MarinTrust Standard V2

Whole fish Fishery Assessment

WF04 Sandeel in ICES Divisions 4a-c

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Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name(s): FF Skagen and TripleNine Thyboron AS			
Country: Denmark			
Email address:		**Applicant Code:**	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor Name	**CB Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/ Re-approval**
Sam Peacock	Sam Dignan	3	Surveillance 1
Assessment Period	March 2024 – March 2025		
Scope Details			
Management Authority (Country/State)		EU (Denmark); UK, Norway	
Main Species		Sandeel (*Ammodytes marinus*)	
Fishery Location		FAO Area 27, ICES Divisions 4a-c	
Gear Type(s)		Midwater trawl	
Outcome of Assessment			
Overall Outcome		PASS	
Clauses Failed		NONE	
CB Peer Review Evaluation		Agree with the recommendation to Pass	
Fishery Assessment Peer Review Group Evaluation		Pass	
Recommendation		Approved	

Table 2. Assessment Determination

Assessment Determination
As with the initial MT fishery assessment, this assessment covers the sandeel fishery in Sandeel Areas (SAs) 1r, 2r, 3r and 4, which are four of the seven SAs within the North Sea. Each area includes up to five sandeel species, but is assessed and managed as an assemblage. The sandeel areas were reviewed by a 2023 ICES benchmarking exercise, with the conclusion that no changes would be made. The main species of sandeel in terms of population and presence in the catch is lesser sandeel, *Ammodytes marinus*, which has been categorised as Least Concern by the IUCN Red List. All four of the other sandeel species have been categorised by the IUCN as either Least Concern or Data Deficient. The assessment also considers three Type 2 species: mackerel, whiting and herring, all of which have also been categorised as Least Concern. None of the species covered by this assessment is present in the CITES appendices. As previously, the sandeel fishery in SAs 1r, 2r and 4 occurs in EU and UK waters, and is managed under the EU CFP and UK Fisheries Act 2020. The majority of catches are taken by EU vessels, primarily the Danish fleet. For the 2024 season, the UK has closed access to fishing within territorial waters for all sandeel-targeting vessels. In SA3r, the majority of catch is taken by Norwegian vessels, and the stock is managed under two separate regimes (EU and Norway) which do not appear to coordinate quotas. Stock assessments and management advice are provided in all four SAs by ICES, and also by the Norwegian IMR in SA3r. Other than the closure of UK waters to sandeel fishing in 2024, there have been no substantial changes relevant to sections M or F since the time of the initial MT assessment, and the fishery continues to meet the requirements of these sections. Similarly, there are no significant changes in the status of the three Category C stocks, and the fishery continues to meet the requirements of Section C. The main issue arising in the initial MT assessment related to the practice of “quota flex”, the ability of quota holders to transfer up to 10% of their TAC between years. In some years this has led to catches exceeding the TAC and the ICES advice, particularly in SAs 1r and 2r, and particularly in years where the ICES advice was for a relatively small or zero quota. At the time of the initial MT assessment, this issue was discussed with the applicant, who stated that the Danish sandeel industry was making efforts to resolve this issue, and additionally that ICES was preparing advice regarding the extent to which the practice can be considered precautionary. The 2023 ICES benchmarking exercise carried out for sandeel included an analysis of the potential impacts of quota flex, concluding that it “marginally increased risk of SSB falling below B_{lim} (0.2% higher risk at F_{cap})”. With regards to the MT requirements, this does not resolve the question of whether the clauses in A3 are met in years when quota flex causes catches to significantly exceed the advice. Catches in 2023 were in line with the ICES advice, and TACs for 2024 have similarly been set in line with the advice. However, the TAC in SA 3r has been limited to a 5,000t monitoring TAC, and in SA 4 the TAC has been set at zero. The outcomes of the upcoming fishing season – specifically, the extent to which these TACs are adhered to – will go a long way to demonstrating whether the efforts of industry to tackle excess catches have been successful. As such, catches in SAs 3r and 4 should be a focus for the 2025 MT surveillance assessment of this fishery. A further significant change with regards to the Category A assessments is that the 2023 benchmarking exercise revised the target and limit reference points of all four sandeel stocks down. At present, all four stocks are now

in reasonably good health relative to the updated reference points; however, SSB of sandeel in SA 4 is slightly below the target reference point level, and SSB of sandeel in SA 3r is expected to fall below the target reference point level by 2025 even in the absence of fishing.

In all the other areas of Category A, the fishery continues to meet the requirements.

Overall, the assessor recommends the approval of this fishery be maintained, but re-iterates that the 2025 MT surveillance should once again focus on the extent to which the quota flex issue has been resolved.

Fishery Assessment Peer Review Comments

This is an extremely comprehensive and detailed assessment of a well reached and well managed fishery which separately covers 4 of 6 sandeel management areas. Stock status is generally good, and there is evidence of fishery closures where this is not the case. Overall, I agree with the recommendation to Pass the fishery.

Notes for On-site Auditor

Table 3 General Results

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

Table 4 Species- Specific Results

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

Category	Species	% landings	Outcome (Pass/Fail)	
Category A	Sandeel in Sandeel Area 1r (ICES Divisions 4b, 4c)	97.7%	A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
	Sandeel in Sandeel Area 2r (ICES Divisions 4b, 4c, and Subdivision 20)		A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
	Sandeel in Sandeel Area 3r (ICES Divisions 4a, 4b, and Subdivision 20)		A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
	Sandeel in Sandeel Area 4r (ICES Divisions 4a and 4b)		A1	PASS
			A2	PASS
			A3	PASS
			A4	PASS
Category B	No Category B Species			
Category C	Herring	<1%	PASS	
	Whiting	<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
Lesser sandeel	*Ammodytes marinus*	Sandeel Area 1r (central and southern North Sea, Dogger Bank)	Least Concern[2]	97.7%	Yes	A
		Sandeel Area 2r (central and southern North Sea)			Yes	A
		Sandeel Area 3r (northern and central North Sea, Skagerrak)			Yes	A
		Sandeel Area 4 (northern and central North Sea)			Yes	A
Herring	*Clupea harengus*	ICES Division 4 and Subareas 3a and 7d	Least Concern[3]	0.38%	Yes	C
Whiting	*Merlangius merlangus*	ICES Division 4 and Subarea 7d	Least Concern[4]	0.40%	Yes	C
Mackerel	*Scomber scombrus*	ICES Divisions 1-8 and 14, and Subarea 9a	Least Concern[5]	0.86%	Yes	C

Species categorisation rationale

No new sources of catch composition data were available to suggest any changes to the species categorisation table used in the previous MT assessment, conducted in 2023. A new MSC Assessment Comment Draft Report published in April 2023[6] utilises the same catch composition data from 2010-2014 used by the MSC certification report identified in the 2023 MT assessment.

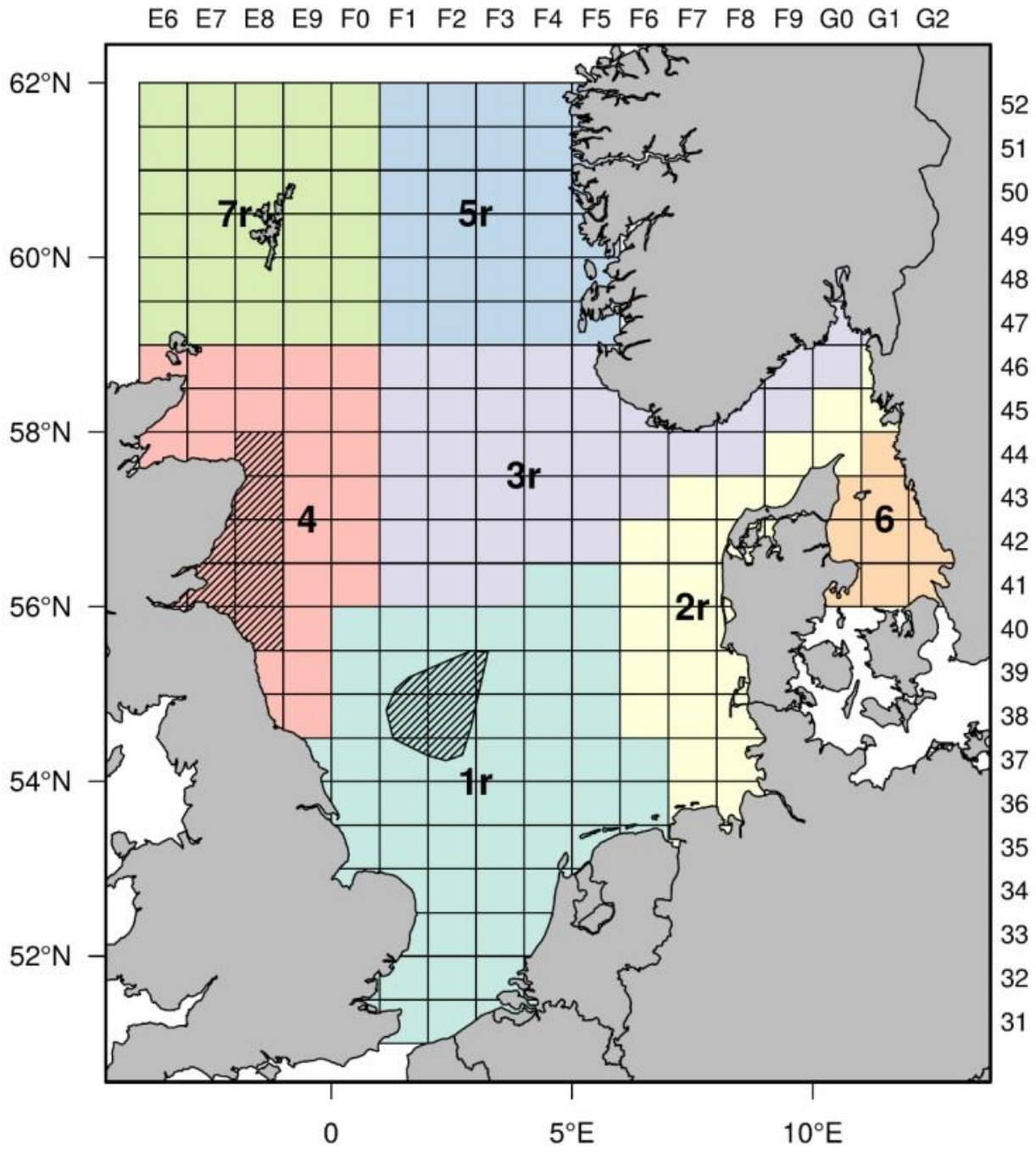
A July 2023 consultation report[7] from the Scottish government examining sandeel fishery impacts concludes that "with the data currently available, it is not possible to comment definitively on the quantity of other fish caught in the fishery directed at sandeel after 2020", and also that "The average bycatch percentage by weight over [2017-2020] was 0.05%".

[1] https://www.iucnredlist.org/
[2] https://www.iucnredlist.org/species/18155957/44738265
[3] https://www.iucnredlist.org/species/155123/4717767
[4] https://www.iucnredlist.org/species/198585/45097610
[5] https://www.iucnredlist.org/species/170354/6764313
[6] https://fisheries.msc.org/en/fisheries/dfpo-dppo-and-spfpo-north-sea-skagerrak-and-kattegat-sandeel-sprat-and-norway-pout/@@assessments?assessments=
[7] https://www.gov.scot/publications/sandeel-consultation-review-scientific-evidence/pages/3/

Overall, in the absence of new data, the assessor considers the appropriate approach to be to apply the catch composition data previously established for the fishery.

Sandeel Areas

Sandeel in the North Sea and adjacent waters are managed by the EU and ICES using six Sandeel Areas. At the request of the applicant, this assessment report covers Sandeel Areas 1r, 2r, 3r and 4. Catches in the other three areas are currently negligible, but in any case are not covered by this assessment. Each area is subjected to a separate stock assessment and TAC, and as such is considered separately in Section A.



Sandeel Areas used to delineate the assessment and management of sandeel into the seven stocks recognised by the EU and ICES. Closed areas shown with hatched markings. This MT Whole Fish assessment covers SAs 1r, 2r, 3r and 4[8].

[8] Sandeel (*Ammodytes* spp.) in divisions 4.b and 4.c, Sandeel Area 1r (central and southern North Sea, Dogger Bank). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, san.sa.1r, https://doi.org/10.17895/ices.advice.21815148

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

There have been few changes in the management of the fishery relevant to this section. Of most significant note, the UK banned the fishing of sandeel within its coastal waters from 26th March 2024 onwards (UK Gov 2024). Fishing by UK vessels had previously been prohibited in 2023; however the new ban has been extended (by the UK and Scottish governments) to cover all international vessels in UK waters, including the Danish fleet covered by this assessment. This act has been controversial, as UK waters have traditionally been a major source of sandeel catches for Danish vessels. Additionally, complaints have been submitted to the EU Parliament that this represents a breach of the Brexit agreement between the UK and EU (Fishing Daily 2024). This does not affect the outcome of this section of the assessment; however, it represents a potential compliance issue and the 2025 surveillance assessment of this fishery should examine the extent to which the ban on sandeel fishing in UK waters was successfully enforced.

A summary of the outcomes of the initial MT assessment are provided here for reference. For full details please refer to the 2024 assessment report.

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

Sandeel in the North Sea and adjacent areas is primarily fished by Denmark and other EU countries. In some Sandeel Areas (SAs), particularly SA3r, catch is also taken by Norway. Historically around 3% of sandeel catch is taken by UK vessels.

Fisheries in the EU, including Denmark, 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. Within the UK, fisheries management is a devolved issue. The body with over-arching responsibility for fisheries management policy is the Department for Environment and Rural Affairs (DEFRA), but the four individual nations also have their own management structures.

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 sandeel 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. ICES carries out annual stock assessments of sandeel in each of the SAs covered by this MT assessment, along with periodic benchmarking exercises

to ensure the stock assessment process and its underpinning assumptions remain appropriate. Within SA3, which is largely 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.

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". The UK Fisheries Act 2020 sets out 8 objectives for fisheries management in the UK. The first of these is the "sustainability objective", which seeks to ensure that "fish and aquaculture activities are (i) environmentally sustainable in the long term, and (ii) managed so as to achieve economic, social and employment benefits and contribute to the availability of food supplies", and also that "the fishing capacity of fleets is such that fleets are economically viable but do not overexploit marine stocks".

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.

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). Of greatest importance to stakeholder engagement within the sandeel fishery is the Demersal working group, although the Skagerrak & Kattegat and Ecosystem working groups are also relevant.

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.

References

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

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#

The Fishing Daily (2024). Denmark Politicians Protests UK's Dogger Bank Sandeel Fishing Ban (Feb 5, 2024) https://thefishingdaily.com/latest-news/denmark-politicians-protests-uks-dogger-bank-sandeel-fishing-ban/

UK Government (2024). Consultation outcome response, sandeel fishing. https://www.gov.uk/government/consultations/consultation-on-spatial-management-measures-for-industrial-sandeel-fishing/outcome/government-response

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

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

There have been no substantial changes in the management of the fishery relevant to this section. As noted in M1, future surveillance assessments of this fishery should consider whether substantial non-compliance arose from the closure of English and Scottish waters to international sandeel fleets.

A summary of the outcomes of the initial MT assessment are provided here for convenience. Please refer to the 2023 assessment report for full details.

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 falls to 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).

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.

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

The 2023 initial MT assessment identified that the most recent summary report from the FA was published in 2022. A more recent report is now available, published in summer 2023 and covering enforcement activities in 2022 (Fishing Daily 2023). Enforcement activities in 2022 included 2,237 vessel inspections and 1,956 landings inspections. Across the entire Danish fishing industry, 383 violations were recorded, and 1,076 sets of illegal fishing gear were confiscated.

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
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 The Fishing Daily (2023). Danish Fisheries Agency Issues Annual Inspections Report 2022 (5th July 2023). https://thefishingdaily.com/latest-news/danish-fisheries-agency-issues-annual-inspections-report-2022

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		**Sandeel in Sandeel Area 1r**
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.

As in the initial assessment, catch and landings data are collected across the entire sandeel fishery and analysed by Sandeel Area (SA). The table below is an updated version of the one from the initial MT assessment, showing continuing data collection. Discards and bycatch of sandeel continue to be thought negligible, and there is no substantial recreational sandeel fishery. In recent years Denmark has been responsible for around 73% of sandeel landings across all SAs (ICES 2018); in 2023 this continued, with Denmark responsible for around 72% of all North Sea sandeel landings (ICES 2024a).

Landings data continue to be collected such that fishery-wide removals of this species are known, and A1.1 is met.

	Area-1r	Area-2r	Area-3r	Area-4	Area-5r	Area-6	Area-7r	All
2014	96430	64707	98055	4505	0	65	0	263762
2015	160764	39492	106703	4736	0	198	0	311894
2016	15407	9569	44074	6232	0	123	0	75405
2017	242069	141314	115642	18474	0	0	0	517499
2018	132213	20226	76656	42515	0	0	0	271610
2019	86539	5132	138674	6648	0	96	0	237089
2020	108944	70198	247411	20116	0	97	0	446765
2021	17082	4146	157524	53765	0	93	0	232610
2022	5195	71614	84240	5541	0	38	0	166628
2023	88581	39653	18955	17269	0	77	0	164535

Sandeel landings by Sandeel Area, 2014 – 2023. All weights in tonnes (ICES 2024a)

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

As previously, a range of additional data are collected to support the stock assessment and fishery management processes. Information sources utilised by the 2024 stock assessment include an annual December dredge survey index; commercial catch rates in April, total international catch and fishing effort; annual natural mortality estimated from the ICES multispecies assessment; maturity-at-age time-variable survey data; and age frequencies from catch sampling (ICES 2024).

Sufficient additional information is collected to enable a reliable estimate of the status of the stock to be generated, and A1.2 is met.

References

ICES (2018). Stock Annex: Sandeel (Ammodytes marinus) in the North Sea area 1 (SA1). ICES Stock Annexes. Report. https://doi.org/10.17895/ices.pub.18623159.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b and 4.c, Sandeel Area 1r (central and southern North Sea, Dogger Bank). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.1r, https://doi.org/10.17895/ices.advice.25019648

ICES (2024a). Herring Assessment Working Group for the Area South of 62° N (HAWG). ICES Scientific Reports. 6:24. https://doi.org/10.17895/ices.pub.25305532

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

[SA1r]

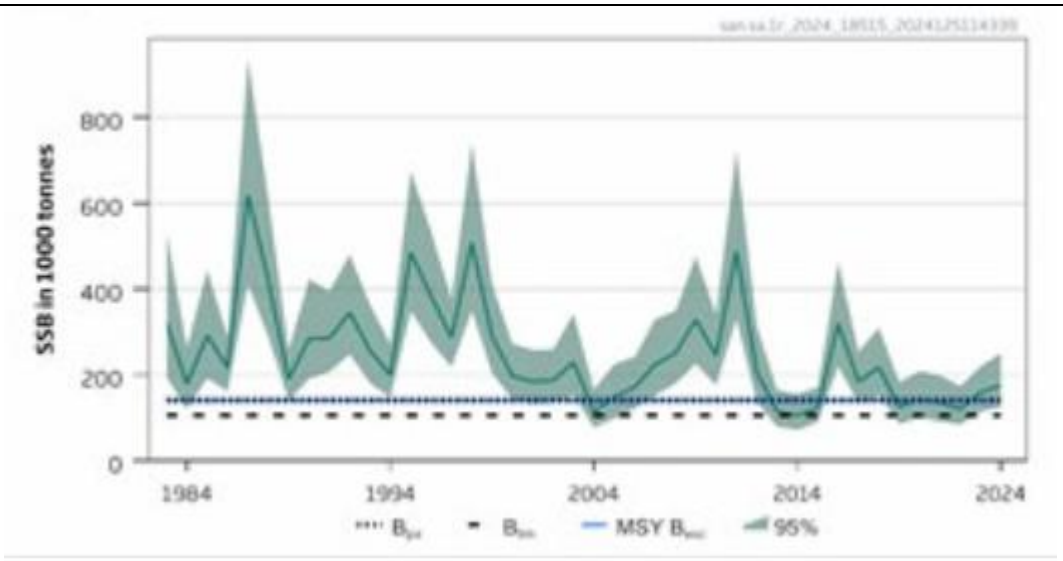
A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.

As previously, a stock assessment is conducted by the ICES Herring Assessment Working Group (HAWG) annually. The most recent assessment was conducted in 2022, with the resulting results and catch advice published in February 2024 (ICES 2024). As at the time of the initial assessment, all international catches are included, discards and bycatch are considered negligible, and there is no significant recreational fishery. The assessment takes into account the biological characteristics of the species, as demonstrated by the stock annex which describes the life history and ecological role of sandeel in detail (ICES 2018).

An appropriate annual stock assessment continues to be conducted, and A2.1 is met.

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

The target and limit reference points identified by the 2023 initial MT assessment for this fishery were updated to reflect the outcomes of the 2023 benchmark carried out on all four sandeel stocks. The updated target reference points MSY $B_{escapement}$ and B_{pa} are now set at 140,824t (previously 145,000t). The updated limit reference point B_{lim} is now set at 105,809t (previously 110,000t). The 2024 catch advice indicated a projected SSB value in 2024 of 175,408t, and stated "Spawning-stock size is above MSY $B_{escapement}$, B_{pa}, and B_{lim}" (ICES 2024). The stock assessment produces an estimate of the status of the stock relative to established reference points, and A2.2 is met.



Sandeel in Divisions 4.b-c, SA 1r. SSB relative to current reference points (ICES 2024)

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

As previously, the annual ICES catch advice clearly sets out a specific recommendation for the maximum appropriate catch in the following year. The 2024 advice states that "when the MSY approach is applied, catches should be no more than 132,315 tonnes in 2024" (ICES 2024). The catch advice also provides alternative catch scenarios to project the likely impacts of other levels of total catch in the coming year, as shown on the table below.

The assessment provides a clear indication of the volume of fishery removals which is appropriate for the current stock status, and A2.3 is met.

Sandeel in Divisions 4.b-c, SA 1r. Annual catch scenarios. All weights in tonnes (ICES 2024)

Basis	Total catch (2024)	F_{total} (2024)	SSB (2025)	% SSB change*	% TAC change**	% advice change***
ICES advice basis						
SSB(2025) ≥ MSY $B_{escapement}$ = B_{pa}	132 315	0.36	166 003	−5	13	9.9
Other scenarios						
F = 0	0	0	229 840	31	−100	−100
B_{lim}	260 657	0.87	105 809	−40	123	116
F = F_{2022}	98 714	0.26	182 078	4	−15	−18

* SSB_{2025} relative to SSB_{2024}.
** Catch scenario for 2024 relative to TAC in 2023 (116 815 t).
*** Advice value 2024 relative to advice value 2023 (120 428 t).

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

There have been no substantial changes in the ICES peer review process since the initial MT assessment. ICES advice continues to be provided based on the ten Advice Principles, which include the peer review of all analyses and methods by at least two peer reviewers. Regular benchmarking of recurring advice continues to occur, and the stock assessments for all four Sandeel Areas have been benchmarked since the initial MT assessment in 2023 (ICES 2024a). Note that where the outcomes of the

benchmark have resulted in changes to the stock assessment process or outcomes (such as revised reference points), this is noted in the relevant section. The ICES stock assessment is subject to peer review, and A2.4 is met.

A2.5 The assessment is made publicly available.

As previously, details of the stock assessment process, the data used to carry it out, and the results of the stock assessment are all made publicly available on the ICES website. All documentation used to complete this MT assessment report was sourced online without needing to be requested. A2.5 is met.

References

ICES (2018). Stock Annex: Sandeel (Ammodytes marinus) in the North Sea area 1 (SA1). ICES Stock Annexes. Report. https://doi.org/10.17895/ices.pub.18623159.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b and 4.c, Sandeel Area 1r (central and southern North Sea, Dogger Bank). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.1r, https://doi.org/10.17895/ices.advice.25019648

ICES (2024a). Benchmark Workshop on Sandeel (*Ammodytes spp*.) (Outputs from 2022 and 2023 meetings) (WKSANDEEL). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.21581151.v2

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

[SA1r]

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

Sandeel in the North Sea are subject to Sandeel-Area-specific Total Annual Catch (TAC) limits. Total international TACs and are set via negotiation between delegations from the fishery management administrations managing the fishery. The EU share of the 2024 sandeel TAC in SA1r has been agreed with the UK to be 96.89% of the total SA1r TAC of 128,346t (UK Gov 2024). The EU share is further subdivided between member states via Council Regulation. At the time of writing this does not appear to have been agreed for the 2024 season.

In the EU, TACs are monitored and enforced by the fishery management administrations of member states, supported by the reporting requirements and landings obligation set out in A1.1.

As previously identified in the initial MT assessment, an important aspect of the sandeel TAC is that up to 10% of the annual quota for a given Sandeel Area can be 'banked' and used the following year, within the same Area. On occasions where one

year has a substantially lower quota than the previous (as occurred in 2020/2021) this can lead to substantially higher landings than have been deemed by ICES to be appropriate. As part of the 2023 benchmarking for this stock, ICES evaluated the potential impacts on this interannual quota transfer, concluding that the practice "marginally increased risk of SSB falling below B_{lim} (0.2% higher risk at F_{cap})" (ICES 2024).

Overall, although the TAC transfer allowance can cause issues in specific years, as in the initial MT assessment this is considered this to be covered by clause A3.2 and A3.3, and therefore that the existence and enforcement of the TAC means A3.1 is met.

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

The initial assessment for this stock identified an issue where total fishery removals do sometimes exceed the ICES advice, noting that "since 2018, TACs have been set in line with or below the advice; however in 2021 and 2022, landings exceeded the TAC. In 2021, landings were roughly triple the level advised by ICES", and additionally that "these excess landings reflect the "quota flex", with quota holders able to transfer up to 10% of their quota between years. Thus the excess landings do not represent a breach of regulations; however, they have led to catches sometimes being considerably in excess of the ICES recommendation".

The initial assessment noted that the 2022 sandeel benchmarking workshop was intended to reach a conclusion as to whether the practice of transferring quota between years was precautionary; however, as noted in A3.1, ICES do not appear to have reached a conclusion on whether or not it is precautionary. Instead, the conclusion reached is that the practice results in only a small increase to long-term risk that B_{lim} will be breached.

Since the 2023 initial MT assessment, the catch data for 2023 has become available. Total catches in SA 1r were 88,581t, well within the maximum catch recommended by ICES (120,428t). Although limited progress appears to have been made towards resolving the impacts of the use of "quota flex" on catches relative to advice, catches are currently below the level recommended by ICES and A3.2 is met.

Year	ICES advice	Catch corresponding to advice	TAC	ICES catch SA 1	ICES catch SA 1r	Total ICES catch (SAs 1r–7r)
2010*	The fishery should only be allowed if monitoring information is available and shows that the stock can be rebuilt to B_{pa} by 2011	-	377000**	301000		414000
2011	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 320000	320000	312000		438000
2012	MSY approach: allowfor sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 23000	23000	46000		102000
2013	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 224544	225000	210000		278000
2014	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 57000	57000	99000		264000
2015	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 133000	133000	163000		312000
2016	Catches for monitoring purposes should not exceed 5000 t	≤ 5000	13000	12751	15407	75405
2017^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 255956	255956		242069	517499
2018^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 134461	134461		131898	269579
2019^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 91916	91916		86723	235537
2020^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 113987	113987		108944	446765
2021^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 5464	5351		16615	232610
2022^	MSY approach: zero catch	0	5000		5195	166628
2023^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 120428	116815		88581***	164535***
2024	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 132 315				

* Advice for Subarea 4, excluding the Shetland area.
** Set for EU waters of divisions 2.a and 3.a and Subarea 4.
*** Preliminary.
^ ICES statistical rectangles included in this sandeel area changed with the 2017 assessment and advice.

Sandeel in Divisions 4.b-c, SA 1r. ICES advice, TAC, SA 1r catches and total sandeel catches, 2010 – 2024 (ICES 2024)

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).

There has been no substantial change in the status of this clause since the initial MT assessment. That assessment concluded as follows:

"In 2016, ICES recommended that the sandeel fishery in Sandeel Area 1r should be closed except for a 5,000t sampling quota. This recommendation was not adopted, and the TAC was set at 13,000t. Additionally, TACs are frequently exceeded due to the ability of participants in the fishery to transfer quota between years…meaning that at present it is likely that a similar issue could arise the next time ICES recommend a small or zero TAC. However…the reduction industry is taking steps to prevent this excess catch from occurring in the future and it will not be an issue in the 2023 season. Due to the pro-active measures taken by the industry, the assessor considers the fishery to meet the requirements of this clause; however, future assessments should review progress in tackling the issue, particularly in years where the recommended catch is low".

At this time, the assessor considers questions around the sustainability of the "quota flex" system to remain open, and there is still potential for transfer of TAC between years to lead to catches in excess of the ICES advice in future. However, on the basis of some progress being made (in the form of the ICES benchmarking analysis), of continuing industry commitment to tackling the issue, and of the appropriate level of catch relative to the TAC in 2023, A3.3 continues to be met.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b and 4.c, Sandeel Area 1r (central and southern North Sea, Dogger Bank). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.1r, https://doi.org/10.17895/ices.advice.25019648

UK Government (2024). Written record of fisheries consultations on 7 and 8 March 2024 between the United Kingdom and the European Union about sandeels in 2024. https://assets.publishing.service.gov.uk/media/65f435309d99de001d03df89/WR_EU-UK_for_2024_Sandeel.pdf

Standard clause 1.3.2.1.3

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

A4	Stock Status – Minimum Requirements		
	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	PASS
		Clause outcome:	PASS

[SA1r]

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.

As detailed in A2.2, the 2023 stock assessment estimated that SSB is currently above the target and limit reference points. SSB in 2024 was projected to be 175,408t, relative to a target reference point (B_{pa} / MSY $B_{escapement}$) of 140,824t (ICES 2024). Therefore, the stock meets the requirements of the first statement, and A4.1 is met.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b and 4.c, Sandeel Area 1r (central and southern North Sea, Dogger Bank). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.1r, https://doi.org/10.17895/ices.advice.25019648

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

Species Name		Sandeel in Sandeel Area 2r	
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.

As in the initial assessment, catch and landings data are collected across the entire sandeel fishery and analysed by Sandeel Area (SA). The table below is an updated version of the one from the initial MT assessment, showing continuing data collection. Discards and bycatch of sandeel continue to be thought negligible, and there is no substantial recreational sandeel fishery. In recent years Denmark has been responsible for around 73% of sandeel landings across all SAs (ICES 2020); in 2023 this continued, with Denmark responsible for around 72% of all North Sea sandeel landings (ICES 2024a).

Landings data continue to be collected such that fishery-wide removals of this species are known, and A1.1 is met.

	Area-1r	Area-2r	Area-3r	Area-4	Area-5r	Area-6	Area-7r	All
2014	96430	64707	98055	4505	0	65	0	263762
2015	160764	39492	106703	4736	0	198	0	311894
2016	15407	9569	44074	6232	0	123	0	75405
2017	242069	141314	115642	18474	0	0	0	517499
2018	132213	20226	76656	42515	0	0	0	271610
2019	86539	5132	138674	6648	0	96	0	237089
2020	108944	70198	247411	20116	0	97	0	446765
2021	17082	4146	157524	53765	0	93	0	232610
2022	5195	71614	84240	5541	0	38	0	166628
2023	88581	39653	18955	17269	0	77	0	164535

Sandeel landings by Sandeel Area, 2014 – 2023. All weights in tonnes (ICES 2024a)

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

As previously, a range of additional data are collected to support the stock assessment and fishery management processes. Information sources utilised by the 2024 stock assessment include an annual December dredge survey index; total international

catch and fishing effort; constant maturity-at-age estimates from surveys; natural mortality estimated from the ICES multispecies assessment; and age frequencies from catch sampling (ICES 2024).

Sufficient additional information is collected to enable a reliable estimate of the status of the stock to be generated, and A1.2 is met.

References

ICES (2020). Stock Annex: Sandeel (*Ammodytes spp*.) in Divisions 4.b and 4.c, and Subdivision 20, Sandeel Area 2r (Skagerrak, central and southern North Sea). ICES Stock Annexes. 40 pp. https://doi.org/10.17895/ices.pub.18623168.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.2r, https://doi.org/10.17895/ices.advice.25019651

ICES (2024a). Herring Assessment Working Group for the Area South of 62° N (HAWG). ICES Scientific Reports. 6:24. https://doi.org/10.17895/ices.pub.25305532

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

[SA2r]

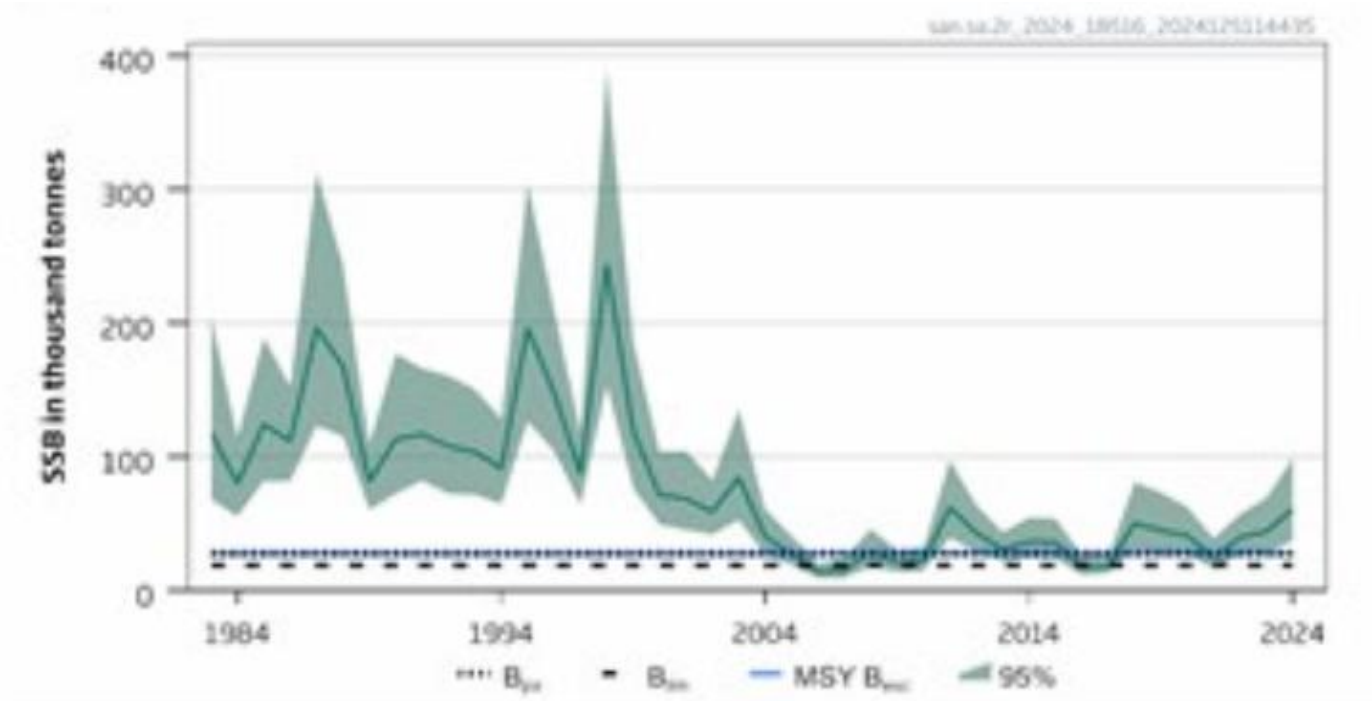
A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.

As previously, a stock assessment is conducted by the ICES Herring Assessment Working Group (HAWG) annually. The most recent assessment was conducted in 2022, with the resulting results and catch advice published in February 2024 (ICES 2024). As at the time of the initial assessment, all international catches are included, discards and bycatch are considered negligible, and there is no significant recreational fishery. The assessment takes into account the biological characteristics of the species, as demonstrated by the stock annex which describes the life history and ecological role of sandeel in detail (ICES 2020).

An appropriate annual stock assessment continues to be conducted, and A2.1 is met.

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

The target and limit reference points identified by the 2023 initial MT assessment for this fishery were updated to reflect the outcomes of the 2023 benchmark carried out on all four sandeel stocks. The updated target reference points MSY $B_{escapement}$ and B_{pa} are now set at 27,757t (previously 84,000t). The updated limit reference point B_{lim} is now set at 18,949t (previously 56,000t). The 2024 catch advice indicated a projected SSB value in 2024 of 60,736t, and stated "Spawning-stock size is above MSY $B_{escapement}$, B_{pa}, and B_{lim}" (ICES 2024). The stock assessment produces an estimate of the status of the stock relative to established reference points, and A2.2 is met.



Sandeel in Divisions 4.b-c and Subdivision 20, SA 2r. Estimated SSB relative to current reference points (ICES 2024).

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

As previously, the annual ICES catch advice clearly sets out a specific recommendation for the maximum appropriate catch in the following year. The 2024 advice states that "when the MSY approach is applied, catches should be no more than 35,925 tonnes in 2024" (ICES 2024). The catch advice also provides alternative catch scenarios to project the likely impacts of other levels of total catch in the coming year, as shown on the table below.

The assessment provides a clear indication of the volume of fishery removals which is appropriate for the current stock status, and A2.3 is met.

Sandeel in Divisions 4.b-c and Subdivision 20, SA 2r. Annual ICES catch scenarios, all weights in tonnes (ICES 2024)

Basis	Total catch (2024)	F_{total} (2024)	SSB (2025)	% SSB change*	% TAC change**	% advice change***
ICES advice basis						
$SSB_{2025} \geq MSY\ B_{escapement} = B_{pa}$	35 925	0.51	27 757	−54	−12	−12
Other scenarios						
F = 0	0	0	49 824	−18	−100	−100
B_{lim}	51 026	0.85	18 949	−69	24	24
$F = F_{2023}$	31 638	0.43	30 322	−50	−23	−23

* SSB_{2025} relative to SSB_{2024}.
** Catch scenario for 2024 relative to TAC in 2023 (40 997 t).
*** Advice value 2024 relative to advice value 2023 (40 997 t).

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

There have been no substantial changes in the ICES peer review process since the initial MT assessment. ICES advice continues to be provided based on the ten Advice Principles, which include the peer review of all analyses and methods by at least two peer reviewers. Regular benchmarking of recurring advice continues to occur, and the stock assessments for all four Sandeel Areas have been benchmarked since the initial MT assessment in 2023 (ICES 2024a). Note that where the outcomes of the benchmark have resulted in changes to the stock assessment process or outcomes (such as revised reference points), this is noted in the relevant section. The ICES stock assessment is subject to peer review, and A2.4 is met.

A2.5 The assessment is made publicly available.

As previously, details of the stock assessment process, the data used to carry it out, and the results of the stock assessment are all made publicly available on the ICES website. All documentation used to complete this MT assessment report was sourced online without needing to be requested. A2.5 is met.

References

ICES (2020). Stock Annex: Sandeel (*Ammodytes spp*.) in Divisions 4.b and 4.c, and Subdivision 20, Sandeel Area 2r (Skagerrak, central and southern North Sea). ICES Stock Annexes. 40 pp. https://doi.org/10.17895/ices.pub.18623168.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.2r, https://doi.org/10.17895/ices.advice.25019651

ICES (2024a). Benchmark Workshop on Sandeel (*Ammodytes spp*.) (Outputs from 2022 and 2023 meetings) (WKSANDEEL). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.21581151.v2

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

[SA2r]

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

Sandeel in the North Sea are subject to Sandeel-Area-specific Total Annual Catch (TAC) limits. Total international TACs and are set via negotiation between delegations from the fishery management administrations managing the fishery. The EU share of the 2024 sandeel TAC in SA2r has been agreed with the UK to be 96.89% of the total SA2r TAC of 35,925t (UK Gov 2024). The EU share is further subdivided between member states via Council Regulation. At the time of writing this does not appear to have been agreed for the 2024 season.

In the EU, TACs are monitored and enforced by the fishery management administrations of member states, supported by the reporting requirements and landings obligation set out in A1.1.

As previously identified in the initial MT assessment, an important aspect of the sandeel TAC is that up to 10% of the annual quota for a given Sandeel Area can be 'banked' and used the following year, within the same Area. On occasions where one year has a substantially lower quota than the previous (as occurred in 2017/18) this can lead to substantially higher landings than have been deemed by ICES to be appropriate. As part of the 2023 benchmarking for this stock, ICES evaluated the potential impacts on this interannual quota transfer, concluding that the practice "marginally increased risk of SSB falling below B_{lim} (0.2% higher risk at F_{cap})" (ICES 2024).

Overall, although the TAC transfer allowance can cause issues in specific years, as in the initial MT assessment this is considered this to be covered by clause A3.2 and A3.3, and therefore that the existence and enforcement of the TAC means A3.1 is met.

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

The initial MT assessment for this stock identified an issue where total fishery removals do sometimes exceed the ICES advice, noting that "Since 2018, TACs have been set in line with or below the advice; however in 2018, 2019 and 2020, landings exceeded the TAC. In 2018, landings were roughly four times the level advised by ICES. This has also been an issue historically, with landings exceeding ICES advice and/or TAC by more than 10% in 2012, 2013, 2014 and 2016. These excess landings reflect the "quota flex", with quota holders able to transfer up to 10% of their quota between years. Thus the excess landings do not represent a breach of regulations; however, they have led to catches sometimes being considerably in excess of the ICES recommendation".

The initial assessment noted that the 2022 sandeel benchmarking workshop was intended to reach a conclusion as to whether the practice of transferring quota between years was precautionary; however, as noted in A3.1, ICES do not appear to have reached a conclusion on whether or not it is precautionary. Instead, the conclusion reached is that the practice results in only a small increase to long-term risk that B_{lim} will be breached.

Since the 2023 initial MT assessment, the catch data for 2023 has become available. Total catches in SA 2r were 39,653t, within the maximum catch recommended by ICES (40,997t). Although limited progress appears to have been made towards resolving the impacts of the use of "quota flex" on catches relative to advice, catches are currently below the level recommended by ICES and A3.2 is met.

Year	ICES advice	Catch corresponding to advice	TAC	ICES catch SA 2	ICES catch SA 2r	Total ICES catch (SAs 1r–7r)
2011	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 34 000	34000	30000		438000
2012	Catches for monitoring purposes should not exceed 5000 t	< 5000	5000	8000		102000
2013	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 17 544	18000	23000		278000
2014	Catches for monitoring purposes should not exceed 5000 t	< 5000	5000	8900		264000
2015	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 29 000	29000	21000		312000
2016	Catches for monitoring purposes should not exceed 5000 t	≤ 5000	5000	4037	9569	75405
2017^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 175 941	175941		141314	517499
2018^	Catches for monitoring purposes should not exceed 5000 t	≤ 5000	5000		20240	269579
2019^	Catches for monitoring purposes should not exceed 5000 t	≤ 5000	5000		5151	235537
2020^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 62 658	62658		70198	446765
2021^	MSY approach: zero catch. Monitoring TAC should not exceed 5000 t.	≤ 5000	5000		4146	232610
2022^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 71 859	71859		71614	166628
2023^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 40 997	40997		39653***	164535***
2024	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 35 925				

* Advice for Subarea 4, excluding the Shetland area.
** Set for EU waters of divisions 2.a and 3.a and Subarea 4.
*** Preliminary.
^ ICES statistical rectangles included in this sandeel area changed with the 2017 assessment and advice.

Sandeel in Divisions 4.b-c and Subdivision 20, SA 2r. ICES catch advice, TAC, catches in SA 2/2r, and total sandeel catches, 2011 – 2024 (ICES 2024)

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).

There has been no substantial change in the status of this clause since the initial MT assessment. That assessment concluded as follows:

"In 2018 and 2019, ICES recommended that the sandeel fishery in Sandeel Area 2r should be closed except for a 5,000t sampling quota. Although this advice was implemented by fishery managers, in practice the fishery was not limited to only the sampling quota (due, presumably, to the ability to transfer quota between years), and in 2018 four times this amount was landed. However…the reduction industry is taking steps to prevent this excess catch from occurring in the future and it will not be an issue in the 2023 season. Due to the pro-active measures taken by the industry, the assessor considers the fishery to meet the requirements of this clause; however, future assessments should review progress in tackling the issue, particularly in years where the recommended catch is low."

At this time, the assessor considers questions around the sustainability of the "quota flex" system to remain open, and there is still potential for transfer of TAC between years to lead to catches in excess of the ICES advice in future. However, on the basis of some progress being made (in the form of the ICES benchmarking analysis), of continuing industry commitment to tackling the issue, and of the appropriate level of catch relative to the TAC in 2023, A3.3 continues to be met.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.2r, https://doi.org/10.17895/ices.advice.25019651

UK Government (2024). Written record of fisheries consultations on 7 and 8 March 2024 between the United Kingdom and the European Union about sandeels in 2024. https://assets.publishing.service.gov.uk/media/65f435309d99de001d03df89/WR_EU-UK_for_2024_Sandeel.pdf

Standard clause 1.3.2.1.3

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

A4	**Stock Status – Minimum Requirements**		
	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	PASS
		Clause outcome:	PASS

[SA2r]

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.

As detailed in A2.2, the 2023 stock assessment estimated that SSB is currently above the target and limit reference points. SSB in 2024 was projected to be 60,736t, relative to a target reference point (B_{pa} / MSY $B_{escapement}$) of 27,757t (ICES 2024). Therefore, the stock meets the requirements of the first statement, and A4.1 is met.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.b-c and Subdivision 20, Sandeel Area 2r (central and southern North sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.2r, https://doi.org/10.17895/ices.advice.25019651

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

Species Name	**Sandeel in Sandeel Area 3r**

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.

As in the initial assessment, catch and landings data are collected across the entire sandeel fishery and analysed by Sandeel Area (SA). The table below is an updated version of the one from the initial MT assessment, showing continuing data collection. Discards and bycatch of sandeel continue to be thought negligible, and there is no substantial recreational sandeel fishery. In recent years Denmark has been responsible for around 73% of sandeel landings across all SAs (ICES 2020); in 2023 this continued, with Denmark responsible for around 72% of all North Sea sandeel landings (ICES 2024a).

Landings data continue to be collected such that fishery-wide removals of this species are known, and A1.1 is met.

	Area-1r	Area-2r	Area-3r	Area-4	Area-5r	Area-6	Area-7r	All
2014	96430	64707	98055	4505	0	65	0	263762
2015	160764	39492	106703	4736	0	198	0	311894
2016	15407	9569	44074	6232	0	123	0	75405
2017	242069	141314	115642	18474	0	0	0	517499
2018	132213	20226	76656	42515	0	0	0	271610
2019	86539	5132	138674	6648	0	96	0	237089
2020	108944	70198	247411	20116	0	97	0	446765
2021	17082	4146	157524	53765	0	93	0	232610
2022	5195	71614	84240	5541	0	38	0	166628
2023	88581	39653	18955	17269	0	77	0	164535

Sandeel landings by Sandeel Area, 2014 – 2023. All weights in tonnes (ICES 2024a)

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

As previously, a range of additional data are collected to support the stock assessment and fishery management processes. Information sources utilised by the 2024 stock assessment include an acoustic survey index for the period 2009 – 2023 and a dredge survey index for the period 2006 – 2023; total international catch and fishing effort; maturity-at-age estimated from the dredge survey; natural mortality estimated from the ICES multispecies assessment; and age frequencies from catch sampling (ICES 2024).

Sufficient additional information is collected to enable a reliable estimate of the status of the stock to be generated, and A1.2 is met.

References

ICES (2020). Stock Annex: Sandeel (*Ammodytes spp*.) in Divisions 4.a and 4.b, and Subdivision 20, Sandeel Area 3r (Skagerrak, northern and central North Sea). ICES Stock Annexes. 45 pp. https://doi.org/10.17895/ices.pub.18623180.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b and Subdivision 20, Sandeel Area 3r (northern and central North Sea, Skagerrak). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.3r, https://doi.org/10.17895/ices.advice.25019654

ICES (2024a). Herring Assessment Working Group for the Area South of 62° N (HAWG). ICES Scientific Reports. 6:24.

https://doi.org/10.17895/ices.pub.25305532	
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

[SA3r]

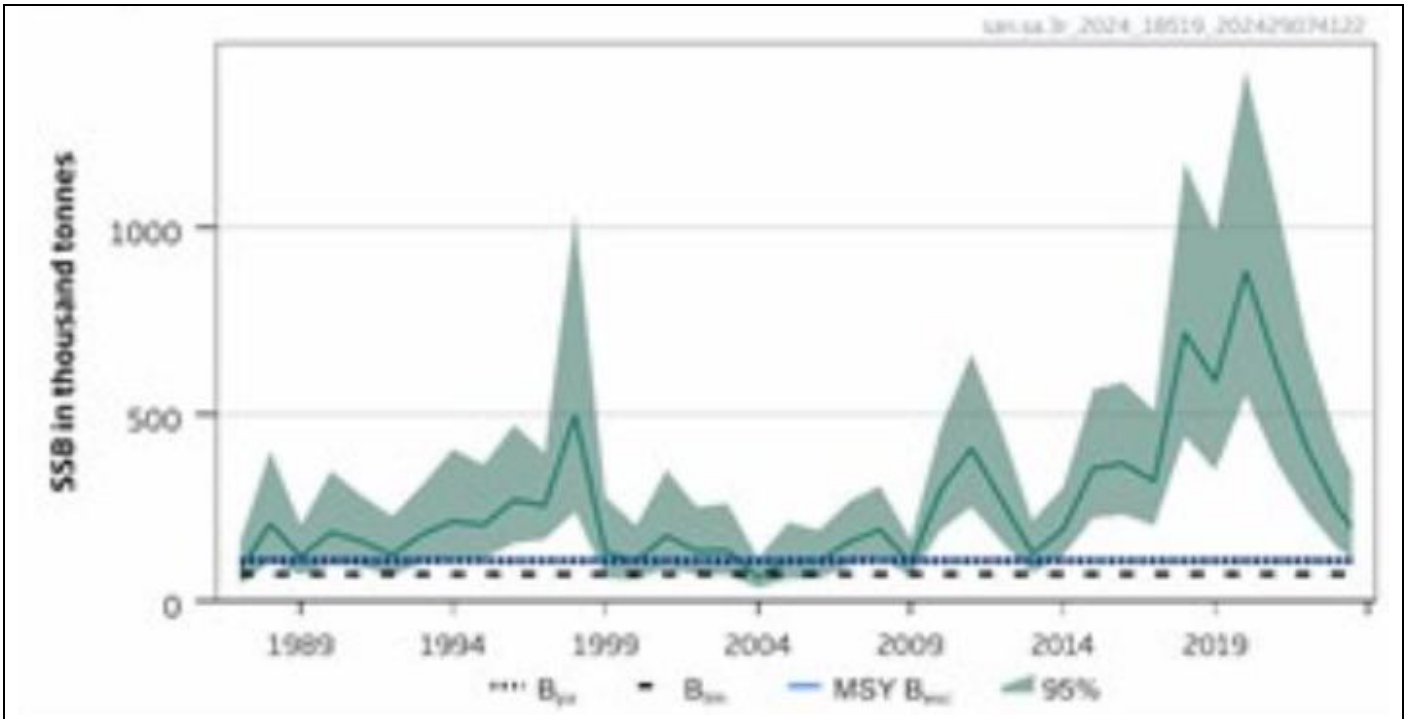
A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.

As previously, a stock assessment is conducted by the ICES Herring Assessment Working Group (HAWG) annually. The most recent assessment was conducted in 2022, with the resulting results and catch advice published in February 2024 (ICES 2024). As at the time of the initial assessment, all international catches are included, discards and bycatch are considered negligible, and there is no significant recreational fishery. The assessment takes into account the biological characteristics of the species, as demonstrated by the stock annex which describes the life history and ecological role of sandeel in detail (ICES 2020).

An appropriate annual stock assessment continues to be conducted, and A2.1 is met.

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

The target and limit reference points identified by the 2023 initial MT assessment for this fishery were updated to reflect the outcomes of the 2023 benchmark carried out on all four sandeel stocks. The updated target reference points MSY $B_{escapement}$ and B_{pa} are now set at 108,978t (previously 129,000t). The updated limit reference point B_{lim} is now set at 72,713t (previously 80,000t). The 2024 catch advice indicated a projected SSB value in 2024 of 145,862t, and stated "Spawning-stock size is above MSY $B_{escapement}$, B_{pa}, and B_{lim}" (ICES 2024). The stock assessment produces an estimate of the status of the stock relative to established reference points, and A2.2 is met.



Sandeel in Divisions 4.a-b and Subdivision 20, SA 3r. Estimated SSB relative to current reference points (ICES 2024)

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

As previously, the annual ICES catch advice clearly sets out a specific recommendation for the maximum appropriate catch in the following year. The 2024 advice states that "when the MSY approach is applied, there should be zero catch in 2024" (ICES 2024). The catch advice also provides alternative catch scenarios to project the likely impacts of other levels of total catch in the coming year, as shown on the table below.

The assessment provides a clear indication of the volume of fishery removals which is appropriate for the current stock status, and A2.3 is met.

Sandeel in Divisions 4.a-b and Subdivision 20, SA 3r. Annual ICES catch scenarios, all weights in tonnes (ICES 2024)

Basis	Total catch (2024)	F_{total} (2024)	SSB (2025)	% SSB change*	% TAC change**	% advice change***
ICES advice basis						
$SSB_{2025} \geq MSY\ B_{escapement} = B_{pa}$	0	0	107 627	−26	-100	−100
Other scenarios						
F = 0	0	0	107 627	−26	-100	−100
$SSB_{2025} = B_{lim}$	68 509	0.51	72 713	−50	10	124
$F = F_{2023}$	17 553	0.13	98 555	−32	-72	−43
Monitoring TAC	5000	0.03	105 035	-28	-92	-84

* SSB_{2025} relative to SSB_{2024}.
** Catch scenario for 2024 relative to the TAC in 2023 (62 446 t = the sum of the Norwegian [60 000 t], EU–UK TAC [2446 t]).
*** Advice value 2024 relative to advice value 2023 (30 570 t).

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

There have been no substantial changes in the ICES peer review process since the initial MT assessment. ICES advice continues to be provided based on the ten Advice Principles, which include the peer review of all analyses and methods by at least two peer reviewers. Regular benchmarking of recurring advice continues to occur, and the stock assessments for all four Sandeel Areas have been benchmarked since the initial MT assessment in 2023 (ICES 2024a). Note that where the outcomes of the benchmark have resulted in changes to the stock assessment process or outcomes (such as revised reference points), this is noted in the relevant section. The ICES stock assessment is subject to peer review, and A2.4 is met.

A2.5 The assessment is made publicly available.

As previously, details of the stock assessment process, the data used to carry it out, and the results of the stock assessment are all made publicly available on the ICES website. All documentation used to complete this MT assessment report was sourced online without needing to be requested. A2.5 is met.

References

ICES (2020). Stock Annex: Sandeel (*Ammodytes spp*.) in Divisions 4.a and 4.b, and Subdivision 20, Sandeel Area 3r (Skagerrak, northern and central North Sea). ICES Stock Annexes. 45 pp. https://doi.org/10.17895/ices.pub.18623180.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b and Subdivision 20, Sandeel Area 3r (northern and central North Sea, Skagerrak). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.3r, https://doi.org/10.17895/ices.advice.25019654

ICES (2024a). Benchmark Workshop on Sandeel (*Ammodytes spp*.) (Outputs from 2022 and 2023 meetings) (WKSANDEEL). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.21581151.v2

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

[SA3r]

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

Sandeel in the North Sea are subject to Sandeel-Area-specific Total Annual Catch (TAC) limits. Total international TACs and are set via negotiation between delegations from the fishery management administrations managing the fishery. The EU share of the 2024 sandeel TAC in SA1r has been agreed with the UK to be 96.89% of the total SA3r monitoring TAC (excluding Norway)

of 5,000t (UK Gov 2024). The EU share is further subdivided between member states via Council Regulation. At the time of writing this does not appear to have been agreed for the 2024 season.

In the EU, TACs are monitored and enforced by the fishery management administrations of member states, supported by the reporting requirements and landings obligation set out in A1.1.

As previously identified in the initial MT assessment, an important aspect of the sandeel TAC is that up to 10% of the annual quota for a given Sandeel Area can be 'banked' and used the following year, within the same Area. On occasions where one year has a substantially lower quota than the previous this can lead to substantially higher landings than have been deemed by ICES to be appropriate. However, this is less of an issue in SA3r than the other SAs because the EU component of the fishery is relatively small compared to the Norwegian catch, which is not transferable between years.

Overall, although the TAC transfer allowance can cause issues in specific years, as in the initial MT assessment this is considered this to be covered by clause A3.2 and A3.3, and therefore that the existence and enforcement of the EU, UK and Norwegian TACs means 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 in the initial MT assessment of this stock, total fishery removals of this species do sometimes exceed the ICES advice. However, as there are two organisations (ICES and IMR) providing catch advice on separate bases the situation is more complex than in the other SAs. Total international landings exceeded the ICES advice in 2017, 2019, and 2020; in 2017 and 2020 the advice was exceeded by more than 10%. However, the Norwegian component of the quota is set in line with advice provided by the IMR, based on a preliminary, conservative quota updated mid-season as a result of the annual in-year sandeel research cruise. The assessment also noted that it can therefore be argued that a more appropriate recommendation against which to compare the total catch is the Norwegian advice. By this standard the catch exceeded the recommendation in 2018, 2019 and 2021. In none of these years was the advice exceeded by more than 10%, and at all times the sandeel biomass in SA3r was estimated to be above the target reference point (ICES 2024).

Since the 2023 initial MT assessment, the catch data for 2023 has become available. Total catches in SA 3r were 18,955t, well within the maximum catch recommended by ICES (30,570t). For the 2024 fishing season, ICES has recommended a monitoring TAC of 5,000t only, and this advice has been implemented by fishery managers (UK Gov 2024).

Year	ICES advice	Catch corresponding to advice	EU & UK zone TAC	Norwegian zone TAC	ICES catch SA 3	ICES catch SA 3r	Total ICES catch (SAs 1r–7r)
2010*	The fishery should only be allowed if monitoring information is available and shows that the stock can be rebuilt to B_{pa} by 2011	-	377000**	50000	81000		414000
2011	No fishery	0	10000	90000	95000		438000
2012	Catches for monitoring purposes should not exceed 5 000 t	< 5000	5000	42000	46000		102000
2013	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 78331	40000	20000	39000		278000
2014	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	< 270000	140000	90000	143000		264000
2015	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment, with additional F_{cap}	< 370000	190000	100000	122000		312000
2016	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 123135	63000	40000	50737	44074	75405
2017^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 74176	0	120000		115642	517499
2018^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 108365	8669	70000		75143	269579
2019^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 133610	10689	125000		136901	235537
2020^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 155072	12406	250000		247411	446765
2021^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 161335	12907	145000		157524	232610
2022^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 85559	6845	95000		84240	166628
2023^	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 30570	2446	60000		18955^^	164535^^
2024^	MSY approach: zero catch	0					

* Advice for Subarea 4, excluding the Shetland area.
** Set for EU waters of divisions 2.a and 3.a, and Subarea 4.
*** TAC for EU fisheries set at 10 000 t; seasonal effort limitations set for Norwegian fisheries.
^ ICES statistical rectangles included in this sandeel area have changed with the 2017 assessment and advice.
^^ Preliminary.

Sandeel in Divisions 4.a-b and Subdivision 20, SA 3r. ICES advice, TACs, total catches in SA 3/3r, and total sandeel catches, 2010 – 2024 (ICES 2024)

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).

There has been no substantial change in the status of this clause since the initial MT assessment. Neither ICES nor the IMR has recommended the fishery be entirely closed in recent years, with the exception of this year's ICES advice which is to close the fishery with the exception of a 5,000t monitoring quota. Quota recommendations produced by both ICES and the MRI have fluctuated according to the status of the stock, and both the EU TAC and Norwegian TAC has been set broadly in line with one of the two recommendations.

The quota transfer rule – allowing 10% of EU quota to be carried over from one season to next – has the potential to cause the same issues as have been identified in the other sandeel management areas. As the EU TAC has been limited to a 5,000t monitoring quota for the 2024 season, the 2025 MT surveillance assessment should consider whether the quota flex rule has caused any issues similar to those experienced in SA 1r and 2r.

As at the time of the initial assessment, there is currently no evidence that the fishery in this Sandeel Area would not be closed if recommended, and managers have implemented the ICES recommendation to close the fishery in 2024 except for a 5,000t monitoring TAC. The stock is considered to Pass clause A3.3.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b and Subdivision 20, Sandeel Area 3r (northern and central North Sea, Skagerrak). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.3r, https://doi.org/10.17895/ices.advice.25019654

UK Government (2024). Written record of fisheries consultations on 7 and 8 March 2024 between the United Kingdom and the European Union about sandeels in 2024. https://assets.publishing.service.gov.uk/media/65f435309d99de001d03df89/WR_EU-UK_for_2024_Sandeel.pdf

Standard clause 1.3.2.1.3

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

A4	**Stock Status – Minimum Requirements**		
	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	PASS
		Clause outcome:	PASS

[SA3r]

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.

As detailed in A2.2, the 2023 stock assessment estimated that SSB is currently above the target and limit reference points. SSB in 2024 was projected to be 145,862t, relative to a target reference point (B_{pa} / MSY $B_{escapement}$) of 108,978t (ICES 2024). Therefore, the stock meets the requirements of the first statement, and A4.1 is met.

Additionally, due to the declining SSB and low estimated recruitment, ICES has recommended the closure of the fishery as it is likely that even with zero catch, SSB will fall below the target reference point level in 2025. This provides supporting evidence for future assessment of this clause should biomass fall below the target and/or limit reference point.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b and Subdivision 20, Sandeel Area 3r (northern and central North Sea, Skagerrak). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.3r, https://doi.org/10.17895/ices.advice.25019654

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

Species Name	Sandeel in Sandeel Area 4	
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.

As in the initial assessment, catch and landings data are collected across the entire sandeel fishery and analysed by Sandeel Area (SA). The table below is an updated version of the one from the initial MT assessment, showing continuing data collection. Discards and bycatch of sandeel continue to be thought negligible, and there is no substantial recreational sandeel fishery. In recent years Denmark has been responsible for around 73% of sandeel landings across all SAs (ICES 2016); in 2023 this continued, with Denmark responsible for around 72% of all North Sea sandeel landings (ICES 2024a).

Landings data continue to be collected such that fishery-wide removals of this species are known, and A1.1 is met.

	Area-1r	Area-2r	Area-3r	Area-4	Area-5r	Area-6	Area-7r	All
2014	96430	64707	98055	4505	0	65	0	263762
2015	160764	39492	106703	4736	0	198	0	311894
2016	15407	9569	44074	6232	0	123	0	75405
2017	242069	141314	115642	18474	0	0	0	517499
2018	132213	20226	76656	42515	0	0	0	271610
2019	86539	5132	138674	6648	0	96	0	237089
2020	108944	70198	247411	20116	0	97	0	446765
2021	17082	4146	157524	53765	0	93	0	232610
2022	5195	71614	84240	5541	0	38	0	166628
2023	88581	39653	18955	17269	0	77	0	164535

Sandeel landings by Sandeel Area, 2014 – 2023. All weights in tonnes (ICES 2024a)

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

As previously, a range of additional data are collected to support the stock assessment and fishery management processes. Information sources utilised by the 2024 stock assessment include a dredge survey index for the periods 1999 – 2003 and 2008

– 2023; total international catch and fishing effort; fixed maturity data; natural mortality rates estimated from the ICES multispecies assessment; and age frequencies from catch sampling (ICES 2024).

Sufficient additional information is collected to enable a reliable estimate of the status of the stock to be generated, and A1.2 is met.

References

ICES (2016). Stock Annex: Sandeel (*Ammodytes spp*.) in divisions 4.a and 4.b, Sandeel Area 4 (northern and central North Sea). ICES Stock Annexes. 36 pp. https://doi.org/10.17895/ices.pub.18623186.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b, Sandeel Area 4 (northern and central North Sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.4, https://doi.org/10.17895/ices.advice.25019657

ICES (2024a). Herring Assessment Working Group for the Area South of 62° N (HAWG). ICES Scientific Reports. 6:24. https://doi.org/10.17895/ices.pub.25305532

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

[SA4]

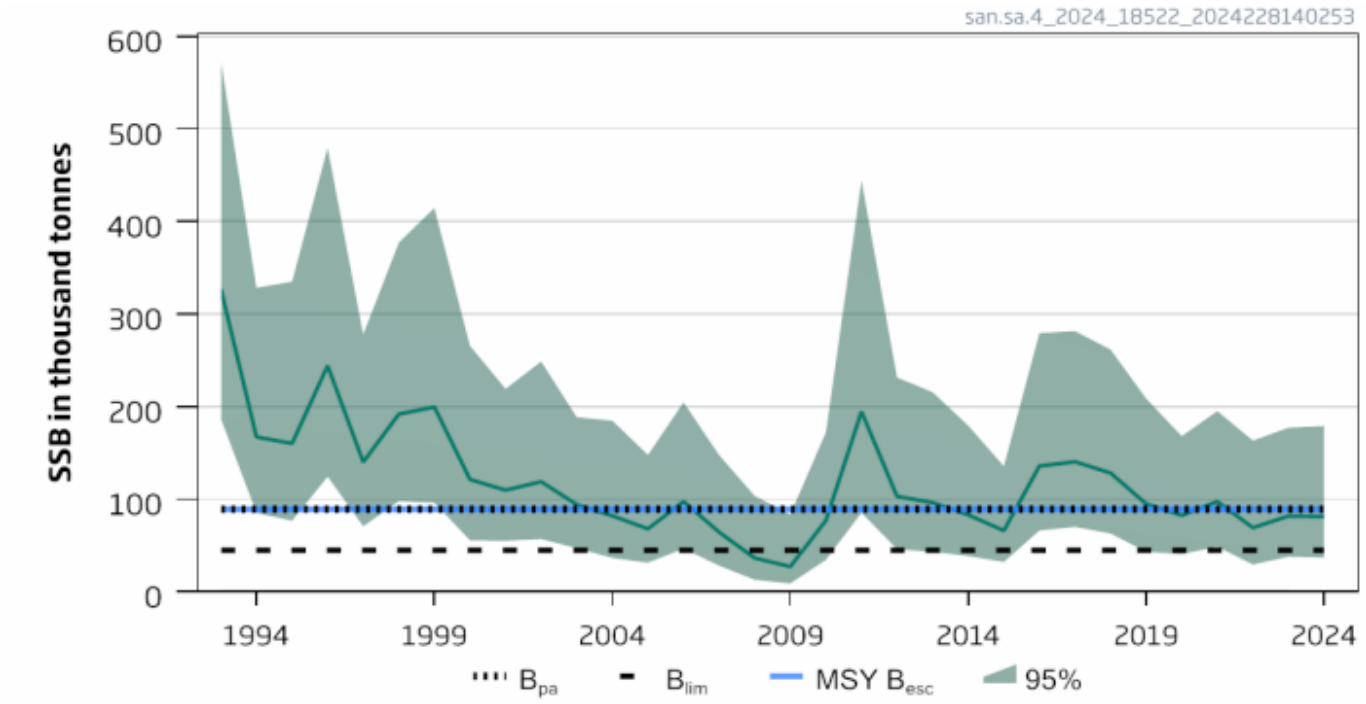
A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.

As previously, a stock assessment is conducted by the ICES Herring Assessment Working Group (HAWG) annually. The most recent assessment was conducted in 2022, with the resulting results and catch advice published in February 2024 (ICES 2024). As at the time of the initial assessment, all international catches are included, discards and bycatch are considered negligible, and there is no significant recreational fishery. The assessment takes into account the biological characteristics of the species, as demonstrated by the stock annex which describes the life history and ecological role of sandeel in detail (ICES 2016).

An appropriate annual stock assessment continues to be conducted, and A2.1 is met.

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

The target and limit reference points identified by the 2023 initial MT assessment for this fishery were updated to reflect the outcomes of the 2023 benchmark carried out on all four sandeel stocks. The updated target reference points MSY $B_{escapement}$ and B_{pa} are now set at 88,995t (previously 102,000t). The updated limit reference point B_{lim} is now set at 44,716t (previously 48,000t). The 2024 catch advice indicated a projected SSB value in 2024 of 81,162t, and stated "Spawning-stock size is below MSY $B_{escapement}$ and B_{pa}, and above B_{lim}" (ICES 2024). The stock assessment produces an estimate of the status of the stock relative to established reference points, and A2.2 is met.



Sandeel in Divisions 4.a-b, SA 4. Estimated SSB relative to current reference points (ICES 2024)

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

As previously, the annual ICES catch advice clearly sets out a specific recommendation for the maximum appropriate catch in the following year. The 2024 advice states that "when the MSY approach is applied, there should be zero catch in 2024" (ICES 2024). The catch advice also provides alternative catch scenarios to project the likely impacts of other levels of total catch in the coming year, as shown on the table below.

The assessment provides a clear indication of the volume of fishery removals which is appropriate for the current stock status, and A2.3 is met.

Sandeel in Divisions 4.a-b, SA 4. Annual ICES catch scenarios, all weights in tonnes (ICES 2024)

Basis	Total catch (2023)	F_{total} (2023)	SSB (2024)	% SSB change*	% TAC change**	% advice change***
ICES advice basis						
SSB(2025) ≥ MSY $B_{escapement}$ with F_{cap}	0	0	69 406	−14	−100	−100
Other scenarios						
F = 0	0	0	69 406	37	−100	−100
SSB(2025) = B_{lim}	44 423	0.41	44 716	−45	31	27
F = F_{2023}	12 847	0.1	62 146	−23	−62	−63
Monitoring TAC	5002	0.04	66 570	−18	-85	−86

* SSB_{2025} relative to SSB_{2024}.
** Catch scenario for 2024 relative to the TAC in 2023 (33 969 t).
*** Advice value 2024 relative to advice value 2023 (35 020 t).

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

There have been no substantial changes in the ICES peer review process since the initial MT assessment. ICES advice continues to be provided based on the ten Advice Principles, which include the peer review of all analyses and methods by at least two peer reviewers. Regular benchmarking of recurring advice continues to occur, and the stock assessments for all four Sandeel Areas have been benchmarked since the initial MT assessment in 2023 (ICES 2024a). Note that where the outcomes of the benchmark have resulted in changes to the stock assessment process or outcomes (such as revised reference points), this is noted in the relevant section. The ICES stock assessment is subject to peer review, and A2.4 is met.

A2.5 The assessment is made publicly available.

As previously, details of the stock assessment process, the data used to carry it out, and the results of the stock assessment are all made publicly available on the ICES website. All documentation used to complete this MT assessment report was sourced online without needing to be requested. A2.5 is met.

References

ICES (2016). Stock Annex: Sandeel (*Ammodytes spp*.) in divisions 4.a and 4.b, Sandeel Area 4 (northern and central North Sea). ICES Stock Annexes. 36 pp. https://doi.org/10.17895/ices.pub.18623186.v1

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b, Sandeel Area 4 (northern and central North Sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.4, https://doi.org/10.17895/ices.advice.25019657

ICES (2024a). Benchmark Workshop on Sandeel (*Ammodytes spp*.) (Outputs from 2022 and 2023 meetings) (WKSANDEEL). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.21581151.v2

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

[SA4]

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

Sandeel in the North Sea are subject to Sandeel-Area-specific Total Annual Catch (TAC) limits. Total international TACs and are set via negotiation between delegations from the fishery management administrations managing the fishery. The EU and UK have implemented the ICES recommendation that catches of sandeel in SA4 should be zero in 2024 (UK Gov 2024).

In the EU, TACs are monitored and enforced by the fishery management administrations of member states, supported by the reporting requirements and landings obligation set out in A1.1.

As previously identified in the initial MT assessment, an important aspect of the sandeel TAC is that up to 10% of the annual quota for a given Sandeel Area can be 'banked' and used the following year, within the same Area. On occasions where one year has a substantially lower quota than the previous this can lead to substantially higher landings than have been deemed by ICES to be appropriate; however, catch records appear to indicate this has been less of an issue in SA4 than the other SAs.

Overall, although the TAC transfer allowance has the potential to cause issues in specific years, as in the initial MT assessment this is considered this to be covered by clause A3.2 and A3.3, and therefore that the existence and enforcement of the TAC means A3.1 is met.

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

The initial assessment for this stock identified an issue where total fishery removals do sometimes exceed the ICES advice, noting that "Total fishery removals of this species do sometimes exceed the ICES advice. Since 2018, TACs have been set in line with or below the advice; however in 2019, landings exceeded the TAC by substantially more than 10% (6,666t against a TAC of 5,000t) and in 2022 landings are preliminarily estimated to have exceeded the TAC by almost exactly 10% [this has since been confirmed]. Excess catch has been less of an issue historically in SA4 than in other SAs; prior to 2018, the advice was only exceeded in 2016, and then by less than 10%".

The initial assessment noted that the 2022 sandeel benchmarking workshop was intended to reach a conclusion as to whether the practice of transferring quota between years was precautionary; however, as noted in A3.1, ICES do not appear to have reached a conclusion on whether or not it is precautionary. Instead, the conclusion reached is that the practice results in only a small increase to long-term risk that B_{lim} will be breached.

Since the 2023 initial MT assessment, the catch data for 2023 has become available. Total catches in SA 4 were 17,269t, well within the maximum catch recommended by ICES (35,020t). Although limited progress appears to have been made towards resolving the impacts of the use of "quota flex" on catches relative to advice, catches are currently below the level recommended by ICES and A3.2 is met.

Year	ICES advice	Catch corresponding to advice	TAC	ICES catch SA 4	Total ICES catch (SAs 1r–7r)
2012	Catches for monitoring purposes should not exceed 5000 tonnes	< 5000	5000	2585	102000
2013	Catch in 2012 reduced by 20% as a precautionary buffer	< 2041	4000	5225	278000
2014	Catches for monitoring purposes should not exceed 5000 tonnes (with associated sampling protocol)	< 5000	5000	4414	264000
2015	Catches for monitoring purposes should not exceed 5000 tonnes (with associated sampling protocol)	< 5000	5000	4392	312000
2016	Precautionary approach	≤ 6000	6000	6232	75405
2017	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 54043	54043	18474	517499
2018	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 59345	59345	42298	269579
2019	Catches for monitoring purposes should not exceed 5000 tonnes	≤ 5000	5000	6666	235537
2020	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 39611	39611	20116	446765
2021	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 77512	68989	51448	232610
2022	MSY approach: zero catch	0	5000	5541	166628
2023	MSY approach: allow for sufficient stock (MSY $B_{escapement}$) to remain for successful recruitment	≤ 35020	33969	17269***	164535***
2024	MSY approach: zero catch	0			

* Advice for Subarea 4, excluding the Shetland area.
** Set for EU waters of divisions 2.a and 3.a, and Subarea 4.
*** Preliminary.

Sandeel in Divisions 4.a-b, SA 4. ICES recommendation, TAC, catch in SA 4, and total sandeel catch, 2012 – 2024 (ICES 2024)

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).

There has been no substantial change in the status of this clause since the initial MT assessment. The 2023 MT assessment concluded "ICES has recommended that a quota of 5,000t specifically for research purposes should be set in 2019 and 2022. In both years the TAC was set in line with this advice, but excess catch was taken (see above). Despite the issues with quota transfer potentially preventing the ability of managers to prohibit catch, this does not appear to occur in practice in SA4 to the same extent as other SAs".

The quota transfer rule – allowing 10% of EU quota to be carried over from one season to next – continues to have the potential to cause the same issues as have been identified in the other sandeel management areas. As the TAC has been set to zero for the 2024 season, the 2025 MT surveillance assessment should consider whether the quota flex rule has caused any issues similar to those experienced in SA 1r and 2r.

As at the time of the initial assessment, there is currently no evidence that the fishery in this Sandeel Area would not be closed if recommended, and managers have implemented the ICES recommendation to close the fishery in 2024. The stock is considered to Pass clause A3.3.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b, Sandeel Area 4 (northern and central North Sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.4, https://doi.org/10.17895/ices.advice.25019657

UK Government (2024). Written record of fisheries consultations on 7 and 8 March 2024 between the United Kingdom and the European Union about sandeels in 2024. https://assets.publishing.service.gov.uk/media/65f435309d99de001d03df89/WR_EU-UK_for_2024_Sandeel.pdf

Standard clause 1.3.2.1.3

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

A4	**Stock Status – Minimum Requirements**		
	A4.1	The stock is at or above the target reference point, OR IF NOT: The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT: The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.	PASS
		Clause outcome:	PASS

[SA4]

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.

As detailed in A2.2, the 2023 stock assessment estimated that SSB is currently below the target reference point level, but above the limit reference point. SSB in 2024 was projected to be 81,162t, relative to a target reference point (B_{pa} / MSY $B_{escapement}$) of 88,995t and a limit reference point (B_{lim}) of 44,716t (ICES 2024). Arguably, SSB could be considered to remain "at the target reference point"; however, in this instance the distinction is irrelevant as ICES has advised the closure of the fishery, and this closure has been adopted by the EU with a 2024 sandeel TAC of 0t (UK Gov 2024). This means that the stock meets the requirements of the second statement, and A4.1 is met.

References

ICES (2024). Sandeel (*Ammodytes spp*.) in divisions 4.a–b, Sandeel Area 4 (northern and central North Sea). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, san.sa.4, https://doi.org/10.17895/ices.advice.25019657 UK Government (2024). Written record of fisheries consultations on 7 and 8 March 2024 between the United Kingdom and the European Union about sandeels in 2024. https://assets.publishing.service.gov.uk/media/65f435309d99de001d03df89/WR_EU-UK_for_2024_Sandeel.pdf	
Links	
MarinTrust Standard clause	**1.3.2.1.4**
FAO CCRF	**7.2.1, 7.2.2 (e)**
GSSI	**D6 01**

CATEGORY C SPECIES

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

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

Species Name		**Herring, *Clupea harengus*, in ICES Subarea 4 & Divisions 3a and 7d (North Sea, Skagerrak and Kattegat, eastern English Channel)**	
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.

As previously, an annual stock assessment continues to be conducted by the ICES Herring Assessment Working Group (HAWG). The results of the assessment are used to produce catch recommendations for the stock. All fishery removals for the stock are incorporated into the stock assessment, an effort assisted by mandatory catch reporting and landings obligation rules in place in the EU. Total landings of herring in Subarea 4 and Divisions 3a and 7d in 2022 were estimated to be 462,246t (ICES 2023). This total includes herring bycatch from the sandeel fisheries in the North Sea.

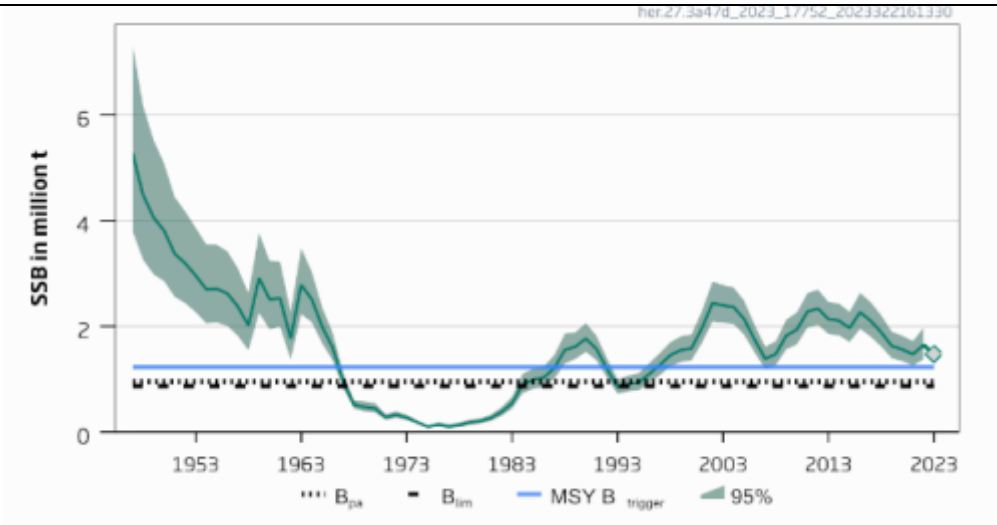
All fishery removals are included and C1.1 is met.

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 annual ICES advice includes an estimate of the status of the stock relative to established target and limit reference points. The May 2023 advice states that "Fishing pressure on the stock is below F_{MSY} and the spawning-stock size is above MSY $B_{trigger}$, B_{pa}, and B_{lim}" (ICES, 2023). SSB in 2023 was estimated to be 1,480,607t, against a limit reference point (B_{lim}) of 874,198t.

The diagram below shows the time series of SSB estimates and demonstrates that the stock size has been above both the target and limit reference points since the early 1990s. Total annual catch is restricted via a TAC which varies according to the state of the stock, and largely in line with ICES advice.

The results of the most recent herring stock assessment indicate that stock biomass is above the target and limit reference points, and C1.2 is met.



Herring in ICES Subarea 4 and Divisions 3.a and 7.d, autumn spawners. 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, *Merlangius merlangus*, in ICES Subarea 4 (North Sea) & Division 7d (eastern English Channel)	
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.

An annual stock assessment is conducted by the ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK), and used to produce catch recommendations for the stock. All fishery removals for the stock are incorporated into the stock assessment, an effort assisted by mandatory catch reporting and landings obligation rules in place in the EU. Total landings of whiting in 2022 were estimated to be 23,136t in Subarea 4, and 4,727t in Division 7d (ICES 2023). Both totals include catch from the sandeel fisheries covered by this assessment.

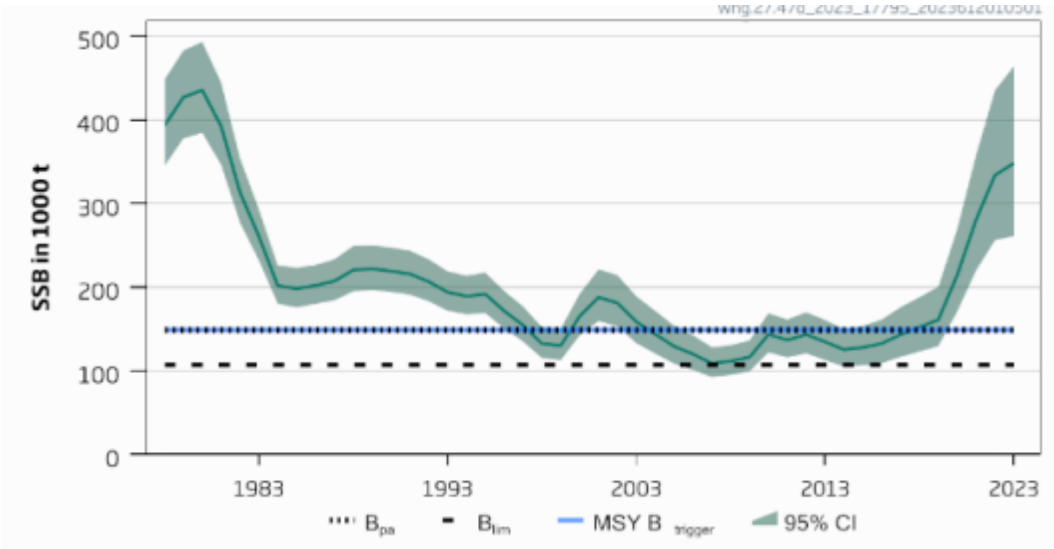
Fishery removals are accounted for in the stock assessment process and C1.1 is met.

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 annual ICES advice includes an estimate of the status of the stock relative to established target and limit reference points. The June 2023 advice states that "Fishing pressure on the stock is below F_{MSY}, and the spawning-stock size is above MSY $B_{trigger}$, B_{pa}, and B_{lim}" (ICES, 2023). SSB in 2024 was projected to be 347,863t, against a limit reference point (B_{lim}) of 107,146t.

The graph below shows the time series of SSB estimates and demonstrates that the stock size has been above both the target and limit reference points in recent years. Total annual catch is restricted via separate TACs for Subarea 4 and Division 7d, both of which vary according to the state of the stock, and are largely in line with ICES advice.

The 2022 whiting stock assessment concluded that stock biomass is currently above both the target and limit reference points, and C1.2 is met.



Whiting in ICES Subarea 4 and Division 7.d. 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	**Mackerel, *Scomber scombrus*, in ICES Subareas 1-8 & 14 & Division 9a (Northeast Atlantic and adjacent waters)**	
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.

An annual stock assessment is conducted by the ICES Working Group on Widely Distributed Stocks (WGWIDE), and is used to produce catch recommendations for the stock. All fishery removals for the stock are incorporated into the stock assessment, an effort assisted by mandatory catch reporting and landings obligation rules in place in the EU. Total catches of mackerel in 2022 across all areas were estimated to be 1,046,720t. This total includes catch from the sandeel fisheries covered by this assessment (ICES 2023).

Fishery removals are accounted for in the stock assessment process and C1.1 is met.

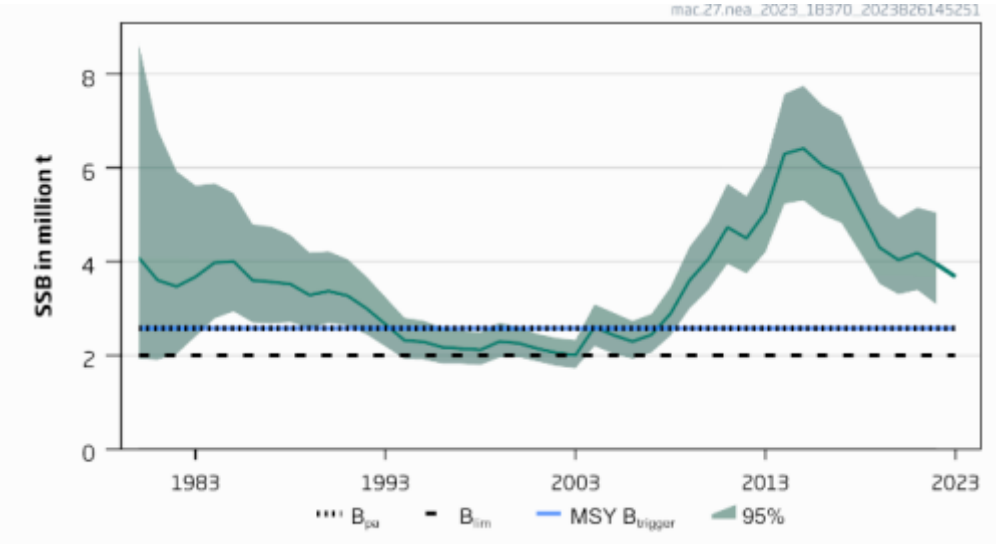
C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.

The annual ICES advice includes an estimate of the status of the stock relative to established target and limit reference points. The September 2023 advice states that "Fishing pressure on the stock is above F_{MSY} but below F_{pa} and F_{lim}; spawning-stock size is above MSY $B_{trigger}$, B_{pa}, and B_{lim}" (ICES, 2023). SSB in 2023 was estimated to be 3,681,064t, against a limit reference point (B_{lim}) of 2,000,000t.

The graph below shows the time series of SSB estimates and demonstrates that the stock size has been above both the target and limit reference points since the mid-2000s. Total annual catch is restricted via TACs.

As noted in the initial assessment for this fishery, there has been no agreement on total international catch since 2009, and total landings are frequently above the ICES recommended level. The failure to agree an international TAC is reflected in the long-term decline in estimated SSB since around 2015. If the decline continues in coming years, it is possible that the stock will fall

below B_{lim}, in which circumstance it would no longer meet MT requirement C1.2. However, at the present time, biomass remains above the target and limit reference points, and C1.2 is met.



Mackerel in ICES Subareas 1-8 and 14, and Division 9.a. Estimated SSB relative to current reference points (ICES 2023)

References

ICES (2023). 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, 2023. ICES Advice 2023, mac.27.nea, https://doi.org/10.17895/ices.advice.21856533

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

FURTHER IMPACTS

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

F1	Impacts on ETP Species - Minimum Requirements		
	F1.1	Interactions with ETP species are recorded.	PASS
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	PASS
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	PASS
		Clause outcome:	PASS

There have been no substantial changes in the understanding of the potential impacts of the fishery on ETP species since the time of the initial MT assessment. A summary of the outcomes of that assessment is provided here for convenience; for more details, please refer to the 2023 assessment report.

F1.1 Interactions with ETP species are recorded.

Interactions with ETP species are recorded as required by EU and UK 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. As noted previously, a report is published by the WGBYC annually, with the most recent produced in 2023 (ICES 2023). The report contains detailed information on the data sources used to inform the activities of the group. Bycatch data, including those submitted by the Danish fleet, are used by the WGBYC to estimate bycatch rates and overall impacts of fisheries on ETP species in the waters covered by ICES.

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

As described in the initial MT assessment, the 2016 ICES sandeel benchmarking report noted that bycatch of sea mammals and birds is very low, stating that it is "undetectable using observer programmes" (ICES 2017, page 23). The 2023 benchmark does not appear to have revised this conclusion, with the benchmark report not mentioning ETP species or marine mammals, nor the direct impacts of the fishery on seabirds (ICES 2024).

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

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).

References

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

ICES (2017). Report of the Benchmark Workshop on Sandeel (WKSand). ICES Expert Group reports (until 2018). Report. https://doi.org/10.17895/ices.pub.7718

ICES (2023). Working Group on Bycatch of Protected Species (WGBYC). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.24659484.v2

ICES (2024). Benchmark Workshop on Sandeel (*Ammodytes spp*.) (Outputs from 2022 and 2023 meetings) (WKSANDEEL). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.21581151.v2

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

There have been no substantial changes in the understanding of the potential impacts of the fishery on habitats since the time of the initial MT assessment. One minor change is an improvement in the understanding of the gears used in the fishery; however, this does not affect the outcome of the assessment. The gears used in the sandeel fishery were previously thought to be "pelagic trawls". Updated information indicates they are "midwater trawls" which may make some contact with the sea bed, primarily via trawl doors and ground rope, but which are still "not intended to have contact with the bottom while fishing" (FAO 2024).

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

As noted in the initial assessment, the MarinTrust fishery assessment guidance states that "good practice requires there to be a strategy in place that is designed to ensure the fishery does not pose a risk of serious or irreversible harm to habitat types". Such a strategy is not required for the specific fishery under assessment here, as due to the gear type used it fundamentally does not pose such a risk. However, in general terms the potential impacts of fisheries on habitats are considered throughout the management process in both the EU and Norway.

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

The midwater gears used in the sandeel fishery under assessment are not intended to interact with the seabed and are therefore considered unlikely to have a significant negative impact on seabed habitats. No evidence was encountered during the completion of this assessment report to indicate that the fishery has a significant impact on physical habitats.

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

The pelagic gears used in the Danish component of the sandeel fishery are considered unlikely to interact with seabed habitats. However, the protection of sensitive habitats throughout the area covered by this MT assessment is regulated through the international convention on biodiversity (OSPAR 03/17/1, Annex 9), and the corresponding national legislation (Natura2000 in Denmark, National Order No. 1048/2013). There are a series of Marine Protected Areas in the North Sea.

References

FAO (2024). Fishing Techniques. Sandeel midwater trawling. Technology Fact Sheets. In: Fisheries and Aquaculture. Rome. https://www.fao.org/fishery/en/fishtech/1086/en

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

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

There have been no substantial changes in the understanding of the potential impacts of the fishery on ecosystems since the time of the initial MT assessment. A summary of the outcomes of that assessment is provided here for convenience; for more details, please refer to the 2023 assessment report.

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). In addition to this high-level ecosystems consideration, the potential impacts of the fishery on the North Sea ecosystem are also considered by the HAWG during stock assessment and catch advice development. Finally, ecosystem considerations form part of the stock annex and benchmarking processes for all four sandeel stocks.

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

The sandeel stock annexes include an exploration of the potential impacts of low forage fish abundance on dependant predators, compared to the proportion of each predator's diet which is known to be made up of sandeel (ICES 2019). While marine mammals and fish are generally found to be at low risk of localised sandeel depletion, a number of seabird species are considered vulnerable in the North Sea. These include sandwich tern (*Sterna sandvicensis*); Arctic tern; great skua (*Catharacta skua*); Arctic skua; guillemot (*Uria aalge*); and Kittiwake (*Rissea tridactyla*) (ICES 2019).

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

ICES recognises the importance of sandeel in North Sea food webs, and has previously advised that management of the sandeel fisheries should ensure that sandeel abundance be maintained high enough to provide food for a variety of predator species (ICES 2017). By including natural mortality estimates when making catch recommendations, ICES introduces additional precaution to reflect the important role of sandeel in the North Sea ecosystem.

References

ICES (2017). Report of the Benchmark Workshop on Sandeel (WKSand). ICES Expert Group reports (until 2018). Report. https://doi.org/10.17895/ices.pub.7718

ICES (2019). Stock Annex: Sandeel (*Ammodytes marinus*) in the North Sea area 1 (SA1). ICES Stock Annexes. Report. https://doi.org/10.17895/ices.pub.18623159.v1

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	1.3.3.3

FAO CCRF	7.2.2 (d)
GSSI	D.2.09, D3.10, D.6.09

SOCIAL CRITERION

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

Appendix A - Determining Resilience Ratings

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

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

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

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

Glossary

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

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

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	Sandeel fishery
Management authority (Country/State)	EU (Denmark); UK, Norway
Main species	Sandeel (*Ammodytes marinus*)
Fishery location	FAO Area 27, ICES Divisions 4a-c
Gear type(s)	Midwater trawl
Overall recommendation. (Approve/ Fail)	I agree with the recommendation to pass, it is a well-managed fishery.

Summary: in this section, provide any additional information about the fishery that the reviewers feel is significant to their decision.
As stated by the reviewer, the approval of the fishery could be maintained, but it should be resolved the extent to which the quota flex issue has been resolved.
General Comments on the Draft Report provided to the peer reviewer
In this fishery there is no evidence of interactions of ETP species with the fishery. It is however suspected that the impact is negligible though need to be demonstrated through a dedicated observers' program, the fishers themselves could help to record the interactions that all fisheries have with marine fauna.

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		

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?
Scoring agreed
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?
Scoring agreed
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?
Scoring agreed
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?
Scoring agreed
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?
Scoring agreed, though, apparently, there is no a permanent observers program of the interactions of the fishery with ETP species. The interactions always exist although can be negligible, In this moment is just impossible to measure the kind of impact on protected species.
Certification body response
n/a

Optional: General comments on the Peer Review Draft Report
the only important issue in this fishery is related to the fact that ICES evaluated the potential impacts of the interannual quota transfer, concluding that the practice “marginally increased risk of SSB falling below Blim (0.2% higher risk at Fcap)”.
Certification body response
Agree that this is an important issue. As noted in the report, future assessments should investigate the extent to which the quota transfer issue has been resolved and ensure that it has not lead to fishery removals in excess of the advice.