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process so sub-clause C1.1 is met.**

**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.**

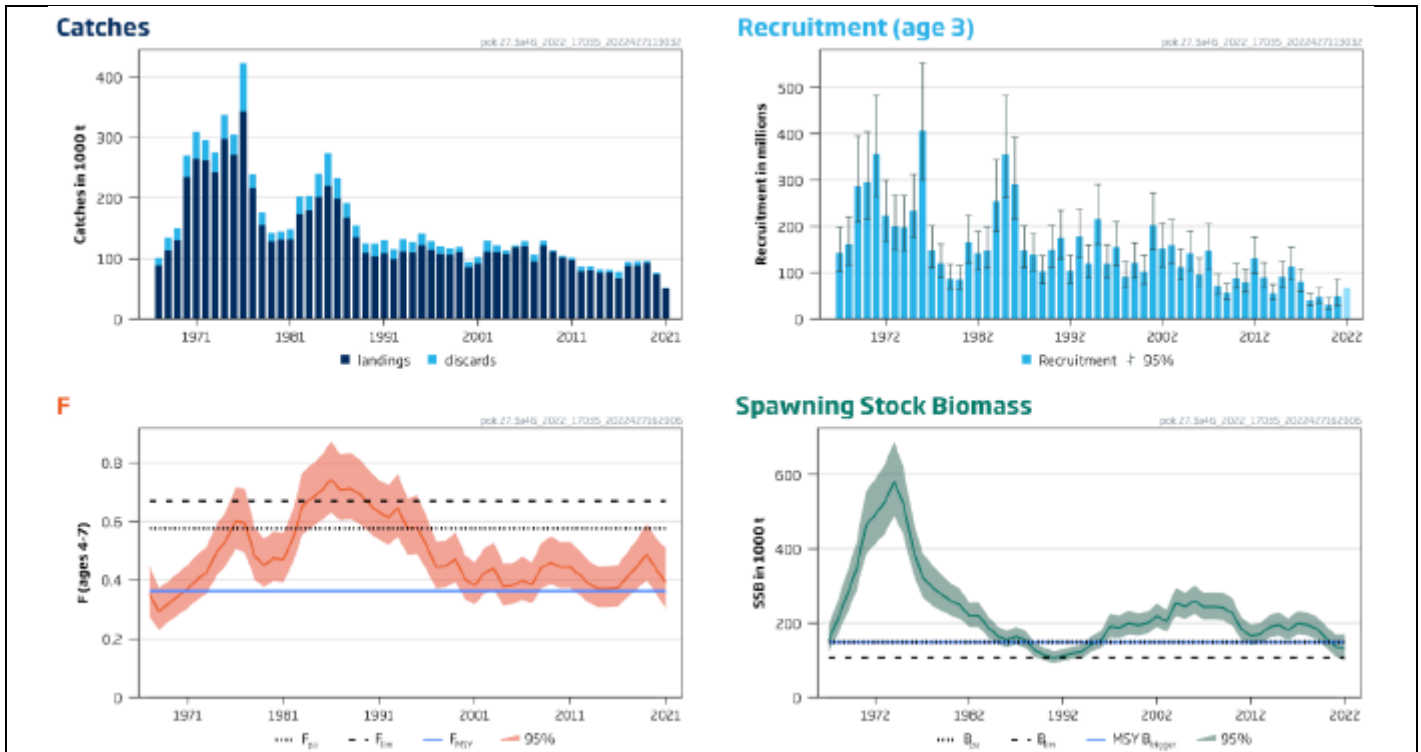
The latest stock assessment was undertaken in September 2022 by the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak.

An age-based analytical assessment SAM (ICES, 2022b) that uses catches and surveys in the model and in the forecast was used to assess the status of the stock.

ICES is aware of an EU multiannual management plan (MAP) which has been agreed by the EU for this stock (EU, 2018). There is no agreement with Norway and UK regarding this plan, and it is not used as the basis of the advice for this shared stock. ICES was requested by the EC and UK to provide advice based on the MSY approach, and to include  $F_{MSY}$  ranges in the catch scenarios.

ICES considers in its last stock assessment from 2022, that fishing pressure on the stock is above  $F_{MSY}$  but below  $F_{pa}$  and  $F_{lim}$ ; and spawning-stock size is below MSY  $B_{trigger}$  and between  $B_{pa}$  and  $B_{lim}$  (Figure 9).





**Figure 9.** Saithe in subareas 4 and 6, and in Division 3.a. Summary of the stock assessment. The assumed recruitment value for 2022 is shaded in a lighter colour. Landings and discards are for ages 3–10+ only, as used in the assessment.  
Source: ICES 2022a.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), so Clause C1.2 is met.

**References**

EU. 2018. Regulation (EU) 2018/973 of the European Parliament and of the Council of 4 July 2018 establishing a multiannual plan for demersal stocks in the North Sea and the fisheries exploiting those stocks, specifying details of the implementation of the landing obligation in the North Sea and repealing Council Regulations (EC) No 676/2007 and (EC) No 1342/2008. Official Journal of the European Union, L. 179. 13 pp. <http://data.europa.eu/eli/reg/2018/973/oj>

ICES. 2022a. Saithe (*Pollachius virens*) in subareas 4 and 6, and in Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, pok.27.3a46: <https://doi.org/10.17895/ices.advice.19453649>

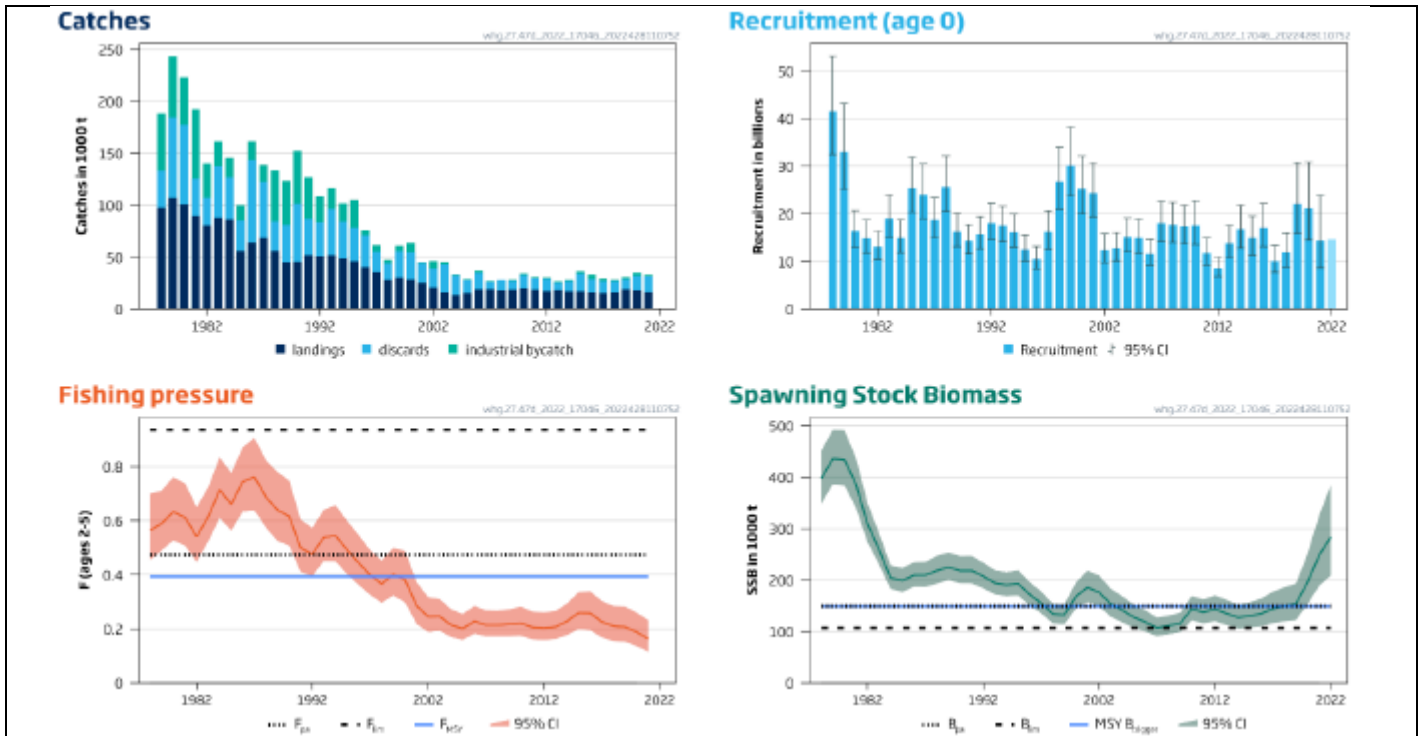
ICES. 2022b. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). ICES Scientific Reports. 4:43: <http://doi.org/10.17895/ices.pub.19786285>

**Links**

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



Species Name		Whiting ( <i>Merlangius merlangus</i> ) - Subarea 4 and Division 7.d	
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.	Yes
	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.	Yes
			Clause outcome: <b>PASS</b>
<p><b>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.</b></p> <p>The EU's data collection framework (DCF) outlines the EU countries' obligations to collect, manage and make available a wide range of fisheries and aquaculture data needed for scientific advice. In Norway, a landing obligation is in place and all the catch recorded in the logbook and sent to the research and management institutions which use this data for assessing and managing purposes.</p> <p>Whiting (<i>Merlangius merlangus</i>) in Subarea 4 and Division 7.d (North Sea and eastern English Channel), is assessed by ICES using the following input data: Commercial catches (international catches, ages from catch sampling by métier, since 1978), two survey indices (NS-IBTS Q1 [G1022] &amp; Q3 [G2829]; ages 0 to 5; since 1983); time-varying maturity estimated from NS-IBTS Q1 data; time-varying natural mortalities from the North Sea SMS multispecies model (ICES, 2021b)</p> <p>ICES advises that when the MSY approach is applied, catches in 2023 should be no more than 110 172 tonnes.</p> <p>ICES notes the existence of a precautionary management plan, developed and adopted by one of the relevant management authorities for this stock.</p> <p>Management should be implemented at the stock level.</p> <p><b>Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process so sub-clause C1.1 is met.</b></p>			
<p><b>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.</b></p> <p>The latest stock assessment was undertaken in September 2022 by the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak.</p> <p>An age-based analytical assessment SAM (ICES, 2022b) that uses catches and surveys in the model and in the forecast was used to assess the status of the stock.</p> <p>ICES is aware of an EU multiannual management plan (MAP) which has been agreed by the EU for this stock (EU, 2018). There is no agreement with Norway and UK regarding this plan, and it is not used as the basis of the advice for this shared stock. ICES was requested by the EC and UK to provide advice based on the MSY approach, and to include <math>F_{MSY}</math> ranges in the catch scenarios.</p> <p>ICES considers in its last stock assessment from 2022, that fishing pressure on the stock is below <math>F_{MSY}</math>; and spawning-stock size is above <math>MSY B_{trigger}</math>, <math>B_{pa}</math> and <math>B_{lim}</math> (Figure 10).</p>			



**Figure 10.** Whiting in Subarea 4 and Division 7.d. Summary of the stock assessment. The assumed recruitment value for 2022 is shaded in a lighter colour.  
Source: ICES 2022a.

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), so Clause C1.2 is met.

**References**

EU. 2018. Regulation (EU) 2018/973 of the European Parliament and of the Council of 4 July 2018 establishing a multiannual plan for demersal stocks in the North Sea and the fisheries exploiting those stocks, specifying details of the implementation of the landing obligation in the North Sea and repealing Council Regulations (EC) No 676/2007 and (EC) No 1342/2008. Official Journal of the European Union, L. 179. 13 pp.: <http://data.europa.eu/eli/reg/2018/973/oj>

ICES. 2022a. Whiting (*Merlangius merlangus*) in Subarea 4 and Division 7.d (North Sea and eastern English Channel). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, whg.27.47d: <https://doi.org/10.17895/ices.advice.19457411>

ICES. 2022b. Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSK). ICES Scientific Reports. 4:43: <http://doi.org/10.17895/ices.pub.19786285>

**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-assessment style approach must be taken.

<b>D1</b>	<b>Species Name</b>	<b>Anglerfish (<i>Lophius budegassa</i>, <i>Lophius piscatorius</i>)</b>	
	<b>Productivity Attribute</b>	<b>Value</b>	<b>Score</b>
	Average age at maturity (years)	3.4 – 6.3	2
	Average maximum age (years)	16-28.7	3
	Fecundity (eggs/spawning)	>20 000 eggs (1,000,000)	1
	Average maximum size (cm)	100-200	2
	Average size at maturity (cm)	45-55	2
	Reproductive strategy	Demersal egg layer	2
	Mean trophic level	4.5	3
	<b>Average Productivity Score</b>		<b>2.14</b>
	<b>Susceptibility Attribute</b>	<b>Value</b>	<b>Score</b>
	Availability (area overlap)	Distribution Eastern Atlantic south-western Barents Sea to Strait of Gibraltar including, Mediterranean and Black Sea, Iceland and Mauritania 10-30% of the stock occurs in area fished	2
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Bathymersal 20-1000m, includes the range of mid-water and bottom trawl	3
	Selectivity of gear type	Individuals < size at maturity are frequently caught	3
	Post-capture mortality	Retained species	3
	<b>Average Susceptibility Score</b>		<b>2.75</b>
	<b>PSA Risk Rating (From Table D3)</b>		<b>Fail</b>
	<b>Compliance rating</b>		<b>FAIL</b>
	<b>Further justification for susceptibility scoring (where relevant)</b>		
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		
The species fails the PSA risk-rating (Table D1), it is further assessed under D4, in accordance with MT standards and procedures.			
<b>References</b>			

FishBase.	<i>Lophius</i>	<i>piscatorius</i>	Linnaeus,	1758,	Angler:
<a href="https://www.fishbase.de/Summary/SpeciesSummary.php?ID=716&amp;AT=anglerfish">https://www.fishbase.de/Summary/SpeciesSummary.php?ID=716&amp;AT=anglerfish</a>					
FishBase. <i>Lophius budegassa</i> , Spinola, 1807, Blackbellied angler: <a href="https://www.fishbase.se/summary/5094">https://www.fishbase.se/summary/5094</a>					
<i>Standard clauses 1.3.2.2</i>					

**Table D2 - Productivity / Susceptibility attributes and scores.**

<b>Productivity attributes</b>	<b>High productivity (Low risk, score = 1)</b>	<b>Medium productivity (medium risk, score = 2)</b>	<b>Low productivity (high risk, score = 3)</b>
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

<b>Susceptibility attributes</b>	<b>Low susceptibility (Low risk, score = 1)</b>	<b>Medium susceptibility (medium risk, score = 2)</b>	<b>High susceptibility (high risk, score = 3)</b>
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	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

would be released and that it would be in a 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	Anglerfish ( <i>Lophius budegassa</i> , <i>Lophius piscatorius</i> )	
<b>Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements</b>			
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.		Yes
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		Yes
<b>Outcome:</b>			<b>PASS</b>
<b>Evidence</b>			
<p><b>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.</b></p> <p>ICES advises that when the MSY approach is applied, catches should be no more than 9 881 tonnes in each of the years 2023 and 2024.</p> <p>ICES notes the existence of a precautionary management plan, developed and adopted by one of the relevant management authorities for this stock.</p> <p>Management should be implemented at the stock level.</p> <p>These species are assessed with a complex applying the ICES framework for category 3 stocks. A survey biomass index was used as an indicator of stock development. The advice is based on the ratio of the mean of the last two index values (Index A, with 2020 treated as missing) and the mean of the three preceding values (Index B), multiplied by the recent advised catch.</p> <p>No reference points are defined for the stock.</p> <p>An EU multiannual management plan (MAP) has been agreed by the EU for this stock (EU, 2018). The MAP stipulates that when the <math>F_{MSY}</math> ranges are not available, fishing opportunities should be based on the best available scientific advice. However, there is no agreed shared management plan with the UK or Norway for this stock, and ICES provides advice according to ICES precautionary approach.</p> <p>Under the landing obligation, all catches must be recorded and landed. Therefore, landings of the fishery are known. In the Norwegian fishery, from 2010, selection grids have been used to reduce the bycatch of larger gadoids. Bycatch limits have been also set for some species (Johnsen et al., 2016). The maximum bycatch of cod, haddock and saithe in industrial trawling in the North Sea is maximum 20% in weight by haul and by landing. The bycatch of herring is maximum 10%. Any bycatch of herring is taken from the vessel quota. The bycatch of greater silver smelt is maximum 10%. Maximum bycatch of monkfish is 0.5% and landing of monkfish by trip should not exceed 500 kg. Only vessels with quota of blue whiting are allowed to conduct small meshed industrial trawling.</p> <p><b>Therefore, the potential impacts of the fishery on this species are considered during the management process, so sub-clause D4.1 is met.</b></p>			

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

In recent years, landings have been below the agreed TAC which has been in line with ICES advice. Bycatch limits have been set for some species (Johnsen et al., 2016). Maximum bycatch of monkfish is 0.5% and landing of monkfish by trip should not exceed 500 kg. The recorded bycatch of the fishery is low.

**Therefore, it is considered that there is no substantial evidence that the fishery has a significant negative impact on the species, so sub-clause D4.2 is met.**

**References**

EU. 2018. Regulation (EU) 2018/973 of the European Parliament and of the council of 4 July 2018 establishing a multiannual plan for demersal stocks in the North Sea and the fisheries exploiting those stocks, specifying details of the implementation of the landing obligation in the North Sea and repealing Council Regulations (EC) No 676/2007 and (EC) No 1342/2008. Official Journal of the European Union, L 179: 1–13: <http://data.europa.eu/eli/reg/2018/973/oj>

ICES. 2022. Anglerfish (*Lophius budegassa*, *Lophius piscatorius*) in Subareas 4 and 6, and Division 3.a (North Sea, Rockall and West of Scotland, Skagerrak and Kattegat). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, anf.27.3a46: <https://doi.org/10.17895/ices.advice.19772359>

Johnsen, E., Misund, R., Palmason, S. R., and Blom, G. 2016. Norwegian industrial fishery for Norway pout in the North Sea in ICES. 2016. Report of the Benchmark Workshop on Norway Pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat), 23–25 August 2016, Copenhagen, Denmark. ICES CM 2016/ACOM:35. 396 pp.: <https://doi.org/10.17895/ices.pub.5599>

**Links**

<b>MarinTrust Standard clause</b>	1.3.2.2, 4.1.4
<b>FAO CCRF</b>	7.5.1
<b>GSSI</b>	D.5.01

<b>D1</b>	<b>Species Name</b>	<b>Greater silver smelt (<i>Argentina silus</i>)</b>	
	<b>Productivity Attribute</b>	<b>Value</b>	<b>Score</b>
	Average age at maturity (years)	3.6	1
	Average maximum age (years)	15	2
	Fecundity (eggs/spawning)	>20 000 eggs (1,000,000)	1
	Average maximum size (cm)	70	1
	Average size at maturity (cm)	24.3	1
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	3.3	3
	<b>Average Productivity Score</b>		<b>1.43</b>
	<b>Susceptibility Attribute</b>	<b>Value</b>	<b>Score</b>
	Availability (area overlap)	Eastern Atlantic, deeper parts of North Sea and across the Wyville Thomson ridge to Denmark Strait. Western Atlantic: Davis Strait to George's Bank in Canada. Arctic Ocean: east to Finnmark, Norway, Barents Sea. 10 to 30% of stock occurs in area fished	2
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Close to the seabed, 140-1440m	2
	Selectivity of gear type	Individuals < size at maturity are frequently caught	3
	Post-capture mortality	Retained species	3
	<b>Average Susceptibility Score</b>		<b>2.5</b>
	<b>PSA Risk Rating (From Table D3)</b>		<b>Pass</b>
	<b>Compliance rating</b>		<b>PASS</b>
	<b>Further justification for susceptibility scoring (where relevant)</b>		
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		
<b>References</b>			
Froese, R. and D. Pauly. Editors. 2021. FishBase. Greater silver smelt ( <i>Argentina silus</i> ): <a href="https://www.fishbase.de/summary/Argentina-silus.html">https://www.fishbase.de/summary/Argentina-silus.html</a>			
<i>Standard clauses 1.3.2.2</i>			

## 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>		<b>PASS</b>	
<p>The following information remains mainly the same as last year’s assessment, as no major update has been found in the impacts on ETP species of the fishery. Some updates from the DNV ACDR report 2022 and the last reports from Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK)/Working Group on Bycatch of Protected Species (WGBYC), have been added.</p> <p><b>F1.1 Interactions with ETP species are recorded.</b></p> <p>All commercial species caught in Norwegian waters must be retained (a landing obligation is implemented since 1984), recorded in the electronic logbook and landed.</p> <p>Under the landing obligation, all catches must be recorded and landed. Therefore, landings of the fishery are known. In the Norwegian fishery, from 2010, selection grids have been used to reduce the bycatch of larger gadoids. Bycatch limits have been also set for some species (Johnsen et al., 2016). The maximum bycatch of cod, haddock and saithe in industrial trawling in the North Sea is maximum 20% in weight by haul and by landing. The bycatch of herring is maximum 10%. Any bycatch of herring is taken from the vessel quota. The bycatch of greater silver smelt is maximum 10%. Maximum bycatch of monkfish is 0.5% and landing of monkfish by trip should not exceed 500 kg. Only vessels with quota of blue whiting are allowed to conduct small meshed industrial trawling.</p> <p>Interaction with ETP species, included discarded species, also must be recorded. There is rigorously enforced discard ban on all Norwegian vessels regardless of the area jurisdiction and on all foreign vessels fishing within Norwegian waters. A Norwegian reference fleet is also used by the Institute of Marine Research (IMR) to collect data on interactions with bycatch and ETP species (which includes vessels targeting Norway pout for reduction purposes) in order to assess the impact of Norwegian fisheries on those species.</p> <p>At the EU level, Council Regulation (EC) No 812/2004 lays down measures aimed at mitigating incidental catches of cetaceans by fishing vessels. Data collected under Regulation 812/2004 are submitted to the ICES group Working group on bycatch of protected species (WGBYC) through their annual data call. These data are most linked to at-sea observations carried out for fisheries monitoring following the EU Data Collection Framework Regulation 2017/1004 (DCF) (ICES WGBYC 2020).</p> <p>The fishery is nearly exclusively performed by Danish and Norwegian vessels using small mesh trawls (&lt; 32 mm cod end) in the north-western North Sea, especially at the Fladen Ground and along the edge of the Norwegian Trench in the north-eastern part of the North Sea.</p> <p>A Norwegian reference fleet is used by the Institute of Marine Research (IMR) to collect data on interactions with bycatch and ETP species in order to assess the impact of Norwegian fisheries on those species. For the larger vessels (&gt;28m vessel length) the fisheries prioritised in the High-seas Reference Fleet include, among others, the industrial trawl fisheries targeting sandeel, Norwegian pout and blue whiting for fish-meal production. Landing data for that fleet operating to the south of latitude 62°N and in the North Sea, is provided by the IMR for the period 2015-2018. The only ETP species identified in the catch of this fishery is spurdog (IMR 2020). Complete information from the reference fleet including vessel selection, sampling protocol and data handling can be found on: <a href="https://www.hi.no/hi/nettrappporter/rapport-fra-havforskningen-en-2020-8">https://www.hi.no/hi/nettrappporter/rapport-fra-havforskningen-en-2020-8</a>.</p> <p><b>Therefore, interactions with ETP species are recorded, so sub-clause F1.1 is met.</b></p>			

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

According to the ICES WGBYC 2022, the available monitoring data for 2017–2021 used to highlight species, métiers, and ecoregions where bycatch may be of particular concern, indicate that the average bycatch rate of marine mammals and seabirds in the entire ICES area (Greater North Sea) was 0.08 and 0.7 specimens per monitored day-at-sea respectively. However, bycatch rates of these species were mainly recorded in other gears and areas. No specific reference is made to trawl fisheries in the North Sea or the Norwegian sea. No interactions with marine mammals or protected seabirds have been reported by this specific fishery either.

Spurdog (*Squalus acanthias*):

In 2007, Norway introduced a general ban on target fisheries for spurdog in the Norwegian economic zone and in international waters of ICES subareas 1–14, with the exception of a limited fishery for small coastal vessels. Bycatch could be landed and sold as before. All directed fisheries were banned from 2011, although there is still a bycatch allowance. From October 2011, bycatch should not exceed 20% of total landings on a weekly basis. Since 4 June 2012, bycatch must not exceed 20% of total landings over the period 4 June–31 December 2012. Norwegian Regulation J-250-2013 specifically protects basking sharks, spurdogs, portbeagle and silky sharks (From 1 January 2013, bycatch must not exceed 15% of total landings on a half calendar year basis. Live specimens can be released, whereas dead specimens must be landed. From 2011, the regulations also include recreational fisheries. Norway has a 70 cm minimum landing size (first introduced in 1964).

A zero TAC for spurdog for EU vessels was introduced in 2011. Since 2011 the annual Norwegian landings, which land significantly more spurdog than other countries, have been fluctuating between 217–409 tonnes, with reported landings of 367 tonnes in 2021. During this same year, total reported landings (all countries fishing in the Northeast Atlantic) were 539 tonnes and discards 639 tonnes.

In 2020, ICES advised that “when the precautionary approach is applied, there should be no targeted fisheries on this stock in 2021 and 2022. Based on medium-term projections, annual catches at the recent assumed level (2,468 tonnes) would allow the stock to increase at a rate close to that estimated with zero catches. Any possible provision for the landing of bycatch should be part of a management plan, including close monitoring of the stock and fisheries”.

In its last assessment (2022), ICES advised that when the MSY approach is applied, catches in 2023 and 2024 should be no more than 17 353 tonnes and 17 855 tonnes, respectively.

According to the 2022 ACDR, no information on recent ETP species interactions (or absence of interactions) has been provided at this stage. The Public Certification Report from 2018 noted 49 kg of spurdog taken by bottom trawl sprat during 2016 as the only interactions noted for this fishery (no more recent data have been found). This was considered to be a small number of fish. ICES advice (ICES 2022) shows the stock gradually recovering after directed commercial fishing was stopped (zero TAC). On this basis, the direct effects of the fishery are highly likely not to have a significant negative impact on this ETP species.

None of the three following surveillance audit reports (DNV 2019, 2020, 2021) note any interactions with ETP species.

**Therefore, there is no substantial evidence that the fishery has a significant negative effect on ETP species, so sub-clause F1.2 is met.**

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

As indicate above, measures to reduce the bycatch of spurdog has been set in the area, including a zero TAC in all EU regulated waters. All alive individuals must be released. According to the ICES, the annual catches at the recent assumed level would allow the stock to increase at a rate close to that estimated with zero catches.

**Therefore, it is considered that the management measures are being effective in maintaining the stock, so sub-clause F1.3 is met.**

**References**

DNV Business Assurance, 2022. Norway sandeel, pout and north sea sprat fisheries Announcement Comment Draft Report: <https://fisheries.msc.org/en/fisheries/norway-sandeel-pout-and-north-sea-sprat/@assessments>

ICES WGBYC 2020. Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. 2:81. 209 pp.: <http://doi.org/10.17895/ices.pub.7471>

ICES. 2022. Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. 4:91. 265 pp.: <https://doi.org/10.17895/ices.pub.21602322>

Regulation (EU) 2019/1241 of the European Parliament and of the Council of 20 June 2019 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures, amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2000, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005. Current consolidated version: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02019R1241-20220806>

ICES. 2022. Spurdog (*Squalus acanthias*) in subareas 1–10, 12, and 14 (the Northeast Atlantic and adjacent waters). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, dgs.27.nea: <https://doi.org/10.17895/ices.advice.19753588>

IMR. 2020. MONITORING BYCATCHES IN NORWEGIAN FISHERIES. Species registered by the Norwegian Reference Fleet 2015-2018: <https://www.hi.no/templates/reporteditor/report-pdf?id=31549&48929167>

Johnsen, E., Misund, R., Palmason, S. R., and Blom, G. 2016. Norwegian industrial fishery for Norway pout in the North Sea in ICES. 2016. Report of the Benchmark Workshop on Norway Pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat), 23–25 August 2016, Copenhagen, Denmark. ICES CM 2016/ACOM:35. 396 pp.: <https://doi.org/10.17895/ices.pub.5599>

**Links**

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

<b>F2 Impacts on Habitats - Minimum Requirements</b>		
<b>F2.1</b>	Potential habitat interactions are considered in the management decision-making process.	Yes
<b>F2.2</b>	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.	Yes
<b>F2.3</b>	If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.	Yes
<b>Clause outcome:</b>		<b>PASS</b>

Except some minor updates, the following information remains mainly the same as last year’s assessment.

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

In Norway, a number of regulations have been set to protect marine habitats, including habitat closures (see F2.3). The fishery is conducted with a relatively light gear.

Several regulations have been also set at the EU and regional level aimed at the protection of the seabed in the area of operation of the fishery:

- The aim of the Natura 2000 network, designated under the EU Habitats and Birds Directives, (92/43/EEC, 2009/147/EC) is to maintain and restore habitats that support a number of species that form qualifying features to these designations. The habitat directive states: “This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species’ habitats concerned to be maintained or, where



appropriate, restored at a favourable conservation status in their natural range” (article 3) and further: “For special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites” (article 6).

- Regulation (EU) 2019/1241 on the conservation of fisheries resources and the protection of marine ecosystems through technical measures also contemplates in its article 21 the introduction of measures to minimise the impacts of fishing gear on sensitive habitats.

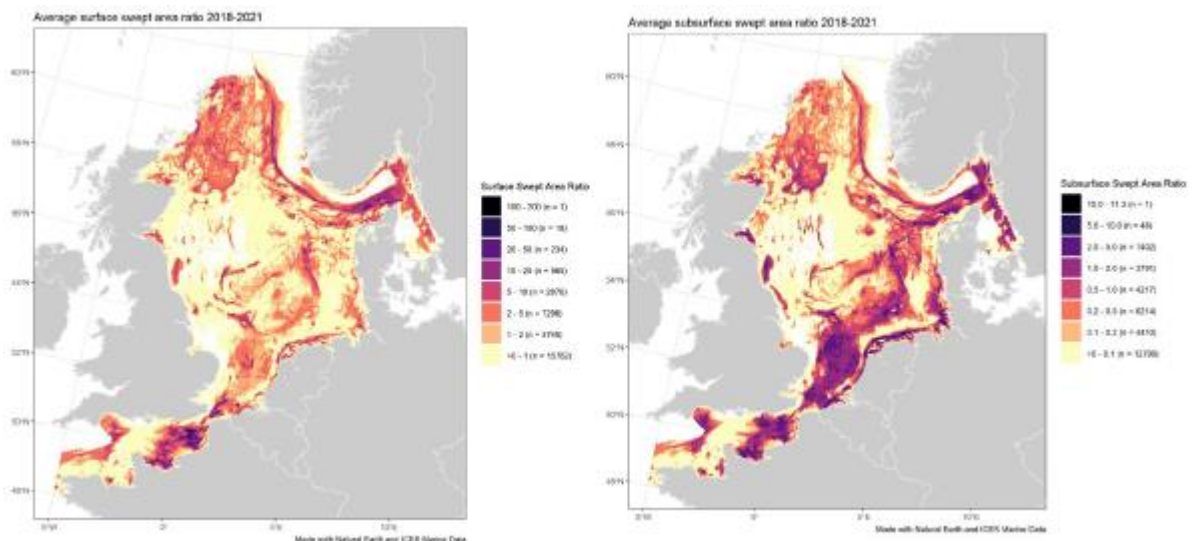
Moreover, when providing advice, ICES publishes an ecosystem overview for the main ecosystems in European waters, including the Greater North Sea area and Norway, in which the Key signals within the environment and the ecosystem are listed.

**Therefore, potential habitat interactions are considered in the advice and in the management decision-making process, so sub-clause F2.1 is met.**

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

Pelagic trawls are designed to catch shoals of pelagic species, including Norway pout, they operate in the water column, and they do not contact the seabed. The BENTHIS project assessed the impacts of European fisheries on the seabed, concluding that physical impacts of pelagic fisheries were insignificant (Eigaard et al., 2013).

In the case of the bottom trawl fishery, abrasion occurs from towed bottom-contacting gear with some damage to benthic organisms and habitats. The extent, magnitude and impact of the bottom gear on the benthic habitats can be assessed using vessel monitoring system (VMS) and logbook data. It varies geographically across the Norwegian Sea and the Greater North Sea area. Using vessel monitoring system (VMS) and logbook data ICES estimates that mobile bottom trawls used by commercial fisheries in the 12 m+ vessel category have been deployed over approximately 490,185 km<sup>2</sup> of the ecoregion in 2018, corresponding to ca. 73.1 % of the ecoregion’s spatial extent (ICES ecosystem overview 2021). However, it is important to highlight that figure refers to the whole North Sea, and bottom trawl is not permitted in Norwegian waters (<12 mn) where the fishery operates (NOTE: the Norwegian Sea ecoregion used by ICES refers to the Northern waters of Norway, the assessed fishery occurs to the south of the country).



**Figure 11.** Average annual surface (left) and subsurface (right) disturbance by mobile bottom-contacting fishing gear (bottom otter trawls, bottom seines, dredges, beam trawls) in the Greater North Sea during 2018–2021 (with available data), expressed as average swept area ratios (SAR).

Source: ICES 2022c.

The fishery for Norway pout is conducted with a relatively light gear. North Sea benthic substrates are characterised by soft sediments with sediments from mobile muds to coarse sands present throughout the region and gravel beds mainly distributed in the English Channel and the southern North Sea. Limited biogenic and geogenic reefs are found in the area, except for patches of *Sabellaria spinulosa* reefs and scattered boulder fields and oysters and sea grass which were common long ago in the central part of the North Sea have mostly disappeared. These habitats are now protected, and the fishery does not operate in those areas. However, the fishery could overlap with some areas where seapens are present (DNV 2022).

Several closed areas are also in place that serve to limit the extent, and therefore the potential habitat impacts, of the fishery under assessment. The “Norway pout box” is a large spatial closure in the Northwest North Sea established in 1977 where fishing with small-meshed trawls is banned while additional spatial closures specifically targeted at the Norway pout fishery in Norwegian waters include the Patch Bank (closed to industrial trawling since 2002) and the Egersund Bank (closed in one form or another since 2003 with a current closed season of 01 October – 31 May). Effectivity of the Norway pout box is assessed here: [https://stecf.jrc.ec.europa.eu/documents/43805/44876/07-09\\_SG-MOS+07-03+-+Evaluation+of+closed+areas+II.pdf](https://stecf.jrc.ec.europa.eu/documents/43805/44876/07-09_SG-MOS+07-03+-+Evaluation+of+closed+areas+II.pdf).

The Central Fladen Nature Conservation MPA has been designed to protect seapens and burrowing megafauna. The Directorate of Fisheries does not report any infringements regarding the fleet entering MPA. Elsewhere, and outside the area of operations of the fishery under assessment, bottom trawling is regulated along the Norwegian continental slope through closed areas to avoid damaging fragile and vulnerable benthic communities and reef-building organisms with regulations established in 2011 having restricted the use of bottom trawls in areas with coral reefs and at depths exceeding 1,000 m.

A number of measures have been introduced by the Norwegian and EU authorities to protect VMEs in North Sea and Norwegian waters, including seapens.

Finally, targeted trawling for Norway pout is prohibited north of 62°N as the Norwegian regulations prohibit trawling with small-meshed trawls for species such as cod, haddock, whiting and saithe north of this latitude. Therefore, the Norwegian industrial trawling for Norway pout can be carried out in Skagerrak and south of 64°N in the North Sea.

Bottom trawls for Norway pout are small and relatively light. The fishery mainly operates on muddy and sandy bottoms. Kaiser et al. (2006) concluded that impacts on muddy and sandy bottoms are lighter than on harder bottoms, and the areas recover more readily. According to Meenakumari et al. (2008), sandy habitats can recover after trawling disturbance in less than 5 years.

**Therefore, it is understood that there is no substantial evidence that the fishery has a significant negative impact on physical habitats, so sub-clause F2.2 is met for both gears.**

**F2.3 If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.**

A number of management measures have been established in Norwegian water to protect the habitat:

- Norwegian regulation J-61-2019 regulating bottom gears to protect vulnerable marine ecosystems (<https://fiskeridir.no/Yrkesfiske/Regelverk-og-reguleringer/J-meldinger/Kommende-J-meldinger/J-61-2019>)
- Trawling is forbidden within the majority of the 12 nautical mile limit from Norwegian baselines (in some instances, this limit is set at 6 nautical miles). Much of the cold-water coral reefs are located within this limit
- Norwegian Regulation J-40-2016 – which applies to all the Norwegian EEZ establishes in its article 2 that when a trawl vessel catches more than 30 kgs of coral or 400 kg of sponges in a single haul, the vessel shall stop fishing and move position at least 2 nautical miles in order to avoid such catches. The incident must be reported to the Directorate of Fisheries
- Regulation J-40-2016 requires that when fishing in a “new fishing area” in the Norwegian EEZ or the Svalbard, vessels must have a special permit from the Directorate of Fisheries
- Fishing below 1000 m within the Norwegian EEZ is banned in order to protect deep-water sensitive habitats and species.

Existing EU technical measures such as the closed Norway pout box, minimum mesh size in the fishery, and bycatch regulations to protect other species have been maintained for all directed fishing in EU waters. Norwegian vessels fishing for the stock in EU and Norway waters are obliged to use a sorting grid to reduce unwanted bycatch and discarding of juvenile Norway pout. The closed Norway pout box will guarantee no vessel (trawler or pelagic gear) will interact with the seabed as all fishing operations are prohibited when the box is closed.

**Therefore, the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts, so sub-clause F2.3 is met.**

#### References

ICES. 2022c. Greater North Sea ecoregion – Ecosystem overview. In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, Section 7.1: <https://doi.org/10.17895/ices.advice.21731912>

Kaiser et al., 2006. Mar Ecol Prog Ser. Global analysis of response and recovery of benthic biota to fishing: [https://www.researchgate.net/publication/222092690\\_Global\\_analysis\\_and\\_recovery\\_of\\_benthic\\_biota\\_to\\_fishing\\_Mar\\_Ecol\\_Prog\\_Ser](https://www.researchgate.net/publication/222092690_Global_analysis_and_recovery_of_benthic_biota_to_fishing_Mar_Ecol_Prog_Ser)

Meenakumari et al., 2008. Fishery technology. Impact of Bottom Trawling on Benthic Communities: A Review: [https://www.researchgate.net/publication/259979122\\_Impact\\_of\\_bottom\\_trawling\\_on\\_benthic\\_communities\\_a\\_review](https://www.researchgate.net/publication/259979122_Impact_of_bottom_trawling_on_benthic_communities_a_review)

Norwegian regulation J-61-2019: <https://fiskeridir.no/Yrkesfiske/Regelverk-og-reguleringer/J-meldinger/Kommende-J-meldinger/J-61-2019>

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora: <http://data.europa.eu/eli/dir/1992/43/oj>

Eigaard et al., 2013. Benthic impact from the perspective of the fisheries. Deliverable 1.1 b.: <https://www.benthis.eu/en/benthis/Results.htm>

DNV. 2022. Announcement Comment Draft Report NORWAY SANDEEL, POUT AND NORTH SEA SPRAT FISHERIES: <https://fisheries.msc.org/en/fisheries/norway-sandeel-pout-and-north-sea-sprat/@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>	<b>PASS</b>

The following information remains mainly the same as last year's assessment, as no major update has been found in the ecosystem impacts of the fishery. Some updates from the DNV ACDR report 2022 and the last reports from Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK)/Working Group on Bycatch of Protected Species (WGBYC), have been added.

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

Environmental issues are managed by Norwegian agencies and through OSPAR, with advice on ecosystem and fisheries issues provided by ICES. The ICES fisheries overview 2021 indicates: *"In terms of weight of catch, fish stocks harvested from the North Sea are being fished at levels consistent with achieving good environmental status (GES) under the EU's Marine Strategy Framework Directive; however, the reproductive capacity of the stocks has not generally reached this level. Almost all the fisheries in the North Sea catch more than one species; controlling fishing on one species therefore affects other species as well. ICES has developed a number of scenarios for fishing opportunities that take account of these technical interactions. Each of these scenarios results in different outcomes for the fish stocks. Managers may need to take these scenarios into account when deciding upon fishing opportunities. Furthermore, biological interactions occur between species (e.g., predation) and fishing on one stock may affect the population dynamics of another. Scenarios that take account of these various interactions can be used to evaluate the possible consequences of policy decisions"*.

A number of management measures which take into consideration the full ecosystem, are in place in the fishery, including: the closed Norway pout box, minimum mesh size in the fishery, sorting grids to reduce the catch of big gadoids, and bycatch regulations to protect other species and the marine habitat.

Moreover, ICES has created a number of working groups, including the Working group on Multispecies Assessment Methods (WGSAM), and the ICES Working group on Mixed Fisheries (WGMIXFISH) with the objective of implement the ecosystem-based approach to fisheries. The specific objectives of this last group for example, are:

- Synthesize and evaluate existing ecosystem-based advice frameworks, including MSEs,
- Evaluate existing proposals on ecosystem aspects, including MSFD descriptors that can be included in the stock assessments and advice,
- Synthesize existing and develop new ecosystem - based indicators for the Baltic Sea, which can be used to adjust advice on future fishing opportunities.

Fisheries in the area are managed according to a MSY approach strategy (in this particular case using an escapement strategy, see section A for more information) where key trophic interactions are incorporated (predation mortality, etc). Therefore, the ecosystem approach is embedded in the legislation managing the fishery and some aspects of the broader ecosystem are already incorporated in the advice (although more work needs to be done).

**Therefore, the broader ecosystem within which the fishery occurs is considered during the management decision-making process, so sub-clause F3.1 is met.**

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

The Greater North Sea ecoregion includes the North Sea, English Channel, Skagerrak, and Kattegat. It is a temperate coastal shelf sea with a deep channel in the northwest, a permanently thermally mixed water column in the south and east, and seasonal stratification in the north (ICES ecosystem overview 2021). The main pressures (human activities) in the area are fishing and oil and gas production, shipping, ports, wind farms, and aggregate (sand and gravel) extraction.



Fishing has reduced the number of large fish in the North Sea ecosystem (mostly cod *Gadus morhua*, saithe *Pollachius virens*, ling *Molva molva*, sturgeon *Acipenser sturio*, and some elasmobranchs). In historical times, the large whale populations of the North Sea were depleted or extirpated by hunting. Whilst the impact of these removals on the ecosystem functioning is not clearly understood, it should be assumed that the North Sea ecosystem is currently in a perturbed state. Several of these elasmobranch species are now considered threatened or endangered by OSPAR and IUCN and are still caught as bycatch in fisheries. However, it is clear that fishing effort has reduced in the North Sea in recent years (since the 2002 CFP reforms); this can now be detected in the reduction of fishing mortality in most assessed fish stocks and an increase in the amount of larger fish present. The majority of assessed fish stocks are now fished at or below MSY fishing mortality targets ( $F_{MSY}$ ).

As indicated in previous sections, the target and the majority of the species caught by the fishery are over  $B_{limit}$  and  $F_{mortality}$  is  $F_{MSY}$ . In the case of the North Sea cod, the impact of the fishery is considered negligible. Interactions with ETP species is also low. In order to protect other species (cod, haddock, whiting, saithe and herring as well as mackerel, squids, flatfish, gurnards, Nephrops) there is a row of technical management measures in force for the small-meshed fishery in the North Sea such as the closed Norway pout box, bycatch regulations, minimum mesh size, and minimum landing size (Nielsen et al., 2016).

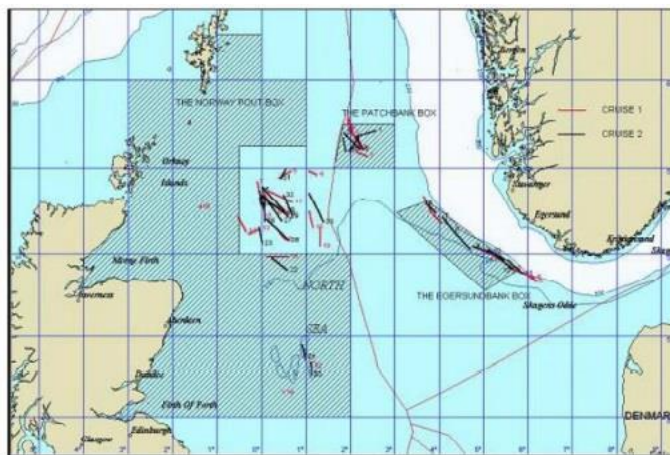


Figure 12. Closed areas in the area of operation of the fishery.

Source: Nielsen et al., 2016.

Furthermore, according to the latest WGSSK in 2022, review of scientific documentation show that gear selective devices can be used in the Norway pout fishery, significantly reducing bycatches of juvenile gadoids, larger gadoids, and other non-target species). Sorting grids are at present used in the Norwegian and Danish fishery (partly implemented as management measures for the larger vessels), but modification of the selective devices and their implementation in management is still ongoing. Existing technical measures such as the closed Norway pout box, minimum mesh size in the fishery, and bycatch regulations to protect other species have been maintained. A detailed description of the regulations and their background can be found in Nielsen et al., (2016a) and in the Stock Annex.

The quality of the landings statistics in Norway and Denmark is described in the ICES WKPOUT (2016) and associated Annexes. The quality seems to be relatively constant during the last 20 years and of a higher quality than in the years before. From April 2020 onwards, the sampling intensity of the Danish Norway pout fishery has increased where every landing is now sampled, and the number of required samples increase with the landing weight from a minimum of 6 to a maximum of 24 per landing. This new sampling system may give more precise estimates of bycatches which should be evaluated in future benchmark assessments. The discard level of Norway pout in the North Sea fisheries is considered to be low (Nielsen et al., 2016a).

**Therefore, there is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem, so sub-clause F3.2 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.**

ICES WGSSK 2022 indicates: “Norway pout is a short-lived species and most likely a one-time spawner. The population dynamics of Norway pout in the North Sea and Skagerrak are very dependent on changes caused by recruitment variation and variation in predation or other natural mortality, and less by the fishery. Recruitment is highly variable and influences SSB and total stock biomass (TSB) rapidly because of the short life span of the species. Only limited knowledge is available on the influence of environmental factors, such as temperature, on the recruitment (Nielsen et al., 2016). Norway pout natural

mortality is likely influenced by spawning and maturity having implications for its age specific availability to predators in the ecosystem and the fishery (Nielsen et al., 2012). On this basis, Norway pout should be managed as a short-lived species. With present fishing mortality levels in recent years the status of the stock is more determined by natural processes and less by the fishery, and in general the fishing mortality on 0-group Norway pout is low.

This stock is among other an important food source for the species saithe, haddock, cod, whiting, and mackerel and predation mortality is significant. Especially the more recent high abundance of saithe predators and the more constant high stock level of northern mackerel as likely predators on smaller Norway pout are likely to significantly affect the Norway pout population dynamics. Interspecific and intraspecific density patterns in Norway pout mortality and maturity have been documented. Natural mortality levels by age and season used in the stock assessment do include the predation mortality levels estimated for the stock, and in the 2012 Inter-benchmark assessment revised values for natural mortality have been used based on the results from Nielsen et al. (2012).

Biological interactions with respect to intra-specific and inter-specific relationships for Norway pout stock dynamics and important predator stock dynamics have been also reviewed”.

And concludes: “There is a need to ensure that the stock remains high enough to provide food for a variety of predator species. It is advised that bycatches of other species should also be considered in management of the fishery. Also, it is advised that existing measures to protect other species should be maintained”.

The key role of the species is taking into consideration when recommending total permissible fishery removals.

**Therefore, 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, so sub-clause F3.3 is met.**

**References**

**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

### 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>	Norway pout ( <i>Trisopterus esmarkii</i> ) in FAO 27, ICES 4 and Division 3a (NorthSea, Skagerrak, and Kattegat)
<b>Management authority (Country/State)</b>	Norway, EU
<b>Main species</b>	Norway pout ( <i>Trisopterus esmarkii</i> )
<b>Fishery location</b>	FAO 27 (Northeast Atlantic), ICES Subarea 4 and Division 3a
<b>Gear type(s)</b>	Small-meshed trawls; Bottom trawl and mid-water trawl
<b>Overall recommendation. (Approve/ Fail)</b>	Approve

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

No catch data was provided by the client for this report, a recommendation should be made to the onsite auditor to check the catch profile for % and species composition.  
Some references are missing links to report: MSC report (ACRD 2022)

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

The opening few tables were missing the client email and application code but otherwise, the report is completed to a high level.

## 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	X		
Category D Species	X		
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 peer reviewer agrees with all scoring which has been clearly addressed and evidenced throughout. A few recommendations are made, but this does not impact overall PASS recommended.
<b>Certification body response</b>
Well noted, thank you.

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?
All scoring sections of the report have been completed with sufficient information and evidence to justify the scoring given.
<b>Certification body response</b>
Well noted, thank you.

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?

Yes, the species categorisation is done correctly, but more information could have been added on the management of each stock (i.e., managed to ref points or not) and how that links into the 4 species categories.

Certification body response

Information added.

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. 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

Certification body response

Thanks

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

I agree with the scoring outcome and the rationale is clearly justified.

Certification body response

Thanks

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

Certification body response

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

I agree with the scoring outcome and the rationale is clearly justified.

Certification body response

Thanks

3D. Are the “Category D Species” scores clearly justified? YES
I agree with the scoring outcome and the rationale is clearly justified.
Certification body response
Thanks

3F. Are the scores in “Section F – Further Impacts” clearly justified?
F1.2 Evidence of fishery-specific interaction with spurdog should be documented against ICES advice.
Reference could be added to habitats F2.2. final paragraph <i>“Bottom trawls for Norway pout are small and relatively light. The fishery mainly operates on muddy and sandy bottoms. Impacts on muddy and sandy bottoms are lighter than on harder bottoms, and the areas recover more readily. Several studies found that sand habitats can recover after trawling disturbance in less than 5 years.”</i>
Certification body response
F1.2: I am not sure about what you ask for. I added/amended some information in the text. All the data found has been put in the report, there is not much more precise evidence of fishery-specific interaction...
F2.2: references added in the report.

Optional: General comments on the Peer Review Draft Report
No further comments.
Certification body response
Thank you for your review.