



MarinTrust Standard V2

Whole fish Fishery Assessment

WF32 – Norway Pout in ICES Division 3a and Subarea 4

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name(s):			
Country: Denmark			
Email address:		Applicant Code	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor Name	CB Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Peacock	Ivan Mateo	5	Initial
Assessment Period	July 2023 – July 2024		
Scope Details			
Management Authority (Country/State)		EU & Norway	
Main Species		Norway pout (<i>Trisopterus esmarkii</i>)	
Fishery Location		ICES Division 3a and Subarea 4	
Gear Type(s)		Small-meshed midwater trawl, bottom trawl. Primarily otter trawls.	
Outcome of Assessment			
Overall Outcome		PASS	
Clauses Failed		NONE	
CB Peer Review Evaluation		Agree with assessor's assessment	
Fishery Assessment Peer Review Group Evaluation		Approve	
Recommendation		APPROVE	

Table 2. Assessment Determination

Assessment Determination
<p>Norway pout is fished in the North Sea and Skagerrak by Norwegian and Danish vessels operating small-meshed trawl gears, primarily bottom trawling otter gears. Available evidence suggests that management measures put in place to reduce bycatch have been successful and that the fishery has been relatively clean in recent years, with 80-95% of catch being Norway pout. Composition of the bycatch varies considerably between years, rendering as many as a dozen species potentially relevant to this MT assessment. Species categorisation prioritised the catch data provided by the applicant for the 2022 fishery, while taking into account the variation between years. As a result, this assessment considers Norway pout as a Type 1 species, with herring, mackerel, whiting and haddock considered as Type 2. All the relevant stocks are managed relative to established reference points or proxies, and so were assessed under Category A or C as appropriate.</p> <p>All five species have been categorised by the IUCN as Least Concern with the exception of haddock, which is Vulnerable. None appears in the CITES appendices.</p> <p>The fishery is primarily managed under the EU and Norwegian management, control and enforcement systems; the UK also takes very small quantities and the Faroe Islands participate in some years. The relevant management and enforcement systems meet the MT requirements.</p> <p>The Norway pout stock is subject to annual assessment by ICES. Biomass has been above the target reference point since the early 2000's. Catch recommendations are reflected in the TACs, which are set by the EU, Norway and UK. Total catch is consistently substantially lower than the total international quota; this is considered to be primarily due to economic factors but also because of restrictions placed on bycatch. The quota restricting the quantity of herring bycatch, in particular, may be a throttling factor. The stock is well understood and in healthy condition, although population dynamics are strongly driven by environmental factors and status can change rapidly.</p> <p>All five Category C stocks meet the MT requirements. Four are managed relative to established reference points and have a biomass estimated in the most recent stock assessment to be above the target level. The fifth, whiting in Division 3a, is managed relative to a survey abundance index but is in similarly good shape.</p> <p>The available evidence indicates that the fishery does not have a significant negative impact on ETP species, habitats or the broader ecosystem. All three areas are considered throughout the management process, and measures are in place to minimise potential impacts. Catch recommendations include consideration of the important role played by Norway pout as a prey species.</p> <p>Overall, this fishery meets the MT requirements and should be approved as a source of raw material in MT-certified factories.</p>
Fishery Assessment Peer Review Comments
<p>The review is well documented and follows exactly the MT standard. In particular, the productive advice from ICES and the abundance of technical documents facilitate the assessment of the performance of fisheries as this one on Norway pout.</p> <p>(Full PR comments and GTC response can be seen in Appendix B)</p>
Notes for On-site Auditor
None

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	80-95%	A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
Category B	No Category B Species			
Category C	Herring	<10%	PASS	
	Whiting, Subarea 4 & Division 7d	<5%	PASS	
	Whiting, Division 3a	<5%	PASS	
	Haddock	<1%	PASS	
	Mackerel	<1%	PASS	
Category D	No Category D Species			

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category ¹	% of landings	Management	Category
Norway pout	<i>Trisopterus esmarkii</i>	Subarea 4 & Division 3a	Least Concern ²	80-95%	Yes	A
Herring	<i>Clupea harengus</i>	Subarea 4 & Divisions 3a & 7d (Autumn spawners)	Least Concern ³	<10%	Yes	C
Whiting	<i>Merlangius merlangus</i>	Subarea 4 & Division 7d	Least Concern ⁴	<5%	Yes	C
		Division 3a			Yes	C
Haddock	<i>Melanogrammus aeglefinus</i>	Subarea 4, Division 6a and Subdivision 20	Vulnerable ⁵	<1%	Yes	C
Mackerel	<i>Scomber scombrus</i>	Northeast Atlantic	Least Concern ⁶	<1%	Yes	C

Species categorisation rationale

A number of sources are available which provide an indication of catch composition in the Norway pout fishery, as follows:

1 – MSC Certification

The “Norway sandeel, pout and North Sea sprat” fishery is currently certified to the MSC standard. The most recent re-assessment report⁷, published in 2022, includes an indication of the catch composition in the Norwegian component of the Norway pout fishery. This can be summarised as follows:

A – Bottom trawl gears

Species	Proportion of 2016 catch	Proportion of 2017 catch	Proportion of 2018 catch
Norway pout	80.7%	82.6%	82.5%
Blue whiting	8.2%	6.3%	4.1%
Horse mackerel	3.1%	4.4%	1.3%
Argentine	2.2%	1.6%	2.9%
Saithe	2.0%	1.2%	0.7%
Whiting	1.2%	0.8%	2.6%
Herring	0.8%	1.5%	4.3%
Silver pout	0.4%	0.5%	0.6%
White hake	0.4%	0.1%	0.1%
Witch flounder	0.3%	0.3%	0.5%

B – Midwater trawl gears

Species	Proportion of 2016 catch	Proportion of 2017 catch
Norway pout	92.0%	90.0%
Blue whiting	5.5%	5.8%
Horse mackerel	0.8%	2.2%

¹ <https://www.iucnredlist.org/>

² <https://www.iucnredlist.org/species/18125208/45098689>

³ <https://www.iucnredlist.org/species/155123/4717767>

⁴ <https://www.iucnredlist.org/species/198585/45097610>

⁵ <https://www.iucnredlist.org/species/13045/3406968>

⁶ <https://www.iucnredlist.org/species/170354/6764313>

⁷ DNV, 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>

Argentine	0.6%	0.7%
Herring	0.1%	0.4%
Silver pout	0.6%	0.5%
White hake	0.3%	0.1%

In addition to the species listed above, the following species appeared in the catch but made up less than 0.1% of the total volume by weight: cod; velvet belly; haddock; hake; ling; mackerel; gurnard; monkfish; sandeel; pollack.

2 – Applicant submission

Detailed bycatch information was provided by the applicant for the Danish fleet during the 2022 fishing season⁸, with the main species summarised as follows:

Species	Catch (t)	Proportion of Total
Norway pout	13,954.3	89.8%
Herring	868.3	5.6%
Whiting	190.6	1.2%
Haddock	106.3	0.7%
Mackerel	39.6	0.3%

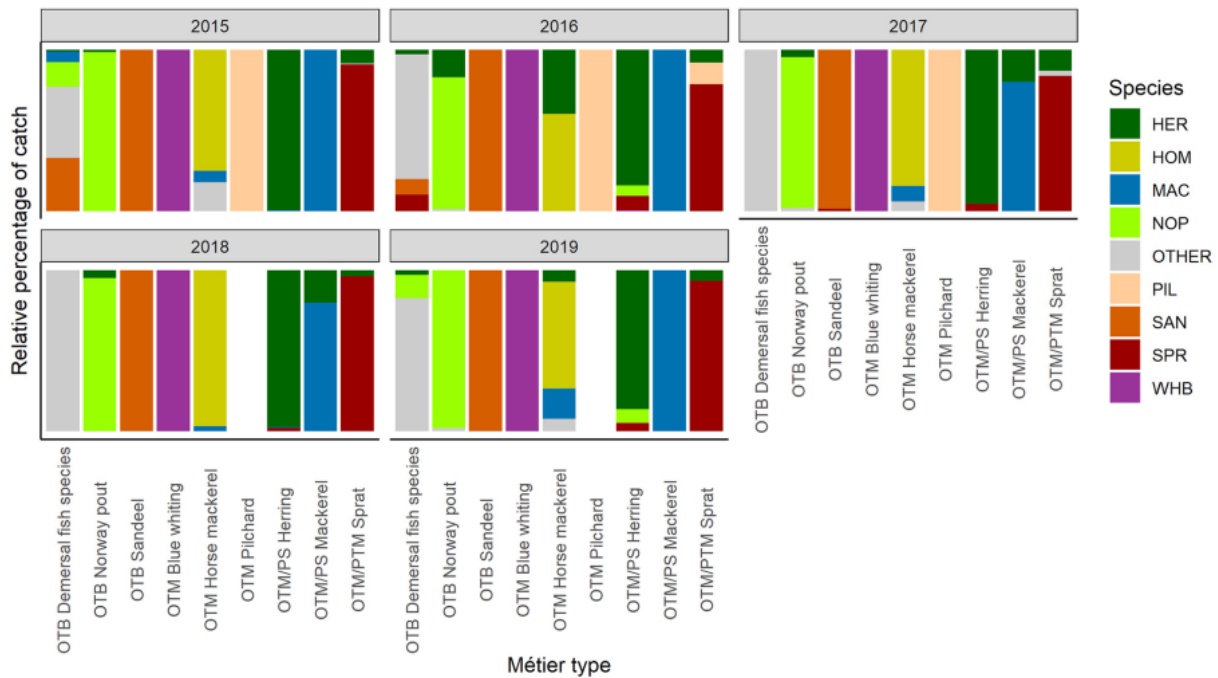
In addition to the species listed above, the following species appeared in the catch but made up less than 0.1% of the total volume by weight: Norway lobster; blue whiting; saithe; cod; squid; American plaice; dab; beard rockling; lemon sole; witch flounder; hake; blue whiting; sprat; horse mackerel; tusk; greater Argentine; redfish; hagfish; silver cod.

3 – Other sources

One recent study⁹ indicates that the Danish bottom trawling fleet targeting Norway pout is relatively clean, with herring making up the majority of bycatch. Although the paper does not provide detailed catch composition data, the diagram shown below indicates the large majority of catch in most years is Norway pout.

⁸ Pers. Comm., Søren Anker Pedersen, 2 May 2023

⁹ Paoletti *et al* (2021). *Potential for Mesopelagic Fishery Compared to Economy and Fisheries Dynamics in Current Large Scale Danish Pelagic Fishery*. *Frontiers in Marine Science*, 24 August 2021. Volume 08, Article 720897



Relative species composition in the catch of each métier by year during the period 2015-2019. The relevant bars for this MT assessment are those labelled “OTB Norway pout”. Species listed are Herring (HER), Horse mackerel (HOM), Mackerel (MAC), Norway pout (NOP), Pilchard (PIL), Sandeel (SAN), Sprat (SPR), and Blue whiting (WHB).

This is supported by the report on the most recent Norway Pout benchmarking workshop, held in 2016, which states, “Bycatches of [haddock, cod and saithe] species have been low in the recent decade, and in general, the by-catch levels of these gadoids have decreased in the Norway pout fishery over the years to a present very low level of by-catch of other species (5-10%)”¹⁰.

Conclusions

All sources indicate that Norway pout makes up the majority of catches in the targeted fishery, around 80-95%, and is clearly a Type 1 species for the purposes of this assessment. The usual approach when determining species categorisation for an MT assessment is to ensure that the Type 1 species represent at least 95% of the catch; however, in this instance the proportion of species other than Norway pout in the catch varies from year to year, and several sources suggest that Norway pout may be 95% of landings in some years. Potential candidates for other Type 1 species include blue whiting, horse mackerel, Argentine, and herring. In each case, at least one reference suggests that each of these is not regularly present in the catch in significant quantities. Therefore, as a pragmatic alternative and to ensure consistency between this and future MT assessment reports, all species representing a significant proportion of the catch have been categorised as Type 2.

In selecting which additional species to assess, emphasis has been placed on those present in the data provided by the applicant, as this is specific to the Danish fishery while the MSC catch composition data is sourced from the Norwegian fleet. To this end the Type 2 species covered by this assessment are:

- Herring
- Whiting
- Haddock
- Mackerel

¹⁰ 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>

Whiting in Division 3a and Subarea 4 represents two separate stocks, and therefore each stock has been assessed separately. Two herring stocks are present in the area, but all herring bycatch in the targeted Norway sprat fishery is thought to be from the North Sea Autumn-Spawning stock¹¹.

All five of these stocks is managed relative to reference points as has therefore been assessed under Category C. Norway pout is also managed relative to reference points and has been assessed under Category A.

¹¹ ICES (2023). 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, 2023. ICES Advice 2023, her.27.3a47d. <https://doi.org/10.17895/ices.advice.21907947>

MANAGEMENT

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

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

Almost all Norway pout is taken by Norway and Denmark, although small amounts are also taken by other EU countries and the UK.

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

Fisheries in Denmark and other EU countries are managed according to the Common Fisheries Policy (CFP), which was most recently updated through Regulation (EU) No. 1380/2013. Individual member states generally incorporate the requirements of the CFP into their national legislation, and are individually responsible for its implementation. The CFP therefore sets out the policies and procedures by which member states manage their fisheries (EC 2018).

Fisheries management in Norway is the responsibility of the Directorate of Fisheries under the Ministry of Trade, Industry and Fisheries. The Directorate is responsible for most day-to-day aspects of fisheries management, including tackling IUU fishing, regulating and licensing fishing activity, and negotiating quotas and other international agreements (Government.no 2023).

There are organisations responsible for managing the fishery, and M1.1 is met.

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

The primary organisation responsible for coordinating and analysing the data relevant to the management of the Norway pout fishery is the International Council for the Exploration of the Sea (ICES). ICES is an intergovernmental marine science organisation which provides frequent analytical and advisory services for the management of fisheries, primarily in the Atlantic but also in the Arctic, Mediterranean, Black Sea and North Pacific (ICES 2023a).

ICES carries out an annual stock assessment of the Norway pout stock, along with periodic benchmarking exercises to ensure the stock assessment processes and their underpinning assumptions remain appropriate. As a key output of the stock assessment process, ICES produces a recommendation for the appropriate level of fishery removals in the coming fishing season.

Within Norwegian waters, the Norwegian Institute of Marine Research (IMR) is also relevant. The IMR is affiliated with the Ministry of Trade, Industry and Fisheries and works closely with many of the ICES Working Groups (IMR 2023).

There are organisations responsible for collecting data and assessing the fishery. Requirement M1.2 is met.

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

Objective 1 of the CFP, as set out in Regulation (EU) No. 1380/2013 is to “ensure that fishing and aquaculture activities are environmentally sustainable in the long-term and are managed in a way that is consistent with the objectives of achieving economic, social and employment benefits, and of contributing to the availability of food supplies”.

The Norwegian Directorate of Fisheries states that its main objective is to “promote profitable economic activity through sustainable and user-oriented management of marine resources and the marine environment” (DoF 2019).

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

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

In EU member states fisheries management is generally carried out under the national legislation arising from the implementation and/or transposing of EU regulations, in particular but not limited to Regulation (EU) No 1380/2013. In Denmark the key legislation implementing the CFP and guiding fisheries management is the Fisheries Act (No. 978 of 2008, as amended). The primary legal instrument empowering fisheries management in Norway is the Marine Resources Act of 6 June 2008 (no. 37). In the UK the primary fisheries legislation is the Fisheries Act 2020; but also the Marine and Coastal Access Act 2009, and the regulations put in place by the devolved administrations.

Fishery management organisations are legally empowered to take management actions, and M1.4 is met.

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

The main mechanism for the consultation of stakeholders within the EU is the North Sea Advisory Council (NSAC). The NSAC “is an interdisciplinary stakeholder-led organisation that takes a regional approach to provide the European Commission and EU countries...with recommendations...on the management of North Sea fish stocks on behalf of the fisheries sector, environmental and other stakeholders” (NSAC 2023).

Norwegian fisheries management engages with industry and other stakeholders via the Advisory Meeting for Fisheries Regulations. The Directorate of Fisheries proposes domestic regulations, and subsequently stakeholders such as fishermen’s associations, industry, trade unions, local authorities, environmental organisations and the Sami parliament are consulted during one or more Advisory Meetings (FAO 2023).

There is a stakeholder consultation process in place, and M1.5 is met.

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

All of the information used to produce this MarinTrust assessment report was freely available online. The fisheries management decision-making process is primarily guided by the ICES advice, the basis for and outcomes of which are made available via the ICES website. Decisions and outcomes at the EU level are published on the EC website and elsewhere. Information regarding Norwegian fisheries management decisions is published on the Directorate of Fisheries website (DoF 2023).

The decision-making process is transparent, and M1.6 is met.

References

Danish Fisheries Act, 2008, amended to 2017. <https://faolex.fao.org/docs/pdf/den134943original.pdf>

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

Directorate of Fisheries (2019). Vision, objective, roles and areas of operation. <https://www.fiskeridir.no/English/About-the-directorate/Objective-and-roles>

Directorate of Fisheries (2023). Website root page. <https://www.fiskeridir.no/English/Fisheries>

EC (2018). Common Fisheries Policy. https://ec.europa.eu/oceans-and-fisheries/policy/common-fisheries-policy-cfp_en

FAO 2023. Fishery and Aquaculture Country Profiles. Norway. Country Profile Fact Sheets. Fisheries and Aquaculture Division. <https://www.fao.org/fishery/en/facp/162?lang=en>

Government.no (2023). “Department for Fisheries” summary page, <https://www.regjeringen.no/en/dep/nfd/organisation/Departments/departement-of-fisheries-and-aquaculture-/id706781/>

ICES (2023a). Who we are. <https://www.ices.dk/about-ICES/who-we-are/Pages/Who-we-are.aspx>

ICES (2023b). Latest Advice. <https://www.ices.dk/advice/Pages/Latest-Advice.aspx>

NSAC (2023). North Sea Advisory Council, “What We Do”. <https://www.nsrac.org/what-we-do/>

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. <https://www.legislation.gov.uk/eur/2013/1380/contents#>

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

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

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

Monitoring and enforcement of fisheries compliance in the EU is the responsibility of the individual member states. The agency responsible in Danish waters is the Danish Fisheries Agency (FA). The FA operates a small fleet of enforcement vessels and is responsible for regulating, monitoring and inspection of Danish fishing activities.

National control and enforcement activities are supported by the European Fisheries Control Agency (EFCA). The EFCA aims to “promote the highest common standards for control, inspection and surveillance under the CFP” (EFCA 2023). The EFCA works in conjunction with the European Border and Coast Guard Agency and the European Maritime Safety Agency to support the various national agencies carrying out coastguard functions.

There are organisations established with responsibility for monitoring compliance, and M2.1 is met.

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

A framework of sanctions is in place as set out in the CFP legislation and transposed into Danish national law. Sanctions potentially include suspension of fishing licence, fines, confiscation of catch and/or equipment, and imprisonment. These are set out in Chapter 23 of the Fisheries Act 2008, as amended. Additionally, as noted in M2.3 below, the CFP establishes a points-based system for serious breaches of fishery regulations, which can ultimately lead to the disqualification of individuals from eligibility for subsidies and may affect licence conditions.

There is a framework of sanctions set out in the key fisheries legislation, and 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.

The most recent summary from the Danish Fisheries Agency covering control and enforcement, published in 2022 (FA 2022), reports that in 2021, 2,342 inspections were carried out on vessels or landings at ports, and 427 inspections were conducted on vessels at sea. This represented a return to relatively normal inspection rates after reduced coverage in 2020 due to Covid.

EU regulations state that serious violations of the CFP should lead to the accumulation of ‘points’ which, when collected in sufficient quantities, render the individual responsible unable to claim subsidies and may affect the terms of their fishing licence. The EU Commission has previously criticised Denmark for failing to apply the points rules correctly, in response to which the FA prepared a new administrative basis for the correct administration of the system. In 2021 a total of 427 cases were evaluated

to determine whether points should be awarded, and in 15 of those cases this was found to be the appropriate course of action (FA 2022).

Throughout the compilation of this MT assessment report, no evidence was encountered suggesting widespread non-compliance in the fishery, and available evidence suggests a robust and focussed control and enforcement regime is in place. 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.

Compliance with laws and regulations is monitored through the use of at-sea and portside inspections, e-logbooks, landings certificates, sales notes, VMS, designated ports, and inspections throughout the supply chain. Control efforts are targeted using a risk-based model, which ensures that inspections and other enforcement activity is focussed in areas where low levels of compliance have been detected in the past. Control targets are set each year, expressed as a degree of regulatory compliance, and thus control is primarily considered a means to encourage fishers to change behaviour rather than an end in itself (FA 2022).

Compliance is actively monitored through a wide range of measures, and M2.4 is met.

References

Danish Fisheries Act, 2008, amended to 2017. <https://faolex.fao.org/docs/pdf/den134943original.pdf>

EFCA (2023). Mission and Strategy. <https://www.efca.europa.eu/en/content/objectives-and-strategy>

FA (2022). Om Fiskeristyrelsen Årsrapport (Danish Fisheries Agency annual report) 2021.

https://fiskeristyrelsen.dk/fileadmin/user_upload/Fiskeristyrelsen/Erhvervsfiskeri/Kontrol/AArsrapport/AArsrapport_2021.pdf

FA (2023). Control. <https://fiskeristyrelsen.dk/erhvervsfiskeri/kontrol>

Links

MarinTrust Standard clause	1.3.1.3
FAO CCRF	7.7.2
GSSI	D1.09

CATEGORY A SPECIES

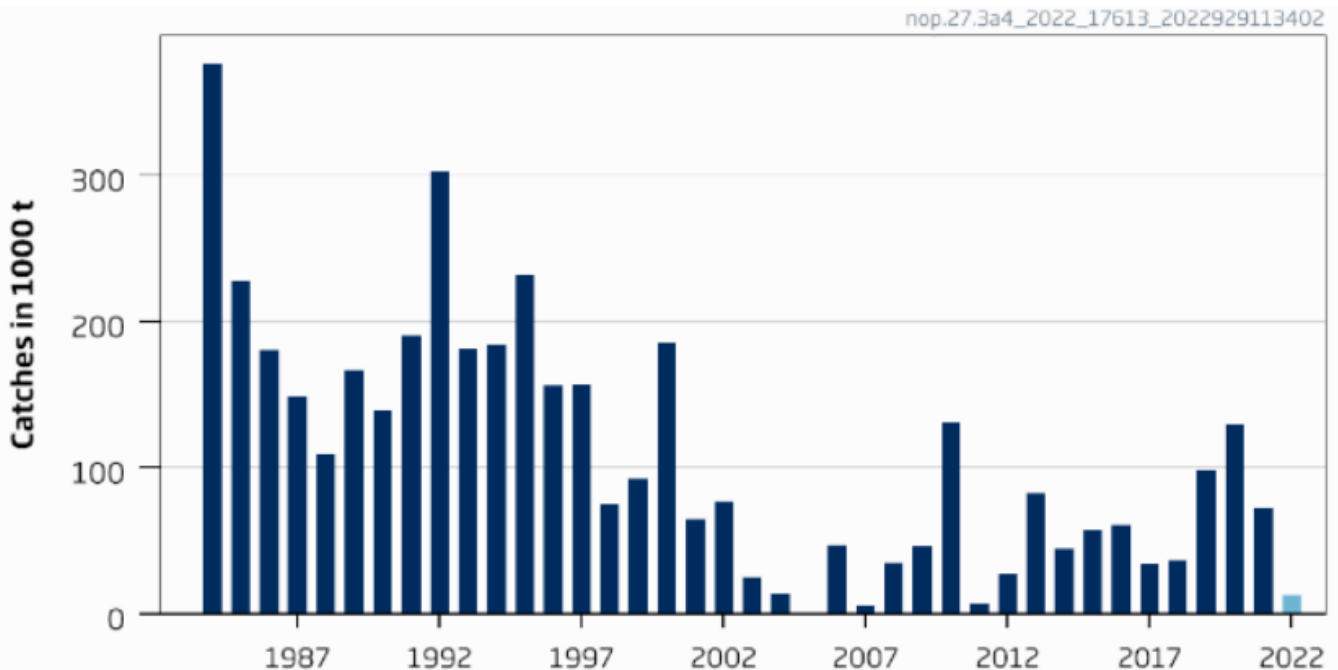
The four clauses in this section apply to Category A species. Clauses A1 - A4 should be completed for **each** Category A species. If there are no Category A species in the fishery under assessment, this section can be deleted. A Category A species must meet the minimum requirements of all four clauses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

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

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

Catch data are collected through logbooks and landings reporting. ICES reports that 100% of catches were taken by the small-meshed trawl fleet, and that discards and bycatch of Norway pout are negligible (ICES 2022). Total catches in 2021 were 71,954t. Catch data are available broken down by location and vessel flag. In Division 3a almost all catch is taken by Denmark, with very small amounts (3t in 2021) taken by Norway and Sweden. In Subarea 4 the large majority of catch is taken in Division 4a by Denmark and Norway, with smaller amounts taken by the Netherlands, Germany, Sweden and the UK. In some years catch is also taken by the Faroe Islands (ICES 2022). The relative share of catch taken by Denmark versus Norway varies each year.

Landings are collected such that fishery-wide removals of Norway pout are well understood, and A1.1 is met.



Norway pout in ICES Division 3a and Subarea 4, Catches 1984 – 2022 (ICES 2022)

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

A range of additional information is used to inform the stock assessment process and allow an estimate of stock status to be calculated. This includes catch sampling, to produce age and weight-at-age data; estimates of maturity and natural mortality

rates based on multispecies assessments; and survey indices from the International Bottom Trawl Survey (IBTS), the English Ground Fish Survey (EGFS), and the Scottish Ground Fish Survey (SGFS) (ICES 2022a).

When discussing the quality of the stock assessment, ICES notes that the assessment “is considered appropriate to indicate trends in the stock and immediate changes in the stock because of the assessment taking into account the seasonality in fishery, use of seasonal based fishery independent information, and using most recent information about recruitment”, and that the method “gives a good indication of the stock status the 1 October the following year based on projection of existing recruitment information in 3rd quarter of the assessment year” (ICES 2022a).

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

References

ICES (2022). Norway pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat). ICES Advice: Recurrent Advice. Report. <https://doi.org/10.17895/ices.advice.19772446.v1>

ICES (2022a). 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>

Links

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

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

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

Norway pout in Subarea 4 and Division 3a is subject to an annual stock assessment by the ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). The most recent of these was carried out in 2022 using an age-based analytical assessment. All fishery removals are considered; discarding and bycatch are considered negligible (ICES 2022). The biology and ecology of the species are taken into account extensively, as evidenced by the contents of the WGNSSK report (2022a), which itself uses a methodology set out by the Norway pout benchmarking process described in the benchmark workshop report (ICES 2016).

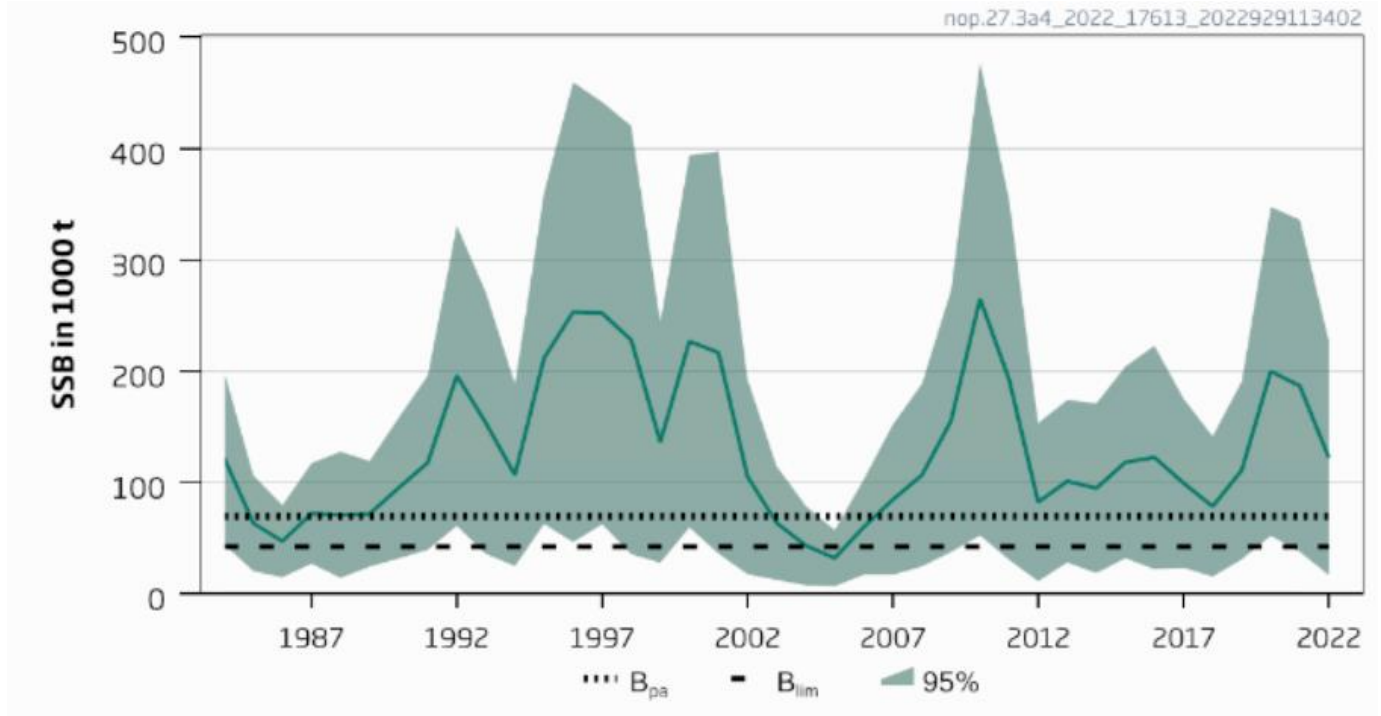
A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

The annual stock assessment provides an indication of the status of the stock relative to target and limit reference points. Three reference points are defined for the stock, as follows (ICES 2022):

- Fishing mortality reference point F_{cap} , set at 0.70, based on 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.

- Biomass limit reference point B_{lim} , set at 42,573t, set at the level of the lowest observed biomass, seen in 2005.
- Biomass target reference point B_{pa} , set at 69,736t, set at a level calculated to ensure the long-term probability of SSB falling below B_{lim} is <5%.

At the time of the 2022 stock assessment, SSB in 2022 was projected to be 122,199t (ICES 2022).



Norway pout in Subarea 4 and Division 3a, estimated SSB relative to current reference points (ICES 2022)

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

ICES publishes an annual recommendation for the maximum appropriate level of fishery removals for the stock. This is based on an escapement strategy, which aims to ensure the probability of SSB falling below B_{lim} is less than 5% in the long term. In practice this means incorporating incoming recruitment into calculations. Recruitment “is highly variable and influences SSB and total stock biomass rapidly because of the short life span of the species” (ICES 2022a). As recruitment is such a significant component of total stock size, ICES catch recommendations are often of a similar scale as the total estimated SSB.

In addition to the headline MSY-based catch recommendation, ICES also provides a range of other potential catch scenarios and lists the likely outcomes of following each (see below). However, in reality TACs are set roughly in line with the headline, MSY-based advice (see A3.1 & A3.2).

Basis	Catch (1 November 2022– 31 October 2023)*	F (1 November 2022– 31 October 2023)	5th percentile SSB (4th quarter 2023)	Median SSB (4th quarter 2023)	% SSB change **	% catch change ***	% advice change ^
ICES advice basis							
MSY approach: (escapement strategy) 95% probability of SSB being above B_{lim} in the 4 th quarter of 2023	116 823	0.635	42 570	133 480	9.2	167	-1.23
Other options							
F = 0	0	0.000	80 120	190 620	56	-100	-100
F = $F_{status\ quo}$	45 564	0.220	63 550	165 940	36	4.3	-61
F = 0.3	61 133	0.303	58 530	158 540	30	40	-48
F = 0.4	79 162	0.405	52 850	149 820	23	81	-33
F = 0.5	95 769	0.503	48 010	142 220	16.4	119	-19.0
F = 0.6	111 636	0.603	43 870	135 600	11.0	155	-5.6
F = 0.7	126 284	0.705	40 520	129 060	5.6	189	6.8

* The catch forecast is for the period 1 October to 30 September.

** SSB at the beginning of the 4th quarter of 2023 relative to SSB at the beginning of the 4th quarter of 2022 (= 122 199 tonnes).

*** Catches 1 October 2022–30 September 2023 relative to catches 1 October 2021–15 September 2022 (= 43 701 tonnes).

^ Advice value 2023 relative to the advice value 2022 (= 118 273 tonnes).

Norway pout in Division 3a and Subarea 4, catch scenarios for 2022/23 (ICES 2022)

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

The Guide to ICES Advisory Framework and Principles (ICES 2020) sets out the process by which ICES carries out scientific activities and provides fishery management advice. The process is designed to be transparent, independent and produce peer-reviewed recommendations. Advice is provided based on ten key Principles, of which Principle 7 states that “To ensure that the best available, credible science has been used and to confirm that the analysis provides a sound basis for advice, all analyses and methods are peer reviewed by at least two independent reviewers. For recurrent advice, the review is conducted through a benchmark process; for special requests through one-off reviews”.

The ICES advice, and the stock assessment methodology underpinning it, are subject to independent peer review, and therefore the fishery meets the requirements of A2.4.

A2.5 The assessment is made publicly available.

All of the stock assessment information used to produce this MarinTrust assessment report was publicly available. Specifically, information is published in the WGNSK report (ICES 2022a), the stock annex (ICES 2017), the benchmarking report (ICES 2016) and the catch advice (ICES 2022). Additionally, the publication of methodologies, data, deliberations and outcomes is a core part of the ICES process, as set out by the ICES Advisory Framework and Principles, particularly Principles 4, 5 and 6 (ICES 2020).

The stock assessment process and outcomes are made publicly available and therefore the fishery meets the requirements of A2.5.

References

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>

ICES (2017). Stock Annex: Norway Pout in the North Sea and Skagerrak (area 4 and 3.a). ICES Stock Annexes. Report.

<https://doi.org/10.17895/ices.pub.18622934.v1>

ICES (2020). Guide to ICES advisory framework and principles. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, Guide to ICES Advice. <https://doi.org/10.17895/ices.advice.7648>

ICES (2022). Norway pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat). ICES Advice: Recurrent Advice. Report. <https://doi.org/10.17895/ices.advice.19772446.v1>

ICES (2022a). 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>

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

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

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

Prior to 2020, removals of this species were restricted by two TACs, one set by Norway and one by the EU. From 2020 onwards, an additional TAC was set by the UK, meaning Norway pout is now subject to three separate TACs. Since 2016, ICES advice has been provided based on the period running from the 1st November of the year previous to the 31st October of the current year, and since 2018 TACs have been set along the same period. Quotas appear to be effective at restricting the total fishing mortality, as – according to ICES data – they have never been exceeded (ICES 2022). ICES notes that “the lack of full quota uptake is likely due to targeting of other industrial species like sprat for which fishing costs are lower, but also high fishing (fuel) costs and bycatch regulations (mainly in relation to herring and whiting bycatch) have an impact” (ICES 2022a).

There is an effective mechanism in place which restricts total fishery removals of this species, and 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.

As noted above, there are three TACs set for this species, by Norway, the EU, and the UK. In recent years the total of all three TACs has generally been slightly larger than the ICES advice (although always less than 10% larger). However, final Norway pout landings are consistently smaller than the total TAC, in many years substantially so. For example, the ICES advice for 2021 (covering November 2020 – October 2021) was for catch not to exceed 254,038t. The total of the three TACs was 255,319t, but total landings were only 71,954t (ICES 2022).

Total fishery removals of this species are consistently lower than the maximum level recommended by ICES, and A3.2 is met.

Year	ICES advice	Predicted catch corresponding to advice^^	TAC Norway	TAC EU^	TAC UK^	Official catch (including bycatch of other species)	ICES catch
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					

Norway pout in Division 3a and Subarea 4: ICES advice, TACs and total catches since 2018 (ICES 2022)

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

ICES has historically recommended the closure of the fishery when biomass was estimated to be low; this occurred several times between 2005 and 2007, and also in 2011 and 2012. During the former period small TACs of 6,000t were set; in 2011 and 2012 quotas were set to zero. ICES currently provides advice using an MSY-based escapement strategy, aiming to reduce the probability that SSB will fall below B_{lim} to less than 5% (ICES 2022).

Norway pout is a short-lived species, and as such recruitment is taken into account when calculating the appropriate catch level to recommend. Therefore, the fishery would not necessarily be closed if SSB were estimated to be below B_{lim} . However, ICES would recommend closure there was a greater than 50% chance that SSB would be below B_{lim} in the following year should any fishing take place. This approach has been assessed by ICES and determined to be precautionary (ICES 2023).

Commercial fishery removals have been prohibited in the past based on ICES advice. ICES is highly likely to recommend the closure of the fishery in future should such action become necessary. A3.3 is met.

References

ICES (2022). Norway pout (*Trisopterus esmarkii*) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat). ICES Advice: Recurrent Advice. Report. <https://doi.org/10.17895/ices.advice.19772446.v1>

ICES (2022a). 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 (2023). Advice on fishing opportunities. In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, section 1.1.1. https://doi.org/10.17895/ices.advice.22240624	
Standard clause 1.3.2.1.3	
Links	
MarinTrust Standard clause	1.3.2.1.3, 1.3.2.1.4
FAO CCRF	7.2.1, 7.22 (e), 7.5.3
GSSI	D3.04, D6.01

A4	Stock Status - Minimum Requirements	
	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.
		Clause outcome: PASS
<p>A4.1 The stock is at or above the target reference point, OR IF NOT:</p> <p>The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT:</p> <p>The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.</p> <p>The most recent ICES catch advice for Norway pout states that “spawning-stock size is above B_{pa} and B_{lim}” (see A2.2). SSB is estimated to be substantially larger than the target reference point, and therefore the stock meets the first statement in this clause. A4.1 is met.</p>		
References		
ICES (2022). Norway pout (<i>Trisopterus esmarkii</i>) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.19772446.v1		
Links		
MarinTrust Standard clause	1.3.2.1.4	
FAO CCRF	7.2.1, 7.2.2 (e)	
GSSI	D6 01	

CATEGORY B SPECIES

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

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

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

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

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

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

If the biomass / fishing pressure risk assessment is not possible

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

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

B > B_{av} and F < F_{av}	Pass	Pass	Pass	Fail
B > B_{av} and F or F_{av} unknown	Pass	Pass	Fail	Fail
B = B_{av} and F < F_{av}	Pass	Pass	Fail	Fail
B = B_{av} and F or F_{av} unknown	Pass	Fail	Fail	Fail
B > B_{av} and F > F_{av}	Pass	Fail	Fail	Fail
B < B_{av}	Fail	Fail	Fail	Fail
B unknown	Fail	Fail	Fail	Fail
Resilience	High	Medium	Low	Very Low

Assessment Results

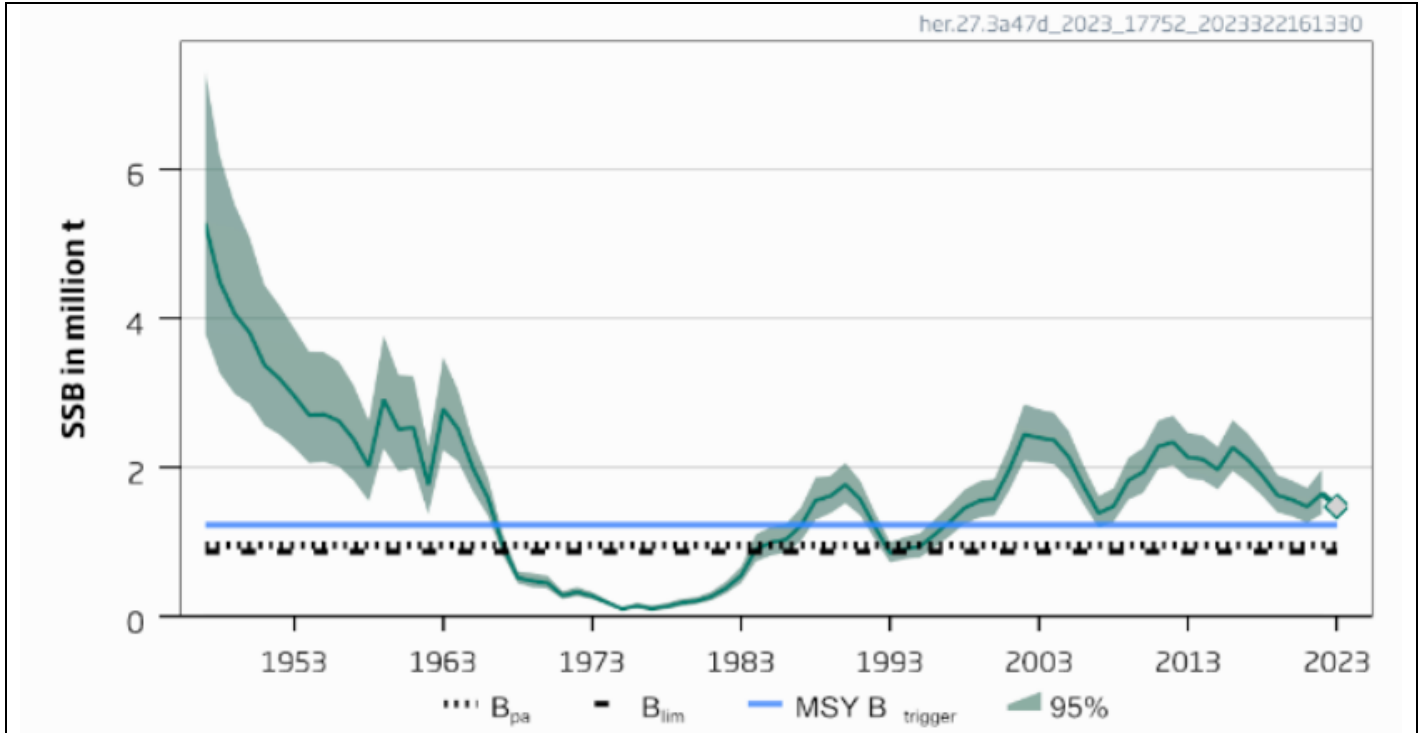
Species Name		n/a
B1	Species Name	
	Table used (Ba, Bb)	
	Outcome	
References		
Links		
MarinTrust Standard clause		1.3.2.2, 4.1.4
FAO CCRF		7.5.1
GSSI		D.5.01

CATEGORY C SPECIES

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

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

Species Name		Herring in Subarea 4 and Divisions 3a and 7d (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.	PASS
	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.	PASS
			Clause outcome: PASS
<p>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.</p> <p>Herring in Subarea 4 and Divisions 3a and 7d is subject to annual stock assessment by the ICES Herring Assessment Working Group for the Area South of 62°N (HAWG). The most recent stock assessment was conducted in 2023, using an age-based analytical assessment with catches incorporated into the model and forecast. The stock assessment also utilised five survey indices and survey maturity data, plus estimates of natural mortality from the North Sea multispecies model. The section of the catch advice which comments on potential sources of uncertainty, “Quality of the assessment”, does not indicate any concerns about the outcomes of the assessment (ICES 2023). Fishery removals from the Norway pout fishery are included in the stock assessment process through the use of a four-fleet approach to monitor catches; Fleet B is defined as “the industrial fleet of EU nations targeting sprat, Norway pout, and sandeel, operating in the North Sea” (ICES 2023). C1.1 is met.</p> <p>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.</p> <p>The 2023 stock assessment produced an estimate of the current status of the stock relative to established reference points. The target reference points $MSY B_{trigger}$ and B_{pa} have been set at 1,232,828t and 956,482t respectively. The limit reference point B_{lim} has been set at 874,198t. The 2023 catch advice estimated that SSB in 2023 would be 1,480,607t, above all three reference points. The advice also states that “spawning-stock size is above $MSY B_{trigger}$, B_{pa}, and B_{lim}” (ICES 2023). Stock biomass is estimated to be above all three reference points, and C1.2 is met.</p>			



Herring in Subarea 4 and Divisions 3a and 7d, estimated SSB relative to current reference points (ICES 2023)

References

ICES (2023). 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, 2023. ICES Advice 2023, her.27.3a47d. <https://doi.org/10.17895/ices.advice.21907947>

Links

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

Species Name	Whiting in Subarea 4 and Division 7d
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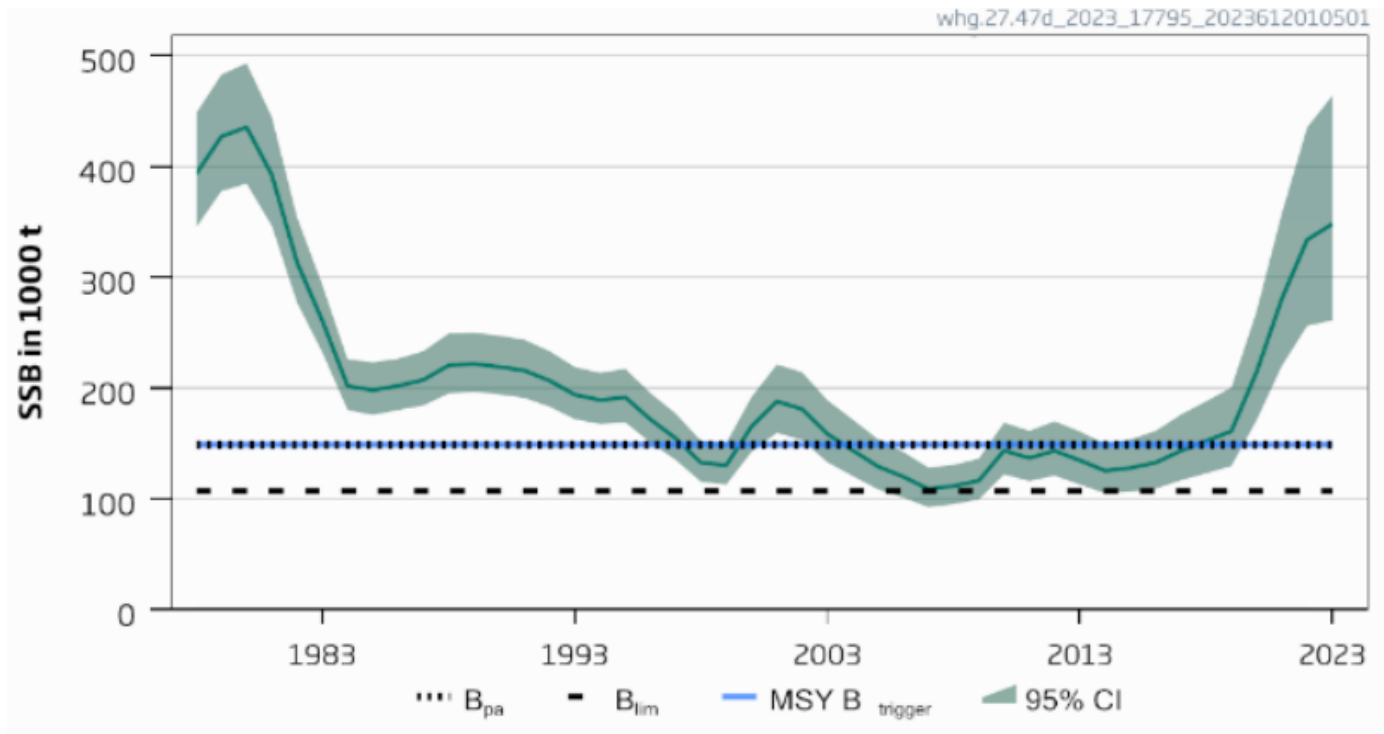
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most recent stock assessment, 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.	PASS
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.

Whiting in Subarea 4 and Division 7d is subject to annual stock assessment by the ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). The most recent assessment was conducted in 2023 using an age-based analytical approach which utilised catches in the model and forecast. The stock assessment also incorporated two survey indices and a survey maturity estimate, plus time-varying natural mortalities from the North Sea multispecies model. Discarding is significant but included in the assessment. The ICES documentation does not raise any concerns in relation to the reliability of the stock assessment outcomes. 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 2023 stock assessment produced an estimate of stock status relative to established reference points. The target reference points MSY $B_{trigger}$, B_{pa} , and MAP MSY $B_{trigger}$ have been set at 148,888t. The limit reference points B_{lim} and MAP B_{lim} have been set at 107,146t. The stock assessment produced a short-term forecast for SSB, estimating that it would be 347,863t in 2024, substantially larger than the reference point levels. The catch advice also states that “spawning-stock size is above MSY $B_{trigger}$, B_{pa} , and B_{lim} ” (ICES 2023). Stock biomass is above the target and limit reference points and C1.2 is met.



Whiting in Subarea 4 and Division 7d, estimated SSB relative to current reference points (ICES 2023)

References

ICES (2023). Whiting (*Merlangius merlangus*) in Subarea 4 and Division 7.d (North Sea and eastern English Channel). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, whg.27.47d. <https://doi.org/10.17895/ices.advice.21864324>

Links

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

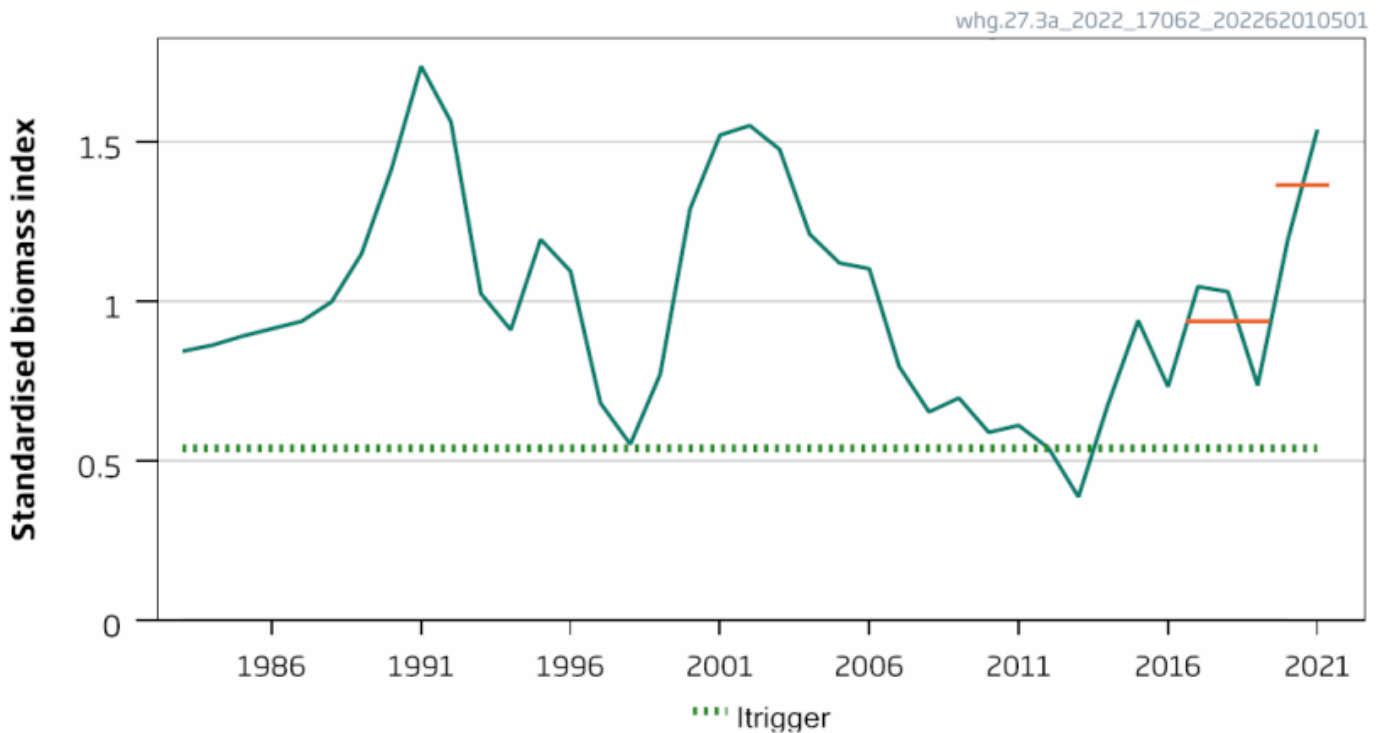
Species Name		Whiting in Division 3a	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, 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.	PASS
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.

Whiting in Division 3a is subject to bi-annual stock assessment by the ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSK), the most recent of which was carried out in 2022. A survey-trends-based assessment was applied, utilising commercial catches and survey information from six trawl and acoustic surveys, plus discard and bycatch data. The ICES documentation indicates that there is a degree of uncertainty over the extent of stock mixing between this whiting stock and those in the North Sea and western Baltic (ICES 2023); however this does not appear to have produced significant concerns over the reliability of the stock assessment outcomes. 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 2022 catch advice provides an indication of the current status of the stock relative to one established reference point. $I_{trigger}$ is defined as 1.4 times larger than I_{loss} , which in turn is the lowest value of the biomass index produced by the combined survey index. The stock index is currently estimated to be around three times larger than the reference point level, and the catch advice states that “the stock size index is above $I_{trigger}$ ” (ICES 2023). The stock is estimated to have a biomass above the proxy reference point, and C1.2 is met.



Whiting in Division 3a, biomass index relative to current reference point (ICES 2022)

References

ICES (2022). Whiting (*Merlangius merlangus*) in Division 3.a (Skagerrak and Kattegat). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, whg.27.3a. <https://doi.org/10.17895/ices.advice.19454252>

Links

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

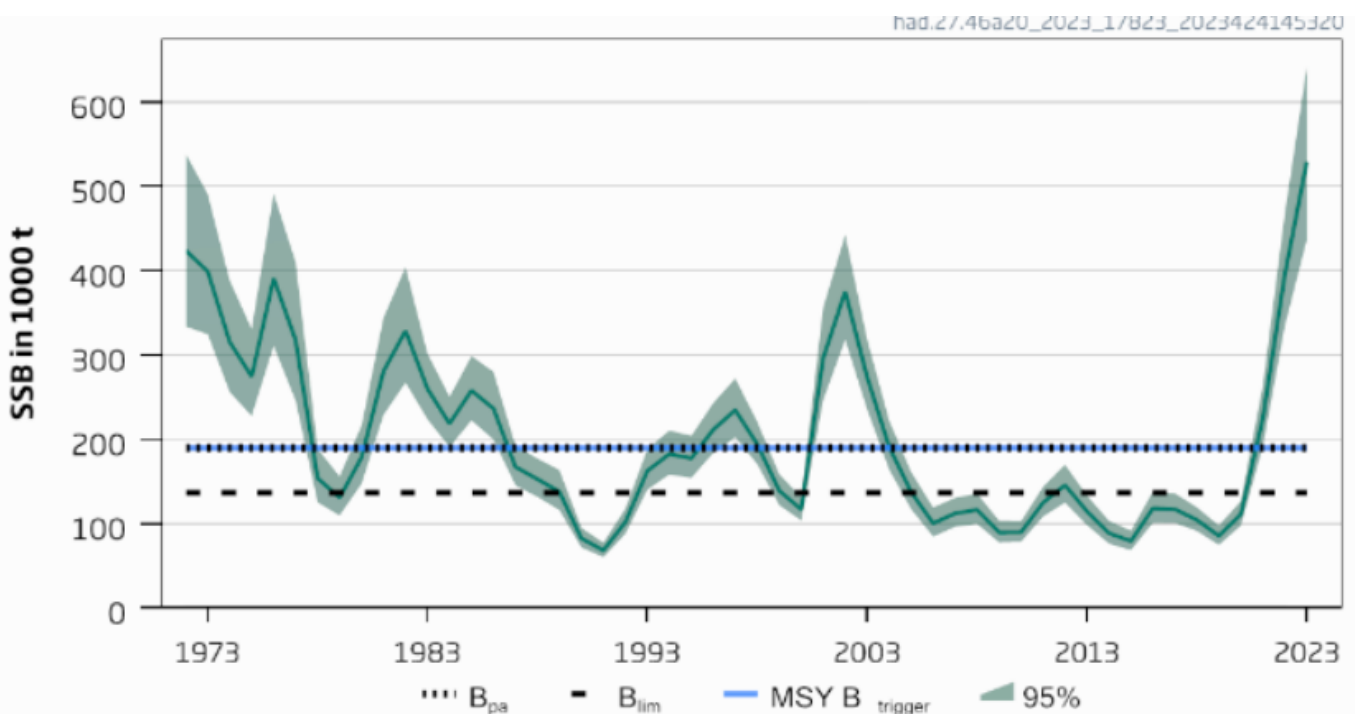
Species Name		Haddock	
C1	Category C Stock Status - Minimum Requirements		
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	PASS
	C1.2	The species is considered, in its most 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.	PASS
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.

Haddock in Subarea 4, Division 6a and Subdivision 20 is subject to annual stock assessment by the ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). The most recent assessment was conducted in 2023, using an age-based analytical approach which utilised catches and survey data in the model and the forecast. In addition to targeted catch, discards, below minimum size landings and haddock taken as bycatch in other fisheries have been included since 2016. The ICES documentation does not raise any major concerns relating to the quality of the assessment. 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 2023 stock assessment produced an estimate of stock status relative to reference points. The target reference points $B_{trigger}$, B_{pa} , and $MAP\ MSY\ B_{trigger}$ have been set at 189,734t. The limit reference points B_{lim} and $MAP\ B_{lim}$ have been set at 136,541t. The 2023 stock assessment produced a short-term projection for the estimated biomass in 2024 of 533,910t, substantially larger than the reference point levels. Additionally, the 2023 catch advice states that “spawning-stock size is above $MSY\ B_{trigger}$, B_{pa} , and B_{lim} ” (ICES 2023). Stock biomass is estimated to be above the target and limit reference points, and C1.2 is met.



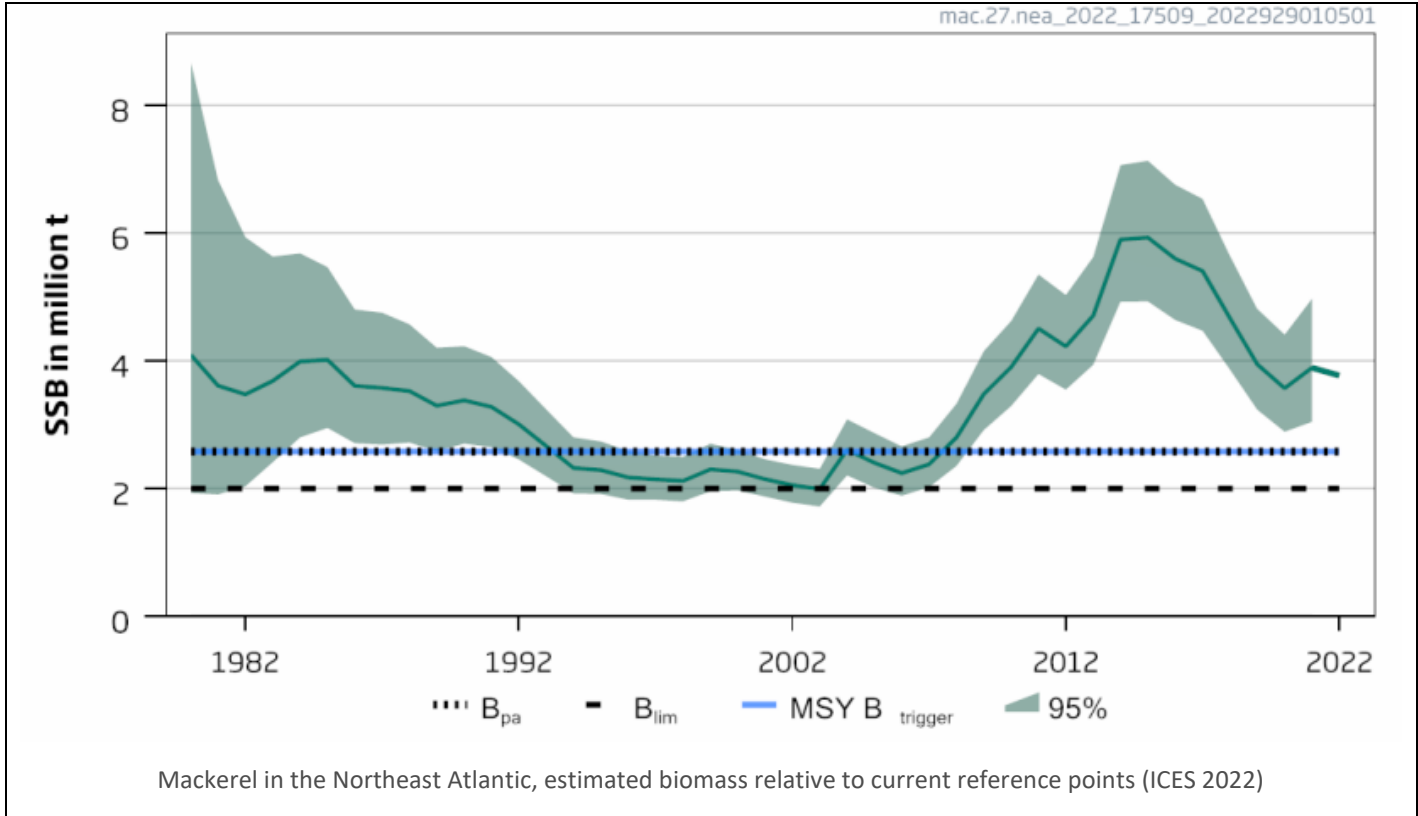
Haddock in Subarea 4, Division 6a and Subdivision 20, estimated biomass relative to current reference points (ICES 2023)

References

ICES (2023). 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, 2023. ICES Advice 2023, had.27.46a20. <https://doi.org/10.17895/ices.advice.21840795>

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

Species Name		Mackerel	
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.	PASS
	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.	PASS
			Clause outcome: PASS
<p>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.</p> <p>Mackerel in the Northeast Atlantic is subject to annual stock assessment by the ICES Working Group on Widely Distributed Stocks (WGWIDE), the most recent of which was carried out in 2022. The assessment used an age-based analytical model which utilised catches in the model and the forecast. The approach also incorporated data from three survey indices, steel tagging data from 1980-2006, and RFID tagging data from 2014-2021. Bycatch in other fisheries is included in the catch data. The ICES documentation reports some potential sources of uncertainty, such as limited data regarding the Russian component of the fishery; however these are largely accounted for in the methodology and do not appear to be considered to have affected the reliability of the assessment outcomes. C1.1 is met.</p> <p>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.</p> <p>The 2022 stock assessment produced an indication of the current stock status relative to established reference points. The target reference points $MSY B_{trigger}$ and B_{pa} are set at 2,580,000t. The limit reference point B_{lim} is set at 2,000,000t. The 2022 assessment estimated that at spawning time in 2022 SSB would be 3,769,326t, substantially above the reference point levels. The catch advice also states that “spawning-stock size is above $MSY B_{trigger}$, B_{pa}, and B_{lim}” (ICES 2023). Stock biomass is considered to be above the target and limit reference points, and C1.2 is met.</p>			



References

ICES (2022). Mackerel (*Scomber scombrus*) in subareas 1-8 and 14 and division 9.a (the Northeast Atlantic and adjacent waters). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, mac.27.nea. <https://doi.org/10.17895/ices.advice.7789>

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.

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

Table D2 - Productivity / Susceptibility attributes and scores.

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

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

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

D4	Species Name	n/a	
Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements			
D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
			Outcome:
Evidence			
D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
References			
Links			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	

FURTHER IMPACTS

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

F1	Impacts on ETP Species - Minimum Requirements		
	F1.1	Interactions with ETP species are recorded.	PASS
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	PASS
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	PASS
			Clause outcome: PASS
F1.1 Interactions with ETP species are recorded.			
<p>Interactions with ETP species are recorded as required by EU legislation (for example EC Regulation 812/2004 and EU Regulation 2017/10042) and are submitted to the ICES Working Group on Bycatch of Protected Species (WGBYC) for analysis. The most recent WGBYC report was published in March 2022 (ICES 2022) and contains detailed information on the data sources used to inform the activities of the group. The report is not specific to the Danish Norway pout fishery and does not provide specific details of the data submitted by Danish vessels targeting Norway pout; however it provides a summary of monitoring efforts and bycatch across the Greater North Sea ecoregion (page 13); indicates that Denmark submitted data on fishing effort, monitoring effort, and bycatch events as requested in 2017-2021 (Table 3.1, page 27); and lists the number of reported mammal, bird and turtle interactions in 2021 by region and gear type (Table 3.2, page 29-43). The bycatch data are used by the WGBYC to estimate bycatch rates and overall impacts of fisheries on ETP species in the waters covered by ICES.</p> <p>Interactions with ETP species are recorded, and F1.1 is met.</p>			
F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species.			
<p>The catch composition data provided by the applicant lists all species present in the catch, including those where less than 100kg were caught in the 2022 season. None of the species listed meet the MT definition of an ETP species. The Norwegian component of the fishery holds an MSC certification, and as part of the MSC assessment process the potential direct impacts of the fishery on ETP species were reviewed. The most recent assessment reports, including the full re-assessment from 2022 and surveillance from 2023, state that the level of impact of the Norwegian fishery on ETP species is low (MSC 2023). The two species considered ETP under the MSC methodology are harbour porpoise (<i>Phocoena phocoena</i>, Least Concern) and spiny dogfish (<i>Squalus acanthias</i>, Vulnerable), neither of which meet the MT definition of ETP.</p> <p>The available evidence suggests it is unlikely that the fishery is having a significant negative effect on ETP species, and no evidence was encountered to the contrary. F1.2 is met.</p>			
F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality.			
<p>There is no evidence to indicate the fishery regularly interacts with ETP species, and therefore no such measures are required to be in place. However, some general measures are in place across EU fisheries, such as the reporting requirements listed in F1.1 above, and a recently proposed Action Plan for further protecting ecosystems and vulnerable species (EC 2023).</p>			
References			
<p>EC (2023). Fisheries, aquaculture and marine ecosystems: transition to clean energy and ecosystem protection for more sustainability and resilience. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_828</p> <p>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</p> <p>IUCN Red List, Harbour porpoise. https://www.iucnredlist.org/species/17027/50369903</p> <p>IUCN Red List, Spiny dogfish. https://www.iucnredlist.org/species/91209505/124551959</p> <p>MSC (2023). Norway sandeel, pout and North Sea sprat fishery certification reports. https://fisheries.msc.org/en/fisheries/norway-sandeel-pout-and-north-sea-sprat/@@assessments</p>			
Links			

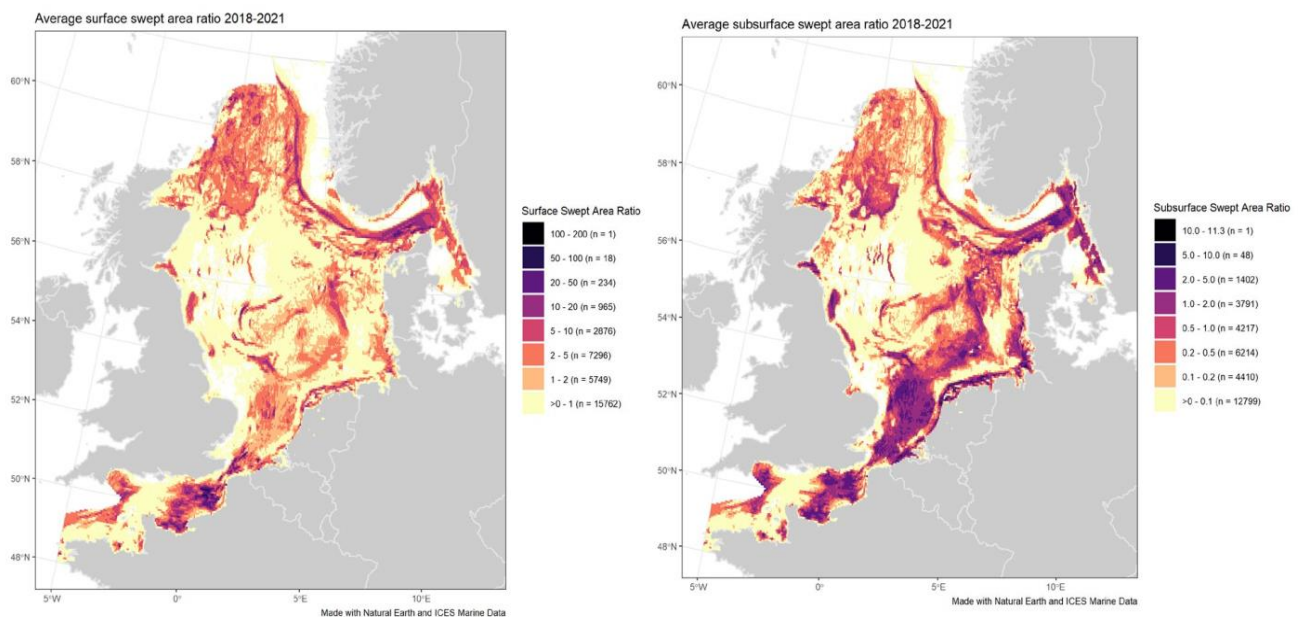
MarinTrust Standard clause	1.3.3.1
FAO CCRF	7.2.2 (d)
GSSI	D4.04, D.3.08

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

The targeted Norway pout fishery is conducted using midwater and bottom trawls, mainly otter trawls. Midwater trawls are known to have minimal impact on physical habitats, as they are operated with the intention of avoiding contact with the sea bed. This section therefore considers only the bottom trawling component of the fishery, with the midwater trawl gears assumed to meet the requirements.

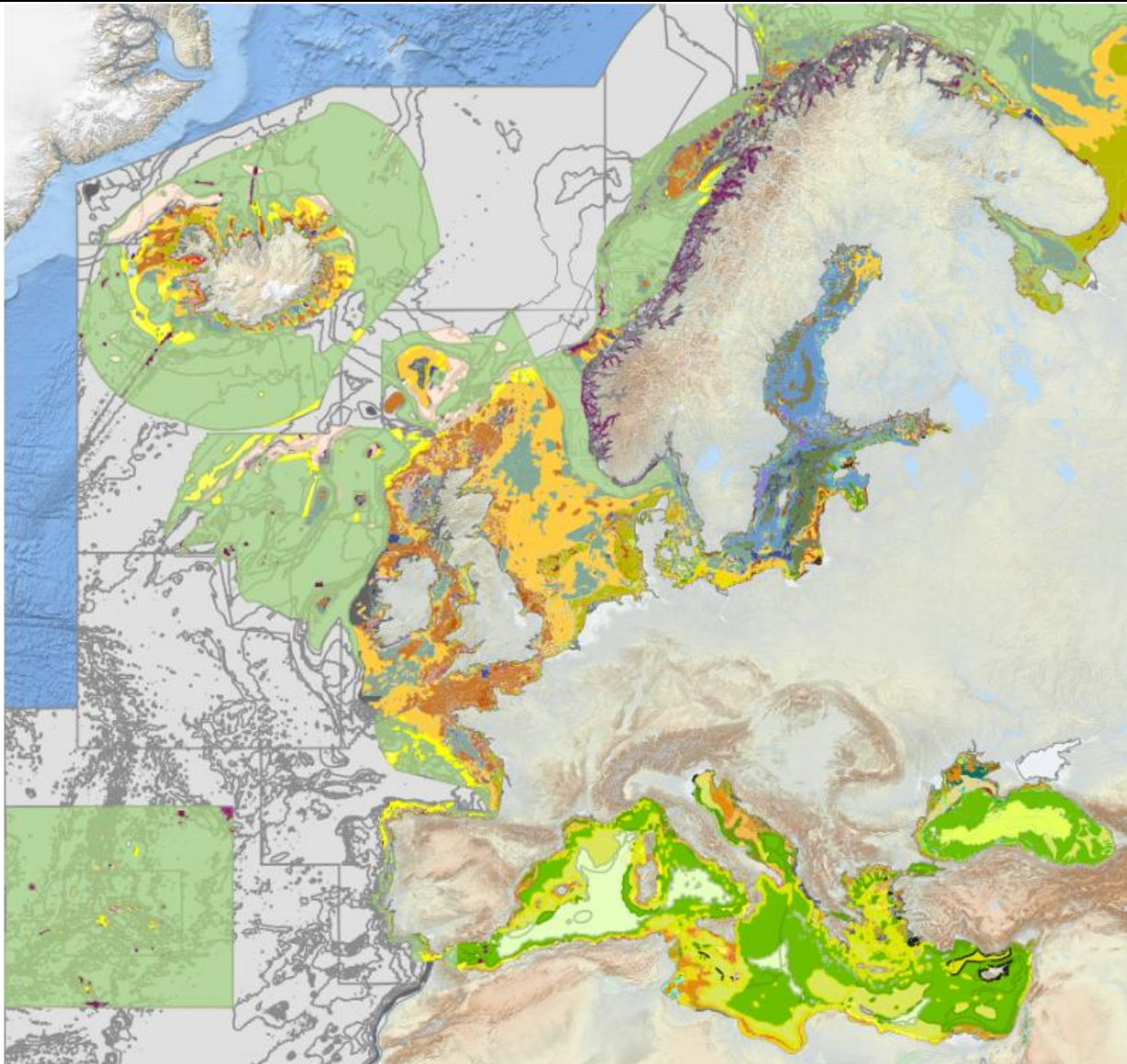
F2.1 Potential habitat interactions are considered in the management decision-making process.

The potential impacts of the fishery on seabed habitats are taken into account during the decision-making process. The ICES ecosystem overviews – of which the Greater North Sea ecoregion is the most relevant to this report – include an analysis of the overall level of seabed disturbance caused by fisheries and other human activities (ICES 2022).



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) (ICES 2022)

Habitats in the North Sea are relatively well mapped and understood, through mechanisms including the North Sea International Bottom Trawl Survey. Maps are maintained and made available by the European Marine Observation and Data Network (EMODnet).



Broad-scale seabed habitat map for Europe (EMODnet 2023)

These analyses feed in to the broader mechanisms in place to protect seabed habitats in the North Sea.

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

No evidence was encountered to indicate that the Norway pout fishery has a substantial negative impact on physical habitats. The fishery primarily takes place in muddy areas, and regulations are in place to minimise the potential impacts (see F2.3). F2.2 is met.

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

The fishery is known to interact with seabed habitats, primarily deeper, muddy seabeds (Bigné *et al* 2019). Protection for these habitats is provided across all fisheries and is not specific to the Norway pout fishery. Mechanisms include Natura 2000, which protects core breeding and resting sites for rare species, along with rare natural habitats (EC 2023). Natura 2000 sites in the North Sea include Sylt Outer Reef, Borkum Reef Ground, Dogger Bank, Eastern German Bight, Cleaver Bank, and Frisian Front (EC 2022). Additional Marine Protected Areas in the North Sea include the Frisian Front and Central Oyster Grounds MPAs. Trawling is prohibited in all of these areas (EC 2022a).

References

Bigné, M, Rasmus Nielsen, J, Bastardie, F. Opening of the Norway pout box: will it change the ecological impacts of the North Sea Norway pout fishery? ICES Journal of Marine Science, Volume 76, Issue 1, January-February 2019, Pages 136–152, <https://doi.org/10.1093/icesjms/fsy121>

European Commission (2022). Fisheries and nature conservation: Increased protection of Natura 2000 sites in the North Sea. https://oceans-and-fisheries.ec.europa.eu/news/fisheries-and-nature-conservation-increased-protection-natura-2000-sites-north-sea-2022-12-08_en

European Commission (2022a). Commission delegated regulation C(2022) 8918. https://oceans-and-fisheries.ec.europa.eu/system/files/2022-12/C-2022-8918_en.pdf

European Commission (2023). Natura 2000. https://ec.europa.eu/environment/nature/natura2000/index_en.htm

EMODnet (2023). Seabed habitats. <https://emodnet.ec.europa.eu/en/seabed-habitats>

ICES (2022). Greater North Sea ecoregion – Ecosystem Overview. ICES Advice: Ecosystem Overviews. Report. <https://doi.org/10.17895/ices.advice.21731912.v1>

Links

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

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

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

The potential ecosystem impacts of fisheries are primarily taken into account in the management process by ICES. A key component of this is the development of ecosystem overviews, the outcomes of which are incorporated into Working Group discussions and recommendations. The relevant ICES ecoregion to this fishery is the Greater North Sea (ICES 2022), which includes the North Sea but also the English Channel, Skagerrak, and Kattegat. Ecosystem overviews provide a summary of the key environmental indicators, ecosystem pressures, and the current state of the ecosystem. Relevant aspects of the North Sea ecoregion which are summarised in the ICES report include:

- The episodic changes in productivity of key elements of the ecosystem in the North Sea, including phytoplankton, zooplankton and demersal and pelagic fish.
- The links between these changes in productivity and temperature trends both within the North Sea and across the North Atlantic.
- The impacts of wind farms and other artificial hard substrates on biodiversity and productivity.
- The impacts of fishing on ecosystem structure, particularly the removal of many larger fish.
- A shift from pelagic to benthic production, particularly the substantial increase in the size of the plaice stock.

In addition to this over-arching consideration, the role of Norway pout in the ecosystem also factors in to the development of the stock assessment process. The most recent WGNSSK report notes that the population dynamics of the species are “very dependent on changes caused by high recruitment variation and variation in predation mortality...due to the short lifespan of the species” (ICES 2022a). The most recent benchmarking workshop, conducted in 2016, considered the ecological role of Norway pout extensively, including a detailed analysis of predator-prey interactions, and the role of environmental drivers in Norway pout population dynamics (ICES 2017).

There are also a range of technical management measures in place to protect other species, including a closed Norway pout box, restrictions on bycatch, minimum mesh size, and minimum landing size (ICES 2022a).

The broader ecosystem and the role of Norway pout within in it considered extensively throughout the decision-making process, and F3.1 is met.

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

As discussed in F3.1, Norway pout plays an important role in the marine ecosystem and as such the ecological aspects of the fishery are analysed extensively throughout the management process. Although there is clear potential for the fishery to have a significant negative impact on the ecosystem if Norway pout was overfished, there are two main reasons why it is highly unlikely to be having such an impact at present. Firstly, the ICES catch recommendations are based on the extensive analysis of potential ecosystem impacts described above, particularly the importance of Norway pout as a prey species. Secondly, in

recent years the fishery has rarely caught quantities close to the maximum amount recommended, due primarily to economic factors but also because of bycatch regulations and restrictions. Therefore as long as catch recommendations are followed, and especially where TACs are not fully taken, the fishery is unlikely to have a significant negative impact on the marine ecosystem.

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

Norway pout is recognised as an important prey species within the ecosystem of the North Sea and Skagerrak. ICES states that “there is a need to ensure that the stock remains high enough to provide food for a variety of predator species” (ICES 2022a). These include saithe, haddock, cod, whiting and mackerel. Natural mortality levels are estimated for the stock as part of the stock assessment process, using a multispecies assessment model. This ensures that catch recommendations recognise the likely quantity of Norway pout which will be removed by predators over the coming year, and are lower than they would be otherwise. Additional precaution is included in catch recommendations to recognise the important role of the species in the ecosystem, and F3.3 is met.

References

ICES (2022). 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>

ICES (2022a). 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>

Links

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

SOCIAL CRITERION

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

Appendix A - Determining Resilience Ratings

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

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

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

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

Appendix B – MarinTrust Fishery Assessment Peer Review Template

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

Fishery under assessment	WF32 – Norway Pout in ICES Division 3a and Subarea 4
Management authority (Country/State)	EU & Norway
Main species	Norway pout (<i>Trisopterus esmarkii</i>)
Fishery location	ICES Division 3a and Subarea 4
Gear type(s)	Small-meshed midwater trawl, bottom trawl. Primarily otter trawls.
Overall recommendation. (Approve/ Fail)	Approve

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

As in most fisheries certified under the MT standard, data on interactions with ETP species are taken, but no specific details exist for every fishery. Any fishing vessel, in every part of the ocean interacts with ETP species, so it is not enough to justify the approval by keeping that ‘no evidence exists to say that the fishery impact to ETP species’. Here it is an aspect that should improve since the recording of interactions exist, so that ‘no negative impact’ could be demonstrated.

Another aspect to highlight is the negative impact of trawling on seafloor. The only effective protection of seafloor is the creation of some marine protected areas where trawling is prohibited. Lamentably most of the region has been impacted since decades ago, then they probably cannot be recovered though the Norway pout fishery cannot be exclusively blamed for that.

General Comments on the Draft Report provided to the peer reviewer

The review is well documented and follows exactly the MT standard. In particular, the productive advice from ICES and the abundance of technical documents facilitate the assessment of the performance of fisheries as this one on Norway pout.

Summary of Peer Review Outcomes

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

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

Detailed Peer Review Justification

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

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

Boxes may be extended if more space is required.

1. Is the scoring of the fishery consistent with the MarinTrust standard, and clearly based on the evidence presented in the assessment report?
Scoring agreed
Certification body response
n/a

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?
Yes
Certification body response
n/a

--

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?
Yes
Certification body response
n/a

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

3A. Are the “Category A Species” scores clearly justified?
Yes
Certification body response
n/a

--

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

N.a.

Certification body response

n/a

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

Yes

Certification body response

n/a

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

n.a.

Certification body response

n/a

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

Yes, but there are two aspects I feel I must highlight:

There is no specific data to sustain that this fishery does not interact with ETP species in despite of the existent system for recording interactions with these protected species. Probably the interaction exists but is not negative, but that can only be sustained if the data collected by the same fleet fishing Norway pout is used. Instead, the data is used by an ICES technical group, which produces an overall analysis of the impacts of fishing on ETP species.

The second aspect is related to the North Sea seafloor, which may be irretrievable since decades ago due to pollution and trawling. The approval of this clause in this fishery is because there is nothing else that can be maintained or recovered in the seafloor where several trawling fisheries operate.

Certification body response

With regards to ETP species, there is a degree of evidence that there are no interactions, in the form of catch composition data and MSC evidence for the Norwegian component of the fishery. However, we agree that an evidence source demonstrating that the Danish component does not interact with ETP species would be useful.

With regards to the impacts of the fishery on habitats, we also agree with the PR feedback.

Optional: General comments on the Peer Review Draft Report

Certification body response

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)

MarinTrust Fishery Assessment Peer Review Template

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

Fishery under assessment	WF32 – Norway Pout in ICES Division 3a and Subarea 4
Management authority (Country/State)	EU & Norway
Main species	Norway pout (<i>Trisopterus esmarkii</i>)
Fishery location	ICES Division 3a and Subarea 4
Gear type(s)	Small-meshed midwater trawl, bottom trawl. Primarily otter trawls.
Overall recommendation. (Approve/ Fail)	Approve

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

As in most fisheries certified under the MT standard, data on interactions with ETP species are taken, but no specific details exist for every fishery. Any fishing vessel, in every part of the ocean interacts with ETP species, so it is not enough to justify the approval by keeping that ‘no evidence exists to say that the fishery impact to ETP species’. Here it is an aspect that should improve since the recording of interactions exist, so that ‘no negative impact’ could be demonstrated.

Another aspect to highlight is the negative impact of trawling on seafloor. The only effective protection of seafloor is the creation of some marine protected areas where trawling is prohibited. Lamentably most of the region has been impacted since decades ago, then they probably cannot be recovered though the Norway pout fishery cannot be exclusively blamed for that.

General Comments on the Draft Report provided to the peer reviewer

The review is well documented and follows exactly the MT standard. In particular, the productive advice from ICES and the abundance of technical documents facilitate the assessment of the performance of fisheries as this one on Norway pout.

Summary of Peer Review Outcomes

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

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

Detailed Peer Review Justification

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

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

Boxes may be extended if more space is required.

1. Is the scoring of the fishery consistent with the MarinTrust standard, and clearly based on the evidence presented in the assessment report?
Scoring agreed
Certification body response
n/a

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?

Yes
Certification body response
n/a

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?
Yes
Certification body response
n/a

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

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

Certification body response

n/a

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

N.a.

Certification body response

n/a

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

Yes

Certification body response

n/a

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

n.a.

Certification body response

n/a

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

Yes, but there are two aspects I feel I must highlight:

There is no specific data to sustain that this fishery does not interact with ETP species in despite of the existent system for recording interactions with these protected species. Probably the interaction exists but is not negative, but that can only be sustained if the data collected by the same fleet fishing Norway pout is used. Instead, the data is used by an ICES technical group, which produces an overall analysis of the impacts of fishing on ETP species.

The second aspect is related to the North Sea seafloor, which may be irretrievable since decades ago due to pollution and trawling. The approval of this clause in this fishery is because there is nothing else that can be maintained or recovered in the seafloor where several trawling fisheries operate.

Certification body response

With regards to ETP species, there is a degree of evidence that there are no interactions, in the form of catch composition data and MSC evidence for the Norwegian component of the fishery. However, we agree that an evidence source demonstrating that the Danish component does not interact with ETP species would be useful.

With regards to the impacts of the fishery on habitats, we also agree with the PR feedback.

Optional: General comments on the Peer Review Draft Report

Certification body response