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PUBLIC COMMENT DRAFT REPORT FOR THE Initial assessment Faroese tusk and ling fishery

JFK Trol

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Assessment of the Faroese Ling and Tusk fishery against MSC Fisheries Standards v2.0.

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GLOSSARY

Abbreviations - Acronyms - Concepts

- Cpue Catch per unit effort (abundance indicator)
- CoC Chain of Custody
- ETP Endangered, Threatened and Protected
- HCR Harvest Control Rule
- IPI Inseparable or Practically Inseparable (Species)
- LTL Low Trophic Level
- MCS Monitoring, Control and Surveillance
- MSC Marine Stewardship Council
- nm Nautical mile (1 nm = approx. 1852 m)
- PI Performance Indicator
- PISG Performance Indicator Scoring Guidepost
- RBF Risk-Based Framework
- SSB Spawning Stock Biomass
- SG Scoring Guidepost
- TAC Total Allowable Catch
- UoA Unit of Assessment
- UoC Unit of Certification

Stock assessment reference points

- F_{MSY} Fishing mortality at MSY
- B_{MSY} Spawning biomass (equilibrium) when fishing at **F**_{MSY}
- PRI Point where Recruitment would be Impaired
- MSY Maximum Sustainable Yield
- B_{lim} Precautionary reference point. SSB below B_{lim} indicate increase risk of impairment of recruitment
- $\mathsf{B}_{\mathsf{P}^{\mathsf{a}}}$ Precautionary reference point SSB below $\mathsf{B}_{\mathsf{P}\mathsf{A}}$ indicate that action should be taken to recover the stock
- F_{lim} Fishing mortality which should be avoided with high probability because it is associated with unknown population dynamics or stock collapse.
- FpaFishing mortality to ensure that there is a high probability that Flim will be
avoided and that the spawning stock biomass will remain above the threshold Blim
- MSY Biomass level below which fishing mortality should be reduced
- Btrigger

Organisations

- CITES Convention on International Trade of Endangered
- Species of Wild Fauna and Flora
- EU European Union
- FAO Food and Agriculture Organization
- ICES International Council for the Exploration of the Sea
- MSC Marine Stewardship Council
- NEAFC Northeast Atlantic Fisheries Organisation

1 EXECUTIVE SUMMARY

This report provides information on the first assessment of the Faroese tusk and ling fishery against Marine Stewardship Council (MSC) Fisheries Standard.

The assessment was carried out using MSC Fisheries Certification Requirements and Guidance v2.0. For the assessment, the default assessment tree was used.

The assessment is presented for Ling (Molva molva) and Tusk (Brosme brosme) fished in ICES Divisions 5.b and the Faroese sector of ICES Division 6.a (only a minute part of that division) and fished with pair trawl, long line, and jigs. These fisheries exploit the ling stock in ICES Division 5.b and the tusk stock in in Subareas 4 and 7-9 and Divisions 3.a, 5.b, 5.a and 12.b sorw (Northeast Atlantic), see figure 1 for specification of these areas.

The fisheries authorities of the Faroe Islands manage these fisheries.



45°W 40°W 35°W 30°W 25°W 20°W 15°W 10°W 5°W 0° 5°E 10°E 15°E 20°E 25°E 30°E 35°E 40°E 45°E 50°E 55°E 60°E 65°E 70°I

Figure 1 ICES Statistical areas. Source ICES Map facility

http://www.ices.dk/marine-data/maps/Pages/default.aspx

Date of certification

Table 1 Assessment team			
Role	Name		
Team leader	Lucia Revenga		
Principle 1 expert:	Hans Lassen		
Principle 2 expert:	Lucia Revenga		
Principle 3 expert:	Geir Hønneland		
DNV GL project manager and Chain of custody responsible:	Stefan Midteide		
Table 2 Assessment timeline			

Event	Date
Announcement of initial assessment:	21th July 2017
Site visit and stakeholder consultations:	6-7 September 2017
Publication of Public Certification Report	10 th July 2018

Publication of Public Certification Report Eligibility date:

DNV GL – Report No. 2017-027, Rev. 2 – <u>www.dnvgl.com</u> MSC Full Assessment Reporting Template V2.1 – issued 8 April 2015 Template approval date:

1.1 Main strengths and weaknesses of the client's operation

1.1.1 Main strengths

PRINCIPLE	PERFORMANCE INDICATOR	COMMENT
1	1.1.1 and 1.2.3	There are detailed data documenting the fisheries available and data from two annual surveys covering the Faroese Grounds
2	2.4.2	There is a comprehensive habitat management strategy protecting the different VME present in Faroese waters.
3	3.2.3	The Faroese fishery management authority has a comprehensive monitoring and control of every stage in Faroese fisheries.

1.1.2 Main weaknesses

PRINCIPLE	PERFORMANCE INDICATOR	COMMENT
1	1.2.1 1.2.2	The harvest strategy was based on an effort system that does is not explicitly controlling the exploitation pressure on ling and tusk on the Faroese Grounds. The revised Faroese Act on the Management of Marine Resources is new and there is no experience with how this may perform. Nor has any HCR been established under this revised Act.
2	2.1.3 2.2.3	There is lack of specific information as regards bird interactions with the longline fleet as well as in the identification of the cod and redfish fish stocks.
3	-	There is no specific weakness to highlight in the Faroese fisheries management system.

1.2 Draft determination

The Faroese tusk and ling fishery achieved a score of 80 or more for each of the three MSC Principles and did not score under 60 for any of the set MSC criteria. Based on the evaluation of the fishery presented in this report the assessment team recommends the certification of the Faroese tusk and ling fishery for the client JFK Trol.

As the fishery achieved a score of below 80 against two scoring indicators (PI 1.2.2. for ling, PI 1.2.2 for tusk, and PI 2.3.3 for all UoCs), the assessment team has set three conditions (Table 3) for the continued certification that the client is required to address. The conditions are applicable to improve performance to at least the 80 level within the period set by the assessment team. The assessment team also makes three recommendations for the fishery (Table 4).

Table 3 Conditions for certification (full text in Appendix 1.3)

CONDITION NUMBER	PI	CONDITION	TIME-SCALE FOR COMPLIANCE
1	1.2.2 (Ling)	The fishery for ling shall be subject to well-defined HCRs. The HCRs shall meet objectives consistent with PI 1.1.1 and include provision for reducing exploitation pressures if the stock falls below PRI reference points	2 years
2	1.2.2 (Tusk)	The fishery for tusk shall be subject to well-defined HCRs. The HCRs shall meet objectives consistent with PI 1.1.1 and include provision for reducing exploitation pressures if the stock falls below PRI reference points. The tusk (NEA) is fished by several Parties (EU, Norway, Faroe Islands) and a joint approach to management is required.	4 years
3	2.3.3	The Client shall work together with Havstovan and the Faroese Natural Museum to provide a quantitative estimate of the impact that the three UoCs make on the ETP populations, notably sea birds. Data should be adequate to contribute to the estimate trends and status of the sea bird populations.	4 years

Table 4 Recommendations (full text in Appendix 1.3)

REC #	PI	RECOMMENDATION
1	2.1.3	It is recommended that catches of redfish and grenadiers are specified to the species level (if possible).
2	2.2.2	It is recommended that the client considers the sustainability of the bait stocks when purchasing bait species.
3	2.2.3	It is recommended that interactions with elasmobranchs (sharks, rays and skates) and with all bird species are recorded.

2 AUTHORSHIP AND PEER REVIEWERS

2.1 Assessment team

Table 5 Assessment team

Role	Qualifications
Team leader: Lucia Revenga	See below.
Principle 1 expert: Hans Lassen	Hans Lassen is an independent consultant. He holds a cand. scient. (M.Sc.) from Copenhagen University (1969) and a HD (B.Sc.) from the Copenhagen Business School (1978). His background is in fish stock assessments, particularly in the application of computers and models.
	He joined the Danish Institute of Fisheries and Marine Research (DIFRES) in 1971. 1988-1992 he worked in the Greenland Fisheries Research Institute as Deputy Director and Director and returned to DIFRES in 1992. Between 1998 and 2003 he was in charge of the Fisheries Group in the ICES Secretariat as Fisheries Adviser who serves as secretary to the ICES Advisory Committee on Fishery Management. After 2004 he was head of the ICES Advisory Programme within the ICES Secretariat. He retired from the ICES secretariat in 2010 and has since worked as a private consultant on projects within his expertise.
	He has been a member and Chairman of numerous ICES committees and groups, has within the Northwest Atlantic Fisheries Organization chaired STACFIS and the Scientific Council, been a member of STECF (EC, DG Fish), scientific adviser to Danish delegations to fisheries negotiations and chaired an internal EC expert group to provide input to the EC Multi-annual Guidance Program, within the Nordic Council of Ministers he chaired its Working Group on

Fisheries and worked with the FAO/DANIDA project (1982-1998) on teaching fish stock assessment. In 2006 he was awarded the prestigious Swedish prize "Kungsfenan" for contributions to communication between science and the fishing industry. At his retirement from ICES he was awarded a Special Service Award. He is author and co-author of more than 30 peer reviewed papers in prime scientific journal and numerous papers for scientific symposia.

He is experienced in numerous MSC assessments, reviews and surveillance audits including as a member of MSC certification assessment teams for *inter alia* West Greenland shrimp, Greenland halibut and lumpfish, for Barents Sea Demersal trawl fisheries (Greenland), for Latvian Sprat fisheries, and Greenlandic and Norwegian fisheries in the Barents Sea, He has acted as reviewer for several MSC assessment reports including shrimp, cod, haddock, anchovy, sardine and vendace.

He is trained in the MSC v1.3 and v2.0 standards and in the use of the RBF. He has no conflicts of interest in relation to the UoA under his responsibility.

Principle 2 expert: Lucia Revenga Lucia Revenga Marine Sciences and in Environmental Sciences. For 5 years she worked with TRAGSA for the Spanish General Marine Secretariat, conducting researches on the biology and stock status of different species, such as bluefin tunas, skipjack tunas, albacores, mackerels, sardines, eels, prawns, Norway lobsters, halibuts. She has also taken part in oceanographic surveys focused in the search of vulnerable marine ecosystems. From 2011 to 2015 she worked for IFAPA (Institute for Research and Training in Fisheries) as a Fisheries biology teacher for fishermen. She also conducts research in fishery local activities with the aim of increasing community awareness of the conservation of coastal ecosystems and encouraging sustainable fishing practices. Since then she works as an independent consultant. As a P2 expert she has been involved in the DS Nephrops assessment, the Olympic krill assessment, the AKER BioMarine Krill Fishery reassessment, and the Medfish project. She has been involved as a team leader in the ISF and Norges Fiskarlag blue whiting assessments, the Norges Fiskarlag sandeel, sprat and pout assessment and the IDW blue shell mussel reassessment.

Lucia`s qualifications meet the competence criteria defined in the MSC Certification requirements v.2.0, annex PC, for the Team-leader. Revenga has no conflicts of interest in relation to the UoA under her responsibility

Geir Hønneland holds a PhD in political science from the University of Oslo (2000) and has Principle 3 expert: Geir Honneland studied international fisheries management (with main emphasis on enforcement and compliance issues), international environmental politics and international relations in Polar regions. He has been affiliated with the Fridtjof Nansen Institute in Oslo for more than 20 years and has acted as director since 2015. Among his fisheries-related books are Making Fishery Agreements Work (Edward Elgar, 2012; China Ocean Press, 2016), Law and Politics in Ocean Governance: the UN Fish Stocks Agreement and Regional Fisheries Management Regimes (Martinus Nijhoff, 2006), Russian Fisheries Management: The Precautionary Approach in Theory and Practice (Martinus Nijhoff, 2004) and Coercive and Discursive Compliance Mechanisms in the Management of Natural Resources (Kluwer, 2000; Springer, 2014). Before embarking on an academic career, he worked five years for the Norwegian Coast Guard, where he was trained and certified as a fisheries inspector. Geir has been involved in MSC assessments since 2009 and has acted as P3 expert in more than 30 full assessments and re-assessments, as well as a number of pre-assessments and surveillance audits. His experience from full assessments includes a large number of demersal, pelagic and industrial fisheries in the Northeast Atlantic and Southern Ocean, as well as inland fisheries. In the Northeast Atlantic, he has covered the international management regimes in the Barents Sea, Norwegian Sea, North Sea, Skagerrak, Kattegat and the Baltic Sea, as well as national management regimes in Norway, Sweden, Denmark, Russia, Iceland, Faroe Islands, Greenland and Scotland, as well as the EU level and the enforcement component of other EU countries, such as Germany, Netherlands and the UK.

His qualifications meet the competence criteria defined in the MSC Certification requirements v.2.0, annex PC. Hønneland has no conflicts of interest in relation to the UoA under his responsibility.

DNV GL project manager and Chain of custody responsible: Stefan Midteide Stefa

His qualifications meet the competence criteria defined in the MSC Certification requirements v.2.0, annex PC. Midteide has no conflicts of interest in relation to the UoA under his responsibility

2.2 Peer reviewers

Based on experience with the relevant MSC Fishery programme and components of the Unit of Certification, the peer reviewers listed in Table 6 were selected in accordance with MSC Fishery Certification Requirements on qualifications and competencies.

Table 6 Peer reviewers

Peer reviewer	Name	
Peer reviewer 1	Susan Hanna	
Peer reviewer 2	Robert Blyth-Skyrme	

3 DESCRIPTION OF THE FISHERY

3.1 Unit(s) of Assessment (UoA) and scope of certification sought

The fishery is, to the knowledge of the assessment team, within the scope of the MSC Fisheries standard according to the following determinations:

- The target species is a fish stock, no amphibians, reptiles, birds or mammals are target species.
- The fishery does not use poisons or explosives.
- The fishery is not conducted under a controversial unilateral exemption to an international agreement.
- The Client Group has not been prosecuted for violation of laws on forced labour.
- There is no enhancement of the tusk and ling stocks.
- The client or client group does not include an entity that has been successfully prosecuted for a forced labour violation in the last 2 years.
- The fishery is not the subject of controversy and/or dispute at the time of initialization of the full assessment.

3.1.1 UoA and Proposed Unit of Certification (UoC)

MSC certification is specific to the fishery holding the certificate, the Unit of Certification. The assessment team may choose to assess a wider unit, the Unit of Assessment, to which the certificate may be extended under specific circumstances.

3.1.1.1 Unit of Assessment

The Units of Assessment defines the full scope of what is being assessed and includes the Unit of Certification and any other eligible fishers.

The Units of Assessment includes the target stock (s), the fishing method or gear type/s, vessel type/s and/or practices, and the fishing fleets or groups of vessels, or individual fishing operators pursuing that stock, including any other eligible fishers that are outside the Unit of Certification.

The Units of Assessment for this fishery assessment are specified in Table 7 and Table 8. They were chosen as they cover all Faroese demersal trawlers trawlers owned by the client group as well as the jiggers delivering to the client. More details of the Units of Assessment for this fishery assessment are specified below.

Fishery name	Faroe Islands Ling
Species	Ling (Molva molva)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Demersal trawl
Stock	Faroe Islands: ICES Vb1 and Vb2 / (Faroe Plateau and Faroe Bank)
Management	Fisheries authorities of the Faroe Islands

Table	7.a	Unit	of	Assessment	1)
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Client group	This certification applies exclusively to the fleet of demersal trawlers and longlines that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau.
Other eligible fisheries	Other eligible fishers are defined as Faroese vessels fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and using the gears defined above.

Fishery name	Faroe Islands Ling
Species	Ling (<i>Molva molva</i>)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Longline
Stock	Faroe Islands: ICES Vb1 and Vb2 / (Faroe Plateau and Faroe Bank)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longlines that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau.
Other eligible fisheries	Other eligible fishers are defined as Faroese vessels fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and using the gears defined above.

Table 7.b: Unit of Assessment (UoA 2)

Table 7.c: Unit of Assessment (UoA 3)

Fishery name	Faroe Islands Ling
Species	Ling (<i>Molva molva</i>)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Jigging
Stock	Faroe Islands: ICES Vb1 and Vb2 / (Faroe Plateau and Faroe Bank)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longlines that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and

	the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau.
Other eligible fisheries	Other eligible fishers are defined as Faroese vessels fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and using the gears defined above.

Table 8 Unit of Assessment (UoA 4)Fishery nameFaroe Islands Tusk

Fishery name	
Species	Tusk (Brosme brosme)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Demersal trawl
Stock	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau.
Other eligible fisheries	Other eligible fishers are defined as Faroese vessels fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and using the gears defined above.

Table 8.b: Unit of Assessment (UoA 5)

Fishery name	Faroe Islands Tusk
Species	Tusk (Brosme brosme)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Longline
Stock	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau.
Other eligible fisheries	Other eligible fishers are defined as Faroese vessels fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and using the gears defined above.

Table 8.C: Unit of Assessment (UoA 6)	Table	8.c:	Unit	of	Assessment	(UoA (5)
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Fishery name	Faroe Islands Tusk
Species	Tusk (Brosme brosme)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Jigging
Stock	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau.
Other eligible fisheries	Other eligible fishers are defined as Faroese vessels fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and using the gears defined above.

3.1.1.2 Proposed Unit of Certification

The Unit of Certification is the unit entitled to receive an MSC certificate.

The proposed Units of Certification includes the target stock (s), the fishing method or gear type/s, vessel type/s and/or practices, the fishing fleets or groups of vessels or individual fishing operators pursuing that stock including those client group members initially intended to be covered by the certificate.

The MSC FCR v2.0 specifies that the Unit of Certification is defined as "The target stock or stocks (= biologically distinct unit/s) combined with the fishing method/gear and practice (including vessel type/s) pursuing that stock and any fleets, groups of vessels, or individual vessels of other fishing operators."

The different Units of Certification cover the fleet of demersal pair trawlers and longlines that are members of P/F JFK, P/F Faroe Origin and Delta Seafood, and the jiggers that deliver to the client group. The proposed Unit of Certification are provided in Table 9 to Table 14.

Table 9 Proposed Unit of Certification 1 at the start of the certificate (prior to any cert	ificate
sharing)	

Unit of Certification	1
Fishery name	Faroe Islands Ling
Species	Ling (Molva molva)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Demersal trawl
Stock	Faroe Islands: ICES Vb1 and Vb2 / (Faroe Plateau and Faroe Bank)

Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau

Table 10: Proposed Unit of Certification 2 at the start of the certificate (prior to any certificatesharing)

Unit of Certification	2
Fishery name	Faroe Islands Ling
Species	Ling (Molva molva)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Longlines
Stock	Faroe Islands: ICES Vb1 and Vb2 / (Faroe Plateau and Faroe Bank)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau

Table 11 Proposed Unit of Certification 3 at the start of the certificate (prior to any certificatesharing)

Unit of Certification	3
Fishery name	Faroe Islands Ling
Species	Ling (Molva molva)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Jiggs

Stock	Faroe Islands: ICES Vb1 and Vb2 / (Faroe Plateau and Faroe Bank)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau

Table 12 Proposed Unit of Certification 4 at the start of the certificate (prior to any certificatesharing)

Unit of Certification	4		
Fishery name	Faroe Islands Tusk		
Species	Tusk (Brosme brosme)		
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.		
Method of capture	Demersal trawl		
Stock	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)		
Management	Fisheries authorities of the Faroe Islands		
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau		

Table 13: Proposed Unit of Certification 5 at the start of the certificate (prior to any certificatesharing)

Unit of Certification	5
Fishery name	Faroe Islands Ling
Species	Tusk (Brosme brosme)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.

Method of capture	Longlines
Stock	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau

Table 14 Proposed Unit of Certification 6 at the start of the certificate (prior to any certificatesharing)

Unit of Certification	6
Fishery name	Faroe Islands Tusk
Species	Tusk (Brosme brosme)
Geographic area	ICES subarea Vb (5.b), including Vb1 and Vb2, and a minute sector of ICES VIa, all of which fall inside Faroese EEZ.
Method of capture	Jiggs
Stock	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)
Management	Fisheries authorities of the Faroe Islands
Client group	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau

3.1.1.3 Other eligible fishers at the start of the certificate (prior to any certificate sharing)

Other eligible fishers are operators that have been evaluated as part of the Unit of Assessment, but who are <u>not</u> eligible to use the MSC Fishery certificate without a certificate sharing agreement with the client group.

Other eligible fisheries: Other eligible fishers are defined as Faroese vessels that do not belong to the client group and which fish for tusk or ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau using demersal trawls, long lines and jigs.

3.1.2 Final UoC(s)

(PCR ONLY)

The 6 Units of Certification covered by the MSC Fishery certificate at the time of certification are described in Table 15 to Table 20. The ling population is forming a unit stock in ICES Division 5.b while the tusk population in ICES 5.b. is part of the larger tusk stock in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic).

Table 15 Unit of Certification 1 at the time of certification

Target stock(s)	Ling (Molva molva) in ICES 5.b (Faroes Grounds).
Fishing method or gear type(s), vessel type(s) and/or practices	Demersal trawls
The fishing fleets or groups of vessels or individual fishing operators pursuing that stock including those client group members initially intended to be covered by the certificate	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.
Geographical range of fishing operations	ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.

Table 16 Unit of Certification 2 at the time of certification

Target stock(s)	Ling (Molva molva) in ICES 5.b (Faroes Grounds)				
Fishing method or gear type(s), vessel type(s) and/or practices	Long-line				
The fishing fleets or groups of vessels or individual fishing operators pursuing that stock including those client group members initially intended to be covered by the certificate	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				
Geographical range of fishing operations	ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				

Table 17 Unit of Certification 3 at the time of certification

Target stock(s)	Ling (Molva molva) in ICES 5.b (Faroes Grounds)
Fishing method or gear type(s), vessel type(s) and/or practices	Jigging vessels (includes jiggers and small longlines)

The fishing fleets or groups of vessels or individual fishing operators pursuing that stock including those client group members initially intended to be covered by the certificate	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.
Geographical range of fishing operations	ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.

Table 18 Unit of Certification 4 at the time of certification

Target stock(s)	Tusk (Brosme brosme) in ICES 5.b (Faroes Grounds)				
Fishing method or gear type(s), vessel type(s) and/or practices	Demersal trawls				
The fishing fleets or groups of vessels or individual fishing operators pursuing that stock including those client group members initially intended to be covered by the certificate	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				
Geographical range of fishing operations	ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				

Table 19 Unit of Certification 5 at the time of certification

Target stock(s)	Tusk (Brosme brosme) in ICES 5.b (Faroes Grounds)				
Fishing method or gear type(s), vessel type(s) and/or practices	Long-line .				
The fishing fleets or groups of vessels or individual fishing operators pursuing that stock including those client group members initially intended to be covered by the certificate	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				
Geographical range of fishing operations	ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				

Table 20 Unit of Certification 6 at the time of certification

Target stock(s)	Tusk (Brosme brosme) in ICES 5.b (Faroes Grounds)				
Fishing method or gear type(s), vessel type(s) and/or practices	Jigging vessels (includes jiggers and small longlines)				
The fishing fleets or groups of vessels or individual fishing operators pursuing that stock including those client group members initially intended to be covered by the certificate	This certification applies exclusively to the fleet of demersal trawlers and longliners that are members of P/F JFK, P/F Faroe Origin and Delta Seafood and the jiggers that deliver to the client group. Additional vessels are included belonging to the companies, P/F Vørustíggjur, P/F Eysturbúgvin and P/F Thor. Certification only applies only to these vessels when they are fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				
Geographical range of fishing operations	ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and in a small section of ICES 6.a which falls inside Faroe EEZ.				

3.1.2.1 Final other eligible fishers at the time of certification

Other eligible fishers are defined as Faroese vessels that do not belong to the client group and which fish for tusk or ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau using demersal trawls, long lines and jigs.

3.1.3 Total Allowable Catch (TAC) and Catch Data

At present (May 2018) the Faroese fisheries for ling and tusk are regulated through effort (fishing days) and no TAC applies. Where non-Faroese fisheries operate within the Faroese EEZ, these fish under a quota allocation. Furthermore, the fishing year in the Faroese regulations are 1 September – 31 August. The total catches for all fleets operating on the Faroese grounds (ICES 5.b) are described in Table 21 and Table 22.

The reviewed Faroese Act on Management of Marine Resources has come into effect on December 18th, 2017. According to it, as of January 2019, the Faroese fleet of longliners and trawlers catching demersal fish in Faroese waters will no longer be allocated fishing days based on the previous days-at-sea system, which will be replaced by a quota system. Small fishing vessels which conduct coastal fisheries on a smaller scale will, however, continue to base their activity on annually allocated fishing days.

Table 21 Catch data for Ling in ICES 5.b (Faroese Grounds). Source ICES (2017) Ling in 5.bAdvice Table 8 and VØRN HAGTØL download 14/12/2017

	Year	Total	Source
Total catch all fleets 1/1/2016-31/12/2016	2016	5886 t	ICES (2017) Ling 5.b advice
Total catch all fleets 1/9/2016- 31/8/2017	2016/2017	4756 t	Client
Faroese vessels 1/1/2016-31/12/2016	2016	4883 t	VØRN HAGTØL 14/12/2017
Faroese vessels 1/9/2016- 31/8/2016	2016/2017	3650 t	Client

Total green weight catch by all UoC 1/9/2016-31/8/2017	2016/2017	1948 t	Client
Total green weight catch by all UoC	2015	645 t	Client

Table 21 (cont) Ling in Division 5.b. History of ICES estimated commercial catch presented by area for each country participating in the fishery. All weights are in tonnes.

	Subdivision 5.b1					Total 5.b1	Su	bdivision	5. b 2	Total 5.b ₂	Total 5.b	
Year	Den- mark	Faroe Isl.	Franc e	Norway	UK	Russia		Faroe Isl.	France	Norwa y		
2012	117	5452	7				5576	434	1		435	6011
2013	3	3734	7				3744	387	1		388	4132
2014		5653	10	308	7	13	5990	276		389	665	6655
2015		4375	15	993	5	6	5392	244	1	337	582	5974
2016		4214	4	855	114		5187	569	4	126	699	5886

Table 22 Catch data for Tusk in ICES 5.b (Faroese Grounds). Source ICES (2017) WGDEEPTable 8

		Total	Source
Total catch all fleets 1/1/2016-31/12/2016	2016	2303 t	ICES (2017) Advice
Total catch all fleets 1/9/2016- 31/8/2017	2016/2017	1651 t	Client
Faroese vessels 1/1/2016-31/12/2016	2016	1535 t	VØRN HAGTØL 14/12/2017
Faroese vessels 1/9/2016- 31/8/2016	2016/2017	1099 t	Client
Total green weight catch by all UoCs. 1/9/2016-31/8/2017	2016/2017	412 t	Client
Total green weight catch by all UoCs.	2015	187 t	Client

Table 22 (cont) Tusk (Northeast Atlantic) catch by ICES area. Source: ICES (2017) TuskAdvice Table 8.

Year	3.a	4.a	4.b	5.b.1	5.b.2	6.a	7.b,c	7.g–k	All areas
2012	20	1749	47	3793	0	1174	63	2	6848
2013	22	1510	31	1500	12	1594	4	0	4673
2014	9	1463	11	2310	129	662	1		4585
2015	9	1530	18	2081	324	1193			5155
2016	14	1650	9	2261	42	844			4820

Table 23 Ling and Tusk catches by gear for the fishing year 2016/17 and for the Faroe Plateau

LING	Gear trawl	Gear longline	Gear jigging
Total catch for the vessels under certification (UoC)	1.288 tons	659 tons	0,96 tons
Total catch for the Faroese fleet as a whole	1.290 tons	2.359 tons	1,1 tons

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Total catch for the Faroes Plateau for all fleets, not only the Faroese	1.364 tons	3.391 tons	1,1 tons
TUSK			
Total catch for the vessels under certification (UoC)	125 tons	286 tons	0,74 tons
Total catch for the Faroese fleet as a whole	137 tons	961 tons	0,74 tons
Total catch for the Faroes Plateau for all fleets, not only the Faroese	139 tons	1.511 tons	0,74 tons

3.1.4 Scope of Assessment in Relation to Enhanced Fisheries

Both ling and tusk are indigenous to the Faroese Grounds and there are no enhancement activities for these species.

3.1.5 Scope of Assessment in Relation to Introduced Species Based Fisheries (ISBF)

Both ling and tusk are indigenous to the Faroese Grounds and the species are not introduced.

3.2 Overview of the fishery

3.2.1 Client name and contact information

Table 24 Client contact data

Client name:	JFK Trol
Contact person:	Durita í Grotinum
Address:	3 Kósarbrúgvin, FO-700
	Klaksvik, Faroe Islands
Telephone:	+298 555 453
Email:	Durita@jfk.fo

3.2.2 Client information

This assessment applies exclusively to the fleet of pair and single-vessel demersal trawlers and longlines that are members of P/F JFK, P/F Faroe Origin, Delta Seafood and the jiggers that deliver to the client group. The clients' share of the total Faroese annual catches in recent years exceeds 90%.

Currently, the client fleet consists of pair and single-vessel demersal trawlers, longlines and jiggers. Certification only applies to these vessels when they are fishing ling (*Molva molva*) and tusk (*Brosme brosme*) within ICES Division Vb1 and Vb2, and also on a small part of area VIa – Faroe Bank and Faroe Plateau. The full list of vessels included in the unit of certification and which are eligible to use the certificate is provided in Appendix 2.

We will now briefly describe these three companies:

P/F JFK: http://www.jfk.fo/

The Faroese company JFK has a history of fishing that extends back nearly 100 years. The company has three business areas:

- fish products, frozen at sea from the Barents Sea,
- processed fish products from the Faroese fishing grounds and
- processed fish products from Greenlandic fishing grounds.

The company's head office is at Klaksvik, Faroe Islands, with factories located in the Faroe Islands and Greenland. The largest factory, Kósin, is located in Klaksvik, and another three factories are at Nanortalik, Qaqortoq and Kuummiut in Greenland. JFK owns a cold store in Klaksvik through a joint venture with two other companies and is also co-owner of the pelagic trawler Næraberg and the pelagic factory PP Faroe Pelagic. The sales office JFK Ltd is located in St Albans in the UK.

The client fleet catch is landed gutted and fresh (i.e. iced but not frozen) in the Faroe Islands for further processing and export to the EU. JFK runs Kósin, the largest fish factory in the Faroe Islands, situated in Klaksvík. Land-based production at the factory is based on its capability to produce frozen as well as fresh fish products.

Figure 2 P/F JFK company structure. Source: Client



P/F Faroe Origin: http://www.faroeorigin.fo/

Faroe Origin is a fishing company and seafood processor with its main focus on delivering top quality products from saithe and whitefish. The main products produced are fresh or frozen fillets and loins from saithe, and fresh and wet salted products from cod, ling and tusk.

Faroe Origin is a joint venture owned by P/F Varðin, Sp/f Framherji, P/F Bacalao and the Icelandic company Samherji HF. The company has a fleet of trawlers, some of which were taken over from the company Faroe Seafood on its bankruptcy. Faroe Origin trawlers supply the company's processing facilities at Vestmanna, Vágur, Runavík and Toftir, and the company's sales office is located at Runavík. Target export countries are also within the EU.

Delta Seafood: <u>http://www.deltaseafood.fo/f%C3%B8royar/?lang=en</u>

Delta Seafood is a Faroese company located at Sandoy and operating 6 pair-trawlers which mainly target saithe in the UoA. The main saithe products include fresh, frozen and salted fish. Tusk and ling are bycatch species. Fresh and frozen fish products are mainly exported to the Western European market, and salted fish primarily to Spain and Italy. All products are produced in one of the company's three factories, which are all HACCP-approved and certified by the Faroese Food and Veterinary Agency. MSC fisheries certification of Delta Seafood will be coordinated by JFK.

3.2.3 General overview of the fishery

The demersal fisheries in ICES 5.b are described in Chapter 2, Demersal Stocks in the Faroe Area in ICES NWWG Report, 2016¹.

The main fisheries in Faroese waters are mixed-species, demersal fisheries and single species pelagic fisheries. The fisheries that take tusk and ling are demersal and are mainly conducted by Faroese vessels. Some amounts are taken by foreign vessels licensed through bilateral and multilateral fisheries agreements. The pattern was disrupted 2011- 2013 when no mutual agreement could be reached between the Faroe Islands and the EU and Norway, respectively, due to the dispute regarding the sharing of mackerel. After 2013, the agreement has been re-established.

¹ ICES. 2016. Report of the North-Western Working Group (NWWG), 27 April- 4 May 2016, ICES HQ, Copenhagen, Denmark. ICES CM 2016/ACOM:08. 703pp.

The fishery where ling and tusk are taken are operates between 200-400 m with tusk occurring deeper than ling. The depth range for Ling and Tusk on the Faroese Plateau are shown in Figure 3.

Figure 3 Typical depth range for ray and skates and fish species

(below 65 m) on the Faroese shelf and ocean around the Faroe Islands. The horizontal black lines indicate the depth range for ling and tusk. Source ICES Ecosystem Overview 2008 Figure 4.1.5 (Modified)



All vessels above 20 m overall length fishing in Faroese waters (both Faroese-registered and non-Faroese) must be fitted with satellite vessel monitoring systems (VMS), and must maintain up-to-date daily log-sheet records of fishing activity, positions and catches. Vessels must be available for at-sea and in-port inspection of fishing gear, log-sheets and catch when required by the Faroese Directorate of Fisheries. All registered fishing vessels must provide prior notice of intention to fish and intention to land (or enter and leave Faroese waters). Penalties may apply if evidences of non-compliance to these requirements are found. Penalties may include fines, confiscation of catch, confiscation of gear and loss of licence to fish. The tight control of fishing activity extends to the onshore side of the industry too, as fish and fish products are the principal export from the Faroe Islands. There is close monitoring and control at point of landing but also through on-shore processing and export channels.

Non-Faroese vessels are permitted to fish under the terms of bilateral agreements, e.g. with the EU, Iceland and Norway. All vessels are subject to the Faroese management regime when fishing in Faroese waters. All Faroese-registered fishing vessels must have two licences: one permits the vessel to participate in fishing; the second specifies the what, when and where of the fishery in which each vessel is licensed to fish. Foreign vessels are subject to the same effort control, gear restrictions, quotas, seasonal and area closures as Faroese vessels.

To own a vessel permitted to fly the Faroese flag, the owners must be individuals or individuals in a group who are mutually accountable. 2/3 owners must have a permanent relationship to the Faroe Islands and have been registered in the Peoples Registry Office for at least two years. All owners must be subject to taxation in the Faroe Islands. Faroese vessels must be registered at the Faroese Registration of Ships. Access to participation in commercial fishing in the Faroe Islands is regulated through various licences and certificates. The harvesting licence is a licence for a specific vessel, allocated based on statutory

requirements with respect to the nationality of the owner of the vessel (for further information, see section 3.5).

All fishing vessels are grouped by size and gear type and each group is allocated a number of fishing days per year. The overall allocation of fishing days is reviewed on an annual basis. Fishing days will be determined on advice from the Faroese Marine Research Institute (Havstovan), and a committee consisting of representatives of the various fleet segments is involved. To date (December 2017), numbers of fishing days are set by the parliament. By law, number of fishing days shall be set, so that the most sustainable yield is maintained. The new Act on the Management of Marine Resources (which came into effect on 18 of December 2017) sets that, as of 2019, the Faroese fleet of longliners and trawlers catching demersal fish in Faroese waters will no longer be allocated fishing days based on the previous days-at-sea system, which will be replaced by a quota system. Small fishing vessels which conduct coastal fisheries on a smaller scale will, however, continue to base their activity on annually allocated fishing days.

Fleets catching tusk and ling in Faroese waters consist mainly of large longlines and jigging vessels, although demersal trawlers also take it as bycatch. The present assessment covers six different Units of Certification which refer to the following fishing gear types:

Units of Certification 1 and 4: Demersal trawlers (includes single trawlers both less and greater 400 HP, and also pair trawlers). On a general basis, fishing inside the 12 nm zone is forbidden for industrial trawling vessels which are only allowed to fish outside this baseline. Smaller vessels (<20m) are allowed to fish inside this area in the summer time, primarily between the 6 and 12 nm baselines NE and SE of the Faroe Islands. Permitted minimum mesh size is 145 mm.

Single trawlers: To date (December 2017), there are 11 single trawlers with licences to fish within Faroese waters. These are moderate to large trawlers with engine power in excess of 1,000 HP, operating as single trawlers and fishing mainly on and off the shelf break targeting saithe, redfish and blue ling in addition to other deep-water species. They are also allowed a restricted bycatch of cod and haddock. (www.fishin.fo). The larger (offshore) trawlers use a Baka 630 trawl with 53.3 cm disc rockhopper ground gear. Rock-hopper trawls are designed for use on rough ground; the rig of the ground rope enables the trawl to hop free of seabed obstructions if it becomes fast but in doing so it can break fragile upright structures (e.g. coral) and turn boulders, possibly crushing turf communities such as sponges. This potentially negative environmental effect is countered to some small degree in single-boat trawlers by the use of slotted Faroe doors; curved ovoid doors with two rows of choked slots. The slots accelerate the water flow across the back of the door creating a strong lateral force (lift) pulling the door away from the centreline of the trawl, typically providing 150 m spread. Hydrodynamically, this system is more efficient than traditional non-slotted doors which are moved laterally by drag, an efficiency that contributes to reduced fuel usage and lower seabed pressure from the door. The doors are attached to the trawl wingends by 140 m bridles, giving an estimate trawl spread of 70 m. Headline transducers show typical headline height is c. 5.5 m. Sorting grids are not required in Faroese demersal fisheries but some vessels opt to use 150 mm cod-end mesh rather than the statutory 145 mm, to further minimise the capture of small fish.

Pair trawlers are the most numerous of the larger demersal fishing vessels. They use trawl that is towed between two vessels acting as a pair. Their main target specie is saithe, and in the period 1985-1997 saithe constituted ca. 70% of their total catch. However, depending on the availability, they also have significant bycatches of cod in some years, in addition to minor bycatches of a number of other species. The pair trawlers also in the period 1985-1999 landed 19% of the demersal fish caught at the Faroese EEZ by Faroese vessels. The gear used by the pair trawlers is basically the same as by the single-boats but without the use of doors. Any environmental advantage that might be gained through the absence of doors, however, is lost through the action of the chain deadweight attached to the front end of the lower bridle to help keep the gear on the seabed. The small (c. 10 vessels, < 20 m) inshore (summer) trawl fleet use very similar rock-hopper gear to that used by the large, offshore vessels except that it is scaled down to a level commensurate with the towing vessel. In the event that the gear is lost for any reason (e.g.

warps parting) skippers will make every effort to recover the lost gear due to its high value. With the benefit of modern sonar, echosounders and position-fixing equipment, the recovery rate of such lost gear is very high.

Unit of Certification 2 and 5: Longlines (includes longlines less and greater than 110 GRT). Longliners target ling and tusk and take saithe as bycatch. They operate mainly in the deeper waters of the continental slope.

Larger longlines fishing offshore: Larger longlines comprise vessels larger than 100 feet in overall length and equipped with baiting machinery, which automatically baits and shoots the lines during the setting. The largest vessels shoot their lines at 10 knots and deploy 15–45 thousand hooks on a single line in one set. Setting the line from a large, offshore long liner takes about 12 hours, at which point the vessel returns immediately to the first setting place and begins recovering the line and catch. Thus, a typical soak time for each hook is c. 12 hours. The main fishing areas are offshore the baselines, in deep water along the margin of the continental slope targeting cod, haddock, tusk and ling. In the period 1985-1997, their landings of demersal fish from the Faroe area constituted 7.5% of the total landings from the area. (www.fishin.fo).

All of the auto-long liners fly tori-lines (bird streamers) when fishing to minimise the risk of birds taking the bait and thereby reducing catch potential. The interaction of this gear with the seabed is limited to the potential anchors turning of boulders or light abrasion of the line across turf communities with the aquatic environment when hauling.

Unit of Certification 3 and 6: Jiggers (small coastal vessels, up to 80-100 feet in overall length, fishing in inshore waters. They may have either longlines, jiggers or both gear types. They target gadoid species such as cod, haddock, ling and tusk. Saithe is taken as a bycatch species. These vessels fish primarily in depths less than 200 m. and near the coast).

Smaller longlines fishing inshore: The fishing system is the same as in bigger longlines, the main difference being that small vessels may bait manually and shoot a few hundred hooks each day.

Jiggers (hand- and auto-jigging): Jigging involves the use of multiple hooks decorated with strips of brightly coloured plastic rather than bait. The lines are lowered either by hand or from auto-jigging machines, from a stationary boat or one that is going slowly ahead. When a boat gets into a shoal of fish it will either circle the area or heave too until the catch rate falls. The method is used primarily inshore and on the Faroe Plateau by smaller (c. 50 vessels < 15m) vessels, although there are no restrictions on where jigging vessels can operate other than the areas closed to all forms of fishing. There is no interaction between jigging gear and the aquatic environment or seabed other than the occasional loss of the weight that takes the line down or line itself if the line breaks.

3.2.4 Fisheries and management measures

The Faroese Parliament decided in 2007 to cancel all fishing licences for Faroese vessels in Faroese waters by 31 December 2017 and a revised Faroese Act on the Management of Marine Resources came into effect on 18 of December 2017. This Act prescribes that, as of January 2019, the Faroese fleet of longlines and trawlers catching demersal fish in Faroese waters will no longer be allocated fishing days based on the previous days-at-sea system but be replaced by a quota system. Small fishing vessels which conduct coastal fisheries on a smaller scale will, however, continue to base their activity on annually allocated fishing days.

Based on the new Act all fisheries must be biologically, economically and socially sustainable, and in particular the Act assures sustainable fishing and conservation of fish stocks. The Act states that a long-term strategy for the management and utilization of marine resources is to be designed and implemented

for each stock in order to maintain the industry and the fish stocks at sustainable levels. The strategy should take into account the recommendations of experts in the field.

The management of the Faroese demersal fisheries are based on groupings of vessels operating in a similar manner (Trawlers, long liners > 110 GT, small jigging boat, etc). Some vessels change between longlining, jigging and trawling, and they therefore can appear in different fleets. Access to sectors of the Faroese waters is regulated through this grouping; in general, larger vessels are not allowed inside 12 nautical mile-limit.

The fishing year is from 1 September to 31 August. This is changed with the new Faroese Act on the Management of Marine Resources and the calendar year will apply from 2019 onwards. The individual transferable effort quotas apply to: 1) the long liners less than 110 GRT, the jiggers, and the single trawlers less than 400 HP (Groups 4, 5), 2) the pair trawlers (Group 2), and 3) the long liners greater than 110 GRT (Group 3). The single trawlers greater than 400 HP were in 2011 included into the fishing days system and were allocated a number of fishing days. They are not allowed to fish within the 12 nautical mile limit and the areas closed to them, as well as to the pair trawlers, have increased in area and time. This fleet started to pair-trawl, and since the fiscal year 2011/12, merged with the pair trawlers group. The single trawlers less than 400 HP are given special licenses to target flatfish inside 12 nautical miles with a bycatch allocation of 30% cod and 10% haddock. In addition, they are obliged to use sorting devices in their trawles in order to minimize their bycatches. The number of days allocated has been reduced considerable and is now 50% of the originally allocated days. Despite this, there still are many unused days in the system (see Figure 4).

Figure 4 Faroese vessels - Allocated fishing days and non-used fishing days for large trawlers and large long-liners by fishing year.

Source VØRN Hagtøl downloaded 14/12/2017





Figure 5 Zonation applied in the Faroese fisheries management. Source ICES (2016) NWWG report page 23.

Holders of individual transferable effort quotas who fish outside the thick line on

Figure 5 can fish for 3 days for each day allocated inside the line. Trawlers are generally not allowed to fish inside the 12-nautical mile limit. Inside the innermost thick line only long liners less than 110 GRT and jiggers less than 110 GRT are allowed to fish. Due to the serious decline of the Faroe Bank cod, the waters shallower than 200 m in the Faroe Bank have been closed to fishing since 1 January 2009 for all gears types except for a minor jigging fishery during summertime.

The effort quotas are transferable within gear categories. The allocations of number of fishing days by fleet categories was made such that together with other regulations of the fishery they should result in average fishing mortalities on each of the 3 stocks of 0.45, corresponding to average annual catches of 33% of the exploitable stocks in numbers. Built into the system is also an assumption that the day system is self-regulatory, because the fishery will move between stocks according to the relative availability of each of them and no stock will be overexploited. The realized fishing mortalities have been substantially higher than the target for cod, appear to have been almost at the target for saithe in recent years, while for haddock, fishing mortality remains below the target. In addition to the number of days allocated, it is also stated in the law what percentage of total catches of cod, haddock, saithe and redfish, each fleet category on average is expected to fish. These percentages are given in Table 25.

HADDOCK	SAITHE	REDFISH
58 %	17.5 %	1 %
28 %		
10.25 %	69 %	8.5 %
1.75 %	13 %	90.5 %
2 %	0.5 %	0.5 %
	HADDOCK 58 % 28 % 10.25 % 1.75 % 2 %	HADDOCK SAITHE 58 % 17.5 % 28 % 10.25 % 10.25 % 69 % 1.75 % 13 % 2 % 0.5 %

 Table 25 Expected overall average catch distribution by regulatory vessel categories.

The fishing pattern in recent years has changed compared with previous years. The large longliners now exploit the deep areas (> 200 m) to a larger extent (ling and tusk) than previously. This is because the catches in shallower waters of cod and haddock have been poor. They also have fished in other areas, e.g. in Greenland and on the Flemish Cap. This could reduce the fishing mortality on cod and haddock, but the small longliners and jiggers still exploit the shallow areas.

Figure 6 Fishing pattern in on the Faroe Grounds

A: Long line where ling is > 30% of the individual haul for 1985-2016. B: Pair trawl where ling occur in the catches and where saithe > 60%. Source ICES (2017) WGDEEP Figures 4.2.1 and 4.2.2

Ling: There are further details given in ICES (2017) Chapter 4.2. In the resent years about 70–75% of ling in Vb are caught by long liners and the rest mainly by trawlers. Most of the ling caught in Vb by Faroese long liners and trawlers is caught at depths

less than 500 meters. The main fishing grounds for ling in Vb are on the slope of the Faroe Plateau and Faroe Bank.

The traditional longline fleet fishing ling, tusk and blue ling consist of 24 long liners larger than 110 GRT; they are mainly targeting cod and haddock and in years where the availability of these species is high and market conditions satisfactory, they spend very little effort in deep water. The main deep-water fleet consist of about 13 otter board trawlers with engines larger than 1000 HP. Due to poor



economic conditions especially the very high fuel prices, the number of vessels has declined in the most recent years and the effort towards deep-water species has declined further due to a switch to pair trawling targeting mainly saithe. The pair trawler fleet consist of ~ 10 pair trawlers larger than 1000 HP are mainly targeting saithe, but there are some bycatches of ling in this fishery.

The nominal landings for ling by country are shown in Table 27 for 2007 - 2016. The catches were relatively stable during the period 2002 to 2012, afterwards there was a decline in catches, especially in Area 5.b. The total catch was 4,820 t in 2016.

Tusk: There are further details given in ICES (2017) Chapter 6.6. This is a bycatch species in the trawl, gillnet and longline fisheries. Norway has traditionally landed the major proportion of the total landings. In Area 5.b, tusk was mainly fished by longliners (about 90% of the catch), and the rest of the catch was taken by large trawlers. The main fishing ground for tusk is on the slope around the Faroes Plateau and the Faroe Bank deeper than approximately 200 m. The Norwegian longliners were not allowed to fish inside the Faroese EEZ in the period 2011–2013, the Faroese longliners fish in the area where the Norwegian longliners used to fish. Since 2014 Norwegian longliners have been given quotas in 5.b.

Table 26 Catch distribution by fleet in 2016 as estimated by ICES

	CATCH 2016	TRAWL	LONGLINE	GILLNETTERS	DISCARDS
LING IN DIVISION 5.B	5,886	37%	63%	-	negligible
TUSK IN SUBAREAS 4 AND	4,973	5%	90%	5%	153 t
7–9, AND IN DIVISIONS 3.A,					
5.B, 6.A, AND 12.B.					

Table 27 Ling in 5.b. Nominal landings (2017-2016).

Source: WGDEEP 2017 Tables 4.2.1 and 4.2.2

ICES area	Year	Denmark	Faroes	France	Norway	UK (E&W))	Scotland	Russia	Total
	2007	2	3004	9	1071		6		4092
ICES area 5.b1	2008		3354	4	740	32	25	11	4166
	2009	13	3471	2	419		270		4174
	2010	28	4906	2	442		121		5500
	2011	49	4270	2			0		4321
5.b1	2012	117	5452	7			0		5576
	2013	3	3734	7			0		3744
	2014		5653	10	308		7	13	5990
	2015		4375	15	993	1	3	6	5392
	2016		4214	4	855		114		5187
	2007		327	4	309				640
	2008		458	3	120				580
	2009		270	1	198				469
	2010		393	1	236				630
5.b2	2011		522	0	0				522
	2012		434	1	0				435
	2013		387	1	0				388
	2014		276		389				665
	2015		244	1	337				582
	2016*		569	4	126				699

	ICES Division									
Year	3	4.a	4.b	5.b.1	5.b.2	6.a	7.b,c	7.g–k	8.a	All areas
2007	21	2180	15	3468	344	1077	13	1		7119
2008	46	2139	71	3798	61	1347	4	0		7466
2009	19	2268	17	3135	164	1242	4	0		6849
2010	21	1861	15	4889	127	1216	3	4		8136
2011	17	1623	96	3287	0	1337	5	0		6361
2012	20	1749	47	3793	0	1174	63	2		6848
2013	22	1510	31	1500	12	1594	4	0	4	4673
2014	9	1463	11	2310	129	662	1			4585
2015	9	1530	18	2081	324	1193	0			5155
2016	14	1650	9	2261	42	844	0			4820

Table 28 Tusk in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b.

Official commercial landings by area. All weights are in tonnes. Source: WGDEEP 2017 Tables 6.6.1.
3.3 Principle One: Target Species Background

3.3.1 Tusk and Ling as Key LTL species

Ling (*Molva molva*), Family Lotidae (Hakes and burbots), is not among the 'default' Key LTL species, ling shows low resilience to exploitation; trophic level is 4.4². Ling is not a key low trophic level (LTL) species.

Tusk (*Brosme brosme*), Family Lotidae (Hakes and burbots), is not among the 'default' Key LTL species, tusk shows low resilience to exploitation; trophic level is 3.9³. Tusk is not a key low trophic level (LTL) species.

3.3.2 Ling (Molva molva)

3.3.2.1 Biology and Background

Based on http://www.fishbase.org and <u>http://www.fisheries.no/ecosystems-and-stocks/marine_stocks/fish_stocks/ling.</u>

Figure 7 Ling (Molva molva)

Source: http://www.fishbase.org/ComNames/CommonNameSearchList.php



Ling, *Molva molva* (Figure 7) is an oceanic cod-like fish whose habitat is in the Atlantic region and can be found around Iceland, Faroe Islands, British Isles, the Norwegian coast and occasionally around Newfoundland. Specific areas of occurrence, of relevance to this fishery, include the Norwegian Sea, along the coastal shelves, and the Sea of the Hebrides, where the species is abundant, see Figure 8. Ling has a long slender body that can reach up to 2 metres in length; in adulthood, it is generally a deep-running fish, spending much of its life at depths of 100m or more; younger fish are found at shallower depths.

² http://fishbase.de/Summary/SpeciesSummary.php?ID=33&AT=ling

³ http://fishbase.de/Summary/SpeciesSummary.php?ID=51&AT=tusk

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Lange Utbredelse

Figure 8 Distribution of ling (Molva molva) in the Northeast Atlantic Ocean (Source: Norwegian Fisheries Directory).

Adult ling live on rocky bottoms at depths of 15 to 600m or more, commonly from 100 to 400m. Young up to 1-2 years of age are coastal (15-20m depth) and pelagic. At an age of 3 years ling migrate to greater depths. First maturity is reached at 5 years for males (80cm) and 5-6 years for females (90-100cm). Spawning occurs from March to July and eggs are pelagic. Fecundity may reach 20 to 60 million eggs per female. Major spawning grounds are located at 200 m depth from the Bay of Biscay to off Norway at 100 to 300 m off southern Iceland. Growth is rapid (8-10 cm/year): at 1 year, 20 cm; 2 years, 31-35 cm; 3 years, 31-35 cm; 4 years, 73-83 cm. Females grow faster than males. The maximum age is 10 years for males and 14 for females (ca. 200cm total length). Ling mostly eats herring, flatfishes, and other codfishes. It can also eat invertebrates, such as crustaceans, cephalopods and echinoderms (starfish). The global catch statistics is presented in Figure 9. The Faroese catch is 10-20% of the global production.

Ling is not classified as threatened, IUCN redlist (not evaluated).

The ling in ICES 5.b (Faroese Grounds) is considered a single unit stock and is assessed annually by ICES through its WGDEEP working group.



Figure 9 Ling Catch Statistics 1950-2013 global total. (Source: FAO FishStat)

3.3.2.2 Data and Stock assessment

The ling stock in Division 5.b is assessed based on data from the fishery and from the Faroese summer survey. Catches are well documented. Faroese ling catch in tonnes by month, area and gear are obtained from Statistical Faroe Islands (<u>www.hagstovan.fo</u>) and Faroese Coast Guard (<u>www.fvg.fo</u>). The distribution of catches is obtained from logbook statistics where location of each haul, effort, depth of trawling and total catch of ling are given. Good logbook information is available since 1995. Landings from foreign nations fishing in Vb are given by the Faroese Coast Guard and reported to the Directorate of

Fisheries. Survey data for Faroe ling are available from both spring (since 1994) and summer (since 1996) surveys. There are lengths (cm) and round weights of ling from these two groundfish surveys and a recruitment index was calculated as the stratified number and biomass of ling less than 60 cm. The abundance indices from the groundfish surveys are standardized according to number of stations in each stratum and weighted with strata area for all the different strata. However, while age data are available and an exploratory analytical stock assessment is presented by ICES WGDEEP (ICES 2017) the quality of these data led ICES to conclude that the better approach to the assessment and advice is based on the survey trends. The quality of the assessment within the group of trends -based assessments is good. Because of the seasonal distribution of the ling the summer survey is considered to provide the better index and the data from this survey is used in formulating the advice.

Discarding is considered negligible.

The main uncertainties used to score PI 1.2.2 refer to the survey data. However, there are several indices of the stock development available (Cpue series from the commercial fishery and fishery independent survey series) and the conclusion on stock development is therefore robust to the uncertainty of the individual series.

3.3.2.3 Stock assessment and stock status

The Faroese summer survey biomass index shows an overall increase since 2003 but has declined in 2015-2016. In general, the stock is considered to be at a high level (see Figure 10).

Figure 10 Ling in 5.b (Faroe Plateau). Stock trend and status.

Source ICES (2017) Ling 5.b advice



Ling in 5.b (Faroe Plateau)

There is a F_{MSY} proxy reference point defined for the Ling in 5b (see Table 29). This reference point is based on the length frequency data for the stock. There is no biomass-based reference point beyond the TAC reference used in the advice. The temporal development of F_{proxy} is shown in Figure 12 and demonstrates that the stock has fluctuated around MSY for more than 2 decades corresponding to at least 2 generations.

Figure 11 Ling 5b. Stock status viz-a-viz reference points.

Source: ICES (2017) Ling 5b Advice. Table 1

		Fishing pressure					Stock size					
		2014	2015		2016	_		2014	2015	2016		
Maximum sustainable yield	F _{MSY} proxy	0	0	0	Below		MSY B _{trigger}	?	?	? Undefined		
Precautionary approach	F _{pa} ,F _{lim}	0	0	0	Below possible reference points		B _{pa} ,B _{lim}	9	?	Undefined		
Management plan	F _{MGT}	-	-	-	Not applicable		B _{MGT}	-	-	 Not applicable 		
Qualitative evaluation	-	_	_	-	Not applicable		-	۲		Decreasing		

Table 29 Ling 5b. Ling in Division 5.b.

Reference points, values, and their technical basis. Source ICES (2017) Advice on Ling 5b Table 4

Reference point	Value	Technical basis
MSY approach F _{MSY} proxy (Length based)	78.75 cm (2016)	Expected mean length of catch above Lmean when
		F = M.

Figure 12 Ling 5b.

Index ratio Lmean/LF = M from the length-based indicator method, used for the evaluation of the exploitation status. The exploitation status is below the FMSY proxy when the index ratio value is higher than 1. Source: ICES (2017) Advice on Ling 5b Figure 2.



The ICES advice is based on the ICES framework for category 3 stocks (ICES, 2016). The standardized cpue series from the Faroese summer groundfish survey was used as index for the stock development. The advice is based on a comparison of the two latest index values (index A) with the three preceding values (index B), multiplied by the advised landings for the years 2016–2017. The index is estimated to have decreased by less than 20%; thus, the uncertainty cap was not applied. The precautionary buffer, based on effort, was applied in 2012. The stock is exploited below the F_{MSY} proxy indicator, but the stock size indicator has decreased in the last two years. Therefore, the PA buffer was applied.

3.3.2.4 Management and Harvest Control Rule

There is no formal management plan for the ling fishery nor are there a HCR for Faroese ling. Historically (until the end of 2018), the fishery is regulated by fishing days in a group of vessels that also target cod, haddock and saithe, for details see section 3.2.3. The number of fishing days were set based on considerations of the mixture of fish stocks that are exploited by each group, i.e. including cod, haddock and saithe. The Act (18 December 2018) requires a management plan built on TACs and with more strict limitations on the fishing than has been the case in the past. In spite of the potential for overexploitation the ling is in a healthy state.

The main vessels categories that land ling are trawlers (>400 HP) and long liners (> 110 GRT/GT), see Table 26, these account for about 90 % of the total catch.

The fishing days for neither of these two categories are fully used. In recent years, for pair trawlers about 20% and for long liners about 40% of the allocated fishing days are unused (see Figure 4).

3.3.3 Tusk (NEA) Stock Status

3.3.3.1 Biology and Background

The information about this species is based on <u>http://www.fishbase.org</u> and <u>http://www.fisheries.no/ecosystems-and-stocks/marine_stocks/fish_stocks/tusk.</u>

Figure 13 Tusk (Brosme brosme)

(Source: http://www.fishbase.org/ComNames/CommonNameSearchList.php)



Tusk (Figure 13) is a demersal species preferring rocky bottom on the continental shelf and on the slope from 100 until 1000m, normally living in waters deeper than 200m. It is distributed on both sides of the North Atlantic. Its maximum range covers most of the North Atlantic, including the waters around Iceland and the Norwegian coast. It is also found on the Mid-Atlantic Ridge. Tusk has a more northerly distribution compared with

e.g. ling and blue ling. In the Northeast Atlantic, the range extends from southern Ireland to Svalbard and the Kola Peninsula. Tusk is abundant around Iceland and the Faroe Islands and in the deeper parts of the North Sea and Skagerrak. It is also common in the Northwest Atlantic, off Greenland, and along the Reykjanes Ridge.

Figure 14 Distribution of Tusk *(Brosme brosme*) in the Northeast Atlantic Ocean (in blue).

(Source: Norwegian Fisheries Directory)



Spawning is widespread. The age of first maturation is eight to ten years but varies within its geographic range. Maximum age can exceed 20 years, maximum length is about 100 cm, maximum weight about 9 kilos. The species does not seem to form aggregations, e.g., during spawning or wintertime.

Tusk shows little genetic differentiation over large distances, except where populations are surrounded by deep-water areas, namely on the Mid-Atlantic Ridge and the Rockall Bank. This suggests that deep-water areas are barriers for adult movements, and, though they have pelagic eggs and larvae, dispersal during early life stages is not effective over long distances, either.

Tusk spawns in the spring and summer, usually between April and early July. A

medium-sized female has been known to produce more than two million buoyant eggs. The young live near the surface until they are about 5 cm long, and then seek out rocky ocean floors in deep water. It eats crustaceans and other soft-bodied invertebrates and molluscs.

The global production of tusk is presented in Figure 15. The Faroese catch is 10-20% of the global production. The catch by area for the tusk stock is shown in

Figure 16.

Figure 15 Global annual tusk catches in 1950-2013 from FAO statistics. (Source: FAO <u>http://www.fao.org/fishery/species/2220/en accessed 23 December 2015</u>)



Figure 16 Tusk in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b. Source: ICES (2017) WGDEEP Figure 6.6.1.



The IUCN Redlist and CITES does not classify tusk as threatened (Not evaluated). However, tusk in the Northwest Atlantic Ocean Fisheries and Oceans Canada considers tusk endangered based on an evaluation in 2012 by the Canadian Committee on the Status of Endangered Wildlife while US National Marine Fisheries Service classify tusk as a Species of Concern. This classification is based on trends in the Northwest Atlantic Ocean.

3.3.3.2 Stock assessment and stock status

The stock assessment (trend based assessment SPiCT model) is summarised in

Figure 17 Tusk in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b. Summary of the stock assessment. Landings and discards (in thousand tonnes). Cpue (kg per 1000 hooks) from the Norwegian longline fleet (median and 95% confidence interval). The dashed horizontal line indicates the average stock size index used to calculate the advice. The two lower panels show the Relative biomass and Fishing mortalities as estimated in the assessment with the 95% confidence limits. Source: ICES (2017) Advice on Tusk (*Brosme brosme*) in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic).

. Catches in all subareas were stable from 2002 to 2012, lower the last four years. The Norwegian longline Cpue series, based on catches when tusk is targeted, shows a positive trend since 2004. As age data are not systematically available the assessment is based on Cpue data from the fisheries (Norwegian, Faroese long liners and a time series from Danish trawlers. This is supplemented by data from two Faroese surveys (summer and autumn). The advice is based on the trend in the Norwegian series as this index provides the best coverage of the stock.

Figure 17 Tusk in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b. Summary of the stock assessment. Landings and discards (in thousand tonnes). Cpue (kg per 1000 hooks) from the Norwegian longline fleet (median and 95% confidence interval). The dashed horizontal line indicates the average stock size index used to calculate the advice. The two lower panels show the Relative biomass and Fishing mortalities as estimated in the assessment with the 95% confidence limits. Source: ICES (2017) Advice on Tusk (*Brosme brosme*) in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic).



There are reference points available for this stock. The reference points are defined under the MSY approach Table 30.

Table 30 Reference points and their technical basis for Tusk in subareas 4 and 7-9, and in divisions 3.a, 5.b, 6.a, and 12.b.

Source: ICES (2017) Advice for Tusk Table 4.

FRAMEWORK	REFERENCE POINT	VALUE	TECHNICAL BASIS	SOURCE
MSY APPROACH	MSY B _{trigger} proxy	Rel B _{MSY} = 0.5	Relative value from SPiCT model. BMSY is estimated directly from the SPiCT assessment model and changes when the assessment is updated.	ICES (2017)
	F _{MSY} proxy	Rel. F _{MSY} = 1	Relative value from SPiCT model. F _{MSY} is estimated directly from the SPiCT assessment model and changes when the assessment is updated.	ICES (2017)

On the basis of the assessment and the reference points the status of the stock is derived as shown in

Figure 18. The stock is considered to be a full reproductive capacity and harvested sustainably.

Figure 18 Tusk in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b. State of the stock and fishery relative to reference points. Source: ICES (2017) Advice on Tusk Table 1.

			Fishing	; pressu	ıre		Stock size						
		2014	2015	2016		_	2014		2014 2015		2016		
Maximum sustainable yield	F _{MSY} proxy	0	0	0	Below		MSY B _{trigger}	0	0	0	Above		
Precautionary approach	F _{pa} ,F _{lim}	0	0	0	Harvested sustainably		B _{pa} ,B _{lim}	0	0	0	Full reproductive capacity		
Management plan	F _{MGT}	-	-	-	Not applicable		B _{MGT}	_	-	-	Not applicable		
Qualitative evaluation	-	-	-	-	Not applicable		-	-	-	-	Not applicable		

3.3.3.3 Management and Harvest Control Rule

The advice is based on a combined standardized cpue series from the Norwegian longline fishery which covers the main areas of the stock (Helle et al., 2015). The conclusions are reviewed in the light of data from two Faroese abundance surveys. Cpue series from the three main areas show similar trends.

There is no comprehensive management plan for the NEA tusk nor is there a HCR; the ICES framework for category 3 stocks was applied (ICES, 2016) in formulating the ICES advice. Neither is a there a Faroese management plan for the tusk on Faroese waters. The Act (18 December 2018) requires a management plan built on TACs and with more strict limitations on the fishing than has been the case in the past of section 3.3.2.4 for Ling. In spite of the potential for overexploitation the tusk is in a healthy state.

ICES advice is based on the standardized cpue series from the Norwegian longline fleet which was used as index for the stock development. The advice is based on a comparison of the two latest index values DNV GL - Report No. 2017-027, Rev. 2 - www.dnvgl.com

(index A) with the three preceding values (index B), multiplied by the recent (2016–2017) advised catch. The index is estimated to have increased by less than 20%; thus, the uncertainty cap was not applied in estimating the catch advice. Discarding is considered negligible (< 5%). The fishing mortality is below and the stock size above proxies of the MSY reference points; therefore, no additional precautionary buffer was applied.

The main uncertainties used to score PI 1.2.2 refer to the Cpue data. However, there are several indices of the stock development available (Cpue series from the commercial fishery and fishery independent survey series). These series are in agreement on stock development and the conclusion on stock increase is therefore robust to the uncertainty of the individual series.

Table 31 shows that although there is no comprehensive joint management (EU, Norway, Faroe Islands) the catches are well below the estimated MSY level and there are no specific concerns for the tusk stock. There are TAC set for most fisheries components. The Faroese fishery is as noted above regulated through effort, but the number of fishing days are not defined based on concerns for the tusk stock. The Norwegian component on the Faroese Grounds (ICES 5b) are regulated through a TAC as the fishery is limited by a fisheries agreement between Norway and the Faroe Islands. There are no reported catches in the NEAFC regulatory area.

Table 31 Tusk in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b.

ICES advice and official landings. All weights are in tonnes. Source: ICES (2017) Tusk (NEA) advice Extract from Table 6

Year	Predicted catch corresp. to advice (Precautio	EU Subarea 3	EU Subarea 4 (EU waters)	EU Subarea 4 (Norwegia n waters)	EU + Norway Subareas 5, 6, and 7	Norway Divisions 2.a and 5.b, and Subareas	ICES landings
	Approach)					4, 0, anu 7	
	Арргоасті						
2013	8500	24	235	170	353	2923	4673
2014	8500	29	235	170	535	2923	4585
2015	8500	29	235	170	937	2923	5155
2016	8415	29	235	170	937	2923	4820
2017	8415	29	235	170	937	2923	
2018	≤ 8984						
2019	≤ 8984						

ТАС

3.4 Principle Two: Ecosystem Background

Primary species

The Ministry of Fisheries and Natural Resources is responsible for the management of all fisheries in Faroese waters and fisheries by Faroese vessels in other waters. The framework for the regulation of commercial fisheries, both in home, foreign and international waters, is the Commercial Fisheries Act of 1994 and its subsequent amendments, as the recently updated (December 2017) Act on the Management of Marine Resources. Based on this legislation, detailed regulations are implemented governing vessel and fishing licences, area closures, effort allowance, gear and data requirements, technical regulations and minimum bycatch restrictions for certain species. The objective of Faroese fisheries management is to conserve and utilise marine fish stocks in order to ensure biological and economic sustainability and secure optimal socio-economic benefits from fisheries.

Since 1996 the Faroese fisheries are regulated by the "fishing day per boat" system, based on individual quotas (fishing days) which are transferable within the fleet category. In addition to the number of days allocated in the law, it is also stated what percentage of total catches of cod, haddock, saithe and redfish each fleet category can fish. This system was subject to review during 2017, and while still implemented until 2019, the new Act on the Management of Marine Resources (which came into effect on 18 of December 2017) sets that, as of January 2019, the Faroese fleet of longlines and trawlers catching demersal fish in Faroese waters will no longer be allocated fishing days based on the previous days-at-sea system, which will be replaced by a quota system. Small fishing vessels which conduct coastal fisheries on a smaller scale will, however, continue to base their activity on annually allocated fishing days.

The individual transferable effort quotas which are at present in place apply to:

- pair trawlers
- the long-liners greater than 110 GRT.
- long-liners less than 110 GRT.
- jiggers
- single trawlers less than 400 HP

This "fishing day per boat" fishing regime does not apply to single trawlers greater that 400 HP, which don't have effort limitations.

Landing records (available at <u>http://www.vorn.fo/</u>), provide reliable and accurate quantitative information on the landings of all species by the different types of vessels in the fleet, Havstovan (<u>http://www.hav.fo/</u>) conducts scientific research on the different fish species present in Faroese ecosystem while ICES (<u>http://www.ices.dk/</u>) provides fishing advice for most of them.

The following tables show the quantities of target and bycatch species taken by the different UoAs during 2016. These have been the base for determining if primary and secondary species shall be considered as main or minor. The team was granted catch tables from 2012 onwards, showing similar species and catch proportions.

Table 32 Catch composition for UoC1 and UoC 4 (demersal trawlers) in 2016

in kilos, and proportion of each species in the catch. Main primary species for both UoCs is saithe (77,25% of the catch).

Species		Catch (Kilos)	%	
	Cod	1 072 626	3,76	

Haddock	317 868	1,12
Saithe	22 010 899	77,25
Redfish (Sebastes spp)	708 146	2,49
Ling	1 597 670	5,61
Tusk	166 994	0,59
Blue ling	729 255	2,56
Atlantic wolfish	8 190	0,03
Whiting	127 355	0,45
Monkfish	248 494	0,87
Greenland halibut	1 198 761	4,21
Lemon sole	2 037	0,01
Plaice	5 563	0,02
Grenadiers (Macrouridae)	28 815	0,10
Halibut	21 725	0,08
Porbeagle	1 956	0,01
Other	247 046	0,87
Total	28 493 400	100,00

Table 33 Catch composition for UoC 2 and UoC 5 (Longlines) in 2016 in kilos, and proportion of each species in the catch. Main primary species are Faroese Plateau cod (30%), haddock (14%) and Greenland halibut (10%). Other minor primary species to consider for the longline UoCs are Atlanto-Scandian herring and NEA mackerel, which are used as bait species by the longline fleet.

Species	Total (kilos)	%
Cod	642 957	30,02
Haddock	301 536	14,08
Saithe	38 989	1,82
Redfish (Sebastes spp.)	3 362	0,16
Ling	577 144	26,95
Tusk	255 164	11,91
Blue ling	46 136	2,15
Atlantic wolfish	570	0,03
Whiting	2 786	0,13
Monkfish	2 779	0,13
Greenland Halibut	223 131	10,42
Lemon sole	0	0,00
Grenadiers (Macrouridae)	419	0,02
Halibut	1 287	0,06
Other	45 352	2,12
Total	2 141 612	100,00

Table 34 Catch composition for UoC3 and UoC 6 (Jiggers and small longlines) in 2016

in kilos, and proportion of each species in the catch. Main primary species for UoC 3 and UoC 6 are haddock (38%), cod (37%) from the Faroese Plateau and saithe (17,91%).

Species	(kilos)	
Cod	335 984	37,36
Haddock	346 101	38,49
Saithe	161 019	17,91
Redfish	1 426	0,16
Ling	28 848	3,21
Tusk	15 051	1,67
Blue ling	40	0,00
Atlantic wolfish	172	0,02
Whiting	1 603	0,18
Monkfish	942	0,10
Greenland Halibut	481	0,05
Lemos sole	2	0,00
Grenadiers-Macrouridae	389	0,04
Halibut	119	0,01
Porbeagle	104	0,01
Other	7 005	0,78
TOTAL	899 286	100,00

ICES provides annual or biannual scientific fishing advice for all main primary species in the catch.

ICES 2017 Advice for saithe in Faroe grounds (Vb)

The spawning-stock biomass (SSB) was below MSY Btrigger from 2011 to 2015, but is estimated to be above MSY Btrigger in 2016 and 2017. Estimated recruitment has been well above the long-term average since 2015. Fishing mortality (F) has been above FMSY since 1981. ICES advises that when the MSY approach is applied, fishing mortality in 2018 should be no more than 35 003 t. There is no management plan for this stock.





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Figure 20 Faroese saithe Fishing mortality.



			Fishir	ng pres	sure		Stock size					
		2014	2015	2016		_	2015 2		2016	2017		
Maximum Sustainable Yield	F _{MSY}	0	0	•	Above		MSY B _{Trigger}	0	0	Above trigger		
Precautionary Approach	F _{pa} , F _{lim}	0	0	0	Harvested sustainably		B _{pa} , B _{lim}	0	0	Full reproductive capacity		
Management plan	F _{MGT}	-	_	-	Not applicable		B _{MGT}	_	_	 Not applicable 		

ICES 2017 Advice for cod in the Faroese Plateau

The spawning-stock biomass (SSB) has been below Blim since 2005. Fishing mortality (F) has decreased from the year 2000 but is still above Fmsy. The 2009–2015 year-classes are estimated to be below average size. The 2016 year-class is estimated to be the highest since 2009, though uncertainty is large. ICES advices that when the MSY approach is applied, fishing mortality in 2018 should be no more than 4579 tonnes.







Figure 23 Faroe Plateau cod fishing mortality.

Figure 24 State of the Faroe Plateau cod stock and fishery relative to reference points.

		Fishing pressure						Stock size						
		2014	2015		2016		2015		2016		2017			
Maximum Sustainable Yield	F _{MSY}	8	⊗	₿	Above		MSY B _{Trigger}	8	8	8	Below trigger			
Precautionary Approach	F _{pa} , F _{lim}	0	0	0	Harvested sustainably		B _{pa} , B _{lim}	8	8	0	Increased risk			
Management plan	F _{MGT}	_	_	_	Not applicable		B _{MGT}	-	-	_	Not applicable			

There is no specific management plan for this stock, although there is a management plan under construction for cod and haddock which is not yet implemented. The present effort management system is not limiting fishing pressure, as the number of fishing days used by the main fleet targeting cod (longlines) only amounts to around half of the allocated days. There are spawning closed areas directed to protect both for the Faroe Plateau and the Faroe Bank cod stocks. These areas are closed during the main spawning season, and neighbouring areas are closed prior to, and immediately after the spawning season. According to Zeller and Reinert (2004), who used the Ecopath and Ecosim modelling to simulate and examine alternative management options in the Faroe Islands fisheries, the existing area closures could be considered beneficial in conserving and increase the biomass of major stocks of demersal species, including cod and haddock.

The cod stock was benchmarked in 2017.

ICES 2017 advice for cod in the Faroese Bank

Survey indices indicate that the stock is severely depleted. Exploitation ratios (proxies for fishing mortality) have remained at very low levels in recent years and are considered to be below possible reference points (which are not defined for the stock). ICES advices that there should be zero catch in each of the years 2017, 2018, and 2019, as it is likely that the stock will need to take several years before any possible recovery. The waters shallower than 200m in the Faroe Bank have been closed to fishing since 2009. While fishing in statistical area Vb2 is still allowed in waters deeper than 200m, these are very deep waters which reach 800 m depth. While the topography of the Faroe Bank is a Plateau of 100 depth, the area is defined by straight lines in accordance with the coordinates system.

Besides, Faroese Regulation 30/2018 (<u>http://www.kunngerdaportalur.fo/default.aspx</u>) establishes the area at Faroe Bank where fishing is restricted, showing that this restriction also covers some waters which are located at depths deeper than 200.

According to ICES 2017 Advice on Faroe Bank cod, catches in 2015 were 17 tones, all of which were taken by the jigging fleet.

Figure 25: Bathymetric profile of the Faroe Islands (showing that the top part of the Faroe Bank is shallower than 200m). Source: Vukcevik, 2012. http://www.vukcevic.talktalk.net/SNGP.htm



Figure 26: Bathymetry of the Faroese Channels, including schematic arrows of flow pathways. The black box contouring the Faroe Bank represents ICES statistical area Vb2, against the 200 m contour of the top area of the Faroe Bank. Source: Hansen et al. 2017 (<u>https://www.ocean-sci.net/13/873/2017/</u>).



Figure 27 Historical trends of catches of cod in the Faroe Bank

(since 1992 catches on the Faroe Bank are considered to be taken only by Faroese and Norwegian longlines). ICES 2017 advice states that all catches in 2015 (this is, 17 tons) were taken by jigging vessels.



Figure 28 State of the Faroe bank cod stock and fishery relative to reference points (reference points are not defined).

			Fishing p	ressure	•	Stock size						
		2013	2014		2015		2014	2015		2016		
Maximum sustainable yield	F _{MSY}	8	2	8	Undefined	MSY B _{trigger}	?	2	•	Undefined		
Precautionary approach	F _{pa} , F _{lim}	?	?	?	Undefined	B _{pa} , B _{lim}	?	?	8	Undefined		
Management plan	F _{MGT}	-	-	-	Not applicable	SSB _{MG} T	-	-	-	Not applicable		
Qualitative evaluation		\checkmark		\bigcirc	Below possible reference points		۲	∞	۲	Below possible reference points		

ICES 2017 advice for haddock

The spawning-stock biomass (SSB) has decreased since 2003 and is estimated to have been below Blim since 2010, except in 2017. The fishing mortality (F) has decreased in recent years but is still above FMSY. Recruitment (age 1) from 2004 onwards has been well below the long-term average. However, the 2016 year-class is estimated to be above average. ICES advises that catches should be of no more than 4570 t. The stock was benchmarked in 2017. There is no management plan for this stock, although there is a cod and haddock management plan under construction which is not yet implemented.





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Figure 30 Fishing mortality of the haddock stock.

Figure 31 State of the haddock stock and fishery relative to reference points.

	Fishing pressure			_	Stock size						
		2014	2015		2016			2015	2016		2017
Maximum Sustainable Yield	F _{MSY}	8	⊗	8	Above		MSY B _{Trigger}	8	8	8	Below trigger
Precautionary Approach	F _{pa} , F _{lim}	0	\bigcirc	0	Harvested sustainably		B _{pa} , B _{lim}	8	⊗	0	Increased risk
Management plan	F _{MGT}	-	-	-	Not applicable		B _{MGT}	_	-	_	Not applicable

ICES 2017 advice for Greenland halibut

The stock was well above MSY B trigger in the early part of the time-series, but dropped below the MSY B trigger in 2004. Afterwards the stock has increased and is currently above MSY B trigger. Recent fishing mortality (F) is estimated to be relatively close to FMSY. ICES advises that catches in 2018 should be no more than 24 000 tonnes.







Figure 33 Fishing mortality index for the Greenland halibut stock.



	Fishing pressure			Stock size						
		2014	2015		2016		:	2015	2016	2017
Maximum sustainable yield	F _{MSY}	0	8	8	Above		MSY B _{trigger}	0	0	Above trigger
Precautionary approach	F _{pa} ,F _{lim}	\bigcirc	0	0	Increased risk		B _{pa} ,B _{lim}	0	0	Full reproductive capacity
Management plan	FMGT	-	-	-	Not applicable		B _{MGT}	-	-	 Not applicable

The stock covers Greenland halibut present in ICES subareas 5, 6, 12, and 14 (this is, Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland). A formal management plan was agreed by Greenland and Iceland in 2014, aimed at being consistent with MSY. This plan has not yet been evaluated by ICES.

Secondary species:

Secondary species are those species present in the catch, that are not specifically protected by any regulation, and are no subject to specific management measures. As to date (June 2018) the fishing effort is regulated through the allocation of fishing days, and landing obligation requires all catches to be landed, the team has considered all fish species as primary species. Secondary species would be the bait used for the longlines, the elasmobranchs which are not specifically protected and may interact with the fishing gear and released afterwards (with no records of such interactions) as well as bird species and marine mammals present in the area which are not subject to specific protection measures.

As regards the bait used in the longline vessels, according to the client, for 2016 the longline UoC used 156 tons of bait. Bait is normally comprised by the following fish species in the approximately relative proportions: Atlanto-Scandian herring (15%), North East Atlantic mackerel (20%), Patagonian squid (*Loligo spp*) (50%) and Pacific saury (*Cololabis spp*) (15%). When considering the bait in relation to the UoA catch, all bait species together account for a 7% of the UoA catch. As the proportion of the different species in the bait is known, the proportion of each bait species in the UoA catch composition can be estimated as follows: squid (3.5%), mackerel (1.5%), herring (1%) and saury (1%). Therefore, squid and saury bait species fall under the minor secondary species category, while NEA mackerel and Atlanto-Scandian herring fall under the minor primary species category.

As regards bird species, most birds visit the Faroe Islands during the spring and the summer to nest. They are concentrated close to the shoreline. Traditional hunting for certain birds and eggs is allowed and regulated in the Faroe Islands. According to Havstovan and the Natural History Museum, it is expected

that the longline fleet interacts with bird species. Worst case scenario estimations by Havstovan gave a maximum of 20 birds entangled in each large longline vessel per day (only in the Spring or Summer months). According to Olsen, B (2008), average annual interactions of the Faroese longline fleet with birds are estimated to range between 5000-25000 individuals per year. The vast majority of these birds would be with Northern fulmars. Table 35 below lists MSC secondary bird species present in the Faroe Islands.

English name	Scientific name	IUCN Status	
European Shag	Phalacrocorax aristotelis	LC	
European Storm-petrel	Hydrobates pelagicus	LC	
Northern Fulmar	Fulmarus glacialis	LC	
Manx Shearwater	Puffinus puffinus	LC	
Arctic Skua/Jaeger	Stercorarius parasiticus	LC	

Table 35 Bird (secondary) species present in Faroe Islands and their IUCN status.

As regards marine mammals such as whales, these are commonly present in Faroese waters. They enter the area from south-south-west in the early springtime, March – April. Some of the species and groups of whales pass west of the Faroes heading north. Later in the autumn the animals pass on the eastern side of the archipelago, on their way south to winter areas. Among the baleen whales, especially, they may divide up in two groups, as soon as they have entered the Faroese area. One group behaves as described above, while the other group is heading directly towards their main summer feeding area south-southeast of the Faroes. These whales stay there all summer and are later in the season joined by the other group of whales, and they migrate jointly out of the area.

As regards seal species, only two pinniped species seem to be numerous and of ecological importance in Faroese waters; the grey and the hooded seal. Grey seals are distributed in Faroese waters all year round, and a low number breeds here as well, while hooded seals (considered as an ETP species for the purpose of this assessment and listed below in Table 37) seem to migrate periodically, and then in fairly high numbers, in to Faroese waters (Mikkelsen, 2016). Seals are primarily coastal and so, like seabirds, so no interactions are expected for the demersal trawl and large longlines UoCs, which are only allowed to fish outside the 12 nm baseline. Interactions with jiggers are also not expected as it is not probable that they would feel attracted by the plastic bait in the jigging lines. As regards possible interactions of cetaceans with the demersal trawl and longline fleet, this are also not expected, as the targeted tusk and ling are demersal species (while cetaceans are pelagic) and the size of the bait in the longlines would be too small to attract their attention. Conversations with the different stakeholders met during the site visit also confirmed that interactions of the UoA with marine mammals are not expected. According to Mikkelsen (2016), a total of ten animals (mostly long-finned pilot whales) are thought to have been bycaught in the last three years in all Faroese fisheries, and these were primarily caught by the blue whiting fishery. This is in contrast with an annual harvest of around 600 animals (also mostly long finned pilot whales) which is considered sustainable.

Whaling has been a common hunting activity for the past 400 years. The whaling activity in Faroese waters is regulated by the following regulations:

- Parliamentary Act No 57 of 5 June 1984 on whale hunting, as last amended by Parliamentary Act No 54 of 20 May 1996.
- No 56 of 19 May 2015 on pilot whale and other small whales, as last amended by Parliamentary Act No 44 of 6 May 2016 <u>http://www.logir.fo/Logtingslog/56-fra-19-05-2015-um-grind-og-annan-smahval</u>
- Executive Order No 87 of 20 September 2007 on protection of whales <u>http://logir.fo/Kunngerd/87-</u> <u>fra-20-09-2007-um-friding-av-hvali</u>
- No 9 of 26 January 2017 on pilot whale and other small whales <u>http://logir.fo/Kunngerd/9-fra-26-01-2017-um-grind-og-annan-smahval</u>

English name	Scientific name	IUCN Status
Long finned pilot whale*	Globicephalia melas	DD
Common harbour seal	Phoca vitulina	LC
Grey seal	Halichoerus grypus	LC
Harp seal	Pagophilus groenlandicus	LC
Ringed seal	Phoca hispida	LC
Bearded seal	Erignathus barbatus	LC
Beluga	Delphinapterus leucas	NT
Atlantic white sided dolphin*	Lagenorhynchus acutus	LC
Bottlenose dolphin*	Tursiops truncatus	LC
White beaked dolphin*	Lagenorhynchus albirostris	LC
Harbour porpoise*	Phocoena phocoena	LC
Killer whale	Orcinus orca	DD
Narwhal	Monodon monocerus	NT

Table 36 Marine mammals present in Faroese waters.

*There is traditional directed hunting activity (Grindalógin) for the species marked in bold

All marine mammals listed in Table 36 are monitored by NAMMCO, and for the purpose of this assessment are considered as secondary species. Newly implemented electronic logbooks should serve to increase the knowledge as regards interactions with these species, as these require a record (number or nil return) of bycaught mammals and birds.

For historic reasons, seabird research is also part of Havstovan's responsibilities, and is undertaken alongside the sea mammal research programme (<u>www.whaling.fo</u>) at the Faroese Museum of Natural History.

Endangered, threatened and Protected species.

According to MSC FCR v2.0 SA 3.1.5, the team shall consider ETP species as those recognised by national ETP legislation or species listed in binding international agreements such as CITES Appendix I (Convention on International Trade in Endangered Species), ACAP Appendix I (Agreement on Conservation of Albatross and Petrels), AEWA (African Eurasian Migratory Water bird Agreement), ASCOBANS (Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas), ACCOBAMS annex I (Agreement on the Conservation of cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area), the Waddel Sea Seal Agreement, or in any other binding agreements that list relevant ETP species concluded under this Convention. Besides, species classified as 'out-of scope' (amphibians, reptiles, birds and mammals) that are listed in the IUCN Red list as vulnerable (VU), endangered (EN) or critically endangered (CE) shall also be considered here as ETP species.

There is no specific Faroese regulation protecting ETP species. Moreover, bearing in mind the particular location of the Faroe Islands some of the mentioned agreements do not apply in Faroese waters. The Faroe Islands is a signatory member (either in its own right or via Denmark) to a wide range of international conventions that embrace the conservation and protection of marine biota, their habitats and environment, (notably Bern Convention, Bonn Convention, Ramsar Convention, NAMMCO, AEWA, OSPAR). Endangered, threatened and protected (ETP) species which may interact with the fishery will comprise fish species (especially large sharks), birds and marine mammals. Table 37 shows species listed in the any of the above mentioned conventions and which are present in Faroese waters.

Table 37 ETP Species ETP Species	present in the area. Scientific name	Conservation agreements that apply.
REPTILES		
Leatherback turtle	Dermochelys coriacea	OSPAR: Threatened in Region 1. IUCN Vulnerable. CITES Appendix I.
FISH		
European eel	Anguilla anguilla	OSPAR: Threatened in Region 1. IUCN Critically endangered. (CITES Appendix II)
Orange roughy	Hoplostetus atlanticus	OSPAR: Threatened in Region 1.
Salmon	Salmo salar	OSPAR: Threatened in Region 1. IUCN Least Concern.
Sea lamprey	Petromyzon marinus	OSPAR: Threatened in Region 1.
		IUCN Least Concern.
Basking shark	Cetorhinus maximus	OSPAR: Threatened in Region 1.
		IUCN Vulnerable.
Common alusta	Distance batis	(CITES Appendix II).
Common skate	Dipturus datis	USPAR: Inreatened in Region 1.
Loofeeolo gulpor chark	Controphorus squamosus	OSPAR: Threatened in Region 1
Learscale guiper shark	Centrophorus squarnosus	USPAR. Intedented in Region 1. IUCN Vulperable
Portheagle	Lamna nasus	OSPAR: Threatened in Region 1
l'ortheagle	Edinina nasas	IUCN Vulnerable
		(CITES Appendix II).
Portuguese dogfish	Centroscymnus coelolepis	OSPAR: Threatened in Region 1.
		IUCN Near Threatened
Spurdog	Squalus acanthias	OSPAR: Threatened in Region 1.
		IUCN Vulnerable
BIRDS		
Arctic tern	Sterna paradisae	Not listed as OSPAR threatened species in Region 1.
		IUCN Least Concern.
		Listed in AEWA.
Atlantic puffin	Fratercula arctica	Not listed as OSPAR threatened species in Region 1.
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		IUCN Vulnerable.
		Listed in AEWA.
Black guillemot	Cepphus grylle	Not listed as OSPAR threatened species in Region 1.
		Listed in AEWA
Black legged kittiwake	Rissa trydactila	OSPAR: Threatened in Region 1
Black legged kittiwake		IUCN Least Concern.
		Listed in AEWA.
Common	Uria aalge	Not listed as OSPAR threatened species in Region 1.
Murre/Guillemot	2	IUCN Least Concern.
· · · · · · ·		Listed in AEWA.
Eurasian Golden Plover	Pluvialis apricaria	Not listed as OSPAR threatened species in Region 1.
		IUCN Least concern.
Great skua	Starcorarius/Catharacta	Not listed as OSPAR threatened species in Region 1
	skua	IUCN Least concern.
	SKUG	Listed in AEWA.
Ivory gull	Pagophila eburnea	OSPAR: Threatened in Region 1.
		IUCN Near Threatened.
		Not listed in AEWA.
Leach's Storm-petrel	Hydrobates leucorhous	Not listed as OSPAR threatened species in Region 1.
		IUCN Vulnerable.
Lossor black backod gull		USED IN AEWA.
Lesser black backed guil		IUCN Least Concern
		Listed in AEWA.
Northern gannet	Morus bassanus	Not listed as OSPAR threatened species in Region 1.
2		IUCN Least Concern.
		Listed in AEWA.
Thick billed murre.	Uria lomvia	OSPAR. Threatened in Region 1.
		IUCN Least Concern.
Stallar's aider	Palvatista stallari	LISTED IN AEWA.
Steller's elder	Polysticla stelleri	USPAR. Infedience in Region 1.
		Not listed in AFWA
MARINE MAMMALS		
Blue whale	Balaenoptera musculus	OSPAR. Threatened in Region 1.
		IUCN Endangered.
		CITES Appendix I.
Bowhead whale	Balaena mysticetus	OSPAR. Threatened in Region 1.
		IUCN Least Concern.
Fin whale	Balaenontera nhysalus	Not listed as OSPAR threatened species in Region 1
	balachoptera physalas	IUCN Endangered.
		CITES Appendix I.
Hooded seal	Cystophora cristata	Not listed as OSPAR threatened species in Region 1.
		IUCN Vulnerable.
Humpback whale	Megaptera novaeangliae	Not listed as OSPAR threatened species in Region 1.
		IUCN Least Concern.
Minko whole	Palaanantara aguraatrata	CITES Appendix I.
	Balaenoptera acurostrata	IUCN Least Concern
		CITES Appendix I (Except the population of West
		Groopland, which is included in Appendix II)
Northern bottlenose whale		Gieemanu, which is included in Appendix II)
	Hyperoodon ampullatus	Not listed as OSPAR threatened species in Region 1.
	Hyperoodon ampullatus	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient.
	Hyperoodon ampullatus	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I.
Northern right whale	Hyperoodon ampullatus Eubalaena glacialis	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I. OSPAR. Threatened in Region 1.
Northern right whale	Hyperoodon ampullatus Eubalaena glacialis	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I. OSPAR. Threatened in Region 1. IUCN Endangered. CITES Appendix I.
Northern right whale	Hyperoodon ampullatus Eubalaena glacialis Physeter macrocenhalus	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I. OSPAR. Threatened in Region 1. IUCN Endangered. CITES Appendix I. Not listed as OSPAR threatened species in Region 1.
Northern right whale Sperm whale	Hyperoodon ampullatus Eubalaena glacialis Physeter macrocephalus	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I. OSPAR. Threatened in Region 1. IUCN Endangered. CITES Appendix I. Not listed as OSPAR threatened species in Region 1. IUCN Vulnerable.
Northern right whale Sperm whale	Hyperoodon ampullatus Eubalaena glacialis Physeter macrocephalus	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I. OSPAR. Threatened in Region 1. IUCN Endangered. CITES Appendix I. Not listed as OSPAR threatened species in Region 1. IUCN Vulnerable. CITES Appendix I.
Northern right whale Sperm whale Walrus	<i>Hyperoodon ampullatus Eubalaena glacialis Physeter macrocephalus Odobenus rosmarus</i>	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I. OSPAR. Threatened in Region 1. IUCN Endangered. CITES Appendix I. Not listed as OSPAR threatened species in Region 1. IUCN Vulnerable. CITES Appendix I. Not listed as OSPAR threatened species in Region 1.
Northern right whale Sperm whale Walrus	<i>Hyperoodon ampullatus Eubalaena glacialis Physeter macrocephalus Odobenus rosmarus</i>	Not listed as OSPAR threatened species in Region 1. IUCN Data deficient. CITES Appendix I. OSPAR. Threatened in Region 1. IUCN Endangered. CITES Appendix I. Not listed as OSPAR threatened species in Region 1. IUCN Vulnerable. CITES Appendix I. Not listed as OSPAR threatened species in Region 1. IUCN Vulnerable. CITES Appendix I. Not listed as OSPAR threatened species in Region 1. IUCN Vulnerable.

According to official landing records, of all the species listed in Table 37, the UoA has only had interactions with portbeagles, and these have been minimal. Specifically, the clients trawling vessels landed 2 tonnes of portbeagle in 2016, while jiggers landed 100 kg. Different institutions such as Havstovan, the Natural History Museum, the Directorate of Fisheries and the client itself report that interactions with these species is highly improbable.

Although not established by regulation, elasmobranchs such as sharks, skates and rays are released back to the sea when they have no commercial value, regardless these species being dead or alive. It is generally accepted (and is described by Mandelman and Farrington (2007)) that these species have a high postcapture survival rate. However, the fishery would benefit from recording all interactions with these species.

Regarding marine mammal species, it is noticeable that some species receive very different qualification on different agreements. While minke whales are listed in CITES Appendix I they are qualified as a Least concern by IUCN and NAMMCO states that is the most abundant baleen whale with over 180,000 in the North Atlantic (NAMMCO 2011b, IWC 2010). (<u>https://nammco.no/topics/common-minke-whale/</u>). NAMMCO monitors the marine mammal population trends in the North Atlantic.

About seabirds, there is a large population of seabirds associated with the Faroe Islands. Regardless of the common use of tori lines in the longline fleet and the setting of the lines in the night to avoid interactions, interactions with seabirds are common and expected, mostly with fulmars (secondary species), but not with other bird species. ETP bird species feed closer to the shore and interactions with the fishing fleet are not expected (Bergur Olsen, Havstovan, personal comment).

There are 3 Ramsar sites in the Faroe Islands to protect bird colonies. These areas are:

Mykines: Grassy slopes, sea cliffs and the surrounding sea provide breeding and feeding habitat for an estimated 250,000 pairs of seabirds of 15 species, many of them of European importance. Half of the bird population is made up of the Faroe Island's largest colony of Atlantic Puffins (*Fratercula arctica*) with 125,000 pairs. Common Guillemot, Black Guillemot, Black-legged Kittiwake and Northern Fulmar breed here as well as the only colony of Northern Gannet (*Morus bassanus*) and Leach's Storm-petrel (*Oceanodroma leucorhoa*) in the Faroe Islands. The skerries around the rocky marine shores provide habitat for colonies of European Shag (*Phalacrocorax aristotelis*).

Nolsoy: Grassy and stony slopes as well as the surrounding sea area provide breeding and feeding habitat for one of the world's largest concentrations of European Storm-petrel (*Hydrobates pelagicus*), with 50,000 pairs. The extensive sea cliffs also host important breeding populations of Atlantic Puffin (*Fratercula arctica*), with 30,000 pairs, Black-legged Kittiwake (*Rissa tridactyla*), Northern Fulmar (*Fulmarus glacialis*) and Black Guillemot (*Cepphus grille*). The Arctic Tern (*Sterna paradisae*) also breeds here. Traditional hunting of Northern Fulmar and Atlantic Puffin is still practiced in the site.

Skuvoy: Grassy slopes and sea cliffs provide breeding habitat for large concentrations of up to 280,000 pairs of seabirds. The site hosts the Faroe Islands' largest colony of Manx Shearwater (*Puffinus puffinus*) with an estimated 10,000 pairs and Common Guillemot (*Uria aalge*) with 96,000 individuals. Moreover 12,000 pairs of Black-legged Kittiwake (*Rissa tridactyla*), 50,000 pairs of Northern Fulmar (*Fulmarus glacialis*), and 40,000 pairs of Atlantic Puffin (*Fratercula arctica*) can be found in the site. Bird species of European importance include the European Storm-petrel (*Hydrobates pelagicus*) and the Golden Plover (*Pluvialis apricaria*). Great Skua and Arctic Skua also feed along the coast. Traditional seabird hunting and chick collection of Manx Shearwater is still practiced to some extent.

Habitats

Benthic habitats in Faroese EEZ waters are studied by different organizations. The European Marine Observation and Data Network (EMODnet) has mapped Faroese waters to find out that common seabed habitats range from muddy (blue) and sandy bottoms (yellow) to bottoms where gravels and stones (brown and red) are also abundant. According to the expert review of the seabed (Bett et al. 2001), the sediment grain size tends to decrease with depth. It also appears to be a systematic variation in sediment type from north to south, with coarser/lower mud content sediments to the south.

Figure 35 Faroese habitat types.

Yellow indicates sandy bottoms, pink indicates muddy gravel, blue light indicates sandy mud and light brown indicates sandy gravel.



Source: http://www.emodnet-geology.eu/map-viewer/

As shown in the VMS maps, the vast majority of the demersal trawl fishing activity takes place in the Eastern part of the Faroese Islands, in the Faroe Plateau. The area is dominated by sandy and muddy grounds. Regulation on fishing activities prohibits all trawling activity inside the 12 nautical miles Territorial Sea of the Faroe Plateau (with a derogation for small boat trawlers targeting flatfish in the summer time, when 10-15 small trawlers (< 500 Hp) are allowed to fish in specified areas within this limit, mainly targeting lemon sole and plaice). As a result, 60% of the Faroe Plateau at depths of less than 200 m is closed to trawling for most of the year. There are four large areas outside the Faroe Plateau 12 nm baseline which are closed throughout the year to all trawl fishery. In addition, most of the Faroe Bank is permanently closed to trawling, as trawling at waters shallower than 200 m is forbidden.

Figure 36 Location of the Faroese demersal trawl fleet activity (VMS maps for the complete 2016 year).



Vulnerable marine ecosystems are studied by the OSPAR Commission. Faroe Islands is a signatory party of the OSPAR Convention. According to the OSPAR Commission, most common Vulnerable Marine Ecosystems (VME) in OSPAR Region 1 are: coral gardens, deep-sea sponge aggregations, intertidal mudflats, *Lophelia pertusa* reefs, *Modiolus modiolus* beds, seamounts and *Zostera* beds. OSPAR map of threatened habitats in Faroese waters shows that *Lophelia pertusa* reefs are abundant in Faroese waters. There are no indications in OSPAR maps of other VME indicator species in the Region.



Figure 37 Location of OSPAR threatened or declining habitats in Faroese EZZ.

Source: https://odims.ospar.org/maps/298

Table 38 shows which habitats are endangered in the different OSPAR regions. Faroe Islands are located in Region 1. According to this table, *Lophelia pertusa* reefs are considered threatened in Region 1.

Table 38 OSPAR regions where Vuli	nerable marine ecosystems a	re in decline.	VME marked in
bold are in decline in Region 1.			
			-

DESCRIPTION	<i>OSPAR Regions where the habitat occurs</i>	<i>OSPAR Regions where such habitats are under threat and/or in decline</i>		
Carbonate mounds	I, V	V		
Coral Gardens	I, II, III, IV, V	All where they occur		
Cymodocea meadows	IV	All where they occur		
Deep-sea sponge aggregations	I, III, IV, V	All where they occur		
Intertidal Mytilus edulis beds on mixed and sandy sediments	II, III	All where they occur		
Intertidal mudflats	I, II, III, IV	All where they occur		
Littoral chalk communities	II	All where they occur		
Lophelia pertusa <i>reefs</i>	All	All where they occur		
Maerl beds	All	III		
Modiolus modiolus beds	All	All where they occur		
Oceanic ridges with hydrothermal vents/fields	I, V	V		
Ostrea edulis <i>beds</i>	II, III, IV	All where they occur		
Sabellaria spinulosa reefs	All	II, III		
Seamounts	I, IV, V	All where they occur		
Sea-pen and burrowing megafauna communities	I, II, III, IV	II, III		
Zostera <i>beds</i>	I, II, III, IV	All where they occur		

Source: <u>https://www.ospar.org/work-areas/bdc/species-habitats/mapping-habitats-on-the-ospar-list-of-threatened-or-declining-species-and-habitats</u>

The benthic fauna of the seas around the Faroe Islands have been sampled and studied for over 200 years (Bruntse and Tendel, 2001) but it is only relatively recently that these studies have been drawn into more formal frameworks aimed at mapping species and habitat distributions and assessing the effects of fishing and other anthropogenic influences (Garcia *et al.*, 2007). The most detailed and up-to-date information on the distribution of benthic species and broad-scale habitats is studied as part of the <u>BIOFAR</u> programme (Bruntse & Tendel, 2001). Besides, Denmark participates in the <u>CoralFish project</u>,

which assess the interaction between cold water corals, fish and fisheries, in order to develop monitoring and predictive modelling tools for ecosystem-based management in the deep waters of Europe.

Figure 38 below shows the distribution of different bottom types and sensitive habitats as described by Bruntse and Tendel (2001).



Figure 38 The distribution of benthic habitats and species sensitive to trawling impacts.

Source: Bruntse and Tendel, 2001.

Cold-water corals such as *Lophelia pertusa, Paragorgia arborea* and *Primnoa resedaeformis* reefs are abundant in Faroese waters, with *Lophelia pertusa* reefs been the most widespread, but their distribution tends to be limited to depths 200–400 m at temperatures of 4–8° C (Bruntse & Tendel, 2001). This distribution is well documented.

Figure **39** below shows the distribution of both current (solid green) and past (hatched green) patches of *Lophelia pertusa* reefs. The red lines are areas define areas closed for trawling, for fisheries management reasons. (See

Figure 40 for areas closed to protect coral gardens).





Source: prepared by Jákupsstovu for WGECO, 2002.

An individual reef (bioherm) studied during the BIOFAR project and measured by sonar equipment showed to be 10 m high and 110 m wide (Bruntse and Tendel, 2001). A census of associated fauna carried out on a total of 25 two-kilos blocks of coral taken from two BIOFAR sampling locations identified 300 (non-fish) species, of which 256 species were found on the blocks examined and 42 species were identified from loose coral rubble (Jensen & Fredrikssen, 1992; Bruntse & Tendel, 2001). Reef areas are also recognised as good long-line fishing areas (Husebø et al., 2002) ROV studies in Norwegian waters have shown a preponderance of saithe and redfish around such reefs (Mortensen et al., 1995). Redfish have also been found to aggregate around such features in Faroese waters but to date, no significant association with saithe has been recorded (Bruntse & Tendal, 2001).

It is probable that the large bioherms takes many centuries, possibly millennia, to grow and it is universally recognised that their brittle structure makes them highly vulnerable to damage by towed fishing gears. Indeed, it is generally recognised that the cold-water coral areas were more extensive pretrawling than they are today (WGECO, 2002). Nevertheless, the continuing, widespread existence of such large, potentially vulnerable structures suggests that while some reefs have been razed by past fishing activity there are still many areas in Faroese waters that remain unaffected. Any coral area that is within the Faroese 12 miles territorial sea receives permanent protection as trawling is prohibited. Beyond the 12 miles limit there are also very extensive areas in which demersal trawling is prohibited, including areas closed explicitly to protect coral reefs. In practice, skippers actively avoid known areas of coral as the economic consequences of coral-trawl-gear interactions can be quite severe – damaged or lost nets with loss of catch and fishing time. Other species receiving special attention within the BIOFAR programme are sponge communities and horse mussel beds, although none of them are identified in the OSPAR map of threatened habitats in Faroese waters.

Large sponge communities increase habitat complexity and attracts a large number of other species (Klitgaard *et al.*, 1997). The fauna associated with the large sponges off the Faroe Islands were found to act as keystone habitat for *c*. 250 species of invertebrates (Bett & Rice, 1992), providing habitat, refuge from predation or physical strain and enhanced food supply from the surrounding water. Very few species utilize the sponges as a food source. The 250 associated-species are facultative sponge dwellers, so they are also be found in other habitats. The only near-obligate species reported are the isopod *Gnathia abyssorum* and the chitonid mollusc *Hanleya nagelfar* (Klitgaard 1995; Warén and Klitgaard 1991). Juvenile redfish and other groundfish have also been regularly observed in association with large sponges, suggesting that they are a suitable feeding ground for particular life-history stages of some fish species (Garcia *et al.*, 2007) but there does not appear to be an explicit association with saithe (Klitgaard & Tendal, 2001).

Surveys of areas where sponges had once been found recorded very few sponges during the survey (Garcia *et al.*, 2007). Of the larger sponges found (20–40cm in maximum dimension), many were found with their inhalent current channel system filled with sediment particles. It was assumed that something happened in the surroundings that re-suspended large quantities of sediment in the water column. While it is not certain that trawling was the cause, at depths of 300+ m it was considered unlikely to be a storm-driven effect. Since the sponges otherwise gave the impression of being healthy, it would seem that they have some ability to recover by cleaning the respiro-feeding system after exposure to high sediment loads. Nevertheless, persistent exposure would undoubtedly result in severe stress and (some) mortality (Garcia et al., 2007).

Bottom trawling damages sponge colonies. Recovery takes place mostly in the summer time, which can lead to slow recovery rate. The size structure within sponge populations indicates slow reproduction and recruitment, and high age of the large specimens. Repeated disturbance may lead to permanent extirpation of sponge species in an area, while recovery, once the disturbance stops, takes a long time. Comparable investigations in Antarctica point to decades if not centuries to recover damaged sponge communities (Dayton 1979; Gatti 2002). Fishermen tend to avoid known areas of sponges as it difficulties the fishing operation.

Horse mussel beds (*Modiolus modiolus*) also provide three-dimensional structure, albeit a somewhat lower profile than coral or sponges, and acts as a keystone species in which many other species are found. Its distribution is shallower (< 200 m) than either the corals or most of the sponge communities and its current distribution around Faroe Islands is limited to three main areas (Dinesen & Bruntse, 2001) which are mostly located inside the 12 nautical miles limit.

As with the corals and sponges, there is a wide variety of other fauna associated with horse mussel reefs; 175 species were identified during the BIOFAR project, many of which are known to be prey species for commercially exploited fish. These beds are most vulnerable to fishing gears that dig into the seabed such as dredges and possibly rock-hopper trawls where long-established beds have built into higher-profile reefs. However, the distribution of these beds is overwhelmingly within the 12 miles territorial sea and other areas in which trawling is prohibited and they are exposed to minimal risk of trawl-related disturbance. As for the summer flatfish trawlers that fish on the Faroe Plateau to the east of the islands, their permitted area of operation is seaward of the principal *Modiolus* beds and consequently pose minimal threat.

Many habitats and species of conservation interest receive an element of protection either through fishery management measures or explicit environment protection measures. Besides, there is a comprehensive set of marine protected areas in Faroese EEZ. Some of them are temporary closures to protect spawning or juvenile fish while others are permanent closures specifically designed to protect coral reefs.

Figure 40 below shows that the entire Faroe Plateau and much of the surrounding slope (where many sensitive species such as cold-water corals are most abundant) is closed to trawling throughout the year, as well as much of the slope area around the Faroe Bank, plus three areas closed explicitly to protect cold-water coral-reef features. Enforcement in area closures is carried out by the Coast Guard.

No areas have been specifically designated for the protection of sponge communities or horse mussel beds in Faroese waters. Sponge-community are extensive within the various boundaries in which trawling is prohibited, so they benefit from the 12 nautical miles trawling restriction. It is expected that the C2 area closure to protect coral reefs will also serve to protect sponge communities in the area, as

Figure 38 above shows some overlap between the two species. In any case, again skippers generally avoid known areas of high sponge abundance to minimise the risk of adverse economic interactions. Significant catches of sponges both crush the fish, making them unfit for human consumption, and can burst the net on hauling. Either outcome results in a loss of time, catch and increases costs.





Source: http://vorn.kort.fo/# , 2017.

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Ecosystem

The Faroe Islands (comprised by 18 small islands and smaller skerries) are located at the South East of Iceland and North West from the Shetland Islands, at 62°N and 7°W. The Faroe Plateau, with depths <200 m around the islands, comprises c.20 000 km² (c. 6.5% of the 308 000 km2 EEZ) while depths <100 m only constitute c.5400 km².

To the SW of the Faroe Islands there are a series of banks, the largest of which is the Faroe Bank, mostly <100 m depth. It is separated from the Faroe Plateau by the 800+ m deep Faroe Bank Channel. Other Banks include Bill Bailey Bank, Outer Bailey (Lousy) Bank, George Bligh Bank, and the Rosemary Bank. Although small in area, the upper parts of the banks (i.e. within the 200m depth contour) inside the Faroese EEZ are important for commercial fisheries (Bruntse & Tendel, 2001).

Water around Faroe Islands are bathed by the warm Gulf stream, with water temperature of around 8°C and salinities around 35.25. Deeper waters are cooler and can reach 0°C. Shallow regions are influenced by tidal currents which mix the shelf water creating a homogeneous water mass at 6-10°C (depending on the season) which runs clockwise and which is easily distinguishable from offshore waters. Offshore waters have experienced an increase in water temperature in the past decades.

The water masses of the Faroe-Shetland Channel consist of an upper layer of warm North Atlantic Water flowing towards the northeast into the Norwegian Sea, overlying a lower layer of cold Norwegian Sea bottom water, flowing in the opposite direction (Turrell et al. 1999). The colder, deeper layer is funnelled to the west through the Faroe Bank Channel and into the North Atlantic to the west of the Faroe Islands. The boundary between the warm and cold waters is rather dynamic and may occur in depths between 400 and 600 m on the Shetlands side and 500 and 800 m on the Faroe side (Bett et al. 2001).

Five water masses can be distinguished according to differences in salinity and temperature (Turrell et al. 1999). These water masses are described in the following paragraphs with regards to the vertical distribution.

Surface layers (upper 0-200/400 m of the water column). In the surface layer two distinctive water masses exist:

- The North Atlantic Water (NAW), warmer (> 8 °C) and more saline, is confined to the Scottish slope and exists inshore at depths less than 400 m.
- The Modified North Atlantic Water (MNAW), cooler, (6.5-8 °C), and dominating bigger areal extensions. It flows clockwise around the Faroe Plateau.

Intermediate layer. Below the surface layer waters, colder East Icelandic/Arctic Intermediate Water (EI/AIW) arrives from the north on the eastern Faroe Plateau slope and mixes with the modified North Atlantic water. AIW (2-5.5 °C) flows anticlockwise along the southern edge of the Norwegian Sea Basin and around the Faroe-Shetland Channel.

Bottom layers. Due to sinking of surface water in the Arctic Ocean and Nordic seas, an overflow of cold and somewhat less saline water is pushed through the deepest part of the Faroe-Shetland Channel, below about 600 m depth. Two different water masses occur in this part of the Channel:

- $_{\odot}$ Norwegian Sea Arctic Intermediate water (NSAIW), with water temperature between -0.5 and +0.5 °C, and below that is the
- Norwegian Sea Deep Water (NSDW) colder than -0.5 °C and situated under the NSAIW.

Figure 41 Bottom topography, circulation, and water masses at the surface in the area around the Faroes. Source: ICES Advice 2008, Book 4.



Ecosystem in these areas are also distinguishable as they have different planktonic communities, benthic fauna and fish stocks. As an example, spring phytoplankton bloom takes place earlier in the shallower shelf waters than in the off-shelf area. Regardless occurring first in shelf waters, timing and intensity of blooming varies from year to year, with expected consequences in the ecosystem, such as the availability of food for fish larvae.

The zooplankton species composition is also quite different from that in the surrounding oceanic environment. While the copepod *Calanus finmarchicus* dominates the oceanic zooplankton, closer to the shelf the zooplankton is a mixture of shelf species, oceanic species, fish larvae and benthic fauna that spawn on the shelf. The seasonal cycle of the zooplankton closely follows the phytoplankton cycle. The main spawning season for the fish on the shelf is spring, between February and May. The eggs and larvae are dispersed around the shelf area with the currents and feed on zooplankton during spring and early summer.

Primary production also experiences high variability through the years, apparently due to hydrological factors, and shows a mean (on shelf waters) of around 160-200 g C m-2 of which about 50% is estimated to be new production (Debes et al., 2008). This primary production variability affects higher trophic levels in the ecosystem and can be used as an indicator of the productive status of the ecosystem for every year.

A clear relationship between primary production and higher trophic levels, such as fish and birds, has been found in the Faroe shelf ecosystem with a rapid response at all trophic levels to variations in primary productivity (Gaard et al., 2002). The productivity of the Faroese waters was very low in the late 1980s and early 1990s with concomitant negative effects on fish recruitment and growth. It appears that this correlation may be driven by the strength of the sub-polar gyre south-west of the Faroe Islands, which is itself driven by the relative strengths of the warm and cold-water currents (Hansen, 2011). Since then, however, fishery productivity appears to have reverted to 'normal' conditions.

There are about 240 fish species in Faroese waters, of which 25 are commercially exploited. Cod, haddock and saithe are the most commercially important demersal stocks. Sandeel and Norway pout also play important roles in the Faroese ecosystem, as they play a prey role for demersal fish species but also for seabirds. Blue whiting is the most abundant pelagic species.

Marine environment and fishery research in Faroe Islands are carried out by the Faroe Islands Marine Research Institute, Havstovan (<u>www.frs.fo</u>). The main task of Havstovan is to advise the Faroe Islands fisheries minister on the basis of its research into the marine resources harvested by Faroese fishermen (shellfish, fish, birds and marine mammals) and the environment governing their distribution and production. Havstovan is an active contributor to and participates in the scientific activities of all the major marine science organisations in the NE Atlantic: the International Council for the Protection of the Sea

(ICES; <u>www.ices.dk</u>), the International Whaling Commission (IWC; <u>www.iwc.org</u>), the North Atlantic Salmon Conservation Organisation (NASCO; <u>www.nasco.int</u>), the North East Atlantic Fisheries Commission (NEAFC; <u>www.neafc.org</u>), the Nordic Council Cooperative Research (Nordforsk; <u>www.nordforsk.org</u>), the Oslo and Paris Commission for the Protection of the Marine environment in the NE Atlantic (OSPAR; <u>www.ospar.org</u>); and the North Atlantic Marine Mammal Commission (NAMMCO; <u>www.nammco.no</u>).

3.5 Principle Three: Management System Background

3.5.1 Jurisdiction

The fishery is restricted to the Faroese EEZ and is managed under Faroese jurisdiction.

3.5.2 Objectives

The objective of Faroese fisheries management is to conserve and utilize marine fish stocks in order to ensure biological and economic sustainability and secure optimal socio-economic benefits from fisheries. The precautionary approach is not mentioned explicitly in the Commercial Fisheries Act (replaced in December 2017 by the Act on the Management of Marine Resources), but the requirement to protect marine resources and take the best scientific knowledge into account equals the requirements of the precautionary approach, as laid out in the FAO Code of Conduct.

3.5.3 Management system and decision-making procedures

The Faroe Islands is part of the Kingdom of Denmark, but has had home rule since 1948, including full autonomy in all matters related to fisheries management. It has a well-established system for fisheries management in place, codified in the 1994 Commercial Fisheries Act and replaced in 2017 by the Act on the Management of Marine resources, and a plethora of supporting legislation. Under the Government of the Faroe Islands (Landsstýri), the Ministry of Fisheries (Fiskimálaráðið) has the power to issue executive orders to regulate the fisheries, while scientific advice is produced by the Faroe Marine Research Institute (Havstovan) and enforcement taken care of by the national Fisheries Inspection Service (Vørn – Fiskiveiðieftirlitið), both subordinate to the Ministry. The authority to decide the number of fishing days each season rests with the Faroese Parliament (Løgtingið – in Danish: Lagting), which, of course, also is the state organ authorized to issue formal law.

3.5.4 Dispute resolution mechanisms

At national level in the Faroe Islands, there is an effective, transparent dispute resolution mechanism in place, as fishers can take their case to court if they do not accept the rationale behind an infringement accusation by enforcement authorities or the fees levied against them. Verdicts at the lower court levels can be appealed to higher levels.

3.5.5 Stakeholders and consultation processes

The Faroe Islands has a long tradition of continuous consultation and close cooperation between government agencies and user-group organizations, codified in the Act on the Management of Marine Resources and supplementary legislation. Consultations take place both through a number of formal standing advisory committees, including one overarching Advisory Board, and in focused consultative meetings on specific issues. Fishermen can be represented at an individual, company of producer organization (PO) level, or through the Faroese Fishermen's Association. There is also a written hearing process before regulations are revised or new regulations introduced, a procedure required by law. The fisheries research institute Havstovan interacts with both management authorities and stakeholders. They are consulted by the Ministry of Fisheries on a regular basis, and they also seek advice from the fishing industry in connection with their quota recommendations, traveling around the country to explain the rationale for their recommendations. There are no NGOs in the Faroes that engage themselves in fisheries.

3.5.6 Monitoring, control and surveillance

Monitoring, control and surveillance is taken care of by the Faroese Fisheries Inspection Service, in collaboration with other states' enforcement authorities. The enforcement system includes reports from the vessels, physical inspections at sea and in harbor, as well as information exchange between the various countries' enforcement authorities.

Fishing vessels are required to keep a logbook and report catches to the Fisheries Inspection Service on a daily basis. Electronical logbooks have been introduced for all vessels above 15 BT (in practice all vessels that do not deliver their catch every day), and VMS is obligatory. The Fisheries Inspection Service carries out 300-350 inspections per year in the Faroese Economic Zone. It has two inspection vessels at its disposal, and there is at any time a vessel from the Royal Danish Navy present in Faroese waters, which also enforces Faroese fisheries regulations. One of the Faroese inspection vessels has a helicopter on board, which enables inspectors to conduct impromptu inspections. The Ministry of Fisheries also has its own helicopter, which can be used for fishery inspections. At-sea inspections include control of the catch from the last haul, the fishing gear and fish in the holds. The inspectors have the possibility to close an area with too much juvenile or bycatch for a period of up to two weeks (real-time closure). All landings have to be reported 12 hours in advance in order to give the inspectors the possibility to check the landed catch. Both landing and at-sea control is conducted using a risk-based framework aimed at utilizing resources to optimize compliance at any given moment.

As follows, there are a number of possibilities for enforcement authorities to physically check whether the data provided by fishers through self-reporting are correct. In addition, VMS data enables control of whether area restrictions are observed, among other things.

The Faroese enforcement system uses a graduated sanctioning system, with sanctions ranging from temporary withdrawal of license, confiscation of gear and fines to formal prosecution and possibly permanent withdrawal of license. If the fishers do not accept the fines issued by the enforcement or prosecution authority, they can take the case to court. The decision of a lower-level court can then be appealed to higher-level courts. For a first-time offence, a warning is given if the infringement is not of a very serious nature. If it is repeated, the license will normally be withdrawn and/or the fishing gear will be confiscated. The duration of the withdrawal depends on the seriousness of the infringement, but typically the license will be withdrawn for a two-week period. If the offence is repeated again, a fine will be introduced in addition to the withdrawal of the license or the case will be brought to court.
4 EVALUATION PROCEDURE

4.1 Harmonised Fishery Assessment

4.1.1 Overlapping fisheries

This report covers the MSC assessment of the tusk and ling stocks in ICES areas Vb (Vb1 and Vb2) and part of area VIa, this is, inside Faroese EEZ.

The ling stock under assessment is a local ling stock which is only distributed in Faroese waters. Therefore, there is no possibility to harmonise the Principle 1 results with any other ling fishery (apart from other MSC ling fisheries taking place in Faroese EEZ, of which at present there is none assessed nor under an MSC certification process).

As regards tusk, there are different MSC fisheries targeting tusk in different fishing grounds: **Table 39: Tusk MSC fisheries.**

MSC fishery	Tusk stock	Comment
Faroese tusk and ling fisheries	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)	
Norwegian tusk and ling fisheries	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)	
	ICES subareas I and II (Northeast Arctic)	Not Relevant
	ICES subarea VIb	Not Relevant
North Sea joint demersal fisheries	ICES subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic)	
ISF golden redfish, blue ling and tusk fisheries	ICES subarea 14 and Va	Not Relevant

There are other MSC certified Faroese fisheries, which have been taken into account in the scoring of Principles 2 and 3 of the Faroese tusk and ling fisheries.

Table 40: Faroese MSC fisheries

MSC fishery	Gear type	Geographical area	Assessment status
Faroe Islands silver smelt	Pelagic trawl	Faroe EEZ and Scottish waters	MSC certified
Faroe Islands NEA haddock	Demersal trawl	Barents Sea	MSC certified
Faroe Islands queen scallop	Scallop dredge	Faroe EEZ	MSC certified
Faroe Islands cold water prawn	Demersal trawl	Barents Sea	MSC certified
Faroe Islands saithe	Demersal trawl, longline and jigging	Faroe EEZ.	Certified. Under reassessment process.
Faroe Islands tusk and ling	Demersal trawl, longline and jigging	Faroe EEZ	In assessment
Faroe Islands and Iceland NEA cod, haddock and saithe	Demersal trawl	Barents Sea	MSC certified

4.1.2 Harmonisation activities and outcomes

As mentioned above, there is no space for harmonization activities for the ling stock. As regards the tusk stock, there is space for harmonization in some PI (PI 1.1.1) while there is also space for differences in other PIs as the stocks are managed differently by different jurisdictions.

Table 41: Outcomes for Principle 1 scores for tusk fisheries in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic) are as follows:

Fishery	Stock	CAB	PI	PI	PI	PI	PI
			1.1.1	1.2.1	1.2.2	1.2.3	1.2.4
Faroese tusk and ling	Tusk	DNV-GL	90	85	60	80	90
fisheries							
Norwegian tusk and ling	Tusk	DNV-GL	90	90	75	80	90
fisheries (only UoA 3 and							
UoA 4) ^{*) **)}							
North Sea joint demersal	Tusk	MEC	90	85	75	80	90
fisheries ^{**)}							

^{*)}The Norwegian tusk and ling fishery has different UoA covering different tusk stocks in different fishing grounds (including tusk in areas I and II and tusk in area VIb, which are different tusk stocks than the Faroese tusk under assessment).

**) The Norwegian tusk and ling as well as the North joint demersal fisheries do not include the Faroese Grounds (ICES 5.b) in their UoCs.

The tusk stock is widely spread in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic). There are 3 different MSC fisheries targeting this stock. These fisheries are the North Sea joint demersal fisheries, which targets tusk in the North Sea, the Norwegian tusk and ling fisheries, which targets tusk in the Faroese tusk and ling fishery, which targets tusk in Faroese waters. As PI 1.1.1 refers to the status of the stock, the scoring of these 3 fisheries is harmonised.

The tusk stock is managed differently in the different jurisdictions. While the Norwegian and North Sea catches are managed by Norway and EU through the allocation of TACs, Faroese catches are managed through the allocation of fishing days originally intended to manage the saithe, cod and haddock fisheries. At present there is no TAC system implemented in Faroese waters but the recently modified Faroese Marine Resources Act seeks for the implementation of a TAC system for all Faroese fisheries by 2019. The different Harvest Control Rules implemented in the different jurisdictions justifies the different scores for PI 1.2.2, as scores for the Joint Demersal North Sea fisheries and the Norwegian tusk and ling assessments have not taken into consideration the Faroese component in the management of the stock.

As regards Principle 2 PIs, the tusk and ling fishery has been harmonised with results from the Faroe Islands saithe fishery, as both fisheries take place in the same fishing grounds with the same gear types.

Principle 2 scores	Faroe	Faroe Islands saithe			lands tusk	and ling
Gear type	Demersal trawl	Longline	Jigging	Demersal trawl	Longline	Jigging
2.1.1	90	80	80	90	80	80
2.1.2	80	80	80	80	80	80
2.1.3	85	85	85	85	85	85
2.2.1	80	80	80	80	80	80
2.2.2	85	85	85	85	85	85
2.2.3	85	85	85	85	85	85
2.3.1	95	95	95	95	95	95
2.3.2	90	90	90	90	90	90
2.3.3	80	80	80	80	80	80
2.4.1	80	100	100	80	100	100
2.4.2	85	100	100	85	100	100
2.4.3	85	85	95	85	85	95
2.5.1	90	90	90	90	90	90
2.5.2	85	85	85	85	85	85
2.5.3	95	100	100	95	100	100

Table 42: Principle 2 scores for the saithe and tusk and ling fisheries

As regards Principle 3, have been harmonised with those in the Faroe Islands saithe fishery, also assessed under the v2.0 of the MSC standard.

Principle 3 scores	Faroese saithe fishery	Faroese tusk and ling fishery	Faroese silver smelt	Faroese queen scallop
	V2.0	V2.0	V1.3	V1.3
3.1.1	95	95	75*	100
3.1.2	95	95	100	100
3.1.3	100	100	100	100
3.1.4	N/A	N/A	100	100
3.2.1	90	90	100	95
3.2.2	95	95	100	80
3.2.3	95	95	100	100
3.2.4	80	80	80	75**
3.2.5	N/A	N/A	80	75***

Table 43: Principle 3 scores for Faroese fisheries in Faroese waters.

*condition on PI 3.1.1 for the silver smelt fishery relates to the lack of agreement between EU and Faroe Islands as the stock is managed by different jurisdictions.

**condition on 3.2.4 relates to the lack of monitoring by public management institutions of the scallop stock

***Condition on .2.5 relates to the lack of external review of the scallop stock assessment.

While the scores of the different overlapping fisheries has been taken into consideration when conducting this assessment, the team has not conducted any harmonization activity as such (apart from sharing scoring information with other CABs), as the team considers that different scores are justified by the differences in management by different jurisdictions. Besides, the saithe assessment and the tusk and ling assessment have been carried out by the same CAB and assessment team.

4.2 Previous assessments

The Faroese tusk and ling fishery has not been previously MSC certified. DNV-GL conducted a preassessment on the tusk and ling fishery in August 2017.

4.3 Assessment Methodologies

Table 44 Assessment methodologies

Standard	MSC Fishery Certification Requirements and Guidance version 2.0.
Report template	MSC Full Assessment Reporting Template v2.0
Assessment tree	Default assessment tree

4.3.1 The MSC fisheries standard

The MSC fisheries standard sets out requirements that a fishery must meet to enable it to claim that its fish come from a well-managed and sustainable source. The MSC standard applies to wild-capture fisheries that meet the scope requirements as confirmed in section 3.1.

The MSC fisheries standard comprises three core principles:

Principle 1: Sustainable target fish stocks

A fishery must be conducted in a manner that does not lead to over-fishing or depletion of the exploited populations and, for those populations that are depleted, the fishery must be conducted in a manner that demonstrably leads to their recovery.

Principle 2: Environmental impact of fishing

Fishing operations should allow for the maintenance of the structure, productivity, function and diversity of the ecosystem (including habitat and associated dependent and ecologically related species) on which the fishery depends.

Principle 3: Effective management

The fishery is subject to an effective management system that respects local, national and international laws and standards and incorporates institutional and operational frameworks that require use of the resource to be responsible and sustainable.

4.3.2 The assessment tree structure

The default tree structure is divided into four main levels for the purposes of scoring, as summarised below and illustrated in Figure 42:

- Principle: The Principles represent the overarching basis for the assessment tree
- Component: A high level sub-division of the Principle
- Performance Indicator (PI): A further sub-division of the Principle
- Scoring Issue (SI): A sub-division of the PI into related but different topics. Each PI has one or more scoring issues against which the fishery is assessed at the SG 60, 80, and 100 levels.

The detailed assessment tree used in this assessment is included in Appendix 1.

Figure 42 The assessment tree structure



4.4 Evaluation Processes and Techniques

DNV GL – Report No. 2017-027, Rev. 2 – <u>www.dnvgl.com</u> MSC Full Assessment Reporting Template V2.1 – issued 8 April 2015 Template approval date:

Site visits to the fishery were performed by the certification body (here DNV GL) and the assessment team and consultations were done with interested stakeholders. The performance indicators and the pertaining scoring systems were evaluated, and it was judged if the fishery meets the requirements for MSC certification.

In order to fulfil the requirements for certification the following minimum scores are required:

- The fishery must obtain a score of 80 or more for each of the three MSC Principles, based on the weighted aggregate scores for all Performance Indicators under each Criterion in each Principle.
- The fishery must obtain a score of 60 or more for each Performance Indicator under each Criterion in each Principle.

Even though a fishery fulfils the criteria for certification, there may still be some important potential risks to future sustainability that are revealed during assessment. These are performance indicators that score less than 80, but more than 60. In order to be granted a MSC fishery certificate the client must agree to further improvements to raise the score to 80. The certification body (here DNV GL) sets a timescale for the fishery to improve the relevant areas, so that the certification process can continue.

Default performance indicators and the scorings allocated in the evaluation are enclosed in the section 6.2.

4.4.1 Site Visits

Relevant stakeholders have been identified and stakeholder meetings were scheduled and carried out as planned in Torshavn and Klaskvík (Faroe Islands) in September 2017. Persons consulted and key issues discussed during these site-visits are outlined in Table 45 below. Information gathered was used as a basis for this report and is presented throughout several chapters and in the scoring tables.

Date and location of the	Name and affiliation	Summary of information obtained. The following topics were included in the agenda for the
meeting.		meetings.
5.09.2017 Torshavn	Ministry of Fisheries: Ulla S. Wang	Fisheries Management: Update on status regarding the new fishery laws and management plans. Update on any changes to the regulations and harvest strategies of the fisheries of saithe, tusk, ling. Long-term objectives for the fisheries. Landing obligation. Consultation and decision-making process. Mechanisms for resolution of legal disputes Strategy in scientific research. Protection of sensitive habitats
	Directorate of Fisheries: Meinhard Gaardlykke	Control, surveillance and monitoring routines/regulations applied to the fishery in Faroe EEZ. Logbooks: recording of non-commercial species Significant discrepancies found at landing control. Level of slipping/discards in the fisheries. Fishermen's compliance with laws and regulations. Consultation and decision-making process Mechanisms for resolution of legal disputes Review of regulations for the fisheries.
5.09.2017 Torshavn	Natural History Museum: Bjarni Mikkelsen	ETP species: Marine mammals, birds and elasmobranchs. Expected bycatch and interactions. National regulation (if any) protecting bycatch species. Mitigation measures to avoid bycatch of ETP species, specifically for birds and marine mammals.
6.09.2017 Klaskvík	Client meeting in Klaskvik: Durita í Grotinum Jogvan Hansen Liggjas Johannesen	Fishing season for the different fish species and gear types. Location of fishery Gears: Description and draws of the different gears used. Regulation that applies to the different species and gears.

 Table 45 Stakeholders meetings conducted and key issues discussed

DNV GL – Report No. 2017-027, Rev. 2 – <u>www.dnvgl.com</u> MSC Full Assessment Reporting Template V2.1 – issued 8 April 2015 Template approval date:

	Jørmund Olsen Jens Pauli Petersen	 Historical fishing levels (quotas and catches) VMS maps Disputes with national/ international authorities for the last 5 years. Penalties and sanctions: Records of sanctions and penalties (if any). Management plans: Specific management plan or measure to manage the stocks of saithe, tusk and ling? Future Harvest strategy and Harvest Control Rules that will apply in 2018 and the coming years Management tools available for the stocks of saithe, ling and tusk.
		Traceability and Chain of Custody.
7.09.2017 Torshavn	Havstovan (Marine Research Institute):	Stock status, stock structure and recruitment for the saithe, tusk
1015114111	Lise Helen Ofstad	Review of Limit and Target reference points established for the
	Eilif Gaard	stock
	Bergur Olsen	Approach to stock assessments
		Sampling programs and level of sampling
		Level of discards (composition of species, quantities)
		Level of by-catch (composition of species, quantities).
		Monitoring programmes for ETP species
		Fcosystem research programmes
		Habitats in Faroe EEZ. Location of VME.
		Long term objectives and fishery specific objectives
		Strategy in scientific research.
		Research programmes for fishery under assessment.

4.4.2 Consultations

The assessment team met with relevant stakeholders as outlined in Table 45. Information gathered is presented in this report and in the enclosed scoring tables.

4.4.2.1 Process consultations

Several stakeholders have been identified and contacted during the assessment of the Faroese tusk and ling fishery.

Information was made publicly available at different stages of the assessment (Table 46). Notifications on the MSC website (<u>www.msc.org</u>) were distributed to listed stakeholders in directed mails. As no stakeholder comments were submitted during the stakeholder consultancy period prior to the site visit in Faroe Islands, information gathered during the site visit formed the main basis of the stakeholder consultancy for this assessment (ref. section 4.4.1 above).

Table 46 Process announcements and consultations

Consultation subject	Consultation date	Consultation channels
Announcement of full assessment	21st Jul 2017	msc.org and e-mail
Notification of assessment timeline	21st Jul 2017	msc.org
Announcement of assessment in media with invitation to contribute to assessment process	21st Jul 2017	msc.org and e-mail
Public comment draft report	Pending	
Final report	Pending	
Public Certification Report	Pending	

4.4.3 Evaluation Techniques

4.4.3.1 Announcements

The assessment was announced at MSC.org to reach international stakeholders and e-mails were used to reach local stakeholders.

At the beginning of the full-assessment, the CAB compiled a stakeholder list based on a guidance from the client and existing stakeholder list from the full-assessment and subsequent surveillances. The list covers 75 stakeholders and has been used at every stage of the consultation process undertaken for this fishery.

4.4.3.2 Methodology used

The assessment was made against the MSC Principles and Criteria for Sustainable Fishing v. 2.0. The methodology applied is specified in the MSC Fisheries Certification Requirements, Version 2.0 (1st October 2014). The MSC Full Assessment Reporting Template v2.0 is used as basis for this report. assessment team proposed the use of the Default Assessment Tree as the main assessment framework. No comments or objections were received and therefore the Default Assessment Tree was therefore used.

4.4.3.3 Scoring process

After all relevant information was compiled and analysed, the assessment team scored the Unit of Assessment against the Performance Indicator Scoring Guideposts (PISGs) in the final tree. The team discussed evidence together, weighed up the balance of evidence and used their judgement to agree on a final score following MSC FCR processes and based on consensus.

Individual Performance indicators are scored. Scores for individual PIs are assigned in increments of five points. Any divisions of less than five points are justified. Scores for each of the three Principles are reported to the nearest one decimal.

- If one or more of the scoring issues fails to meet the scoring guidepost at the 60 level, the UoA fails and no further scoring is provided for the Performance indicator.
- Where all of the SG60 scoring issues are met, the PI achieves at least a 60 score, and the team assesses each of the scoring issues at the SG80 level.
- Where one or more of the SG80 scoring issues is not met, the PI is given an intermediate score reflecting the overall performance against the different SG80 scoring issues, and one or more condition(s) are assigned to the PI.
- Where all of the 60 scoring issues and all of the 80 issues are met, the PI achieves at least an 80 score, and the team assesses each of the scoring issues at the SG100 level.
- Where one or more of the SG100 scoring issues is not met, the PI is given an intermediates score reflecting the overall performance against the different SG100 scoring issues.
- Where all of the SG60, SG80 and SG100 scoring issues are met, the PI achieves a 100 score.

In Principle 1 and 2 the scoring may include PI with multiple scoring elements. Scoring is then applied to the individual scoring elements and the overall score for the PI is determined based on the score of the different scoring elements. Scoring elements considered in this assessment are listed in Table 47.

In order to fulfil the requirements for certification the following minimum scores are required:

- The fishery must obtain a score of 80 or more for each of the three MSC Principles, based on the weighted aggregate scores for all Performance Indicators under each Principle.

The fishery must obtain a score of 60 or more for each individual scoring issue under each Performance Indicator in each Principle.

The final scores are based on group consensus within the assessment team. The assessment team will recommend certification where the weighted average score is 80 or more for all the three Principles, and were all individual scoring issues are met at the SG60 level.

Conditions are set where the fishery fails to achieve a score of 80 to any Performance Indicators. Conditions with milestones are set to result in improved performance to at least the 80 level within a period set by the assessment team. The client is required to provide a client action plan to be accepted by the assessment team. The client action plan shall detail:

- how conditions and milestones will be addressed
- who will address the conditions
- the specified time period within which the conditions and milestones will be addressed
- how the action(s) is expected to improve the performance of the UoA _
- how the CAB will assess outcomes and milestones in each subsequent surveillance or assessment
- how progress to meeting conditions will be shown to CABs.

According to MSC CR v2.0, SA 3.4.1, a species shall be considered main if: The catch of a species by the UoA comprises 5% or more by weight of the total catch of all species by the UoA or if the species is classified as 'Less resilient' and the catch of the species by the UoA comprises 2% or more by weight of the total catch of all species by the UoA. Landings by all Faroese vessels is known thanks to the thorough landing system and landing obligation. The Data deficient column refers to those species where stock status is unknown.

Component	Scoring elements	Main / not main	Justification for main/not main [primary and secondary species]	Data- deficient?
P1 (target species)	Ling	N/A	N/A	No
P1 (target species)	Tusk	N/A	N/A	No
Primary species	Saithe	Main	>5% of the catch	No
Primary species	Faroe Plateau Cod	Main	>5% of the catch	No
Primary species	Haddock	Main	>5% of the catch	No
Primary species	Greenland halibut	Main	>5% of the catch	No
Primary species	Beaked redfish	Minor	<5% of the catch	No
Primary species	Golden redfish	Minor	<5% of the catch	No
Primary species	Whiting	Minor	<5% of the catch	No
Primary species	Monkfish	Minor	<5% of the catch	No
Primary species	Atlantic wolfish	Minor	<5% of the catch	No
Primary species	Lemon sole	Minor	<5% of the catch	No

Table 47 Scoring elements for all UoCs

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Primary species	Plaice	Minor	<5% of the catch	No
Primary species	Grenadiers	Minor	<5% of the catch	Yes
Primary species	Halibut	Minor	<5% of the catch	No
Primary species	Blue ling	Minor	<5% of the catch	No
Primary species	Faroe bank cod	Minor (only for the Jigging UoCs)	<2% of the catch	No
Primary species	Atlanto- Scandian herring (bait)	Minor	<5% of the catch	No
Primary species	NEA mackerel (bait)	Minor	<5% of the catch	No
Secondary species	Patagonian squid (bait)	Minor	<5% of the catch	Yes
Secondary speceis	Pacific saury (bait)	Minor	<5% of the catch	Yes
Secondary species	Fulmar	Minor	<5% of the catch	No
ETP species	Portbeagle	N/A	N/A	N/A
Habitat types	Sandy bottoms	Common habitats	N/A	N/A
Habitat types	Muddy bottoms	Common habitats	N/A	N/A
Habitat types	Gravel patches	Common habitats	N/A	N/A
Habitat types	Cold water corals	VME	N/A	N/A
Habitat types	Sponge aggregations	VME	N/A	N/A
Habitat types	Horse mussel beds	VME	N/A	N/A
Habitat types	Minor habitat types	Common habitat	N/A	N/A

4.4.3.4 Risk Based Framework

The RBF framework has not been used to score any PI of this assessment.

5 TRACEABILITY

5.1 Eligibility Date

Products from the certified fishery eligible to be sold as MSC certified or bear the MSC ecolabel from [date]. The eligibility date is the date of the certification of the fishery. The traceability and segregation systems are already implemented in the fishery.

5.2 Traceability within the Fishery

Client vessels fish only in Faroese EEZ and require a license to fish issued by the Faroese authorities. Traceability systems for Faroe Islands tusk and ling fisheries were scrutinized during the assessment of the fishery and deemed to be robust. The Faroese fishery management authority has a comprehensive monitoring and control of every stage in this fishery. The systems of tracking and tracing in place (incl. control, monitoring and recording systems) ensure that all products originating from the certified fishery, and sold as certified, could be identified prior or at the point of landing. As fish and fish products are the principal export from the Faroe Islands, the tight control of fishing activity extends to the onshore side of the industry too. Not only is there close monitoring and control at point of landing but also through on-shore processing and export channels. Thus, within the Faroese fishing fleet and Faroese landing – processing – export system there is very good basis for tracking, tracing and segregation systems within the fishery as well as continuous Chain of Custody.

All vessels fishing in Faroese waters (both Faroese-registered and non-Faroese) are required to:

- have a satellite vessel monitoring systems (VMS) if above 20 m overall length;
- keep up to date electronic logbook with records of fishing activity, positions and catches
- be available for at-sea and in-port inspection of fishing gear, log-sheets, catch and sales notes when required by the appropriate enforcement agency.
- give prior notice of intention to fish and intention to land (or enter and leave Faroese waters).

Through NEAFC and other international agencies, Faroe is an active participant in international measures to combat illegal, unregulated and unreported (IUU) fishing. A catch certification scheme by the European Union (EC no 1224/2009) was implemented in 2010 to ensure full traceability of all marine fishery products traded with the European Community. Fishery products can now only be imported into the European Community when accompanied by a catch certificate, issued by the competent authorities of the flag State certifying that the catches concerned have been made in accordance with applicable laws, regulations and international conservation and management measures.

All information on catches is recorded by skippers and entered in the logbooks on daily basis. At landing the fish is weighed. Each factory has an employee in charge of checking the weighing of the fish product. For certain fish species, such as saithe, cod, and haddock, the size of the fish shall be reported in the weighing note. Sales notes provide information on the species, size, weight and agreed prize. According to national regulations sales notes shall be submitted to authorities no later than one day after landing. All data from e-logbooks and sales notes are cross-checked by national authorities. Due to control and regulation regarding logbooks and sales notes, there is no risk of substitution of non-certified tusk and ling with the certified tusk and ling. The risk is also minimized by the fact that nearly all Faroese vessels are included in the UoA.

The vessels are approved by the Food and Veterinary Agency to fish and produce on-board. All fish caught and processed on-board the vessels are for human consumption. The main products from the at- sea processing are gutted fresh tusk and ling (i.e. iced but not frozen). All catches are weighed and recorded on board. Processed fish is also weighed after processing and weights are recorded in accordance with conversion rates.

There is no transhipment at sea activities involved in Faroe Islands tusk and ling fisheries. All catches are landed and go through the Port state control.

5.2.1 Traceability risk factors

Table 48 Traceability risk factors within the fishery

Traceability Factor	Description of risk factor if present. Where applicable, a description of relevant mitigation measures or traceability systems (this can include the role of existing regulatory or fishery management controls)
Potential for non-certified gear/s to be used within the fishery	Negligible. The certificate covers all vessels by the client group, this is longline vessels that target tusk and ling, as well as demersal trawlers that take tusk and ling as bycatch. The certificate also covers small jigging vessels that deliver to the client group.
Potential for vessels from the UoC to fish outside the UoC or in different geographical areas (on the same trips or different trips)	Negligible. Vessels in the Unit of Assessment do not fish outside the unit of assessment.
Potential for vessels outside of the UoC or client group fishing the same stock	Low risk for ling but high risk for tusk. Ling is a localised stock in the Faroese fishing grounds, so is only caught by Faroese vessels or by foreing vessels with an agreement which allows them to fish in Faroese waters. But the tusk stock covers a broad part of the NEA, therefore there is a high risk of other vessels outside the UoC fishing for the same stock
Risks of mixing between certified and non-certified catch during storage, transport, or handling activities (including transport at sea and on land, points of landing, and sales at auction)	Low risk. Most catches of tusk and ling come from the large longline vessels. Catches by demersal trawlers (where tusk and ling are bycatch species) and by jiggers are small in comparation. Both tusk and ling are distinguishable from other species in the catch, such as saithe, cod, haddock or Greenland halibut. As regards tusk and ling taken with trawlers, catches are 'bagged' aboard (<i>i.e.</i> not pumped) and fed to a conveyor system on the sorting deck. As the fish pass along the conveyor the different species are segregated, then gutted and stored separately. Tusk and ling pass along the conveyor to <i>c</i> .300 kg storage bins with ice and is held in chilled storage aboard the vessel. Tusk and ling taken by longline vessels are also landed gutted and chilled. Chilled, gutted fish is delivered to the landing points.
Risks of mixing between certified and non-certified catch during processing activities (at-sea and/or before subsequent Chain of Custody)	Low risk. All catches taken in the UoAs are properly segregated, reported, labelled and recorded. Logbooks and sales notes are inspected regularly and cross-checked by the relevant fishing authorities.
Risks of mixing between certified and non-certified catch during transhipment	Nil. There is no transhipment at sea activities involved in Faroe Islands tusk and ling fisheries.
Any other risks of substitution between fish from the UoC (certified catch) and fish from outside this unit (non- certified catch) before subsequent Chain of Custody is required	Low risk. There is a comprehensive enforcement system responsible of cross-checking catches from e-logbooks, weighing notes and sales notes.

5.3 Eligibility to Enter Further Chains of Custody

Chilled tusk and ling products originating from UoA vessels covered by this assessment as defined in Section 2.2 will be eligible to enter the Chain of Custody and carry the MSC logo at the completion of the assessment process.

The scope of the certification is up to the point of landing. Chain of Custody commences from the point of sale/landing at the following plants in Faroe Islands:

- For P/F JFK: Kósin in Klaksvík.
- For P/F Faroe Origin: Runavík

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- For P/F Delta Seafood: Sandoy
- TG Seafood, FO 800 Hvalba
- Delta Seafood, FO 800 Tvoroyri
- Tórshavn, Bardid, landing site in Tórshavn

All further activities from the first points of landing, including land-based processing plants as well as cold/freezer stores that perform anything more than movement of product, will be subject to a separate Chain of Custody certification, in accordance with the MSC Certification Requirements. Main markets for tusk and ling are EU countries, specifically Spain, Portugal and Italy.

Table 49 Eligibility to enter further chains of custody

Conclusion and determination	Fresh and chilled whole round or gutted tusk and ling, caught and produced on board by demersal trawlers and longlines owned by the client group and by jiggers that deliver to it, are eligible to enter further certified chains of custody and be sold as MSC certified or carry the MSC ecolabel.				
List of parties, or category of parties, eligible to use the fishery certificate and sell product as MSC certified	Fishing vessels owned by the client group (demersal trawlers and longlines, as per list published on MSC website) or jigging vessels that deliver to the client group, with valid licenses to fish tusk or ling in Faroese fishing grounds (ICES area Vb and partially VIa), are eligible to enter further certified chains of custody and carry MSC logo in case of successful certification				
Point of intended change of ownership of product	Processing plants, fishing ports or fishing auctions where registration of landings is carried out and weights registered.				
List of eligible landing points (if relevant)	Processing plants at the following locations: - For P/F JFK: Kósin in Klaksvík. - For P/F Faroe Origin: Runavík - For P/F Delta Seafood: Sandoy - TG Seafood, FO 800 Hvalba - Delta Seafood, FO 800 Tvoroyri - Tórshavn, Bardid, landing site in Tórshavn				

Point from which subsequent Chain of	When landing takes place at auction houses, these do not need a
Custody is required	as facilitators of trade. Chain of Custody would be required for further processing activities.
	Most of the landings take place at processing facilities. Chain of custody for fresh/chilled tusk and ling intended for human consumption and further exportation will begin at the point of landing at processing factories. In order to sell fish products as MSC certified, the processing plant or factory needs a Chain of Custody Certificate. Most fish go into a processing plant or factory without going through auction, either because both factories and vessels belong to the same industrial group or because
	there are commercial agreements between the vessels and the factories to buy all tusk and ling catch.

5.4 Eligibility of Inseparable or Practicably Inseparable (IPI) stock(s) to Enter Further Chains of Custody

Inseparable or practically inseparable stock is not involved in this assessment.

6 EVALUATION RESULTS

6.1 Principle Level Scores

Table 50 Final Principle scores for ling and tusk [per gear if multiple gears]

		Ling			Tusk	
Principle	Score UoC1 [Trawlers]	Score UoC2 [Longlines]	Score UoC3 [Jigs]	Score UoC4 [Trawlers]	Score UoC5 [Longlines]	Score UoC6 [Jigs]
Principle 1 – Target Species		81.7			82.5	
Principle 2 – Ecosystem	83.0	85.3	86.0	83.0	85.3	86.0
Principle 3 – Management System		93.3				

6.2 Summary of PI Level Scores Table 51 Summary of PI Level Scores:

Dringinla	Principle Performance Indicator (PI)		LING		TUSK			
Principie	Perr	Performance indicator (PI)		UoC 2 (LL)	UoC 3 (Jiggs)	UoC 4 (DT)	UoC 5 (LL)	UoC 6 (Jiggs)
	1.1.1	Stock status		90			9	0
	1.2.1	Harvest strategy		85		85		
Principle 1	1.2.2	Harvest control rules & tools		60			6	0
	1.2.3	Information & monitoring		80			8	0
	1.2.4	Assessment of stock status		85			9	0
	2.1.1	Outcome	80	80	80	80	80	80
	2.1.2	Management strategy	80	80	80	80	80	80
	2.1.3	Information/Monitoring	85	85	85	85	85	85
	2.2.1	Outcome	80	80	80	80	80	80
	2.2.2	Management strategy	85	85	85	85	85	85
Dringinla 2	2.2.3	Information/Monitoring	85	80	85	85	80	85
Principle 2	2.3.1	Outcome	80	80	80	80	80	80
	2.3.2	Management strategy	85	85	85	85	85	85
	2.3.3	Information strategy	70	70	70	70	70	70
	2.4.1	Outcome	80	100	100	80	100	100
	2.4.2	Management strategy	85	100	100	85	100	100
	2.4.3	Information	80	80	85	80	80	85

Drinciple	Performance Indicator (PI)		LING			TUSK			
Principie			UoC 1 (DT)	UoC 2 (LL)	UoC 3 (Jiggs)	UoC 4 (DT)	UoC 5 (LL)	UoC 6 (Jiggs)	
	2.5.1	2.5.1 Outcome		90	90	90	90	90	
	2.5.2	Management	85	85	85	85	85	85	
	2.5.3	Information	95	100	100	95	100	100	
	3.1.1	Legal &/or customary framework		95					
	3.1.2	Consultation, roles & responsibilities					95		
	3.1.3	Long term objectives		100					
Principle 3	3.2.1	Fishery specific objectives				90			
	3.2.2	Decision making processes				95			
	3.2.3	Compliance & enforcement				95			
	3.2.4	Monitoring & management performance evaluation				80			

6.3 Summary of Conditions

Table 52 Summary of Conditions

Condition number	Condition	Performance indicator	Related t previously raise condition?
1	The fishery for ling shall be subject to well-defined HCRs. The HCRs shall meet objectives consistent with PI 1.1.1 and include provision for reducing exploitation pressures if the stock falls below PRI reference points	1.2.2 (Ling)	NA
2	The fishery for tusk shall be subject to well- defined HCRs. The HCRs shall meet objectives consistent with PI 1.1.1 and include provision for reducing exploitation pressures if the stock falls below PRI reference points	1.2.2 (Tusk)	NA
3	The Client shall work together with Havstovan and the Faroese Natural Museum to provide a quantitative estimate of the impact that the three UoCs make on the ETP populations, notably sea birds. Data should be adequate to contribute to the estimate trends and status of the sea bird populations.	2.3.3 (all UoCs)	NA

6.4 Recommendations

There are three recommendations for the fishery.

Recommendation number	PI	Recommendation
1	2.1.3	It is recommended that catches of redfish and grenadiers are specified to the species level (if possible).
2	2.2.2	It is recommended that the client considers the sustainability of the bait stocks when purchasing bait species.
3	2.2.3	It is recommended that interactions with elasmobranchs (sharks, rays and skates) and with all bird species are recorded.

Table 53 Summary of Recommendations

6.5 Determination, Formal Conclusion and Agreement

(REQUIRED FOR FR AND PCR)

1. The report shall include a formal statement as to the certification determination recommendation reached by the Assessment Team about whether or not the fishery should be certified.

(Reference: FCR 7.16)

(REQUIRED FOR PCR)

2. The report shall include a formal statement as to the certification action taken by the CAB's official decision-makers in response to the Determination recommendation.

[PCDR: Draft determination with supporting rationale.

FR: Final determination

PCR: Formal statement from decision making entity]

The tusk and ling fisheries achieved a score of 80 or more for each of the three MSC Principles and did not score under 60 for any of the set MSC criteria.

Based on the evaluation of the fishery presented in this report the assessment team [recommends/does not recommend] the certification of the [xxx] fishery for the client [xxx].

As the fishery achieved a score of below 80 against two scoring indicators (PI 1.2.2 for ling and also for tusk and PI 2.3.3 for all UoCs), the assessment team has set three conditions for the continued certification that the client is required to address. The conditions are applicable to improve performance to at least the 80 level within the period set by the assessment team.

The assessment team also makes three recommendations for the fishery.

6.6 Changes in the fishery prior to and since Pre-Assessment

The pre-assessment of the Faroese tusk and ling fisheries was released in August 2017 and the site visit took place in September 2017. There haven't been any changes in the fisheries in the meantime.

REFERENCES

- ACAP, Appendix I (Agreement on Conservation of Albatross and Petrels).
- ACCOBAMS Annex I (Agreement on the Conservation of cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area)
- Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic (NAMMCO Agreement), 1992.
- AEWA (African Eurasian Migratory Water Bird Agreement).
- Astthorsson, O.S., Gislason, A., Jonsson, S. 2007. <u>Climate variability and the Icelandic marine</u> <u>ecosystem</u>. Deep-Sea Research II 54 (2007) 2456–2477.
- Bett, B.J. & A.L. Rice, 1992. The influence of hexactinellid sponge (Pheronema carpenteri) spicules on the patchy distribution of macrobenthos in the Porcupine Seabight (Bathyal NE Atlantic). Ophelia 36:217-228.
- Bloch, D., Mikkelsen, B. and Ofstad, L.H. 2000. Marine Mammals in Faroese Waters with special attention to the south-south-eastern Sector of the region. GEM Report to Environmental Impact Assessment Programme: 1-26
- Bruntse, G. & Tendel, O.S. (2001) Marine biological investigations and assemblages of benthic invertebrates from the Faroe Islands (*Lophelia pertusa* and other cold-water corals in the Faroe area). Kaldbak. Marine Biological Laboratory, The Faroe Islands. www.vliz.be/imisdocs/publications/217806.pdf
- Brylinski, Gibson and Gordon Jr., 1994. Impacts of flounder trawls on the intertidal and community of the Minas Basin, Bay of Fundy. Canadian Journal of Fisheries and Aquatic Science 51: 650-651.
- Churchill, J. 1989 The effect of commercial trawling on sediment resuspension and transport over the Middle Atlantic Bight continental shelf. Cont. Shelf Res. 9: 841–864.
- CITES Appendix I (Convention on International Trade in Endangered Species).
- Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), 1992
- Convention on the Future Multilateral Cooperation in North-East Atlantic Fisheries (NEAFC Convention), 1980
- Convention on the Conservation of Migratory Species of Wild Animals (<u>Bonn Convention</u>).
- Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention).
- Commercial Fisheries Act (28/1994), Faroese Parliament, 1994.
- CoralFISH project. Ecosystem based management of corals, fish and fisheries, in the deep waters
 of Europe and beyond. <u>http://www.eu-fp7-coralfish.net</u>.
- Council Regulation EC no 1224/2009, of 20 November 2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy.
- Dayton, P. K. 1979. "Observations on growth, dispersal and population dynamics of some sponges in McMurdo Sound, Antarctica. In "Biologie des spongiaires" - Coll. Intern. CNRS Vol. 291, 271– 282. Paris.
- Debes, H. H., Gaard, E., and Hansen, B. 2008a. Primary production on the Faroe Shelf: Temporal variability and environmental influences. Journal of Marine Systems. Volume 74, Issues 1– 2, November 2008, Pages 686-697. <u>https://doi.org/10.1016/j.jmarsys.2008.07.004</u>
- Dinesen, G. & Bruntse, G., 2001. *Modiolus modiolus* beds. In "Marine biological investigations and assemblages of benthic invertebrates from the Faroe Islands" (Bruntse, G. & Tendel, O.S. eds) pp 33–36. Kaldbak Marine Biological Laboratory, The Faroe Islands.www.vliz.be/imisdocs/publications/217806.pdf
- European Marine Observation and Data Network http://www.emodnet.eu/
- Executive Order No 87 of 20 September 2007 on protection of whales http://logir.fo/Kunngerd/87-fra-20-09-2007-um-friding-av-hvali
- Eydna i Homrum, Bogi Hansen, Petur Steingrund and Hjálmar Hótún 2012. Growth, maturation, diet and distribution of saithe (*Pollachius virens*) in Faroese waters (NE Atlantic). Marine Biology Research. 246-254.
- FAO Code of Conduct for Responsible Fisheries, 1995.
- Faroe Islands Fisheries and Aquaculture. Responsible management for a sustainable future. Faroese Ministry of Fisheries and Natural Resources.; <u>http://cdn.lms.fo/media/6850/final_070408.pdf</u>
- Faroese Fisheries Inspection Service: <u>www.vorn.fo</u>
- Faroese Fisheries Laboratory. 2002. Workshop on Ecosystem Modelling of Faroese Waters
- Faroese Fisheries landings statistics: <u>http://www.vorn.fo/</u>
- Faroese Fishermen's Association: <u>www.fiskimannafelag.fo</u>

- Faroese Ministry of Fisheries: <u>www.fisk.fo</u>
- Faroese Act on the Management of Marine Resources Løgtingslóg nr. 161 frá 18. desember 2017 um fyrisiting av sjófeingi <u>http://www.logir.fo</u>
- Fonteyne, R. 2000. Physical impact of beam trawls on seabed sediments, p. 15–36. In M. J. Kaiser and S. J. de Groot [eds.], The effects of trawling on non-target species and habitats: Biological, conservation and socio-economic issues. Blackwell.
- Gaard. E., Hansen, B., Olsen, B & Reinert, J. 2002. Ecological features and recent trends in physical environment, plankton, fish stocks and sea birds in the Faroe plateau ecosystem. *In*:Large Marine Ecosystems of the North Atlantic (K. Sherman and H.-R. Skjoldal eds), pp 245-261. Elsevier.
- Garcia, E., Ragnarsson, S.A., Steingrímsson,S.A., Nævestad, D., Haraldsson, H.P., Fosså, J.H., Tendal, O.S.& Eiríksson, H. 2007. Bottom Trawling and Scallop Dredging in the Arctic Impacts of fishing on non-target species, vulnerable habitats and cultural heritage. TemaNord: Nordic Council of Ministers,Copenhagen. <u>http://www.norden.org/en/publications/publications/2006-529</u>
- Gatti, S. (2002). The role of sponges in the High-Antarctic carbon and silicon cycling a modelling approach. Berichte zur Polar- und Meeresforschung 434.
- Gezelius, S.S. (2012), Regulation and Compliance in the Atlantic Fisheries, Dordrecht: Springer.
- Hansen,m B. (2011) How will climate change affect Northeastern Atlantic and the Nordic seas? In The pelagic complex in the North East Atlantic Ocean (Jákupsstovu, S.H.í., ed.) pp 52–54. Copenhagen: TemaNord.
- Hegland, T.J. and Hopkings, C.C.E. Towards a New Fisheries Effort Management System for the Faroe Islands? Controversies around the Meaning of Fishing Sustainability', *Maritime Studies* 13: 12, doi:10.1186/s40152-014-0012-7, 2014
- Hiddink J.G., Jennings, S., Sciberras, M, C.L. Szostek, Hughes, K.M., Ellis, N., Rijnsdorp, A.D., McConnaughey, R.A., Mazor, T., Hilborn, R., Collie, J.S., Pitcher, C.R., Amoroso, R.O., Parma, A.M., Suuronen, P., Kaiser, M.J. (2017) Global analysis of depletion and recovery of seabed biota after bottom trawling disturbance. PNAS (Proceedings of the National Academy of Sciences of the United States) Vol 114, nº 31. <u>http://www.pnas.org/cgi/doi/10.1073/pnas.1618858114</u>
- Hansen, B., Poulsen, T., Húsgarð Larsen, K. M., Hátún, H., Østerhus, S., Darelius, E., Berx, B., Quadfasel, D., and Jochumsen, K. 2017: Atlantic water flow through the Faroese Channels, Ocean Sci., 13, 873-888. <u>https://doi.org/10.5194/os-13-873-2017</u>. Available from: <u>https://www.researchgate.net/publication/317571730_Atlantic_water_flow_through_the_Faroese_Channels</u>
- Humborstad O.B., Nøttestad, L., Løkkeborg, S., Rapp, H.T. RoxAnn bottom classification system, sidescan sonar and video-sledge: spatial resolution and their use in assessing trawling impacts, *ICES Journal of Marine Science*, Volume 61, Issue 1, 1 January 2004, Pages 53– 63. <u>https://doi.org/10.1016/j.icesjms.2003.10.001</u>
- Husebø, Å., Nøttestad, L., Fosså, J.H., Furevik, D.M. & Jørgensen, S.B. (2002). Distribution and abundance of fish in deep-sea coral habitats. *Hydrobiologia* 471: 91–99
- Homrum, E.I., Hansen, B., Jonsson, S.T., Michalsen, K., Burgos, J., Righton, D., Steingrund, P., Jakobsen, T., Mouritsen, R., Hatun, H., Armannsson, H., Joensen, J.S. (2013). Migration of saithe (*Pollachius virens*) in the Northeast Atlantic. ICES Journal of Marine Science 70:4, pages 782-792.
- Hønneland, G. (2013), Making Fishery Agreements Work, Cheltenham: Edward Elgar.
- <u>http://biofar.fo/</u>
- <u>http://fishbase.de/Summary/SpeciesSummary.php?ID=33&AT=ling</u>
- http://fishbase.de/Summary/SpeciesSummary.php?ID=51&AT=tusk
- <u>http://www.cms.int/en/species</u>
- <u>http://www.cms.int/sites/default/files/document/territories_reservations%202015.pdf</u>
- <u>http://www.coe.int/en/web/bern-convention/home</u>
- http://www.deltaseafood.fo/f%C3%B8royar/?lang=en
- http://www.emodnet-geology.eu/map-viewer/
- http://www.fao.org/docrep/008/y7135e/y7135e06.htm
- <u>http://www.faroeorigin.fo/</u>
- <u>http://www.fisheries.no/ecosystems-and-stocks/marine_stocks/fish_stocks/ling</u>
- <u>http://www.fisheries.no/ecosystems-and-stocks/marine_stocks/fish_stocks/tusk</u>
- <u>http://www.fishbase.org</u>
- http://www.fishbase.org/ComNames/CommonNameSearchList.php
- <u>http://www.foib.fo/foibportal/projects/eia/Faroe_eia/Studies/Mammal_Final_Part1.pdf</u>
- http://www.government.fo/news/news/the-faroese-parliament-passes-fisheries-reform/
- http://www.hav.fo/PDF/Ritgerdir/2003/Workshop_ecosystem.pdf

- <u>http://www.hav.fo/index.php?option=com_content&view=article&id=39&Itemid=155</u> <u>http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2008/2008/4.1-</u> <u>4.2%20Faroe%20plateau%20ecosystem%20overview.pdf</u>
- <u>http://www.jfk.fo/</u>
- https://nammco.no/about-us/
- https://nammco.no/topics/sc-working-group-reports/
- https://odims.ospar.org/maps/298
- <u>https://www.ospar.org/organisation/contracting-parties</u>
- <u>https://www.ospar.org/work-areas/bdc/species-habitats/mapping-habitats-on-the-ospar-list-of-threatened-or-declining-species-and-habitats</u>
- <u>https://www.ospar.org/work-areas/bdc/species-habitats/list-of-threatened-declining-species-habitats</u>
- <u>http://projects.foib.fo/eia/Faroe_eia/new_page_4.htm</u>
- <u>http://www.ramsar.org/wetland/denmark</u>
- <u>https://www.researchgate.net/publication/267919482_A_NORTH-</u>
 <u>EAST_ATLANTIC_MARINE_ECOSYSTEM_MODEL_FOR_THE_FAROE_ISLANDS_ICES_AREA_VB_IN_PUT_</u>
- <u>http://vorn.kort.fo/#</u>
- <u>http://www.whaling.fo/en/</u>
- IUCN Red list of threatened species 2017.
- ICES: <u>www.ices.dk</u>
- ICES Advice 2008, book 4: Faroe Plateau ecosystem overview. http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2008/2008/4.1-4.2%20Faroe%20plateau%20ecosystem%20overview.pdf
- ICES 2012. ICES Implementation of Advice for Data-limited Stocks in 2012 in its 2012 Advice. ICES CM 2012/ACOM 68. 42 pp.
- ICES 2016. Advice basis. In Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 1, Section 1.2.
- ICES 2016. Report of the North-Western Working Group (NWWG), 27 April- 4 May 2016, ICES HQ, Copenhagen, Denmark. ICES CM 2016/ACOM:08. 703pp
- ICES 2017 Ling (5.b) Advice. Ling (Molva molva) in Division 5.b (Faroes grounds) ICES Advice on fishing opportunities, catch, and effort Celtic Seas, Faroes, Icelandic Waters, and Oceanic Northeast Atlantic Ecoregions June 2017. DOI: 10.17895/ices.pub.3140. Code: lin.27.5b
- ICES 2017. Tusk (NEA) Advice. Tusk (Brosme brosme) in subareas 4 and 7–9, and in divisions 3.a, 5.b, 6.a, and 12.b (Northeast Atlantic). ICES Advice on fishing opportunities, catch, and effort in Bay of Biscay and the Iberian Coast, Celtic Seas, Faroes, Icelandic Waters, Greater North Sea, and Oceanic Northeast Atlantic Ecoregions. June 2017. DOI: 10.17895/ices.pub.3265. Code: usk.27.3a45b6a7-912b
- ICES 2017. WGDEEP. Report of the Working Group on the Biology and Assessment of Deep-sea Fisheries Resources (WGDEEP), 24 April–1 May 2017, Copenhagen, Denmark. ICES CM 2017/ACOM:14. 702 pp.
- ICES 2017 Advice for cod in the Faroe Plateau. http://ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017/cod.27.5b1.pdf
- ICES 2017 Advice for cod in the Faroe Bank. http://ices.dk/sites/pub/Publication%20Reports/Advice/2016/2016/cod-farb.pdf
- ICES. 2017 Advice haddock (Faroese Grounds)
- ICES. 2017 Advice ling (Faroese Grounds)
- ICES. 2017 Advice for tusk (Subareas 4-6 Division 5.b)
- ICES. 2017 Advice for Greenland halibut
- ICES. 2017 Advice for beaked redfish
- ICES. 2017 Advice for golden redfish
- ICES. 2017 Advice for saithe (Faroese Grounds)
- ICES CM 2002/ACE:05; Ref: E, WGECO. <u>http://www.ices.dk/reports/ace/2002/sgcor02.pdf</u>
- ICES. 2014 NWWG. Report of the North-Western Working Group (NWWG), 24 April–May 2014, Copenhagen.
- ICES. 2017 NWWG. Report of the North-Western Working Group (NWWG), 27 April–4 May, 2017, ICES Headquarters, Copenhagen, Denmark. ICES CM 2016/ACOM:08.

- ICES 2017 WGDEEP Report of the Working Group on the Biology and Assessment of Deep-sea Fisheries Resources (WGDEEP), 24 April–1 May 2017, Copenhagen, Denmark. ICES CM 2017/ACOM:14. 702 pp.
- ICES 2002 WGECO Report of the Study Group on Mapping the Occurrence of Cold-water Corals.
- ICES 2017 WGECO Report of the Working Group on the Ecosystem Effects of Fishing Activities. <u>http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2017/WGECO/wgeco_2017.pdf</u>
- ICES WGMME (2011). Report of the Working Group on Marine Mammal Ecology. ICES CM 2011/ACOM:21. <u>http://www.ices.dk/reports/ACOM/2011/WGMME/wgmme_2011_final.pdf</u>
- ICES 2017 WKFAROE. Report of the Benchmark Workshop on Faroese Stocks (WKFAROE 2017), 13–17 February 2017, ICES Headquarters, Copenhagen, Denmark. In prep.
- International Whaling Commission: IWC; <u>www.iwc.org</u>
- Jennings, S., Dinmore, T.A., Duplisea, D.E., Warr, K.J., Lancaster, J.E., 2001. Trawling disturbance can modify benthic production processes. J. Animal Ecol. 70, 459-475. <u>http://onlinelibrary.wiley.com/doi/10.1046/j.1365-2656.2001.00504.x/pdf</u>
- Jensen, A., R. Frederiksen, 1992. The fauna associated with the bank-forming deepwater coral *Lophelia pertusa* (Scleractinaria) on the Faroe shelf. Sarsia. 77: 53-69.
- Jákupsstovu, H. et al., 2002. Ecosystem Modelling of Faroese Waters. Faroese Fisheries Laboratory; Tórshavn. ISBN 99918-3-133-9 <u>http://www.hav.fo/PDF/Ritgerdir/2003/Workshop_ecosystem.pdf</u>
- Kaiser, M.J., K. R. Clarke, K.R., Hinz, H., Austen, M.C.V., Somerfield, P.J., Karakassis, I. 2006. <u>Global analysis of response and recovery of benthic biota to fishing</u>. Marine Ecology Progress Series. Vol. 311: 1–14, 2006.
- Klitgaard, A.B. 1995. The fauna associated with outer shelf and upper slope sponges (Porifera, Demospongiae) at the Faroe Islands, northeastern Atlantic. Sarsia 80: 1–22.
- Klitgaard, A.B. & Tendal, O.S. "Ostur" "cheese bottoms" sponge dominated areas in the Faroese shelf and slope areas. In *Marine biological investigations and assemblages of benthic invertebrates from the Faroe Islands* (Bruntse, G. & Tendel, O.S. eds) pp 13–21. Kaldbak Marine Biological Laboratory, The Faroe Islands. <u>www.vliz.be/imisdocs/publications/217806.pdf</u>
- Klitgaard, A.B., Tendal, O.S., Westerberg, H.1997. Mass occurrences of large sized sponges (Porifera) in Faroe Island (NE-Atlantic) shelf and slope areas: characteristics, distribution and possible causes. Pp. 129-142. *In* L.E. Hawkins and S. Hutchinson, with A.C. Jensen, M. Sheader and J.A. Williams (eds): The Responses of Marine Organisms to their Environments. Proceedings of the 30th European Marine Biology Symposium, University of Southampton. 362 pp.
- Krost, P., Ernhard, M.B., Erner, F.W. and Ukriede, W.H. 1990. Otter trawl tracks in Kiel Bay (Western Baltic) mapped by side-scan sonar. Meeresforschung 32: 344–353.
- Mandelman, J.W., and M.A. Farrington. 2007a. The estimated short-term discard mortality of a trawled elasmobranch, the spiny dogfish (*Squalus acanthias*). Fisheries Research 83 (2007) 238–245.
- Mapping European Seabed Habitats portal: <u>www.searchmesh.net</u>
- Mikkelsen, B 2016. Fisheries in Faroese waters and the potential for bycatch of marine mammals. NAMMCO Management Committee Working Group on Bycatch, Reykjavík, Iceland, 29 February 2016.
- Mortensen, P.B., M. Hovland, T. Brattegard, R. Farestveit, 1995. Deep water bioherms of the Scleractinian coral *Lophelia pertusa* (L.) at 64° N on the Norwegian shelf: structure and associated megafauna. Sarsia, 80: 145-158.
- Nordic Pro *Nordic Experience of Fisheries Management*, TemaNord 2009: 579, Nordic Council of Ministers, 2009.
- North East Atlantic Fisheries Commission (NEAFC): <u>www.neafc.org</u>
- North Atlantic Marine Mammal Commission (NAMMCO): <u>www.nammco.no</u>
- North Atlantic Salmon Conservation Organization (NASCO): <u>www.nasco.int</u>
- <u>NovasArc</u> project (Nordic Project on Vulnerable Marine Ecosystem and Anthropogenic Activities in Arctic and Sub-Arctic Waters).
- Norwegian Act on management of wild marine resources (Havressurslova <u>https://lovdata.no/dokument/NL/lov/2008-06-06-37</u>
- Olsen, B. 2008. Havhestur druknar á línu (Fulmars are drowning on longlines). Sjóvarmál 2008, Fiskirannsóknarstovan, Tórshavn pages 7-9. http://www.hav.fo/PDF/Ritgerdir/2008/Sjovarmal2008.pdf
- OSPAR Commission: www.ospar.org
- OSPAR Vulnerable and threatened habitats: <u>https://odims.ospar.org/maps/298</u>
- Parliamentary Act No 57 of 5 June 1984 on whale hunting, as last amended by Parliamentary Act No 54.

- Ramsar Convention: <u>https://www.ramsar.org/</u>
- Regulation No 56 of 19 May 2015 on pilot whale and other small whales, as last amended by Parliamentary Act No 44 of 6 May 2016 <u>http://www.logir.fo/Logtingslog/56-fra-19-05-2015-um-grind-og-annan-smahval</u>
- Regulation No 9 of 26 January 2017 on pilot whale and other small whales <u>http://logir.fo/Kunngerd/9-fra-26-01-2017-um-grind-og-annan-smahval</u>
- Regulation 67 from 16 May 2012 on landing of fish and fish products. <u>http://www.logir.fo/Kunngerd/67-fra-16-05-2012-fra-landingar-og-avreidingar-av-fiski-og-fiskavorum</u>
- Regulation 30 from 11th April 2018, on the banning of fishing activities. See article 5. <u>http://www.logir.fo/Kunngerd/30-fra-11-04-2018-um-at-frida-avisar-leidir-i-foroyskum-sjogvi-fyri-veidu-vid</u>
- Rijnsdorp, A.D., McConnaughey, R.A., Mazor, T., Hilborn, R., Collie, J.S., Pitcher, C.R., Amoroso, R.O., Parma, A.M., Suuronen, P., Kaiser, M.J. (2017) Global analysis of depletion and recovery of seabed biota after bottom trawling disturbance. PNAS (Proceedings of the National Academy of Sciences of the United States) Vol 114, nº 31. http://www.pnas.org/cgi/doi/10.1073/pnas.1618858114
- Smith, C.J., Papadopoulou, K.N., Diliberto, S. Impact of otter trawling on an eastern Mediterranean commercial trawl fishing ground, *ICES Journal of Marine Science*, Volume 57, Issue 5, 1 October 2000, Pages 1340–1351. <u>https://doi.org/10.1006/jmsc.2000.0927</u>
- Stakeholder meetings with the client, Havstovan, the Natural History Museum, the Ministry of Fisheries and the Coast Guard.
- Tuck I, Hall S, Roberston M, Armstrong E, Basford D (1998) Effects of physical trawling disturbance in a previously unfished sheltered Scottish sea loch. Mar Ecol Prog Ser 162:227–242.
- Turrell, W.R., Slesser, G., Adams, R.D., Payne, R., Gillibrand, P.A. 1999. Decadal variability in the composition of Faroe Shetland Channel bottom water. Deep Sea Research Part I: Oceanographic Research Papers. Volume 46, Issue 1, January 1999, Pages 1-25. http://www.sciencedirect.com/science/article/pii/S0967063798000673 https://doi.org/10.1016/S0967-0637(98)00067-3
- Vukcevic, M.A. 2012. Stop the next glaciation project. <u>http://www.vukcevic.talktalk.net/SNGP.htm</u>
- Wadden Sea Seal Agreement: <u>http://www.waddensea-secretariat.org/management/seal-management</u>
- Warén, A. & A. Klitgaard, 1991. Hanleya nagelfar, a sponge-feeding ecotype of H. hanleyi or a distinct species of chiton? Ophelia 34: 51–70.
- Webster, C. 2016. Impacts of benthic trawling on sponge community composition around Western Iceland. MSc Thesis. University College London (UCL). <u>http://neafc.org/closures/mid-atlantic</u>
- <u>www.biofar.fo</u>
- <u>www.nordforsk.org</u>
- Zeller, D. and Freire, K.2001. <u>A North East Atlantic marine ecosystem model for the Faroe Islands</u> (ICES Area Vb): Input data. Faroe ecosystem model, page 207.
- Zeller, D. and Reinert, J. 2004. <u>Modelling Spatial Closures and Fishing Effort Restrictions in the Faroe Islands Marine Ecosystem</u>. <u>Ecological Modelling</u> 172(2):403-420. Doi: 10.1016/j.ecolmodel.2003.09.020.

APPENDIX 1 SCORING AND RATIONALES

Appendix 1.1 Performance Indicator Scores and Rationale

Principle 1 Ling in ICES Division 5.b (UoC1, UoC2 and UoC3)

Evaluation Table for PI 1.1.1 – Stock status

PI 1	PI 1.1.1 The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing				
Scoring Issue		SG 60	SG 80	SG 100	
а	Stock sta	atus relative to recruitment	impairment		
	Guide post	It is likely that the stock is above the point where recruitment would be impaired (PRI).	It is highly likely that the stock is above the PRI.	There is a high degree of certainty that the stock is above the PRI.	
	Met?	Y	Y	Y	
	Justifi cation	The stock review is presen be below B _{pa} , B _{lim} . The leng that exploitation pressure I generations). The ICES ass while the length indicator below F _{lim} and that the stor	tted in Figure 11. The fishin th-based fishing mortality in has been constant for more t essment does not define a P suggest that the exploitatio ck hence is well above a the	g mortality is estimated to dicator, Figure 12 suggests than 20 years (more than 2 RI reference point explicitly n level is around MSY, i.e. oretical Bim. SG60 is met.	
		around FMSY while the stock is above	r suggests that the exploit of is generally increasing 20 ve PRI level. SG80 is met.	ation pressure is constant 002-2014 making it highly	
		The long-term time series certainty that the stock is a	with the same stock signals above PRI. SG 100 is met.	provides a high degree of	
b	Stock sta	atus in relation to achieveme	ent of MSY		
	Guide post		The stock is at or fluctuating around a level consistent with MSY.	There is a high degree of certainty that the stock has been fluctuating around a level consistent with MSY or has been above this level over recent years.	
	Met?		Y	Ν	
	Justifi cation	The length-based fishing mortality indicator, Figure 12 suggests that exploitation pressure has been constant for more than 20 years (more than 2 generations) around the F_{MSY} level. SG80 is met. However, the biomass indicator is a commercial cpue index with rather wide confidence limits and the length-based indicator is not a very precise tool to measure short-term variations. Therefore, there is not a high degree of certainty that the stock has been fluctuating around the MSY level. Furthermore, the recent trend in the biomass indicator is a decrease although from a peak level. SG100 is not met.			
Refer	ences	ICES (2017) Ling in 5.b Ad ICES (2017) WGDEEP	vice		
Stock	Status r	elative to Reference Poin	ts		
		Type of reference point	Value of reference point	Current stock status relative to reference point	

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PI 1.1.1	The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing			
Reference point used in scoring stock relative to PRI (SIa)	Not defined		Biomass index (2	2016) =
Reference point used in scoring stock relative to MSY (SIb)	Lmean/LF=M	$L_{F=M} = 78.75 \text{ cm}$ Ratio corresponding to MSY = 1; Values > 1 corresponds to F <f<sub>MSY Ling become mature at ages 5-7 (~69 cm lengths)</f<sub>	22.265 kg/h CV ^ Lmean/LF=M= 1.04	•16% (2016)
OVERALL PERFORMANCE INDICATOR SCORE: UoC 1-3				
CONDITION NUMBER (if relevant):				

Evaluation Table for PI 1.1.1A - key LTL - not applicable

Evaluation Table for PI 1.1.2 – Stock rebuilding- not applicable

Evaluation Table for PI 1.2.1 – Harvest strategy

PI 1	.2.1	There is a robust and precautionary harvest strategy in place				
Scorii Issue	ng	SG 60	SG 80	SG 100		
а	Harvest	strategy design				
	Guide post	The harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and is designed to achieve stock management objectives reflected in PI 1.1.1 SG80.		
	Met?	Y	Y	Ν		
	Met?YYNJustifi cationThe Harvest Strategy is under discussion, the evaluation is based on t (December 2017) framework (effort regulation). The strategy is to establish effort limits that together with a set o measures, not least a large minimum mesh size and an elaborated closed areas overall will maintain the Faroese fisheries within sustaina This means that the effort limits are set through a compromise of co cod, haddock, saithe and the considerations for the status of the ling st minor importance. The upper limits of the fishing days are not reached f trawlers and long liners, about 20% of the trawler days and about 40% liner days are unused in recent years (see Figure 4). Even so, current fi not generate catch levels above ICES advice partly as a result of mack more attractive.Under current conditions the strategy is expected to achieve may objectives reflected in PI 1.1.1 i.e. MSY strategy. The strategy sustainable limits on the catch and exploitation SG60 is met. The strategy is responsive to the stock status although this is n considerations for other stocks as well (cod, haddock, saithe). The elem harvest strategy – effort limitations and technical measures – work t achieve sustainable fisheries objectives. SG80 is met.However, the harvest strategy has not been designed to achi management objectives consistent with PI 1.1.1 objectives fo management scheme which considers Cod/haddock targets rather tha target. The management framework is designed to meet PI 1.1.1 fo		on is based on the current er with a set of technical d an elaborated system of s within sustainable limits. ompromise of concerns for atus of the ling stock are of are not reached for the pair and about 40% of the long ven so, current fishing does a result of mackerel being to achieve management The strategy will insert s met. hough this is mixed with aithe). The elements of the asures – work together to esigned to achieve stock objectives for Faroese rgets rather than ling/tusk neet PI 1.1.1 for a mix of n specific ling/tusk targets.			
b	Harvest	strategy evaluation				
	Guide post	The harvest strategy is likely to work based on prior experience or plausible argument.	The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives.	The performance of the harvest strategy has been fully evaluated and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.		
	Met?	Y	Ŷ	IN		

PI 1	2.1	There is a robust and precautionary harvest strategy in place						
	Justifi	The strategy is likely to generating above Every fishi	The strategy is likely to work based on prior experience, the fishery is not generating above EMSY fishing mortalities					
		The harvest strategy has t	been in operation for more	than 20 years and	the ling			
		5.b stock is fished around	5.b stock is fished around F_{MSY} during this period, Figure 12. SG60 and SG80 are met.					
		The strategy is sensitive to market conditions and to changes in stock status for other stocks than ling. The strategy is not fully evaluated. SG100 is not met						
с	Harvest	strategy monitoring						
	Guide post	Monitoring is in place that is expected to determine whether the harvest strategy is working.						
	Met?	Y						
	Justifi cation	The fisheries are subject to are abundance data from t	an elaborated fisheries stati wo annual surveys. SG60 is	stics programme a met.	nd there			
d	Harvest	strategy review						
	Guide post			The harvest stra periodically review improved as nece	ategy is wed and ssary.			
	Met?			Y				
	Justifi cation	The harvest strategy is under review as part of the 10 years review of the Faroese fisheries Act. The assessment methodology is to be benchmarked in 2018. SG100 is met.						
е	Shark fir	nning		-				
	Guide post	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high of certainty that finning is not place.	degree at shark taking			
	Met?	Not relevant	Not relevant	Not relevant				
	Justifi	Ling is not a shark.						
	cation	Score: Not relevant						
f	Review	of alternative measures	There is a regular	Thoro is a bionni	2			
	post	of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock.	review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock and they are implemented as appropriate.	review of the pote effectiveness and practicality of alte measures to mini UoA-related mort unwanted catch of target stock, and are implemented, appropriate.	ential ernative mise ality of f the they as			
	Met?	Not relevant	Not relevant	Not relevant				
	Justifi cation	The fisheries operate under the fishing gear and the are no unwanted catch. Hence,	r a discard ban. The data b eas to which there are acces , the score is Not relevant	ecause of the select s demonstrate that	tivity of there is			
Refer	rences	Faroese Act on the Manage ICES WGDEEP (2017) Sect	ment of Marine Resources ion 4.2					
OVER	ALL PERI	FORMANCE INDICATOR SO	CORE: UoC 1-3		85			
CONE	CONDITION NUMBER (if relevant): N/A							

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PI 1	.2.2	There are well defined and effective harvest control rules (HCRs) in place				
Scorii Issue	ng	SG 60	SG 80	SG 100		
а	HCRs de	sign and application				
	Guide post	Generally understood HCRs are in place or available that are expected to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.	Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.	The HCRs are expected to keep the stock fluctuating at or above a target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, most of the time.		
	Met?	Y	N	N		
	Justifi cation	There is no explicit HCR dia considerations which histor this system might provide remained in good health ar severe restrictions based o the authorities options to in Act on the Management of 3.2.4), states that a long-t marine resources is to be of maintain the industry and should take into account th is in good shape, see scorin management plan and for PRI reference point. The st presented by Havstovan, i. presented to the Faroese fi on that basis the authorities pressure e.g. through the for otherwise. Because the stor introduce more strict restrict Thus, the Faroese Act on the availability of an appropria reduce the exploitation ratt approached. The revised Fa (18 December 2017) stiput established and implement reductions are required and the ability to achieve the n However, for the Faroese for above, the effort regulation not met	rected at ling in place but the rically was built into the effor for an opportunity for overeend there was no need for au in concern for the stock state introduce additional measures Marine Resources (18 Dece erm strategy for the manag designed and implemented for the fish stocks at sustainable ne recommendations of expen- ing at PI 1.1.1, and there is a reduction of exploitation sho rategy is responsive to the a e. to status of the stock. The ishing industry and to the mass have ample opportunity to fishing days, specific regulation to the stock at sustain the Management of Marine R te HCR. Based on the Act super- tances act on the Managemen- tates that an appropriate mass and the reduction of the fisher ecessary limitations. SG60 i fishery there is no well-defin n was primarily aimed at co	ere are general rt days system. Although xploitation the stock thorities to introduce more us. The legal system gave is if required. The Faroese mber 2017, see section ement and utilization of or each stock in order to e levels. The strategy erts in the field. The stock no immediate need for a build the stock approach a annual assessment e annual assessments are anagement authorities and o regulate the fishing ions for the ling fishery or e has been no reason to esources provides for the ich a HCR is expected to t impairment (PRI) is ent of Marine Resources anagement plan will be ICES advice will signal if y before 2010 illustrates s met. hed HCR in place. As noted od/haddock/saithe. SG80 is		
b	HCRs ro	bustness to uncertainty				
	Guide post		The HCRs are likely to be robust to the main uncertainties.	The HCRs take account of a wide range of uncertainties including the ecological role of the stock, and there is evidence that the HCRs		

Evaluation Table for PI 1.2.2 – Harvest control rules and tools

PI 1.2.2		There are well defined and effective harvest control rules (HCRs) in place			
				are robust to th uncertainties.	ne main
	Met?		Ν	Ν	
	Justifi cation	The HCR such as it is not robust to a range of external conditions, e.g. marke conditions, partly because there are significant unused fishing days in the system Furthermore, there is no well/defined HCR for ling in 5.b.			market system.
с	HCRs ev	valuation			
	Guide post	There is some evidence that tools used or available to implement HCRs are appropriate and effective in controlling exploitation.	Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.	Evidence clearly shows that the to use are effective is achieving the exploitation levels required under th	ools in n e HCRs.
	Met?	Y	Ν	Ν	
	Justifi cation	ifi The Faroese Act on the Management of Marine Resources provides the necessation tools: access limitation, effort restriction TACs, technical measures, closed area and closed seasons known to be effective in implement HCRs. TACs are r implemented for this fishery otherwise the tools are all used and t implementation is effective. The fishing mortality corresponds to the target M level. SG60 is met.			
		Experience with other Faroese stocks (cod, haddock) where the same effort regulation is applied indicates that the tools are not effective in achieving the exploitation rates required. There is no experience revised Faroese Act on the Management of Marine Resources. SG80 is not met			
		Faroese Act on the Manage	ement of Marine Resources 1	.8 December 2017	
References		ICES (2017) WGDEEP			
0)/55		ICES (2017) Ling in 5.b Ad	vice		
OVER	OVERALL PERFORMANCE INDICATOR SCORE: UoC 1-3 60				
COND	CONDITION NUMBER (if relevant): 1				

PI 1	.2.3	Relevant information is collected to support the harvest strategy		
Scorii Issue	ng	SG 60	SG 80	SG 100
а	Range o	f information		
	Guide post	Some relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy.	Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data is available to support the harvest strategy.	A comprehensive range of information (on stock structure, stock productivity, fleet composition, stock abundance, UoA removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available.
	Met?	Y	Y	Ν
	Justifi cation	There is information available on general biology, stock productivity and fleet composition, section 3.3.2. SG60 is met. This information is sufficient to generate advice relative to F _{MSY} . This has allowed the Faroese Authorities to set effort levels in support for the harvest strategy. SG80 is met. The information is comprehensive and is supported by data from deep water surveys in 2014 and 2015 providing addition information. There is a good understanding of the Faroese Plateau ecosystem including ecosystem components not directly influenced by fishing. All removals are well documented. However, the age data are not of sufficient quality to allow ICES to base its advice on an		
h	Monitori			
Ь	Guide post	Stock abundance and UoA removals are monitored and at least one indicator is available and monitored with sufficient frequency to support the harvest control rule.	Stock abundance and UoA removals are regularly monitored at a level of accuracy and coverage consistent with the harvest control rule , and one or more indicators are available and monitored with sufficient frequency to support the harvest control rule.	All information required by the harvest control rule is monitored with high frequency and a high degree of certainty, and there is a good understanding of inherent uncertainties in the information [data] and the robustness of assessment and management to this uncertainty.
	Met?	Y	Y	Ν
	Justifi cation	Fisheries statistics data are available for all fisheries exploiting ling in 5.b and the fisheries operates under a discard ban. Hence all removals are documented. There is abundance survey information available supplemented by Cpue from commercial long line data. SG60 is met. These data are available almost in real time and the surveys are annual. This data level is above what is required by the assessment methodology and the harvest control rule which is defined based on annual information. SG80 is met.		
		relevant information requir	red for a stricter HCR is ava	ilable. The uncertainties of

Evaluation Table for PI 1.2.3 – Information and monitoring

PI 1	PI 1.2.3 Relevant information is collected to support the harvest strategy		narvest strategy		
		the information and the robustness of the management is not well known. SG100 is not met.			
С	Compret	ensiveness of information			
	Guide post		There is good information on all other fishery removals from the stock.		
	Met?		Y		
	Justifi cation	There is detailed data from the fisheries statistics programmes. These programmes cover all fisheries for ling (and other species) on the Faroese Grounds. The fishery operates under a discard ban. SG80 is met.			
Refer	References VØRN HAGTØL <u>http://www.vorn.fo/</u>				
OVER	OVERALL PERFORMANCE INDICATOR SCORE: UoC 1-380				
COND	ITION N	UMBER (if relevant):			N/A

PI 1.2.4		There is an adequate assessment of the stock status		
Scorin Issue	ng	SG 60	SG 80	SG 100
а	Appropri	ateness of assessment to st	ock under consideration	
	Guide post		The assessment is appropriate for the stock and for the harvest control rule.	The assessment takes into account the major features relevant to the biology of the species and the nature of the UoA.
	Met?		Y	Ν
	Justifi cation	The assessment is based abundance surveys. The ad is appropriate (survey infor	on data from the fisher dvice is based on ICES categoriation) for this approach.	y including logbooks and gory 3 and the assessment
		not provide detailed insigh dynamics. The assessment structure of the stock, as w	t into the productivity of the does not take into account vell as selectivity of the UoA	e stock and the population for example age or length SG100 is not met,
b	Assessm	ent approach		
	Guide post	The assessment estimates stock status relative to generic reference points appropriate to the species category.	The assessment estimates stock status relative to reference points that are appropriate to the stock and can be estimated.	
	Met?	Y	Y	
	Justifi cation	The Stock status is assess Hence there is a F _{MSY} proxy	sed based on length data, s v available. SG60 is met.	see scoring table PI 1.1.1.
		status, Figure 12. SG80 is	met.	ata provide a proxy for the
с	Uncertai	nty in the assessment		
	guide post	identifies major sources of uncertainty.	Ine assessment takes uncertainty into account.	into account uncertainty and is evaluating stock status relative to reference points in a probabilistic way.
	Met?	Y	Y	Ν
	Justifi cation	The assessment is based biomass indicators from ab uncertainties associated w the assessment through th extra security against non- The assessment takes the u series available for Lmean. application under ICES cate	on length data from the contract of the second and the second and the second and the second and the sustainable fisheries. SG60 uncertainties into account. The Furthermore, survey uncertained advice. SG80 is met	commercial fishery and on commercial Cpue data. The vn and are incorporated in e precautionary cap as an) is met. his is done through the time ainty is accounted for in the
d	Evaluatio	ne assessment is not prot	Dabilistic. SG100 IS not met	
u	Guide			The assessment has been
	post			tested and shown to be robust. Alternative hypotheses and assessment approaches

Evaluation Table for PI 1.2.4 – Assessment of stock status

PI 1.2.4		There is an adequate assessment of the stock status			
				have been ridexplored.	gorously
	Met?			N	
	Justifi cation	The assessment has not be As noted above the asses structure and fish market.	een formally tested and hen sment may not be robust t SG100 is not met.	ce not shown to be to changes in the	e robust. fisheries
е	Peer rev	iew of assessment			
	Guide post		The assessment of stock status is subject to peer review.	The assessment h internally externally reviewed.	has been and peer
	Met?		Y	Y	
	Justifi cation	 The assessment is subject to the standard ICES quality assurance through the assessment Working Group WGWIDE. This include peer review of the assessment prepared by a subgroup within WGDEEP. SG80 is met. The ICES procedures involve both internal and external reviewers (WGDEEP, ACOM and Benchmark). The annual advice is subject to the standard WGDEEP and ACOM scrutiny. Some external review is done through the annual discussions on management with the Faroese fishing industry. However, no benchmark of the stock assessment has yet been presented but is planned for 2018. The stock assessment is also dealt with in specific methodological working groups (e.g. WKLIFE). SG100 is met. 			
References ICES (2017) Ling in 5.b Advice ICES (2017) WGDEEP					
OVER	OVERALL PERFORMANCE INDICATOR SCORE: UoC 1-385				
COND	CONDITION NUMBER (if relevant): N/A				

Principle 1 Tusk (NEA): UoC 4, UoC 5 and UoC 6.

Tusk (NEA): Tusk (Brosme brosme) in subareas 4 and 7–9, and in divisions 3.a, **5.b**, 6.a, and 12.b (Northeast Atlantic). ICES Advice on fishing opportunities, catch, and effort in Bay of Biscay and the Iberian Coast, Celtic Seas, Faroes, Icelandic Waters, Greater North Sea, and Oceanic Northeast Atlantic Ecoregions. June 2017. DOI: 10.17895/ices.pub.3265. Code: usk.27.3a45b6a7-912b.

Evaluation Table for PI 1.1.1 – Stock status

PI 1.1.1		The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing			
Scorii Issue	ng	SG 60	SG 80	SG 100	
а	Stock st	atus relative to recruitment impairment			
	Guide post	It is likely that the stock is above the point where recruitment would be impaired (PRI).	It is highly likely that the stock is above the PRI.	There is a high degree of certainty that the stock is above the PRI.	
	Met?	Y	Y	Y	
	Justifi cation	The tusk stock, see ICES stock, see Figure 16 for further detail	(2017) for details, is assess	sed as an ICES Category 3	
		No explicit PRI has been de category 3 advisory rule. I as satisfactory to provide p PRI reference point. There is an accepted stoc Norwegian longline fleet development). The indicat longest time series, the Fa stock. It is thus likely that Also, the fishing mortality (1 generation time). This r is met. Stock biomass is assessed reference point (PRI) estin point. As, to be precautio accepted as the stocks ar impaired. Furthermore, th graphs presented in sectio certainty that the stock is met.	fined beyond the reference p dowever, the TAC reference precautionary Advice. Therefore k indicator i.e. the standard . This indicator is used or show that the stock is i roese long line cpue (since 1 stock is above PRI. SG60 is has been around or below Finakes it highly likely that the in relative terms in relation t mated. The current SSB leven ary, a buffer is required a re above PRI reference point is stock is increasing durin on 3.3. This indicates that above PRI i.e. recruitment	boint embedded in the ICES point is accepted by ICES ore, this point is taken as a dized cpue series from the as index for the stock ncreasing since 2000. The 2985), shows a fairly stable met. MSY for more than a decade e stock is above PRI. SG80 o BMSY, and there is no limit yel is above this reference above the PRI level this is nts and recruitment is not ing the recent decade, see there is a high degree of is not impaired. SG100 is	
	Stock status in relation to achievement of MSY				
	Guide post		The stock is at or fluctuating around a level consistent with MSY.	There is a high degree of certainty that the stock has been fluctuating around a level consistent with MSY or has been above this level over recent years.	
	Met?		Y	Ν	
	Justifi cation	B_{MSY} is estimated internally to be 1.5 times above the (CI) limits. Furthermore, st	in the SPiCT model. Stock bi estimated B _{MSY} , and above i ock biomass has been estim	omass in 2016 is estimated ts 95% confidence interval ated to be above Bmsy since	

PI 1.1.1	The stock is at a level which maintains high productivity and has a low probability of recruitment overfishing				
Scoring Issue	SG 60	SG 80	SG 100		
	2008, and fishing mortality has been below F_{MSY} since 2005. Therefore, the stock is above a level consistent with MSY and SG 80 is met. However, B_{MSY} is estimated internally in the SPiCT model and changes when the assessment is updated. In addition, the SPiCT model is based on commercial cpues and its results should be taken with care as cpues' may not necessarily reflect stock trends accurately. Therefore, there is no high degree of certainty that the stock is above MSY and SG 100 is not met.				
ReferencesICES (2016) Advice IICES (2017) Tusk AdICES WGDEEP (2017)		sis Se			
Stock Status	relative to Reference Po	oints			
	Type of reference point	Value of reference point	Current stock status relative to reference	point	
Reference point used in scoring stock relative to PRI (SIa)	1/2B _{MSY} = MSY B _{trigger}	0.5	SSB(2016) ~ 1.5 B _{MSY}		
Reference point used in scoring stock relative to MSY (SIb)	B _{MSY} F _{MSY}	1	F(2016) ~0.3* Fмsy		
OVERALL PE	RFORMANCE INDICATOR	R SCORE: UoC 4-6		90	
CONDITION NUMBER (if relevant):					

Evaluation Table for PI 1.1.1A - key LTL NOT RELEVANT

Evaluation Table for PI 1.1.2 – Stock rebuilding NOT RELEVANT

Evaluation Table for PI 1.2.1 – Harvest strategy

Scorir Issue	ng	SG 60		
Issue		20.00	SG 80	SG 100
15500				
а	Harvest	strategy design		
	Guide post	The harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and is designed to achieve stock management objectives reflected in PI 1.1.1 SG80.
	Met?	Ŷ	Ŷ	N
b	Met? Y N Justifi cation Tusk is a widely distributed species and straddles between EU, Faroese, Nor and NEAFC waters. The stock is not fished in NEAFC waters. In the EU, managed under the CFP and in Faroese and Norwegian waters the national laws apply. All these include MSY objectives to be reached for all stocks, a lid scheme exists, there are technical measures in place and a further set of st management measures can be adopted (including TACs and/or effort limit closed areas and gear specifications) if required based and on stock sta NEAFC a limit on effort expansion has been adopted since 2009 for deep fisheries in general. Although there is no comprehensive joint harvest strategy for tusk (NE various fisheries management schemes that apply, all adhere to the MSY ob and it is expected that the management combined achieve stock manag- objectives reflected in PI 1.1.1 (i.e. MSY exploitation). SG60 is met. Several TACs are set for EU and international waters in partnership with fishing nations. In the Faroes a fishing effort regime and a licensing scheme minimum landing size are also set specifically for tusk. Additional manag- measures are also adopted in the EU, Faroe Islands, Norway and NEAFC, in a discard ban, technical gear and vessels specifications, and closed areas. The harvest strategy is based on ICES advice which is based on an asset tracking stock development. Thus, the harvest strategy is responsive to th of the stock as the regulation are decided taking the ICES advice into accou elements of the harvest strategy work together towards achieving management objectives reflected in PI 1.1.1 and SG 80 is met. However, the harvest strategy has not been designed to achieve management objectives consistent with PI 1.1.1 objectives for all co involved in the fishery e.g.; the Faroese management scheme co Cod/baddock targets ra		en EU, Faroese, Norwegian waters. In the EU, tusk is waters the national fishing ed for all stocks, a licensing and a further set of specific Cs and/or effort limitations, ed and on stock status. In since 2009 for deep-water rategy for tusk (NEA) the othere to the MSY objective chieve stock management SG60 is met. in partnership with other d a licensing scheme and a k. Additional management orway and NEAFC, including s, and closed areas. s based on an assessment y is responsive to the state ES advice into account. The towards achieving stock D is met. signed to achieve stock bjectives for all countries ement scheme considers 00 not met.	
	Guide	The harvest strategy is	The harvest strategy may	The performance of the
	post	likely to work based on prior experience or plausible argument.	not have been fully tested but evidence exists that it is achieving its objectives.	harvest strategy has been fully evaluated and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.

DNV GL – Report No. 2017-027, Rev. 2 – <u>www.dnvgl.com</u> MSC Full Assessment Reporting Template V2.1 – issued 8 April 2015 Template approval date:

PI 1	.2.1	There is a robust and pr	ecautionary harvest strat	egy in place		
	Justifi cation	Current fishing does not g more attractive) and this h	generate catch levels above as been the case since 2011	ICES advice (mackerel is SG60 is met.		
		The harvest strategy has not been fully tested but the catches seen since 2011 indicate that the harvest strategy (fishing at or below ICES precautionary advice) is achieved. SG80 is met.				
		As noted above the harvest strategy has not been fully evaluated. SG100 is not met.				
с	Harvest	strategy monitoring				
	Guide post	Monitoring is in place that is expected to determine whether the harvest strategy is working.				
	Met?	Y				
	Justifi cation	There is a monitoring sche statistics are available for a sampling programmes an Collection Framework, in th scheme in all countries i monitoring programme in information on catches (len is used to inform the sto evaluation of the harvest s	eme in place for the stock a all fisheries (catches, logbook d fishery independent sur ne Faroe Islands and Norwa nvolved in the fishery, an the Norwegian longline fi gth, sex, maturity and otolit ck assessment on stock st trategy. SG 60 is met.	and the fisheries. Fisheries ks, VMS). There are several veys under the EU Data y. There is a port sampling d a reference fleet-based shery to collect biological hs). All these data collected ratus, which allows for an		
d	Harvest	strategy review				
	Guide post			The harvest strategy is periodically reviewed and improved as necessary.		
	Met?			Y		
	Justifi cation	The Faroese, Norwegian periodically (~every 10 yea The Data Collection Frame programme includes a pla annually, Faroes fishing assessments are also revier all components of the harv ability to control fishing assessment and monitoring	an fishing laws as well as the EU CFP are reviewed years) and improvements are made if deemed necessary. meworks are also periodically reviewed. The ICES review planned Deepwater benchmark 2018, WGDEEP review ing law is currently under review. Finally, ICES stock viewed bi-annually and benchmarked regularly. Therefore, harvest strategy, namely the management system and its ing mortality and respond to stock status, the stock ring systems are periodically reviewed. SG 100 is met			
е	Shark fir	nning				
	Guide post	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark finning is not taking place.		
	Met?	Not relevant	Not relevant	Not relevant		
	Justifi cation	Tusk is not a shark. Score:	Not relevant			
f	Review	of alternative measures				
	Guide post	There has been a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock and they are	There is a biennial review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock, and they		
PI 1	PI 1.2.1 There is a robust and precautionary harvest strategy in place					
---------------------------------	------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------	-------------------------------	----	
			implemented as appropriate.	are implemented, appropriate.	as	
	Met?	Not relevant	Not relevant	Not relevant		
	Justifi cation	The long line which dominates the fishery does not catch small tusk hence discards are negligible (<5%); in addition, the main fleets operate under a discard ban by Norway and Faroe Islands and the EU fleet from 2019. there is no unwanted catch. However, the Norwegian and EU fisheries are not part of the UoA.				
		ICES (2017) Tusk (NEA) Advice				
Refer	ences	ICES (2016) Advice basis				
		Faroese Act on the Management of Marine Resources				
		Norwegian Marine Resource Act				
OVER	OVERALL PERFORMANCE INDICATOR SCORE: UoC 4-UoC 685			85		
CONDITION NUMBER (if relevant):			N/A			

PI 1.2.2 There are well defined and effective harvest control rules (HCRs) in place			rol rules (HCRs) in
Scoring Issue	SG 60	SG 80	SG 100
a HCRs de	l sign and application		
Guide post	Generally understood HCRs are in place or available that are expected to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.	Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.	The HCRs are expected to keep the stock fluctuating at or above a target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, most of the time.
Met?	Ŷ	Ν	Ν
Justifi cation	Consistent With ecosystem needs. N Y N N As noted above, Tusk is widely distributed and straddles between EU, Far Norwegian and NEAFC waters. The stock is not fished in NEAFC waters. In th tusk is managed under the CFP and in Faroese and Norwegian waters the na fishing laws apply. All these include MSY objectives to be reached for all stoci licensing scheme exists, there are technical measures in place, and a set of sp management measures can be adopted if required based on information on status (including TACs and/or effort limitations, closed areas and specifications). In NEAFC a limit on effort expansion has been adopted since for deep-water fisheries in general. Atthough there is no comprehensive joint harvest control rule for tusk (NEA various fisheries management schemes that apply, all adhere to the MSY objectives reflected in PI 1.1.1 (i.e. MSY exploitation). There are mechanisms in place (fishing agreements EU-Faroe Islands, EU-Na and Norway-Faroe Islands) that provides for the necessary joint management current status of the stock is good, see PI 1.1.1 and there is no urgent nee more elaborate coordination. Furthermore, the system of 'coastal sc rub status of the stock. The annual assessments are presented to the Far fishing industry and to the management authorities and on that basis the authorities have ample opportunity to regulate		dles between EU, Faroese, n NEAFC waters. In the EU, wegian waters the national be reached for all stocks, a n place, and a set of specific red on information on stock closed areas and gear is been adopted since 2009 trol rule for tusk (NEA) the adhere to the MSY objective is been adopted since 2009 trol rule for tusk (NEA) the adhere to the MSY objective is been adopted since 2009 trol rule for tusk (NEA) the adhere to the MSY objective is been adopted since 2009 trol rule for tusk (NEA) the adhere to the MSY objective is been adopted since 2009 trol rule for tusk (NEA) the adhere to the MSY objective is been adopted since 2009 trol rule for tusk (NEA) the adhere to the MSY objective is since a states anism that can be used. resented by Havstovan, is presented to the Faroese d on that basis the ing pressure e.g. through y or otherwise. Because in to introduce more strict es with fishery on this ces (18 December 2017), the management and inplemented for each stock is ustainable levels. The s of experts in the field. ces further specifies that d there is no immediate exploitation should the on the Management of propriate HCR expected to t impairment (PRI) is

Evaluation Table for PI 1.2.2 – Harvest control rules and tools

PI 1	2.2	There are well defined and effective harvest control rules (HCRs) in place			
		reduction of the fishery before 2010 illustrates the ability to achieve the necessary limitations. SG60 is met. Although the harvest strategy is expected based on past experience to achieve stock management objectives reflected in PI 1.1.1 SG80 no well-defined HCR covering the stock exist. SG80 is not met.			
b	HCRs rol	bustness to uncertainty			
	Guide post		The HCRs are likely to be robust to the main uncertainties.	The HCRs take ac a wide ran uncertainties in the ecological rol stock, and th evidence that th are robust to th uncertainties.	count of ge of ncluding e of the ere is ne HCRs ne main
	Met?		Ν	Ν	
	Justifi cation	Although there is input f approach, this input is management plan. SG 80/2	from the ICES advice, bas not embedded in the no 100 are not met because the	sed on the preca n-existing compre ere is no HCR for lin	utionary ehensive ng/tusk.
С	HCRs ev	valuation			
	post	that tools used or available to implement HCRs are appropriate and effective in controlling exploitation.	indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs.	shows that the to use are effective in achieving the exploitation levels required under th	ools in in e HCRs.
	Met?	Y	Ν	Ν	
	Justifi cation	The tools that are available to managers include the full package of TACs (hitherto not applied on the Faroe Islands), closed areas, closed seasons, gear restrictions, license schemes etc. The fisheries are subject to close control and enforcement schemes wherever they fish. This package is well known to be effective in controlling exploitation. SG60 is met. The fishery since 2011 has demonstrated that the exploitation is kept at or below MSY levels. The implicit HCR is based on MSY fishing and this is achieved. However, experience with other Faroese stocks (cod, haddock) where the same effort regulation is applied indicates that the tools as used until 2017 are not effective in achieving the exploitation rates required. There is no evidence available for how the revised Faroese Act on the Management of Marine Resources may function. Also, the current tusk fishery on the Faroe Islands is influenced by the situation in the mackerel fishery and there is doubt whether the regulation will be effective for tusk should the stock and political situation in the mackerel fishery change. SG80			
Refei	rences	Faroese Act on the Manage ICES (2017) Tusk (Other a	ement of Marine Resources (reas) Advice	18 December 2017)
OVER	RALL PERI	FORMANCE INDICATOR SO	CORE: UoC 4- UoC6		60
CONI tusk)	DITION N required	UMBER (if relevant): man that is acceptable to MS	agement plan for ling (ar C criteria.	nd also for	1
CONI ling) plan	DITION N required	UMBER (if relevant): man that is acceptable to MSC	agement plan for tusk (a Ccriteria involve EU and N	nd also for lorway in this	2

PI 1.2.3		Relevant information is collected to support the harvest strategy		
Scorii Issue	ng	SG 60	SG 80	SG 100
а	Range o	f information		
	Guide post	Some relevant information related to stock structure, stock productivity and fleet composition is available to support the harvest strategy.	Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data is available to support the harvest strategy.	A comprehensive range of information (on stock structure, stock productivity, fleet composition, stock abundance, UoA removals and other information such as environmental information), including some that may not be directly related to the current harvest strategy, is available.
	Met?	Y	Y	N
	Justifi cation	The tusk biology and population productivity like the national statistical pro- harvest strategy. SG60 is r Information on catch, incl growth, maturity and abun Although sampling does no catches and main areas available to support the ha advice relative to B _{MSY} and Information on natural mor on the Faroese componen	pulation structure are known ewise. The fleet composition ogrammes. These data are net. luding discards and effort, dance are all available for two of occur in all the areas, it of occurrence. Therefore rvest strategy. In particular, FMSY are available (SPiCT mo tality generally is missing. T t from the abundance surv	wn in general terms, the is known in detail through a available to support the length and age structure, usk in this large stock area. does cover the majority of , sufficient information is data sufficient to generate odel). SG 80 is met. here is detailed information eys but these do not fully
		understood. SG 100 is not	met.	Stock Structure is not runy
b	Monitori	ng		
	Guide post	Stock abundance and UoA removals are monitored and at least one indicator is available and monitored with sufficient frequency to support the harvest control rule.	Stock abundance and UoA removals are regularly monitored at a level of accuracy and coverage consistent with the harvest control rule , and one or more indicators are available and monitored with sufficient frequency to support the harvest control rule.	All information required by the harvest control rule is monitored with high frequency and a high degree of certainty, and there is a good understanding of inherent uncertainties in the information [data] and the robustness of assessment and management to this uncertainty.
	Met?	Y	Y	Ν
	Justifi cation	There are detailed and e components of the fisherie is monitored through the abundance surveys. The fi provided by ICES. SG60 is Stock abundance is monito data from three additional	effective fisheries statistics s. Removals are known is d Norwegian reference fleet requency matches the requi met red annually by two surveys annual surveys are available	programmes covering all etail. The stock abundance and through the Faroese irement for biennial advice in the Faores waters, while c. Catch per unit of effort is

Evaluation Table for PI 1.2.3 – Information and monitoring

PI 1	.2.3	Relevant information is collected to support the harvest strategy				
		available from the two major fisheries, Norwegian and Faroes longliners and are used in the stock assessment UoAs are sampled quarterly through the national sampling programmes under the EU DCF for biological data, including landings and discard estimates. Therefore, stock abundance and UoA removals are regularly monitored and two indicators are available and monitored with sufficient frequency to support the harvest control rule and SG 80 is met.				
		The surveys are not fully covering the area of occurrence of tusk and there are uncertainty about the stock structure. Hence, not all information required has a high degree of certainty. SG100 is not met.				
		SG60 met fisheries statistics survey information Cpue from long line				
		SG80 information available annual surveys				
		SG100 HCR not defined and therefore all information unknown				
		Score: 80				
С	Compret	hensiveness of information				
	Guide post	There is good information on all other fishery removals from the stock.				
	Met?	Y				
	Justifi cation	All components of the fisheries for tusk (NEA) are well monitored and removals are known in detail. There are very little discards. SG80 is met				
Refer	ences	ICES (2011) Stock annex Tusk (NEA)				
ICES (2017) Tusk (NEA) advice		ICES (2017) Tusk (NEA) advice				
OVER	ALL PER	FORMANCE INDICATOR SCORE: UoC 4- UoC 6	80			
COND	CONDITION NUMBER (if relevant): N/A					

PI 1.	.2.4	2.4 There is an adequate assessment of the stock status		
Scorii Issue	ng	SG 60	SG 80	SG 100
а	Appropri	ateness of assessment to st	ock under consideration	
	Guide post		The assessment is appropriate for the stock and for the harvest control rule.	The assessment takes into account the major features relevant to the biology of the species and the nature of the UoA.
	Met?		Y	Ν
	Justifi cation	There are survey indicator (NEA) is assessed using t provides reliable indication recruitment, and biomass. cpue trends-based assesses The assessment does not t	rs and length indicators available SPiCT model and ICES ons of trends in stock m ICES has therefore based it nent. SG80 is met. ake into account for example interval.	ailable for this stock. Tusk considers that the output etrics such as mortality, ts stock status advice on a e age or length structure of
h	Accore	une slock, as well as select		iot met.
D	Guide		The according	
	post	estimates stock status relative to generic reference points appropriate to the species category.	estimates stock status relative to reference points that are appropriate to the stock and can be estimated.	
	Met?	Y	Y	
	Justifi cation	The Tusk (NEA) is assessed of the stock status relative met. On the arguments (SSB/BN is met.	d using the SpiCT model. This to biomass and exploitatio MSY and F/FMSY ratios availa	s model provides estimates on refernce points. SG60 is able) provided above SG80
с	Uncertai	nty in the assessment		
	Guide post	The assessment identifies major sources of uncertainty.	The assessment takes uncertainty into account.	The assessment takes into account uncertainty and is evaluating stock status relative to reference points in a probabilistic way.
	Met?	Y	Y	Y
	Justifi cation	The SPiCT model is a fully s and fishing mortality esti- observation error in the c Fishing mortality and Biom The SPiCT takes account of The estimators of F _{MSY} , B _M uncertainty a 95% confide account uncertainty in the reference points in a proba	tochastic model: includes ra mated, and in observations atch and cpue series. SPiC ass reference points. SG60 is f the uncertainties. SG80 is r sy and MSY B _{trigger} proxy are ence interval. The assessme catch data and is evaluati ibilistic way. SG 100 is met.	ndom variability in biomass s of cpue and catch; and CT include the provision of is met. met. given with an estimate of ent is therefore taking into ng stock status relative to
d	Evaluatio	on of assessment		
	Guide post			The assessment has been tested and shown to be robust. Alternative hypotheses and

Evaluation Table for PI 1.2.4 – Assessment of stock status

PI 1	.2.4	There is an adequate as	sessment of the stock sta	tus	
				assessment app have been riv explored.	proaches gorously
	Met?			Ν	
	Justifi cation	The assessment has not I SPiCT approach is not know	been benchmarked and the wn SG100 is not met.	specific propertie	s of the
		The benchmark of tusk (NE	EA) is planned for 2018.		
е	Peer rev	iew of assessment			
	Guide post		The assessment of stock status is subject to peer review.	The assessment h internally externally reviewed.	ias been and peer
	Met?		Y	Y	
	Justifi cation	The assessment is subject to the standard ICES quality assurance through the assessment Working Group WGWIDE. This include peer review of the assessment prepared by a subgroup within WGDEEP. SG80 is met.			
		The ICES procedures involve both internal and external reviewers (WGDEEP, ACOM and Benchmark). The annual advice is subject to the standard WGDEEP and ACOM scrutiny. Some external review is done through the annual discussions on management with the Faroese fishing industry. However, no benchmark of the stock assessment has yet been presented but is planned for 2018. The stock assessment is also dealt with in specific methodological working groups (e.g. WKLIFE). SG100 is met.			
Refe	rences	ICES (2017) Tusk (NEA) ad	dvice		
Refe	ICES (2011) Tusk (NEA) stock annex				
OVEF	OVERALL PERFORMANCE INDICATOR SCORE: UoC 4- UoC 690				
CONI	CONDITION NUMBER (if relevant): N/A				N/A

Principle 2

The following tables show the results for the different fishing gears evaluated in this assessment. DT (UoC1 and UoC4): Demersal trawl

LL (UoC2 and UoC5): Big Longlines

Jiggs (UoC3 and UoC6): Jigging vessels and small longlines (same vessels with both gears on board).

Evaluation Table for PI 2.1.1 – Primary species outcome

PI 2	.1.1	The UoA aims to maintain primary species above the PRI and does not hinder recovery of primary species if they are below the PRI.				
Scoring Issue		SG 60	SG 80	SG 100		
а	Main pri	mary species stock status				
а	Guide post	Main primary species are likely to be above the PRI OR If the species is below the PRI, the UoA has measures in place that are expected to ensure that the UoA does not hinder recovery and rebuilding.	Main primary species are highly likely to be above the PRI OR If the species is below the PRI, there is either evidence of recovery or a demonstrably effective strategy in place between all MSC UoAs which categorise this species as main, to ensure that they collectively do not hinder recovery and rebuilding.	There is a high degree of certainty that main primary species are above the PRI and are fluctuating around a level consistent with MSY.		
	DT	Y	Y	N		
	LL	Y	Y	N		
	Jiggs	Y	Y	N		
Justifi cationTo date, all MSC UoAs to consider are the saithe, tusk and lin client under assessment. But as the catch data for the tusk and the same as for the saithe fishery, the only UoA to consider is and ling UoA under evaluation. All other Faroese MSC fisheries a place outside the Faroese Plateau, so they do not take Faroe haddock as main primary species.According to 2016 landing records, main primary species to different UoCs are (numbers in brackets give proportion of the landed by the UoC):UoC 1 and UoC 4: Demersal trawlers: saithe (77%, 22000 to Plateau cod only represents less than 4% of the landings by the the assessment team, following peer review advice, has includ cod as main primary species also for this UoC. UoC 2 and UoC 5: Large longlines: Faroe Plateau cod (30%, 64 (14%, 301 tons), and Greenland halibut (10%, 223 tons). UoC 3 and UoC 6 Jiggers: haddock (38%, 346 tons), Faroe Plate tons) and saithe (17%, 161 tons).		k and ling fisheries by the e tusk and ling fisheries are onsider is the present tusk fisheries are pelagic or take ake Faroe Plateau cod and species to consider in the ion of the catch and tones 22000 tons). While Faroe gs by the UoC (1073 tons), has included Faroe Plateau (30%, 643 tons), haddock ns). aroe Plateau cod (37%, 336				

PI 2.1.1	The UoA aims to maintain primary species above the PRI and does not hinder recovery of primary species if they are below the PRI.
	The status of the primary stocks is summarised below, further details are found in the ICES advice and in section 3.4.1.
	ICES Provides advice for all main retained species:
	<u>Saith</u> e in Faroe grounds: According to ICES advice, the spawning-stock biomass (SSB) is estimated to be above MSY Btrigger in 2016 and 2017. Estimated recruitment has been well above the long-term average since 2015. Fishing mortality (F) has been above FMSY since 1981, but continues to be below Fpa and Flim. ICES advises that when the MSY approach is applied, fishing mortality in 2018 in the Faroese fishing grounds should be no more than 35 003 t. Although landings by UoC 1 and UoC 4 are high, these account for more than 90% of Faroese landings, maintaining the catch below F MSY.
	<u>Greenland halibut:</u> SSB is currently above MSY B trigger. Recent fishing mortality (F) is estimated to be relatively close to FMSY. ICES advises that catches in subareas 5,6,12 and 12 for 2018 should be no more than 24 000 tonnes. Landings in 2016 by UoC were 216 tons.
	Faroe Plateau cod: The spawning-stock biomass (SSB) has been below B lim since 2005 and continues to be just below Blim. Fishing mortality (F) has decreased from the year 2000 but is still above Fmsy. ICES advices that when the MSY approach is applied, fishing mortality in 2018 should be no more than 4579 tonnes. UoCs 1 and 4 (demersal trawlers) landed 1073 tones in 2016, UoCs 2 and 5 (large longlines) landed 643 tons of Plateau cod in 2016 and UoCs 3 and 6 landed 336 tons of Plateau cod. ICES advice for 2016 was to reduce fishing effort to the lowest possible level (LPL) and develop a mixed-fishery management plan. According to ICES 2018 advice, total catches of Faroe Plateau cod were 5933 tones in 2016, of which 2052 tones were landed by the whole UoA (this is, the UoA was responsible for 34% of the landings in 2016). Generally speaking, the Faroe Plateau Cod is fished above FMSY and the stock size is below MSY BTrigger. In recent years the stock is fluctuating slightly above or below Blim for the most recent decade. Blim is taken as the PRI reference point. There is no specific management plan for the cod stock, although there is a management plan under construction for cod and haddock species. Besides, the New Fisheries Act will implement the quota system for all species in January 2019. At present there are different management measures already implemented. There are spawning closed areas directed to protect the Faroe Plateau cod stock (while the waters shallower than 200 m in the Faroe Bank are closed to fishing to protect Faroe Bank cod stock). These areas are closed during the main spawning season, and neighbouring areas are closed prior to, and immediately after the spawning season. According to ICES 2018 advice, trawlers are responsible for 32% of the landings, longlines are responsible for 10% of the landings. According to ICES NWWG 2017 Report the small boats (0-25 GRT) operating with longlines and jigging reels close to land have had an extremely high CPUE in recent years compared with the fishable
	<u>Haddock:</u> The spawning-stock biomass (SSB) has decreased since 2003 and is estimated to have been below Blim since 2010, except in 2017. The fishing mortality (F) has decreased in recent years but is still above FMSY. ICES advise that catches in Faroese EEZ should be of no more than 4570 t. Landings by UoC 2 were 301 tons and by UoC 3 346 tons. This is, catches of haddock by the UoA were 3647 tons in 2016. Generally speaking, the Faroe Plateau Haddock is fished above FMSY and the stock size is below MSY Btrigger, and in 2017 at Blim.

ΡI	2.1	L.1

The UoA aims to maintain primary species above the PRI and does not hinder recovery of primary species if they are below the PRI.

There is no management plan for this stock, although there is a cod and haddock management plan under construction which is not yet implemented. Besides, the New Fisheries Act will implement the quota system for all species in January 2019. The catches of both Faroese Plateau cod and haddock have substantially decreased in the past 15 years. As a result of the reduction in fishing effort, catches by the whole fleet of Faroe Plateau cod were reduced from maximums of 38000 tons in 2002 to the 6000 tons taken in 2016, while catches of haddock was reduced from the maximum catch in 2003 of 27000 tons to 3500 tons in 2016. ICES 2016 advice for these species stated that catches should remain to the "lowest possible level (LPL) and develop a mixed-fishery management plan". In 2017 Faroese stocks were benchmarked, the assessment model for both Faroese Plateau cod and haddock were changed from XSA to SAM model. Reference points for the different stocks were reviewed, decreasing the reference values for Blim and Bmsy and increasing the values for Fmsy and Fpa for the Faroe Plateau cod stock and slightly decreasing these values for the haddock stock. As for the short-term forecast, the spawning stock biomass of Faroese Plateau cod is expected to increase from 28000 tonnes in 2018 to 34000 tonnes in 2019 and eventually 38000 tonnes in 2020, while for haddock the spawning stock biomass is expected to be 34500 tonnes in 2018, 75 400 tonnes in 2019 and eventually 82 000 tonnes in 2020. In summary, the SSB of both stocks is expected to increase in the fore coming years. Again, according to ICES NWWG 2017 Report, the poor state of the Faroese Plateau cod stock since 2004 has been due to poor recruitment (not poor individual growth). Also, the temperature has been high in recent years which may have a negative effect on cod recruitment. While there isn't any specific management plan for cod and haddock, there have been different measures in place since 1987 to manage these stocks. In 1987 a system of fishing licenses was introduced. The demersal fishery at the Faroe Islands has been regulated by technical measures (minimum mesh sizes and closed areas to protect juvenile fish and spawning areas). Besides, a reduction of effort has been attempted through banning of new licenses and buy-back of old licenses. In 1994 a guota system was introduced however it was received with criticism by the fishing industry and resulted in discarding and misreporting of the catches. As a consequence of the poor results, the effort day system was implemented in 1996. Since then discarding has been reduced and to date ICES considers Faroese catch data adequate to assess the different stocks. Today, fishing for Faroe Plateau cod and haddock as targeted species is banned and these species can only be taken as bycatch in other fisheries. Another example of the Faroese effort to prevent depletion of Faroese fish species is the closure of the Faroese bank to protect Faroese bank cod in 2009. As the effort day system is only partially limiting the catch of hindered species, the Faroese Government will implement in January 2019 the fisheries reform, in which the effort day system will be replaced by quotas, antitrust regulations will be introduced to prevent that single companies are getting too large, and auctions will be applied to a part of the quotas. Importantly, the fisheries reform intends to follow principles of sustainability. The team considers that the low level of catches by the UoA under assessment (result of the implementation of different management measures such as effort reduction, area closures and technical measures) together with the responsive management strategy in place (able to reduce catches and adopt new management measures when necessary) serve to support that the UoA (or all MSC UoAs, as it is the same and only one) are not hindering the recovery of these species. Scoring: As mentioned above, the different UoCs have different main species to consider.

As regards UoCs 1 and 4 (demersal trawlers), main primary species are saithe and Faroe Plateau cod. According to ICES advice there is a high degree of

PI 2.1.1

The UoA aims to maintain primary species above the PRI and does not hinder recovery of primary species if they are below the PRI.

certainty that the saithe stock is fluctuating around levels which are consistent with MSY. As regards the Plateau cod, ICES advice for 2017 shows that the stock is fluctuating around the Blim taken as the PRI reference point. There are measures in place in particular the ban on directed fishing for Faroe Plateau cod and haddock as targeted species and these species can only be taken as bycatch in other fisheries. Other measures include closures of spawning areas during the main spawning season, and neighbouring areas are closed prior to, and immediately after the spawning season. Total catches by the whole fleet of Faroe Plateau cod were reduced from maximums of 38000 tons in 2002 to the 6000 tons taken in 2016, while catches of haddock were reduced from the maximum catch in 2003 of 27000 tons to 3500 tons in 2016. The SSB of both stocks is expected to increase in the coming years. According to ICES NWWG 2017 Report, the poor state of the Faroese Plateau cod stock since 2004 has been due to poor recruitment (not poor individual growth).

The Faroe Bank is closed to fishing to protect Faroe Bank cod stock.

These measures are expected to ensure that the demersal trawl fishery and for that matter any fishing taking place in the Faroese zone will not hinder recovery and rebuilding.

SG60 is met.

The only MSC certified fisheries that exist on the Faroe Grounds are the saithe fishery (under reassessment and covering the same vessels in the same grounds with the same catch composition) and the Greater Silver smelt fishery. The latter occurs largely outside the areas where significant cod and haddock are taken. The ban on directed cod and haddock fishery applies to all fisheries in the Faroese zone including all MSC UoAs and likewise the closures of spawning and adjacent grounds. Total catches of Faroe Plateau cod by the whole Faroese fleet were reduced from maximums of 38,000 tons in 2002 to the 6,000 tons taken in 2016. The decline of the stock biomass has been halted and most recently the stock has shown signs of recovery. Also the rather large mesh size (145 mm) is part of the protection of the cod stock. Thus, there is a demonstrably effective strategy in place between all MSC UoAs which categorize this species as main, to ensure that they collectively do not hinder recovery and rebuilding.

For 2017 the stock is at Blim (PRI) while for the past years it has been fluctuating around Blim. According to MSC FCR v2.0 GSA3.4.6, at SG80 the recovery of a species in P2 that is below a PRI or a biologically based limit is only required to levels above the PRI or biologically based limit. Moreover, GSA3.4.6 states that if a species below the PRI has an overarching recovery strategy in place, with effort controls set on total fishing mortality that are adhered to, an 80 score may also be achieved where evidence exists that the fishing mortality caused by all MSC UoAs is within the limits set by the recovery strategy in place for the species. As all MSC UoAs comply with the limits set by the management strategy the team considers that SG80 is met.

The cod and haddock are not above the PRI (Blim) reference with high degree of certainty and SG100 is not met.

As regards UoCs 2&5 (longlines), main primary species are Plateau cod, haddock and Greenland halibut.

PI 2	.1.1	The UoA aims to maintain primary species above the PRI and does not hinder recovery of primary species if they are below the PRI.			
		The justification for scoring (demersal trawlers).	g Plateau cod is given abo	ove for UoC 1 and UoC 4	
		<u>Haddock:</u> The stock is current There are measures in place Plateau cod and haddock as taken as bycatch in other fis fleet were reduced from the tons in 2016 Landings in 20 the management measures area closures in the spawnin at present being drafted for protection for the haddock as	ently around Blim taken as t e in particular the ban on di s targeted species and these sheries. Catches of haddock e maximum catch in 2003 of 016 are small compared with directed to the protection of ng season, and the new ma cod and haddock stocks) a stock.	the PRI reference point. rected fishing for Faroe e species can only be to by the Faroese fishing f 27,000 tons to 3,500 in ICES advice . Moreover, of the cod stocks, such as nagement plan (which is lso provide some	
		As for the cod stock, the sta while for the past years it h FCR v2.0 GSA3.4.6, at SG8 or a biologically based limit based limit. Moreover, GSA overarching recovery strate mortality that are adhered t exists that the fishing morta the recovery strategy in pla limits set by the management	atus of haddock stock in 20 as been fluctuating just belo 0 the recovery of a species is only required to levels at 3.4.6 states that if a species gy in place, with effort cont to, an 80 score may also be ality caused by all MSC UOA rece for the species. All MSC ent strategy.	17 is just above Blim (PRI) ow Blim. According to MSC <i>in P2 that is below a PRI</i> <i>pove the PRI or biologically</i> <i>s below the PRI has an</i> <i>trols set on total fishing</i> <i>achieved where evidence</i> <i>s is within the limits set by</i> UoAs comply with the	
		<u>Greenland halibut</u> in the Faroese zone is part of the Greenland halibut (<i>Reinhardtius hippoglossoides</i>) in subareas 5, 6, 12, and 14 (Iceland and Faroes grounds, West of Scotland, North of Azores, East of Greenland). This stock is at full reproductive capacity, i.e. highly likely to be above the PRI level (Blim). The assessment shows that that the status is that here is a high degree of certainty that the Greenland halibut stock is above the PRI (lim) level.			
		The scoring is dictated by the scoring is dictated by the second se	he status of the cod and ha t.	ddock. SG60 is met. SG80	
		Main primary species for Uo saithe. The saithe stock is a and haddock is given above dictated by the status of the SG100 is not met.	Main primary species for UoCs 3&6 (jiggers) are Plateau cod, haddock and saithe. The saithe stock is at levels above Bmsy. The justification for scoring cod and haddock is given above for UoC 1&4 (Demersal trawlers) and the scoring is dictated by the status of these two stocks. Hence, SG60 is met. SG80 is met but SG100 is not met.		
b	Minor pr	imary species stock status			
	Guide post			Minor primary species are highly likely to be above the PRI OR	
				evidence that the UoA does not hinder the recovery and rebuilding of minor primary species	

PI 2.1.1		The UoA aims to maintain primary species above the PRI and does not hinder recovery of primary species if they are below the PRI.				
	DT			Ν		
	LL			N		
	Jiggs			N		
	Justifi	Minor primary species to c	l onsider are:			
	cation	For UoC 1 and UoC 4: I Greenland halibut, Lemon fish".	redfish, blue ling, Atlantic v sole, plaice, grenadiers, halil	volfish, whiting, monkfish, but, and 247 tons of "other		
		For UoC 2 and UoC 5: saith grenadiers, halibut, Atlant tons of "other fish".	ie, redfish, blue ling, Atlantic o Scandian herring (bait), N	wolfish, whiting, monkfish, EA mackerel (bait) and 45		
		 For UoC 3 and UoC 6: Faroe bank cod, redfish, blue ling, Atlantic wolfish, whiting, monkfish, Greenland halibut, Lemon sole, grenadiers, halibut and 7 tons of "other fish". Due to the high number of minor species involved the team has decided to score them as a group and avoid the use of scoring elements, as described in MSC interpretations website: http://msc-info.accreditation-services.com/guestions/minor-species-and-scoring-element-approach-at-sg100/ 				
		The team considers that v that the UoA is not hinderi	vith the available informatio ng the recovery of the specie	n is not possible to assure es which are below PRI.		
		Specifically, it has not been possible to determine if the redfish landed is golder or beaked redfish. The status of both stocks is very different with golden redfish been above B MSY and beaked redfish below B MSY. There is no scientific advice for the Atlantic wolfish stock, it has not been possible to determine which grenadies species landings refer to and all UoC have some tons (from 7 to 247 tons) of unidentified fish in the catch. Besides, the situation of Faroe bank cod has been				
		As regards bait species, the UoCs. Bait is normally com- relative proportions: Atlant Atlantic mackerel (Primary <i>Loligo spp</i>) (50%) and Pa When considering the bait account for a 7% of the U the bait is known, the prop- can be estimated as follow saury (1%). Therefore, NE minor primary species cate secondary species categor The team considers that w UoA is not hindering the sta- UoC.	pere were 156 tons of bait us prised by the following fish s to-Scandian herring (Primary y species, 20%), Patagonian acific saury (Secondary spec in relation to the UoA catch loA catch. As the proportion ortion of each bait species in vs: squid (3.5%), mackerel A mackerel and Atlanto-Scan regory (while squid and sa y). ith the given uncertainties the ocks of minor primary specie	sed in 2016 by the longline pecies in the approximately species, 15%), North East squid (Secondary species, ies, <i>Cololabis spp</i>) (15%). h, all bait species together of the different species in the UoA catch composition (1.5%), herring (1%) and hdian herring fall under the bury fall under the minor here is no evidence that the s. SG100 is not met by any		
UoC. ICES 2017 advice for Faroese Plateau cod, Faroese Bank cod, ling, haddock Greenland halibut, golden redfish and beaked redfish. Landing records. Stakeholders interviews with the Directorate of Fisheries and Havstovan. http://msc-info.accreditation-services.com/questions/minor-species-and-scelement-approach-at-sg100/			nk cod, ling, haddock, tusk, es and Havstovan. ninor-species-and-scoring-			

PI 2.1.1	The UoA aims to maintain primary species above the PRI and does not hinder recovery of primary species if they are below the PRI.			
OVERALL PERFORMANCE INDICATOR SCORE: DT80				
OVERALL PERFORMANCE INDICATOR SCORE: LL 80				
OVERALL PERFORMANCE INDICATOR SCORE: Jiggs80				
CONDITION NUMBER (if relevant): N/A				

PI 2.1	PI 2.1.2 Primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch.			
Scorin	g Issue	SG 60	SG 80	SG 100
а	Manager	nent strategy in place		
	Guidep ost	There are measures in place for the UoA, if necessary, that are expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are likely to above the point where recruitment would be impaired.	There is a partial strategy in place for the UoA, if necessary, that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the point where recruitment would be impaired.	There is a strategy in place for the UoA for managing main and minor primary species.
	DT	Y	Y	N
	LL	Y	Y	N
	Jiggs	Y	Y	N
	Jiggs Y Y N Justific ation The management of fisheries in Faroe Islands is the responsibility of the Mir of Fisheries. Overall, fishing capacity is controlled through the license system. regulation applies to all UoCs. The revised Act does not introduce changes in regulation. At present (June 2018 and until 1st January 2019), all fisheries in F Islands are managed through the allocation of effort days. The recently appr Act on the management of marine resources (approved in December 2017) s that as of January 2019, the Faroese fleet of longliners and trawlers cate demersal fish in Faroese waters will no longer be allocated fishing days base the previous days-at-sea system, which will be replaced by a quota system basis for the quotas will be advice from ICES and from Havstovan. Small fit vessels which conduct coastal fisheries on a smaller scale will, however, con to base their activity on annually allocated fishing days. To date effort day allocated on an annual basis and tend to follow both ICES and Havstovan ad Besides, gears, mesh and hooks are regulated through regulation, limiting catch of the vessels. Also, the system of closures and technical regula remains. Enforcement of the fishing regulations falls under the responsibility of Directorate of Fisheries and the Coast Guard and is unaffected by the revised The Main primary species for the different UoCs are saithe, Faroe Plateau haddock and Greenland halibut as shown in Tables 32-34. UoC 1&4 (Demersal trawls): The main primary species are saithe and F Plateau cod. Some measures directed to the protection of cod, haddock and saithe have implemented for several years so far and apply to these stocks (cod, haddocf saithe). These measures include area closures during the spawning season i nursery sites, and also just before and after it, mesh size limitations of		gh the license system. This it introduce changes in this 2019), all fisheries in Faroe ays. The recently approved in December 2017) states hers and trawlers catching ated fishing days based on ed by a quota system. The in Havstovan. Small fishing ale will, however, continue ys. To date effort days are CES and Havstovan advice. gh regulation, limiting the and technical regulations der the responsibility of the affected by the revised Act. saithe, Faroe Plateau cod, 34. cies are saithe and Faroe dock and saithe have been e stocks (cod, haddock and the spawning season in the size limitations of 145 mm line vessels, and real-time the landings. Besides, and is an elaborate system of fically, the Faroese Bank is	

Evaluation Table for PI 2.1.2 – Primary species management strategy

PI 2.1.2	There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch.
	closed to all trawling since 2009 to protect the Faroe Bank cod stock (with 17 tones landed in 2015 all taken by jiggers, which are allowed to enter the area certain months of the year).
	These measures are considered sufficient that the tusk and ling fisheries will not hinder recovery of the Faroese Plateau cod stock. SG60 is met for both cod and saithe.
	The approach with a combination of closures, technical measures (minimum mesh size 145 mm) and near-future species quotas based on scientific advice establishes a strategy which applies to the Faroese fisheries in general and the tusk and ling fisheries fishery in particular which assures that the tusk and ling fisheries at least will not hinder rebuilding of the cod stock to levels well above PRI reference point (Blim). As regards the saithe stock, this is at levels above MSY Btrigger. SG80 is met. The strategy is only partial in the sense that a range of minor species are not covered and SG100 is not met.
	UoC 2&5 (Long lines): The main primary species are Faroese Plateau cod, haddock and Greenland halibut.
	<u>Faroese Plateau Cod</u> : The closures for cod fishing (see demersal trawlers above) also apply to the long liners. Directed fishing for cod is banned.
	<u>Faroese Haddock</u> : Directed fish for haddock is banned. The cod closures also provide a degree of protection for the haddock stock. The catch of haddock is small compared to the total fishery and the ICES advice on sustainable limits (<10%).
	<u>Greenland halibut</u> : As explained for UoC 1&4 (demersal trawlers) there is a set of measures at hand that can be applied if necessary to maintain the stock above PRI levels. Area closures and gear limitations also apply to the catch of this stock.
	The scoring is dictated of the cod and haddock situation. There are measures in place for the UoA, if necessary, that are expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are likely to above the point where recruitment would be impaired. SG60 is met.
	The approach with a combination of closures, technical measures and near-future species quotas based on scientific advice establishes a strategy which applies to the Faroese fisheries in general and the tusk and ling fisheries in particular which assures that the tusk and ling fisheries at least will not hinder rebuilding of the cod stock to levels well above PRI reference points. The cod catch is small compared to the total fishery (<15%). SG80 is met. The strategy is only partial in the sense that a range of minor species are not covered and SG100 is not met.
	<u>UoC 3&6 (Jiggers)</u> : The main primary species are Faroese Plateau cod, haddock and saithe. The justification for scoring these species is given above for UoC 1&4 (demersal trawlers) and UoC 2&5 (longlines) and the scoring is dictated

PI 2.1	.2	There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch.		
		by the status of the cod an but SG100 is not met.	d haddock stocks. Hence, S	G60 is met. SG80 is met
b	Manager	ment strategy evaluation		
	Guidep ost	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/species).	There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the fishery and/or species involved.	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the fishery and/or species involved.
	DT	Y	Y	N
		Y	Y	N
	Jiggs	Y	Y	Ν
		fishing effort, catches by the whole fleet of Faroe Plateau cod were reduced from maximums of 38000 tons in 2002 to the 6000 tons taken in 2016, while catches of haddock was reduced from the maximum catch in 2003 of 27000 tons to 3500 tons in 2016. Specifically, and according to ICES 2017 advice, 5933 tonnes of Faroe Plateau cod and 3465 tonnes of haddock were landed by all fleets in 2016. Of those, the UoA under assessment (or collectively) was responsible for the catch of 2052 tons of Faroe Plateau cod (this is, a 34% of the cod landings) and 966 tons of haddock (a 28% of the haddock landings). The different measures implemented are successful in maintaining the Plateau cod and haddock stocks at levels consistent with Blim without closing the fishery. ICES 2016 advice for these species stated that catches should remain to the "lowest possible level (LPL) and develop a mixed-fishery management plan". In 2017 Faroese stocks were benchmarked, the assessment model for both Faroese		
		for the different stocks we and Bmsy and increasing t stock and slightly decreasing term forecast, the spawnin increase from 28000 tonnes tonnes in 2020, while for h 34500 tonnes in 2018, 75 2020. In summary, the Si coming years. Again, accor Faroese Plateau cod stock individual growth). Also, th have a negative effect on c While there isn't any speci been different measures in system of fishing licenses Islands has been regulate closed areas to protect juv effort has been attempted	ere reviewed, decreasing the che values for Fmsy and Fpa ng these values for the hadd ng stock biomass of Faroese s in 2018 to 34000 tonnes in haddock the spawning stock 400 tonnes in 2019 and ev SB of both stocks is expect rding to ICES NWWG 2017 R since 2004 has been due to e temperature has been high cod recruitment. fic management plan for com place since 1987 to manage was introduced. The dem ed by technical measures (enile fish and spawning area through banning of new lice	a reference values for Blim a for the Faroe Plateau cod ock stock. As for the short- Plateau cod is expected to 2019 and eventually 38000 biomass is expected to be ventually 82 000 tonnes in red to increase in the fore eport, the poor state of the poor recruitment (not poor n in recent years which may d and haddock, there have le these stocks. In 1987 a ersal fishery at the Faroe minimum mesh sizes and as). Besides, a reduction of enses and buy-back of old

PI 2.1	.2	There is a strategy in place that is designed to maintain or to not hinder rebuilding of primary species, and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch.			
		licenses. In 1994 a quota system was introduced however it was received with criticism by the fishing industry and resulted in discarding and misreporting of the catches. As a consequence of the poor results, the effort day system was implemented in 1996. Since then discarding has been reduced and to date ICES considers Faroese catch data adequate to assess the different stocks. Today, fishing for Faroe Plateau cod and haddock as targeted species is banned and these species can only be taken as bycatch in other fisheries. Another example of the Faroese effort to prevent depletion of Faroese fish species is the closure of the Faroese bank to protect Faroese bank cod in 2009. As the effort day system will be replaced by quotas, antitrust regulations will be introduced to prevent that single companies are getting too large, and auctions will be applied to a part of the quotas. Importantly, the fisheries reform intends to follow principles of sustainability. The enforcement system assures compliance with the implemented regulations. The team considers that the low level of catches by the UoA under assessment (result of the implementation of different management measures such as effort reduction, area closures and technical measures) together with the responsive management measures when necessary) serve to support with some objective basis for confidence that the partial strategy will work. SG60 and SG80 are met by all UoCs. As this partial strategy has not been tested SG100 is not met.			
C	Manager	nent strategy implementation	on		
	Guidep ost		There is some evidence that the measures/partial strategy is being implemented successfully .	There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its overall objective as set out in scoring issue (a).	
	DT		Y	N	
	LL		Y	Ν	
	Jiggs		Y	Ν	
	Justific ation	Effort and gear limitations, along with other measures such as area closures during spawning season, and real-time closures for the protection of juvenile fish have been implemented for more than 10 years so far. There is clear evidence that the partial strategy (to manage impacts on all scoring elements) is successfully implemented. There are no infractions as regards compliance with these measures. SG80 is met. However, one of the objectives of the strategy is to bring the biomass of the Faroe Bank cod, Faroe Plateau cod and haddock to levels consistent with MSY, and not only to Blim. Therefore, there is no clear evidence that the objectives are been met. SG100 is not met.			
d	Shark fir	nning			
	Guidep ost	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark	

PI 2.1.2There is a strategy in place that is designed to maintain or to not hinder rebuild primary species, and the UoA regularly reviews and implements measure appropriate, to minimise the mortality of unwanted catch.			uilding of ures, as		
				finning is not place.	taking
	DT	Not relevant	Not relevant	Not relevant	
	LL	Not relevant	Not relevant	Not relevant	
	Jiggs	Not relevant	Not relevant	Not relevant	
	Justific ation	No primary species are sha	arks.		
е	Review of	of alternative measures			
	ost	potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species.	of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main primary species and they are implemented as appropriate.	review of the p effectiveness practicality of alt measures to r UoA-related mor unwanted catch primary species, a are implemente appropriate.	bernal ootential and ernative ninimise tality of of all and they ed, as
	DT	Not relevant	Not relevant	Not relevant	
	LL	Not relevant	Not relevant	Not relevant	
	Jiggs	Not relevant	Not relevant	Not relevant	
	Justific ation	There is no unwanted catch value. Moreover, some mai the demersal fleet. Minor value (although value dep relevant for this fishery.	n of main primary species as in primary species as saithe a primary species are also lar pends on the species). This	they all have a cor are the targeted sp nded and have con Scoring Guidepos	nmercial ecies for nmercial st is not
Refere	References Landing records Stakeholder meetings with Havstovan, the Ministry of Fisheries, the Directorate Fisheries and the client. Act on the Management of Marine Resources (2017) Commercial Fisheries Act (1994) http://vorn.kort.fo/#			torate of	
OVER	OVERALL PERFORMANCE INDICATOR SCORE: DT 80				
OVER	OVERALL PERFORMANCE INDICATOR SCORE: LL 80				
OVER	OVERALL PERFORMANCE INDICATOR SCORE: Jiggs 80				
COND	CONDITION NUMBER (if relevant): N/A				

PI 2.1	PI2.1.3Information on the nature and extent of primary species is adequate to determin risk posed by the UoA and the effectiveness of the strategy to manage primary species		adequate to determine the y to manage primary	
Scorin	g Issue	SG 60	SG 80	SG 100
а	Informat	ion adequacy for assessmer	nt of impact on main primary	/ species
	Guidep ost	Qualitative information is adequate to estimate the impact of the UoA on the main primary species with respect to status. OR If RBF is used to score PI 2.1.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for main primary species.	Some quantitative information is available and is adequate to assess the impact of the UoA on the main primary species with respect to status. OR If RBF is used to score PI 2.1.1 for the UoA: Some quantitative information is adequate to assess productivity and susceptibility attributes for main primary species.	Quantitative information is available and is adequate to assess with a high degree of certainty the impact of the UoA on main primary species with respect to status.
	DT	Y	Y	Y
	LL	Y	Y	Y
	Jiggs	Y	Y	Y
	Justific ation	The landing obligation serv impact of Faroese vessels enforced through random in Guard, both at landing p confidence that these record As regards the status of t species thanks to ICES ad trips (Spring survey, Sum which serve to collect infor Specifically, Faroese stocks to the cod and haddock assessment model for both and new reference points (B According to NWWG Repor misreport catches under t considered adequate, as w annual ground-fish surve information on demersal assessment (this is, ICES N in 1959, and the spring su starting in 1996. The land adequate for assessment p fisheries should also – in th	es to provide verifiable quar s on the different species. hspections by the Directorate orts and on sea. The low rds are accurate. hese species, this is well k vices. Besides, Havstovan of mer survey, pelagic surver mation on the main stocks f s were benchmarked in 201 stocks (ICES NWWG Report a stocks was changed from t Blim, Bpa, Fmsy and Fpa) we rt 2017, since there is no i he effort management syst ell as the catch-at-age. Besi ys (Spring survey and Su stocks. The input data in WWG 2017) consisted of the urvey starting in 1994 as w ings statistics is therefore r urposes. The ban on discarce heory – keep the discarding	ntitative information on the The landing obligation is of Fisheries and the Coast of level of infractions give nown for all main primary conducts different research y and deep-water survey) ished in Faroese waters. 7, paying special attention t 2017). As a result, the the XSA to the SAM model, re estimated for the stocks. Incentive to discard fish or tem, the catch figures are ides, the MRI conducts two ummer survey) to collect in the ICES 2017 update e catch-at-age data starting yell as the summer survey regarded by ICES as being ling as stated in the law on at a low level.

Evaluation Table for PI 2.1.3 – Primary species information

PI 2.1	Information on the nature and extent of primary species is adequate to determine to risk posed by the UoA and the effectiveness of the strategy to manage primary species			adequate to determine the y to manage primary
		The team considers the available quantitative information as adequate to assess with a high degree of certainty the impact of the UoA on main primary species with respect to status.SG60, SG80 and SG100 are met for all UoCs.		
b	Informat	tion adequacy for assessmer	nt of impact on minor primar	ry species
	Guidep ost			Some quantitative information is adequate to estimate the impact of the UoA on minor primary species with respect to status.
	DT			Ν
	LL			Ν
	Jiggs			N
	Justific ation	The landing obligation provides verifiable quantitative information on the impacts the fishery may have both on main and minor primary species. The adequateness of this recording method is supported by the strong enforcement system which includes random inspections both at sea and at landing ports. However, although many of the minor primary species are subject to ICES annual advice on stock status, this is not the situation for all of them. Besides, certain species such as redfish and grenadiers are not identified to the species level, so is not possible to determine the impact of the UoA with respect to status. SG100 is		
C	Informat	tion adequacy for manageme	ent strategy	
	Guidep ost	Information is adequate to support measures to manage main primary species.	Information is adequate to support a partial strategy to manage main Primary species.	Information is adequate to support a strategy to manage all primary species and evaluate with a high degree of certainty whether the strategy is achieving its objective.
	DT	Y	Y	Ν
	LL	Y	Y	Ν
	Jiggs	Y	Y	Ν
	Justific ation	The information that is collected through landing records, the sampling of landings and the different research surveys serve to support a strategy to manage main primary species. This is already done through the publication of fishing advice, the assignment of fishing days, and the management and implementation when necessary of fishing closed areas. SG60 and SG80 are met. However, the high number of minor primary species, the misidentification of some of them (redfish, grenadiers) and the fact that stock status of some of them is not always fully known (as for Atlantic wolfish), prevents the different scoring elements and UoCs of the fishery from gaining SG100, as the evaluation of the effectiveness of the strategy can't always be conducted with a high degree of certainty.		

PI 2.1.3 Information on the nature and extent of primary species is adequate to determine risk posed by the UoA and the effectiveness of the strategy to manage primary species			ine the /	
		A recommendation has been set as regards the identification when possible to the species level of redfish and grenadiers catches, as juvenile individuals of these species are difficult to distinguish and to date are only recorded as "redfish" and "grenadiers", without specifying to the species level.		
		Landing records		
Refere	nces	Stakeholder meetings with Havstovan.		
		ICES 2017 advice for Faroese Plateau cod, Faroese Bank cod, haddock, saithe, G halibut, golden redfish and beaked redfish.	ireenland	
OVER	ALL PERF	DRMANCE INDICATOR SCORE: DT	85	
OVER	OVERALL PERFORMANCE INDICATOR SCORE: LL 85			
OVER	OVERALL PERFORMANCE INDICATOR SCORE: Jiggs 85			
COND	CONDITION NUMBER (if relevant): Recommendation 1 N/A			

PI 2	2.2.1	The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit.		
Scori Issue	ing e	SG 60	SG 80	SG 100
а	Main se	condary species stock sta	itus	
a	Main se Guide post	Agin Secondary species are likely to be within biologically based limits. OR If below biologically based limits, there are measures in place expected to ensure that the UoA does not hinder recovery and rebuilding.	Main secondary species are highly likely to be above biologically based limits OR If below biologically based limits, there is either evidence of recovery or a demonstrably effective partial strategy in place such that the UoA does not hinder recovery and rebuilding. AND Where catches of a main secondary species outside of biological limits are considerable, there is either evidence of recovery or a, demonstrably effective strategy in place between those MSC UoAs that also have considerable catches of the species, to ensure that they collectively de not biological catches of	There is a high degree of certainty that main secondary species are within biologically based limits.
	DT	Y	and rebuilding.	N
		v	V	N
	LL	T V	T V	
	Jiggs	Y	Y	N

Evaluation Table for PI 2.2.1 – Secondary species outcome

PI	2.	2.1	The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit.
		Justif icatio n	<u>Fish:</u> The effort system in place since 1996 and the associated landing obligation implies that there is no discarding of fish species. All species are landed and recorded (except for certain elasmobranchs species which are released alive but for which there are no records of interactions). As the Faroese fishery is managed through the allocation of fishing days, there is no specific framework to enlist fish species as secondary species. Fish species are scored under PI 2.1 (Primary species). The team has considered as secondary species those species for which there is no commercial value, such as some elasmobranchs and bird appears (meetly, fullmare) which get antended in the note or backs.
			According to MSC FCR SA3.7.1.2, species defined as 'out of scope' (amphibians, reptiles, birds, mammals) that are not classified as ETP, and that are impacted by the UoA shall be considered main.
			<u>Elasmobranchs (not ETP species)</u> : There are no records of catch of elasmobranchs as these are to be released if alive. Elasmobranchs are not considered as main secondary species as per SA3.4.3, if these species are released alive they shall not be considered as main. Mandelman and Farrington (2007) support that elasmobranchs have a high post-releasement survival rate. Hence these elasmobranchs are scored under PI 2.2.1 (c).
			<u>Bait for longlines:</u> The client provided data for 2016. The longline UoC used 156 tons of bait all bait species fall under the minor secondary species category, see section 3.4.2, and is scored under PI 2.2.1 (c).
			<u>Marine Mammals</u> : Regarding possible interactions with pinnipeds and marine mammals, information from Havstovan and the National History Museum confirm that these would be very rare. Both institutions had no records to share but confirmed that, specifically, pinnipeds remain close to the shore (where fishing with trawlers and longlines is forbidden) while other marine mammals are only present in certain seasons, and that both vessels and animals would avoid such interactions. The general arrangements of the fisheries around the Faroe Islands including banning of larger vessels inside 12 nm of the base line demonstrates together with the common fishing practise to avoid interactions that even for those marine mammals which are outside biological limits the saithe fisheries will not hinder recovery and rebuilding. SG60 is met. Furthermore, there are measures in place, notably the closure of the coastal zone, that ensure that the fisheries in the Faroese zone does not hinder recovery and rebuilding because the impact is low. For marine mammals SG80 is met. This applies to all three UoCs. However, there is no detailed statistics to back this perception and SG100 is not met. This applies to all three UoCs.

PI 2.2.1 The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit.

Sea Birds: The Demersal trawls and the long liners (> 110 GT) are banned from the coastal zone and the main impact is potentially with the small long liners fishing in the coastal zone. There are no records from fishing vessels on bird entanglements (although the e-logbook offers the possibility to record such interactions), while researchers at Havstovan estimate that in a worst-case scenario there can be up to 20 birds entangled per day in each one of the 8 large longlines, especially in the Spring and Summer months. However average interactions would be much lower. According to Olsen, B. (2008), expected annual interactions by the Faroese longline fleet would range between 5000-25000 individuals, of which the vast majority would be fulmars. Fulmar population in Faroe Islands is estimated to be over 600 000 pairs and increasing which suggests that the impact of the saithe long liners (< 3% mortality) is not hindering recovery. On a global scale the population is estimated at c.7,000,000 pairs or 20,000,000 individuals (Carboneras et al. 2016). Trends and status were confirmed at the on-site visit (Havstovan/Natural Museum). According to Havstovan comments during the stakeholder interview, regardless of the impact by the longline fleet, there is no reason of concern about fulmar's population, as the population is in a safe status and increasing. Regarding possible impacts on other bird species, the ornithologist at Havstovan showed no concern with any other bird species and asseverated that impacts with other bird species would be very rare and occasional. The main reason for this would be the ability of fulmars to fly and feed at further distances than other bird species, and the larger population of fulmars versus other bird species. Therefore, fulmar is the only main secondary species to consider.

The general arrangements of the fisheries around the Faroe Islands including banning of larger vessels (this is, vessels in UoCs 1,2,4&5) inside 12 nm of the base line demonstrates together with the common fishing practise to avoid interactions (e.g. setting at night and the use of tori lines) that the tusk and ling fisheries will not hinder the rebuilding of the fulmar population if needed. The fulmar population is increasing and is considered to be healthy.

As MSC FCR SA 3.7.1.2 requires that if a single bird is caught it shall be considered as a main secondary species, while such interactions for UoCs 1&4 and UoCs 3&6 are not expected, there are no guarantees that this has never taken place. The status of the fulmar indicates that the population with a high degree of certainty is above biologically based limits. SG80 is met. This applies to all three UoCs. The lack of detailed statistics prevents the different UoCs from achieving SG100.

PI 2	 The UoA aims to maintain secondary species above a biologically based limit and does not hinder recovery of secondary species if they are below a biological based limit. 			
b	b Minor secondary species stock status			
	Guide post			Minor secondary species are highly likely to be above biologically based limits.
				OR
				If below biologically based limits', there is evidence that the UoA does not hinder the recovery and rebuilding of secondary species
	DT			N
	LL			Ν
	Jiggs			Ν
	Justif icatio n Minor secondary species would be elasmobranchs for all UoCs and bass species (Patagonian squid and Pacific saury) for the longline UoCs. There are no records of released elasmobranchs. Although logbooks have been updated to offer the opportunity to record such interactions there are not yet recorded by the different masters. At present there is no specific regulation protecting elasmobranchs. It is known that some entanglements do occur and that individuals are generally released if alive and landed if dead. According to personal comments at Havstova stakeholder meetings, the number of possible entangled elasmobranchs low, based on similar fishing techniques carried out with their researd vessels. The lack of identification of possible interactions nor the possible damage to the different species. Bird interactions with longlines (UoC 2 and UoC 5) have been estimated to be around 10-20 birds per day per large longline vessel. According Olsen, B (2008) these annual estimations for the Faroese longline fle can range between 5000-25000 individuals . Although impacts are high the fulmar population is in a safe status and increasing.		ns for all UoCs and bait he longline UoCs. Although logbooks have such interactions these At present there is no It is known that some generally released if alive omments at Havstovan angled elasmobranchs is out with their research racting species makes it actions nor the possible 5) have been estimated line vessel. According to be Faroese longline fleet hough impacts are high easing.	
		As regards bait species, there were 156 tons of bait used in 2016 by the longline UoCs. Bait is normally comprised by the following fish species in the approximately relative proportions: Atlanti Scandian herring (Primary species, 15%), North East Atlantic mackerel (Primary species, 20%), Patagonian squid (Secondary species, <i>Loligo spp.</i>) (50%) and Pacific saury		

		The UoA aims to maintain secondary species above a biolog	ically
PI 2	2.2.1	based limit and does not hinder recovery of secondary spec	ies if
		they are below a biological based limit.	
 (Secondary species, <i>Cololabis spp</i>) (15%). When considering the relation to the UoA catch, all bait species together account for a 7% UoA catch. As the proportion of the different species in the bait is the proportion of each bait species in the UoA catch composition estimated as follows: squid (3.5%), mackerel (1.5%), herring (1 saury (1%). Therefore, squid and saury fall under minor secondary species category (while mackerel and herring fat the minor primary species category). There is limited information stock status of Pacific saury and Patagonian squid. The team considers that with the limited information available possible to assure that minor secondary species are above biologic or that the different UoCs are not hindering their recovery. SG10 met by any UoC. 			bait in o of the known, can be %) and r the l under on the c is not al limits D is not
Stakeholder meeting at Havstovan. Olofson, S. 2014. Birds of the Faroe Islands. Published by Visit Islands: https://issuu.com/visitfaroeislands/docs/visit_faroe_islands_birds_u single https://en.wikipedia.org/wiki/Northern_fulmar http://www.hav.fo/index.php?option=com_content&view=article&id & Itemid=332 Mandelman and Farrington 2007. http://www.ramsar.org/wetland/denmark Olsen, B. 2008. Havhestur druknar á línu (Fulmars are drownir longlines). Sjóvarmál 2008, Fiskirannsóknarstovan, Tórshavn pages http://www.hav.fo/PDF/Ritgerdir/2008/Sjovarmal2008.pdf		t Faroe <u>uk-</u> id=589 ing on es 7-9.	
OVEF	RALL PEI	RFORMANCE INDICATOR SCORE: DT	80
OVEF	RALL PEI	RFORMANCE INDICATOR SCORE: LL	80
OVEF	RALL PEI	RFORMANCE INDICATOR SCORE: Jiggs	80
CONI	DITION	NUMBER (if relevant):	N/A

PI 2.2.2		There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch.			
Scorin	g Issue	SG 60	SG 80	SG 100	
а	Managen	nent strategy in place			
	Guidep ost	There are measures in place, if necessary, which are expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be within biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a partial strategy in place, if necessary, for the UoA that is expected to maintain or not hinder rebuilding of main secondary species at/to levels which are highly likely to be within biologically based limits or to ensure that the UoA does not hinder their recovery.	There is a strategy in place for the UoA for managing main and minor secondary species.	
	DT	Y	Υ	Ν	
	LL	Y	Y	Ν	
	Jiggs	Y	Y	Ν	
	Justific	Main secondary species wo	uld be fulmars for all UoCs.		
	ation	As regards fulmars, the species is subject to management measures directed to the management of bird species. Certain areas are specifically closed to protect bird species (as the 3 recently designated Ramsar sites) and hunting of fulmars while allowed, is regulated by the issuing of hunting licences so that population continue to be at safe status. Besides, there is continued research on bir populations so that populations and population trends are known. The use of streamers and the deployment of longlines in the night serve to reduce the impact of longlines to bird species. SG80 is met by all LloCs			
		As regards other minor secondary species in the different UoCs, although there are some measures that benefit all stocks in Faroese waters, such as area closures, gear regulations and effort limitations, the team considers that minor secondary species are not specifically managed. As an example, identification of affected species is limited to expected interactions by the different gear types as suggested by Havstovan, as there are no records of interactions. Besides, and for the longline fleet, there is limited information on how the bait stocks of Patagonian squid and Pacific saury are managed. SG100 is not met by any UoC.			
b	Manager	ment strategy evaluation			
	Guidep ost	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/species).	There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the UoA and/or species involved.	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the UoA and/or species involved.	

Evaluation Table for PI 2.2.2 – Secondary species management strategy

PI 2.2.2		There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch.		
-	DT	Y	Y	Ν
	LL	Y	Y	Ν
	Jiggs	Y	Y	Ν
	Justific ation	Although there is limited information recorded by Ha work (is working already). with sharks (as concluded of the fulmar stock (as su met for all UoCs. However birds makes it difficult to te	information recorded by the ovstovan to give confidence to This is based in the low lev in Havstovan research trips pported by Havstovan resear , the lack of records of releast the partial strategy. SG1	e fleet, there is sufficient that the partial strategy will rel of expected interactions) and in the healthy status arch). SG60 and SG80 are eased sharks or entangled 00 is not met by any UoC.
c	Manager	ment strategy implementation	on	
	Guidep ost		There is some evidence that the measures/partial strategy is being implemented successfully .	There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its objective as set out in scoring issue (a).
	DT		Y	Ν
	LL		Y	Ν
	Jiggs		Y	Ν
	Justific ation The different management measures already implemented (such as area close gear regulations, effort limitations or seasonal fishing) are directed to minimiz catch of non-target species. These measures have been implemented for a period now, as reported by the Directorate of Fisheries. Moreover, this p strategy is working as the population of the only main secondary speci- consider (fulmars) is in a healthy status. SG80 is met by all UoCs. Recon- interactions by the fleet would serve as a clear evidence that the object			
d	Shark fi	nning		
	Guidep ost	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.	There is a high degree of certainty that shark finning is not taking place.
	DT	Y	Y	Y
	LL	Y	Y	Y
	Jiggs	Y	Y	Y
	Justific ation According to Havstovan, some sharks may sporadically interact with the deme trawl fishery. Should this happen, the general procedure is to release the an back to the sea if alive or to land it if dead. Shark finning is not an issue in Fa Islands. SG60, SG80 and SG100 are met by all UoCs.			interact with the demersal ire is to release the animal ing is not an issue in Faroe
	Review	Review of alternative measures to minimise mortality of unwanted catch		

PI 2.2.2 There is a strategy in place for managing secondary species that is designed to maintain or to not hinder rebuilding of secondary species and the UoA regularly reviews and implements measures, as appropriate, to minimise the mortality of unwanted catch.			o ly f		
	Justific ation	There is a review of the potential effectiveness and practicality of alternative measures to minimise UoA- related mortality of unwanted catch of main secondary species.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of main secondary species and they are implemented as appropriate.	There is a b review of the p effectiveness practicality of alt measures to r UoA-related mort unwanted catch secondary specie they are impleme appropriate.	biennial botential ernative ninimise tality of n of all es, and nted, as
е	DT	Y	Y	Ν	
	LL	Y	Y	Ν	
	Jiggs	Y	Y	N	
	Guidep ost	All landings records are regularly reviewed both by the client and by the Directorate of Fisheries. Should a species bring the attention of the client or the Directorate of Fisheries due to an increase in landings, appropriate management measures would be implemented.SG60 and SG80 are met by all UoC. Although there is some annual review of estimated annual related mortality both of bird and elasmobranchs species, such review does not cover all minor secondary species and is not carried out by the client group. SG100 is not met.			
	L	Stakeholder interviews with	n client, Havstovan and the	Directorate of Fishe	eries.
References EU Regula http://ww http://ww =332		EU Regulation 1185/2003, http://www.hav.fo/index.p http://www.hav.fo/index.p =332	on the removal of fins of sha hp hp?option=com_content&vie	arks on board vess ew=article&id=5898	els. <u>&Itemid</u>
OVER	ALL PERF	ORMANCE INDICATOR SCORI	E: DT		85
OVER	ALL PERF	ORMANCE INDICATOR SCORI	E: LL		85
OVER	OVERALL PERFORMANCE INDICATOR SCORE: Jiggs 85				
COND	CONDITION NUMBER (if relevant): Recommendation 2 N/A				

PI 2	.2.3	Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species.				
Scori	ng	SG 60	SG 80	SG 100		
Issue	-					
а	Informat	tion adequacy for assessmer	nt of impacts on main second	dary species		
u	Guide post	Qualitative information is adequate to estimate the impact of the UoA on the main secondary species with respect to status. OR If RBF is used to score PI 2.2.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for main secondary species.	Some quantitative information is available and adequate to assess the impact of the UoA on main secondary species with respect to status. OR If RBF is used to score PI 2.2.1 for the UoA: Some quantitative information is adequate to assess productivity and susceptibility attributes for main secondary species.	Quantitative information is available and adequate to assess with a high degree of certainty the impact of the UoA on main secondary species with respect to status.		
	DT	Y	Y	Ν		
	LL	Y	Y	Ν		
	Jiggs	Y	Y	Ν		
	Justifi cation	Main secondary species to While there are no directed quantitative estimations of interactions of bird species vessels) is expected to result Although these interaction consideration, Havstovan of status and increasing, so concern. Impacts by the de negligible. Although there research undertaken by Ha considered sufficient to ju interactions are expected to assess with a high degree of species. SG100 is not met	consider for all UoCs are fulled records of bird interaction made by Havstovan. Havsto s (mostly only fulmars) with ult in 10-20 fatal interactions is may seem high when the confirmed that the population interactions with the fleet emersal trawling and by the e are no records of such avstovan and the Faroese N ustify SG60 and SG80 for to be low, the lack of such re of certainty the impact of the by any UoC.	mars. ons by the fleet, there are tovan has estimated that in UoCs 2&4 (large longline is per vessel per fishing day. e 8 vessels are taken into in of fulmars is in a healthy should not be a cause of jigging fleet are considered impacts, estimations and atural History Museum are all UoCs. Although these ecords makes it difficult to UoA against any secondary		
b	Informa	ation adequacy for assess	ment of impacts on mino	r secondary species		
	guide post			some quantitative information is adequate to estimate the impact of the UoA on minor secondary species with respect to status.		
	DT			Y		
	LL			Ν		

Evaluation Table for PI 2.2.3 – Secondary species information

PI 2.	PI 2.2.3 Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to man secondary species.			es taken is adequate to s of the strategy to manage	
	Jiggs			Y	
	Justifi cation	As detailed in PI 2.2.1, elasmobranchs for all UoCs.	, minor secondary specie s and elasmobranchs and b	s to consider would be ait species for the longline	
		According to Havstovan, impacts on elasmobranchs are expected to be very low, only sporadic. As these individuals are normally released alive, there is confidence that these interactions do not always result in fatalities. Mandelman and Farrington (2007) concluded that elasmobranchs have a high post capture survival rate after releasement. SG100 is met for demersal trawlers as jiggers.			
		As regards the bait second is information on the amou in 2016) and on the prop composition and also rela- quantitative information av these stocks, it is not poss there is limited information saury. SG100 is not met by	ary species (Patagonian squ int of bait used by the longli portion of each bait species ted to the UoA catch comp vailable to estimate the impact on the stock origin for the P y the longline UoCs.	id and Pacific saury), there ne UoCs 2 and 4 (156 tons s both relative in the bait position. Although there is act of the longline UoCs on t with respect to status, as atagonian squid and Pacific	
С	Informat	tion adequacy for manageme	ent strategy		
	Guide post	Information is adequate to support measures to manage main secondary species.	Information is adequate to support a partial strategy to manage main secondary species.	Information is adequate to support a strategy to manage all secondary species, and evaluate with a high degree of certainty whether the strategy is achieving its objective .	
	DT	Y	Y	N	
	LL	Y	Y	N	
	Jiggs	Y	Y	N	
	Justifi cation	Main secondary species t secondary species would b longline UoCs).	o consider would be fulm e elasmobranchs (for all Uo	ars (for all UoCs). Minor Cs and bait species for the	
		There are estimations on bird interactions by the fleet as well as knowledge on the biological status of different birds and also elasmobranchs species. The continue research undertaken both in bird population and fish stocks (including elasmobranchs) is considered sufficient to manage these stocks. SG60 and SG80 are met for all UoCs. However, the lack of records of interactions by the fleet makes it difficult to evaluate with a high degree of certainty the performance of the strategy and if it is achieving its objectives. SG100 is not met by any UoC. A recommendation to records interactions with released elasmobranchs and entangled birds has been set. Besides, there is limited information to support or evaluate a strategy to manage			
Refer	ences	bait species such as Patagonian squid and Pacific saury. SG is not met by the longline UoCs. Stakeholder interviews with client. Havstovan and the Directorate of Fisheries.			

PI 2.2.3	Information on the nature and amount of secondary species taken is adequate to determine the risk posed by the UoA and the effectiveness of the strategy to manage secondary species.				
	http://www.hav.fo/index.php?option=com_content&view=article&id=287	<u>&Itemid</u>			
	http://www.hav.fo/index.php?option=com_content&view=article&id=589&Itemid =332				
	Mandelman and Farrington 2007.				
	http://www.ramsar.org/wetland/denmark				
	Olsen, B. 2008. Havhestur druknar á línu (Fulmars are drowning on longlines). Sjóvarmál 2008, Fiskirannsóknarstovan, Tórshavn pages 7-9. <u>http://www.hav.fo/PDF/Ritgerdir/2008/Sjovarmal2008.pdf</u>				
OVERALL PER	OVERALL PERFORMANCE INDICATOR SCORE: DT85				
OVERALL PERFORMANCE INDICATOR SCORE: LL					
OVERALL PERFORMANCE INDICATOR SCORE: Jiggs 85					
CONDITION NUMBER (if relevant): Recommendation 3					

Evaluation Table for PI 2.3.1 – ETP species outcome

PI 2	.3.1	The UoA meets national and international requirements for the protection of ETP species		
		The UoA does not hinde	r recovery of ETP species	
Scorii Issue	ng	SG 60	SG 80	SG 100
а	Effects applicab	of the UoA on population/ le	stock within national or i	nternational limits, where
	Guide post	Where national and/or international requirements set limits for ETP species, the effects of the UoA on the population/stock are known and likely to be within these limits.	Where national and/or international requirements set limits for ETP species, the combined effects of the MSC UoAs on the population/stock are known and highly likely to be within these limits.	Where national and/or international requirements set limits for ETP species, there is a high degree of certainty that the combined effects of the MSC UoAs are within these limits.
	DT	Not Relevant	Not Relevant	Not Relevant
		Not Relevant	Not Relevant	Not Relevant
	Jiggs	Not Relevant	Not Relevant	Not Relevant
	cation	described in MSC CR v2.4 protecting endangered spec- right or via Denmark) to a the conservation and protect (notably Bern Convention OSPAR, AEWA). Endangered interact with the fishery of sharks), birds and marine r in Faroese waters and under Table 37. Of all species mentioned, of the trawl fleet, with 2 tonr tonnes landed by the jiggin Vulnerable and is listed in However, the species is cor Faroe Islands is a signator according to Havstovan r unlikely. For the past yea species, and moreover, into past years were also nil. A there is no reason to point secondary or ETP specie (ornithologist at Havstova fulmars. Vessels in the di interactions with ETP specie according to the Directorat issue.	O SA3.1.5.2. There is no s cies, however the region is a wide range of international ection of marine biota, their a, Bonn Convention, Rams ed, threatened and protecte will comprise protected fish mammals. The complete rela- er which agreement they are only porbeagle (<i>Lamna nasu</i> thes landed by the demersal ags UoC in the sale year. Por a CITES Appendix II (and usidered threatened by the C y member. As regards other esearchers, interactions with ars logbooks have recorde eractions of the research ver though interactions with ela to any single species (as tho s). Regarding seabirds, are an), interactions with bird fferent UoCs shall complete es. Records show 0 interactions e of Fisheries there aren't in	specific Faroese regulation signatory (either in its own conventions that embrace habitats and environment, sar Convention, NAMMCO, d (ETP) species which may n species (especially large ation of ETP species present e protected can be found in s) is sporadically caught by trawl UoC in 2016 and 0.1 rbeagle is listed by IUCN as not in CITES Appendix I). DSPAR Commission to which r species listed in Table 37, ith them would be highly d 0 interactions with ETP ssel with ETP species in the asmobranchs are expected, ose elasmobranchs could be ccording to Bergur Olsen species would mostly be e the logbook and include ions for the past years, and afringements related to this

		The lie meets national	and international require	monte for the	
PI 2.3.1 protection of ETP species					
		The UoA does not hinde	r recovery of ETP species		
		All catches by Faroese vessels must be landed, according to the landing obligation implemented by Faroese Regulation 67 in 2012. The Directorate of fisheries monitors all landings by the Faroese fleet and has reported no concern regarding the impacts that the fishery may have on this or other ETP species. This is in concordance with other interviewed stakeholders, such as the Marine Research Institute (Havstovan) and the Natural History Museum, which have also reported that expected interactions of the saithe fishery (with its different fishing gears) with ETP species is null. Besides, different institutions such as NAMMCO and the Natural History Museum monitor the populations of marine mammals and birds present in the Faroese EEZ and would detect and study and decreasing trend in the population of marine mammals and bird species. Fish ETP species such as sharks are monitored by Havstovan. FCR v2.0 states SA3.10.1 In scoring issue (a), "where national and/or international requirements set limits" refers to limits set for protection and rebuilding, provided through the national legislation or binding international agreements, as defined in SA3.1.5 and subclauses. SA3.10.1. If there is no applicable national legislation or binding international agreement, scoring issue (a) shall not be scored. There are no national or international requirements limits' set for protection and rebuilding of porbeagle and hence the PI 3.2.1a is not scored.			
b	Direct	Iffects			
	Guide post	Known direct effects of the UoA are likely to not hinder recovery of ETP species.	Known direct effects of the UoA are highly likely to not hinder recovery of ETP species.	There is a high degree of confidence that there are no significant detrimental direct effects of the UoA on ETP species.	
	DT	Y	Y	Ν	
	LL	Y	Y	Ν	
	Jiggs	Y	Y	Ν	
	Justif	 According to the different stakeholders met during the site visit, direct interactions of the different fishing gears are highly unlikely. Should this happen, these would be recorded in the electronic logbook which has recently added an entry for interactions with marine mammals and birds. Although some interactions may be expected between the longline fleet and different bird species, according to comments by Havstovan, these would be mostly only with fulmars, which are not considered as an ETP species. SG60, SG80 are met as information provided by Havstovan reflects that it is highly likely that the fishery is not hindering the recovery of ETP species. However, the lack of documented reference to support such statement prevents the fishery from achieving SG100. All UoCs achieve SG80. 			
С	Indire	ct effects			
	Guide post	3	Indirect effects have been considered and are thought to be highly	There is a high degree of confidence that there are no significant detrimental	

PI 2.3.1		The UoA meets national and international requirements for the protection of ETP species			
		The UoA does not hinder recovery of ETP species			
			likely to not create unacceptable impacts.	indirect effects of the fishery on ETP species.	
	DT		Y	Ν	
	LL		Y	N	
	Jiggs		Y	N	
	Justifi Indirect effects that may affect ETP species are noise disturbance by the fisher vessels, injuries and entanglements or prey removal.				
		The assessment team considers that the noise disturbance caused by the fishing fleet is small when compared to the noise produced by commercial vessels. Regarding entanglements and injuries, these are difficult to quantify. It is expected that the prohibition to trawl in the 12 nautical miles distance zone from the coast would protect seals from injuries and entanglements in the fishing gears. Regarding longlines, the size of the bait is considered too small to bring the attention of both seals and marine mammals, while birds should be scared by tor lines. Notwithstanding this, interactions with harbor porpoises may still occur as			
		The absence of recorded f fleet or expected by Ha considered to be highly like Havstovan serves to justify ETP bird populations, but n However, the lack of recor ETP species prevents the d	(2015). Tatal interactions with marin vstovan) serves to justify ly not to create unacceptable that expected interactions of nostly fulmars. SG80 is met ds on the indirect effects the ifferent UoCs from obtaining	e mammals (either by the that indirect effects are impacts. Information from of the longlines do not affect by all UoCs. at the fishery may have on g SG100.	
		Havstovan stakeholder inte	erview.		
		Natural History Museum st	akeholder interview.		
		Ministry of Fisheries staker	older interview.		
		Client stakeholder interview	Client stakeholder interview.		
		Bern Convention <u>http://ww</u>	Bern Convention <u>http://www.coe.int/en/web/bern-convention/home</u>		
		Bonn Convention http://www.cms.int/sites/default/files/document/territories_reservations%20201 5.pdf			
		Bonn Convention <u>http://ww</u>	Bonn Convention http://www.cms.int/en/species		
Refer	rences	OSPAR Agreement <u>https://</u>	www.ospar.org/organisation	n/contracting-parties	
		RAMSAR Website <u>http://ww</u>	vw.ramsar.org/wetland/deni	<u>mark</u>	
		Birds in Earoo Islands http://l			
		ILICN Red List of endanger	ed species http://www.iucpr	edlist org/search	
		IUCN Red List of endangered species <u>http://www.iucnredlist.org/search</u> Timothy B. Werner, Simon Northridge, Kate McClellan Press, Nina Young; Mitigating bycatch and depredation of marine mammals in longline fisheries, ICES Journal of Marine Science, Volume 72, Issue 5, 1 June 2015, Pages 1576– 1586, <u>https://doi.org/10.1093/icesjms/fsv092</u> AEWA Agreement <u>http://www.unep-aewa.org/</u> Faroese Regulation 67 (2012)			
PI 2.3.1 The UoA meets national and international requirements for the protection of ETP species					
--------------------------------------------------------------------------------------------------	-------------------------------------------------	----	--	--	--
	The UoA does not hinder recovery of ETP species				
OVERALL PER	FORMANCE INDICATOR SCORE: DT	80			
OVERALL PERFORMANCE INDICATOR SCORE: LL80					
OVERALL PERFORMANCE INDICATOR SCORE: Jiggs80					
CONDITION NUMBER (if relevant):					

Evaluation Table for PI 2.3.2 – ETP species management strategy							
		The UoA has in place precautionary management strategies designed to:					
		 meet national and international requirements; 					
PI 2	.3.2	ensure the UoA does	not hinder recovery of ET	P species.			
				_			
		Also, the UoA regula	arly reviews and impl	ements measures, as			
Scori	na	SG 60	SG 80	SG 100			
Issue				56 100			
а	Manager	ment strategy in place (natio	nal and international require	ements)			
a	Guide	There are management in	There is a strategy in	Thoro is a			
	post	place that minimise the	place for managing the	comprehensive			
	P • • • •	UoA-related mortality of	UoA's impact on ETP	strategy in place for			
		ETP species, and are	species, including	managing the UoA's			
		expected to be highly	measures to minimise	impact on ETP species,			
		likely to achieve	mortality, which is	including measures to			
		requirements for the	likely to achieve	is designed to achieve			
		protection of ETP species.	national and international	above national and			
			requirements for the	international			
			protection of ETP species.	requirements for the			
				protection of ETP species.			
	DT	Not relevant	Not relevant	Not relevant			
	LL	Not relevant	Not relevant	Not relevant			
	Jiggs	Not relevant	Not relevant	Not relevant			
	Justifi						
	cation						
b	Manager	ment strategy in place (alter	native)				
	Guide	There are measures in	There is a strategy in	There is a			
	post	place that are expected to	place that is expected to	comprehensive			
		ensure the UoA does not	ensure the UoA does not	strategy in place for managing ETP species to			
		FTP species.	FTP species.	ensure the UoA does not			
				hinder the recovery of			
				ETP species			
	DT	Y	Y	Ν			
	LL	Y	Y	Ν			
	Jiggs	Y	Y	Ν			
	Justifi	There is no specific Faroes	se regulation protecting end	langered species, however			
	cation	the region is a signatory (e	either in its own right or via	Denmark) to a wide range			
		or international conventio	ns that embrace the conse ts and environment (notab	ervation and protection of			
		Convention Ramsar Conve	ention NAMMCO OSPAR A	FWA) The complete list of			
		ETP species under consid	eration can be found in Ta	ble 23. Of those, landing			
		records only show interact	ons with porbeagles (Lamna	nasus).			
		Direct fishing for porbea	gle is forbidden by the	Commercial Fisheries Act			
		(28/1994), but it can be r	retained as bycatch when ca	aught. Landing records for			

		The UoA has in place precautionary management strategies designed to:				
		 meet national and international requirements; 				
PI 2	.3.2	 ensure the UoA does not hinder recovery of ETP species. 				
		Also, the UoA regularly reviews and implements measures, as				
		appropriate, to minimise the mortality of ETP species.				
		2016 shows 2 tonnes landed by the demersal trawl UoCs and 0.1 ton landed by				
		and rays are landed or released depending on their commercial value and survival				
		chances. There was no landing of elasmobranchs other than porbeagles in the past				
		two years. Mandelman and Farrington (2007) concluded that elasmobranchs have				
		a high post capture survival rate.				
		skippers as shown in landing records.				
		Demersal trawling is not allowed within the 12 nm limit from the coast. This serves				
		mammals are not specially attracted to the demersal trawl gear.				
		Tori lines are broadly used in longline vessels, although these are not mandatory.				
		interactions with birds. According to personal comments by Havstovan, interaction				
		of birds in the longline fleet are expected, however expected interactions are				
		mostly with fulmars which are not an ETP species.				
		Besides, there are 3 designed RAMSAR sites in the Faroe Islands to protect bird species. These sites are: Mykines, Nolsoy and Skulvoy.				
		The Faroese fishery and conservation agencies monitor fish, bird and marine				
		mammal populations. This monitoring would serve to implement measures to minimize the bycatch of these species if these measures were proven to be				
		needed.				
		Commercial Fisheries Act (28/1994) sets technical measures on fishing gears				
		which have also proven efficient to minimize interactions with ETP species.				
		marine mammals and birds, although Havstovan shows some concern that these				
		are not been appropriately used to record all bird interactions. In any case, and as				
		secondary (non ETP) species.				
		The team considers that the different measures that apply to the Faroese fishing				
		fleet, along with monitoring and research undertaken by different institutions,				
		serve as a strategy to effectively managing the UoC impact on ETP species, by minimizing these interactions. SG60 and SG80 are met. The different measures in				
		place nor the management and research undertaken by different research				
		institutions (NAMMCO, ICES and Faroese Natural History Museum) are however				
		not consider sufficient to be considered as a directed comprehensive strategy to manage these impacts, therefore SG100 is not met.				
С	Manager	ment strategy evaluation				
	Guide	The measures are There is an objective The				
	post	considered likely to basis for confidence strategy/comprehensive				
		work, based on plausible that the strategy is mainly based				
		experience, theory or work, based on about the fishery and/or				
		information directly species involved, and a				

	The UoA has in place precautionary management strategies designed to:							
	 meet national and international requirements; 							
PI 2	PI 2.3.2 • ensure the UoA does not hinder recovery of ETP species.							
		Also, the UoA regula	arly reviews and imp	ements measures, as				
	appropriate, to minimise the mortality of ETP species.							
		comparison with similar about the fishery and/or quantitative analysis						
		fisheries/species).	the species involved.	supports high				
				confidence that the				
				strategy will work.				
	DT	Y	Y	N				
	LL	Y	Y	N				
	Jiggs	Y	Y	Ν				
	Justifi	ICES, NAMMCO and the	Natural History Museum co	onduct monitoring of fish,				
	cation	marine mammals and bird	populations in Faroese water	s. Besides, through landing				
		records there is accurate in	nformation on interactions of	the Faroese fleet with ETP				
		species, if any. Both monit	oring of populations and fee	ords of Interactions (II any)				
		already working as shown	in records showing minima	l interactions if any) This				
		conclusion is supported by	personal comments from	Havstovan and the Natural				
		History Museum staff, which	ch support that the strategy	to avoid impacts is working				
		and that the minimal intera	actions that might occur do	not give cause for concern.				
		SG60 and SG80 are met fo	or all UoCs. The lack of publi	shed information regarding				
		such interactions as well as	the lack of available quanti	tative analysis prevents the				
		different UoCs from achiev	ing SG100.					
d	Manager	ment strategy implementation	n					
	Guide		There is some evidence	There is clear evidence				
	post		that the	that the				
			measures/strategy is	strategy/comprehensive				
			successfully.					
			successiony.	and is achieving its				
				objective as set out in				
				scoring issue (a) or (b).				
	DT		Y	Y				
	LL		Y	Y				
	Jiggs		Y	Υ				
	Justifi	Faroese regulations are ef	fectively implemented and a	as expressed in Principle 3				
	cation	scoring tables there is goo	d enforcement and compliar	nce. Both the monitoring of				
		ETP populations and ETP casualties by the UoA serve to identify if the strategy of						
		minimizing the UoA impact	s on ETP species is achievir	ng its objective. The lack of				
		casualties associated to th	e Faroese fleet and the lac	k of concern of Havstovan				
		and the Natural History Museum as regards the impacts that the saithe fishery						
		may cause on ETP species	serves to justify SG80 and S	SG100 for all UoCs.				
е	Review of	of alternative measures to m	inimize mortality of ETP spe	ecies				
	Guide	There is a review of the	There is a regular review	There is a biennial				
	post	potential effectiveness	of the potential	review of the potential				
		and practicality of	effectiveness and	effectiveness and				

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	The UoA has in place precautionary management strategies designed to:					
	 meet national and international requirements; 					
PI 2	.3.2	• ensure the UoA does	not hinder recovery of El	P species.		
		Also, the UoA regula	arly reviews and imp	lements measur	es, as	
		appropriate, to minimise	e the mortality of ETP spe	ecies.	,	
		alternative measures to	practicality of alternative	practicality of alt	ernative	
		minimise UoA-related mortality of FTP species.	UoA-related mortality of	UoA-related mort	ninimise ality FTP	
			ETP species and they are	species, and th	iey are	
			implemented as	implemented,	as	
	DT	V	appropriate.	appropriate.		
		Ť	T	N		
	LL	Y	Y	N		
	Jiggs	Y	Y	N		
	Justifi	ETP population trends of m	arine mammals, birds and e	lasmobranchs are r	egularly	
	cation	reviewed according to NAM	AMCO, the Faroese Natural a regular review of all the	History Museum a species landed by t	nd ICES he UoA	
		including ETP species if any	. Should the impacts of any	UoA on ETP species	become	
		a cause of concern, the ass	sociated measures to minim	ize these impacts w	vould be	
		reviewed and modified acco	ordingly. The team considers	that the regular mo	onitoring	
		by the fishing fleet serves	to justify SG60 and SG80) for all UoCs. The	lack of	
		biennial review of the effe	ctiveness of the different m	neasures prevents	all UoCs	
		from achieving SG100.				
		Havstovan stakeholder inte	erview.			
		Natural History Museum stakeholder interview.				
		Ministry of Fisheries stakeholder interview.				
		Client stakeholder interview.				
		http://www.coe.int/en/wet	<u>)/ bern-convention/ nome</u>	orios reconvotions	(20201	
Refer	ences	5.pdf	ierauit/mes/document/ternt	ones reservations	<u>620201</u>	
		http://www.cms.int/en/spe	ecies			
		https://www.ospar.org/org	anisation/contracting-partie	<u>es</u>		
		http://www.ramsar.org/we	<u>tland/denmark</u>			
		https://nammco.no/about-	<u>us/</u>			
		Mandelman and Farrington (2007)				
OVER	ALL PERI	ORMANCE INDICATOR S	CORE: DT		85	
OVER	ALL PERI	FORMANCE INDICATOR SO	CORE: LL		85	
OVER	ALL PERI	FORMANCE INDICATOR SO	CORE: Jiggs		85	
COND	DITION N	UMBER (if relevant):			N/A	

PI 2.3.3	Relevant information is collected to support the management of UoA impacts on ETP species, including: Information for the development of the management strategy; Information to assess the effectiveness of the management strategy; and Information to determine the outcome status of ETP species.				
Scoring Issue	SG 60	SG 80	SG 100		
a Informa	tion adequacy for assessmer	nt of impacts			
Guidep ost	Qualitative information is adequate to estimate the UoA related mortality on ETP species. OR If RBF is used to score PI 2.3.1 for the UoA: Qualitative information is adequate to estimate productivity and susceptibility attributes for ETP species.	Some quantitative information is adequate to assess the UoA related mortality and impact and to determine whether the UoA may be a threat to protection and recovery of the ETP species. OR If RBF is used to score PI 2.3.1 for the UoA: Some quantitative information is adequate to assess productivity and susceptibility attributes	Quantitative information is available to assess with a high degree of certainty the magnitude of UoA- related impacts, mortalities and injuries and the consequences for the status of ETP species.		
DT	Y	N	N		
	Y	N	N		
Jiggs	Y	N	N		
Justific ation	YNNThere is qualitative information available to Havstovan and Natural Museum the indicates that the impact on ETP species are minimal. This information is obtain through interviews with fishers and some seagoing observations. There information from the logbooks suggesting that the impact is low. Besides, there monitoring of ETP populations by different independent institutions such as t scientific committee at NAMMCO, the Faroese Natural History Museum, and ICL WG on Marine Mammals Ecology. SG60 is met by all UoCs.The available data from logbooks, landing statistics and interviews with fisher support the assumption that ETP catches and associated fatal impacts on the populations is negligible. The recently implemented electronic logbook (with entry for marine mammals and for birds) provides quantitative information assess the UoA related mortality and impact and to determine whether the U- may be a threat to protection and recovery of ETP species. However, the e-logbo is still not implemented for all vessels and perhaps those vessels with the higher impact (coastal not yet fully covered) are those presenting the greater threat the ETP species. Therefore, the quantitative data are not considered adequate fully assess the impact. SG80 is not met.There is no comprehensive recording of bird interactions (although according Havstovan ETP bird species present in Faroe Islands are not expected to interact with the fishing fleet as these have more torrectrial habits and logbook to interact with the fishing fleet as these have more torrectrial habits and logbook to interact				

Evaluation Table for PI 2.3.3 – ETP species information

PI 2.3.3 Relevant information is collected to support the management of UoA impacts on E species, including: Information for the development of the management strategy; Information to assess the effectiveness of the management strategy; and 						
	1	Information to deter	mine the outcome status of E	TP species.		
		by the e-logbook. Also, whe degree of certainty on the	natever data there are avail magnitude of the impact and	able cannot provide a high d SG100 is not met.		
b	Informat	tion adequacy for manageme	ent strategy			
	Guidep ost	JepInformation is adequate to support measures to manage the impacts on ETP species.Information is adequate to measure trends and support a strategy to manage impacts on ETP species.Information is to support comprehensive 				
	DT	Y	Y	N		
	LL	Y	Y	N		
	Jiggs	Y	Y	N		
	Justific ation	Monitoring of ETP population Committee, the Natural His positive or negative trend landings can also provide s is achieving its objective of there is sufficient information species. SG60 and SG80 and However, the lack of reconskates or mammals prevent to determine with a high d the different UoCs are cause	ons by relevant institutions (story Museum and ICES WG I in the status of these po sufficient information to eva of minimizing impacts. It is tion to support a strategy t re met by all UoCs. rds on non-fatal interaction nts all UoCs from achieving S egree of certainty which are sing to the ETP populations.	such as NAMMCO Scientific iMME) serves to detect any opulations. Information on luate whether the strategy therefore considered that to manage impacts on ETP s with birds, sharks, rays, SG100, as it is not possible the non-fatal injuries that		
		Havstovan stakeholder inte	erview.			
		Natural History Museum st	akeholder interview.			
		Ministry of Fisheries staken	older interview.			
		Client stakeholder interview	Ν.			
		http://www.vorn.fo/				
		http://www.coe.int/en/web	o/bern-convention/home			
Refere	nces	http://www.cms.int/sites/c 5.pdf	lefault/files/document/territ	ories_reservations%20201		
		http://www.cms.int/en/spe	ecies			
		https://www.ospar.org/org	anisation/contracting-partie	<u>s</u>		
		http://www.ramsar.org/we	etland/denmark			
		https://nammco.no/about-	us/			
		WGMME (2011). Report of CM	the Working Group on Mar	ine Mammal Ecology. ICES 2011/ACOM:21.		

	Relevant information is collected to support the management of UoA impacts species, including:	on ETP		
PI 2.3.3	 Information for the development of the management strategy; 			
	 Information to assess the effectiveness of the management strategy; 	and		
Information to determine the outcome status of ETP species.				
	http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%	20Repo		
	rt/acom/2011/WGMME/wgmme 2011 final.pdf			
	Bloch, D., Mikkelsen, B. and Ofstad, L.H. 2000. Marine Mammals in Faroese Waters with special attention to the south-south-eastern Sector of the region. GEM Report to Environmental Impact Assessment Programme: 1-26.			
	http://www.foib.fo/foibportal/projects/eia/Faroe eia/Studies/Mammal Fir	nal Part		
	<u>1.pdf</u>			
OVERALL PERF	ORMANCE INDICATOR SCORE: DT	70		
OVERALL PERF	OVERALL PERFORMANCE INDICATOR SCORE: LL 70			
OVERALL PERF	OVERALL PERFORMANCE INDICATOR SCORE: Jiggs 70			
CONDITION NUM	IBER (if relevant):	3		

Lvait								
PI 2	.4.1	The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates.						
Scoring Issue		SG 60	SG 80 SG 100					
а	Commor	nly encountered habitat statu	s					
Guide postThe UoA is unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.The UoA is hig unlikely to red structure and function the common encountered habitats to a point where there would 			The UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.	There is evidence that the UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.				
	DT							
	Jiggs							
	cation	localize where the vessels and large longline fleets (Uvessel types having differed deploy their nets in all Far this fishery to be more coa- land their catch every day. catch in cooling chambers of vessel. Fishing trips for the MSC FCR v2.0 defines "se changes caused by the UoA ecosystem to maintain its is the reduction in habitat such that the habitat would structure, biological divers cease entirely. Fishing activity has taken demersal trawl fleet has be the damage to the seafloo fishing grounds and gear d Common encountered hab with muddy bottoms pred patches being widespread common habitats to consid Bottom trawling affects be infaunal species to the su sediment. The fact that der	All vessels above 20 meters are obliged to have on board a VMS which serves to localize where the vessels are. This includes all vessels in the demersal trawling and large longline fleets (UoC 1, UoC 4, UoC 2 and UoC 5). Regardless the different vessel types having different preferences regarding fishing grounds, they all can deploy their nets in all Faroese EEZ. In any case, the size of the jiggers obliges this fishery to be more coastal, as the vessels do not have cooling chambers and land their catch every day. Longlines and demersal trawlers can either keep their catch in cooling chambers or freeze it, depending on the size and facilities of each vessel. Fishing trips for these vessels normally last up to 10 days. MSC FCR v2.0 defines "serious or irreversible harm to structure or function" as changes caused by the UoA that fundamentally alter the capacity of the habitat or ecosystem to maintain its structure, biological diversity, abundance and function such that the habitat would be unable to recover to at least 80% of its unimpacted structure, biological diversity and function within 5-20 years, if fishing were to cease entirely. Fishing activity has taken place in Faroese fishing grounds for centuries, and the demersal trawl fleet has been fishing in the same grounds for decades. Most of the damage to the seafloor would have been made before fishing restrictions on fishing grounds and gear design were implemented. Common encountered habitats range from muddy to sandy and gravel grounds, with muddy bottoms predominating at depths deeper than 1000 m and gravel patches being widespread in the surrounds of the Faroe Islands. Therefore, common habitats to consider are mud, sand and gravel patches.					
		serves to reduce the area a that otter trawling produce habitats, but no detriment stops. Moreover, there wa variables to this impact. Data on the persistence o scarce because only immed to their relatively short tim	affected by the trawling. Kai ed a significant, negative, si al effects were seen in the as also a longer-term positi f trawl marks in different e liate physical effects are obse e frames. However, there ar	ser et al. (2006) concluded hort-term effect on muddy long term once the fishing ive effect on the response environments are relatively erved in most studies owing re some studies of recovery				

Evolution Table for DI 2.4.1 Liphitate outcom

PI	2.4.1	The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area where the UoA operates.					
		times at <u>http://ww</u>	fter otter trawling in soft or s vw.fao.org/docrep/008/v7135e/v713	andy bo 5e06.htn	ottoms, n .	as des	cribed in
		These ob doors, ar marks ha Jr., 1994 1990). Th (type, ar deeper in The persi the sedir 1998; Fo al.,2004)	observations show that the most noticeable marks are those caused by the and only faint marks are created by other parts of the trawl. Trawl door have been shown to be from 1 to 5 cm deep (Brylinski, Gibson and Gordon 94), but may reach about 20 cm in certain parts of the tracks (Krost et al., The penetration depth depends on the weight and performance of the doors angle of attack, speed) and on sediment grain size and hardness, being in mud than in sand (Churchill, 1989; Krost et al., 1990; Tuck et al., 1998). rsistence of marks produced by trawl doors depends on their original depth, diment type, the current, wave action and biological activity (Tuck et al., Fonteyne, 2000; Smith, Papadopoulou and Diliberto, 2000; Humborstad et 4).				
		Research undertaken in different soft sediment areas showed that trawl door marks were shown to disappear within less than five months in an area of strong currents as in the Barents Sea (Humborstad et al., 2004). In a sheltered Scottish loch, however, faint marks could still be seen 18 months after the trawling treatment (Tuck et al., 1998), and the same trawl track could be identified for almost five years in a sandy mud area in Kiel Bay that is not exposed to tida currents (Bernhard, 1989, cited in Krost et al., 1990)					
		According to this information, the team concludes that it is highly unlikely that the demersal trawl gear will reduce habitat structure and function of commonly encountered habitats (these are muddy and sandy habitats) to the point where there would be serious or irreversible harm as described in MSC FCR v2.0 SA3.13.4. As regards gravel patches, these are located at the south of the islands, where trawling activity does not take place. SG60 and SG80 are met for demersal trawlers (LIOC 1 and LIOC 4)					
		As regar abrasion during ha neither w	ds longlines, these have a very lig by the lines or possibly scraping a juling. Jigging vessels do not involve when using the jiggers nor when using	tht footp nd turnin any direc the long	orint lin ng of be ct conta- glines.	nited to o oulders by ct with the	occasional y anchors e seafloor,
		There are also potential interactions of the fishing gears with the seafloor in case of gear loss, but this is an uncommon event which is avoided when possible by the crew. If a gear is lost efforts will be made to recover it					or in case ble by the
		The limited or null contact with the seafloor serves as evidence that the UoA is highly unlikely to reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm. Although not specific to these fishing grounds, Grekov and Pavlenko (2011) quantified the bottom impact by Barents Sea longlines concluding that impacts of hooks and anchors was small and reversible. SG60, SG80 and SG100 are met both for longlines and jiggers in all commonly encountered habitats (UoC 2, UoC 5, UoC 3 and UoC 6).					
			Scoring element	SG60	S80	SG100	
			Muddy habitats (demersal trawl)	Y	Y	N	
			Sandy habitats (demersal trawl)	Y	Y	Ν	
			Gravel patches (demersal trawl)	Y	Y	N	
			Muddy habitats (Longlines)	Y	Y	Y	
			Sandy habitats (Longlines)	Y	Y	Y	
			Gravel patches (longlines)	Y	Y	Y	
			Muddy habitats (Jiggers)	Y	Y	Y	

PI	2.4.1	The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates.						
			Sandy habitats	(Jiggers)	Y	Y	Y	
			Gravel patches	(Jiggers)	Y	Y	Y	
b	VME hat	oitat status				•		
	Guide post	The UoA reduce st function of habitats t there wou irreversib	s unlikely to ructure and of the VME o a point where Ild be serious or le harm.	unlikely to icture and the VME a point where harm.The UoA is highly to reduce the UoA is highly unlike to reduce the UoA is highly unlike to reduce structure and function of the VME habitats to a point where there would habitats to a point where there would be serious or irreversible harm.There is evidence that the UoA is highly unlike to reduce structure and function of the VM habitats to a point where there would be serious or irreversible harm.				nce that y unlikely cture and he VME int where serious or n.
	וס							
	LL							
	Jiggs							
	Justifi cation	According 1 (this is coral gard reefs, <i>Mo</i> workshop as VME in water cor Figure 38 Identified <i>Lophelia p</i> patches of shown in corals (wi reefs), sp Trawling all fishing activities not suffic concentration located Si designation waters. In damage t Small pai (designation outside fis of ca. 300 while mos skippers of loose of t Horse mu mainly loose some ex Therefore	to the OSPAR Co , Faroese waters, lens, deep sea sp diolus modiolus b on VME databas dicator species pr als, as <i>Lophelia</i> p , are distributed to VME in Faroese pertusa reefs (all of <i>Modiolus modi</i> Figure 37. There hich include <i>Primi</i> onge aggregation is forbidden inside are prohibited in cient to protect a outh Western fro on. Most of the fis n any case skippe he fishing gear. toches of sponge ed to protect corras shing restriction a 0-750 m, are how st of the fishing ad will always tend to ime and fish, and ussel beds, which cated inside the 1 ception in the se overlap of both	mmission, the follow, Icelandic waters, a onge aggregations, ir reds, seamounts and e, lists <i>Primnoa rese</i> resent in Faroese fish <i>ertusa</i> reefs, and, as cogether. EEZ are <i>Primnoa r</i> of which are conside <i>olus</i> beds and spon fore, VME to conside <i>noa resedaeformis, P</i> and horse mussel e the 12 nautical mil this limit, there are order to protect cora all coral reefs in Fa ange between 400-8 om the Islands and shing activity howeve ers will try to avoid in aggregations are di al reefs but which als reas. These patches, ever very small and ctivity takes place in o avoid fishing in the therefore, of money n are distributed as 2 nautical miles limit summer time for s trawlers and longline	ing habin nd all w ntertidal Zostera edaeform ing grou shown resedaef red cora ge aggr er under aragorg beds (<i>M</i> les limit e also 3 al reefs. roese w 00 m), a are as er does t iteractio stribute so holds found p are loca North Ei se area shallow t, where small tr es with t	tats are vaters N mudfla beds. <i>nis</i> , and unds. Be in <i>formis</i> , al garde regation r PI 2.4 <i>ia abore</i> <i>lodiolus</i> , which 3 MPA i These vaters (as some yet not take pla orimarily ted in t astern v s as tak ver wate trawlin awlers these has	in decline lorth of 6 ts, Lophel Besides, I Paragorgio oth specie Paragorgio ns) as well s. Their lo .1.b are co ea, Lophel modiolus, effectively in which a 3 MPA are most of we e of these protected ice in Nort corals as inside the e communy in the de he Wester vaters. In ting spong ers (< 20 g is forbid targeting abitats is r	in Region 2°North): <i>ia pertusa</i> CES 2015 <i>ia aborea</i> s are cold <i>a aborea</i> , l as small bocation is old water <i>ia pertusa</i>). y protects all fishing e however which are reefs are d by MPA h Eastern they may e MPA C1 ities) and pth range m waters, any case, es means 0 m) are den (with flatfish). nil.
		demersal Plateau w making it	trawl fishery ar trawl fishery ar hile much of the highly unlikely f	e located in the No VME are located eith or the fishery to dis	rtheaste rtheaste ier in Sc rupt the	ern wat outhern	ers of the or Wester ure and fu	e Faroese n waters, unction of

PI 2.	.4.1	The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates.						
		VME habit trawlers a improbabl overlap. N Eastern w as describ Detailed a identified demersal The limite overlap be existing p an eviden habitats to longline flu The neglig as evidend	nd cold water reefs and sponge aggregations, while not impossible, is e, as fishing activity and the general location of these VME do not otwithstanding this (that trawling fishing activity takes place in Northern aters), several areas are closed to trawling in Faroese fishing grounds, ed in Figure 40. SG60 and SG80 are met for the demersal trawl fleet. nd overlapped maps of the demersal trawl fishing activities with the /ME would serve as an evidence to prove this. SG100 is not met for the rawl fleet (UoC 1 and UoC 4). d impact of the longline fleet with the fishing grounds, the minimal tween the fishing grounds and the location of identified VME, and the otection measures designed to protect coral reefs serve sufficiently as the UoC is highly unlikely to reduce structure and function of VME of point of irreversible harm. SG60, SG80 and SG100 are met for the et (UoC 2 and UoC 5). ble interactions between the jigging fishing gears and the seafloor serve e that this fleet does not hinder VME habitats. SG60, SG80 and SG100 r the jigging fleet (UoC 3 and UoC 6).					
		Compliance the Coast	ce of the fleet wi Guard.	th the different mar	nagemer	nt meas	sures is ei	nforced by
			Scoring elemen	t	SG60	580	SG100	1
			Cold water cora	ls (demersal trawl)	Y	Y	N	
			Sponge aggree	qations (demersal	Y	Ŷ	N	
			trawl)					
			Horse mussel trawl)	beds (demersal	Y	Y	N	
			Cold water cora	ls (Longlines)	Y	Y	Y	
			Sponge aggrega	ations (Longlines)	Y	Y	Y	
			Horse mussel b	eds (longlines)	Y	Y	Y	
			Cold water cora	lls (Jiggers)	Y	Y	Y	
			Sponge aggrega	ations (Jiggers)	Y	Y	Y	
-	M ²	- 1. 1 1 1 1	Horse mussel b	eds (Jiggers)	Y	Y	Y	
L	Guide post	abitat status				There the U to red functi habita there irreve	is evider oA is high luce struct on of the ats to a po would be rsible har	nce that ly unlikely ture and minor pint where serious or m.
	DT							
	LL							
	Jiggs							
	Justifi cation	As regard specific ev function o harm so it The low le	s demersal traw vidence that this f minor habitats fails to meet SG evel of interactio	lers (UoC 1 and Uo gear is highly un to a point where he 100. n with the seafloor	C 4), th likely to ere woul by the	le team reduce d be se	could no the stru rious or in e fleet, ar	t find any acture and rreversible and the null
		Interaction	is by the jigging	j neet, serve as ev	iaence t	nat the	ese UoCs	are nighly

PI 2.	PI 2.4.1 The UoA does not cause serious or irreversible harm to habitat structure and function, considered on the basis of the area covered by the governance body(s) responsible for fisheries management in the area(s) where the UoA operates.								
		unlikely to including SG100 is	o reduce structure and minor habitats. This ev met by UoC 2, UoC 5,	function /idence is UoC 3 ar	of the o s based nd UoC	different in the d 6.	habita esign	at types of of the fishi	seafloor, ng gear.
			Scoring element SG60 SG80 SG100						
			Minor habitat type trawlers)	e (dem	iersal	Y	Y	N	
			MInor habitat type (lo	ongline)		Y	Y	Y	
			Minor habitat type (ji	ggers)		Y	Y	Y	
Refer	Jennings, S., Dinmore, T.A., Duplisea, D.E., Warr, K.J., Lancaster, J.E., 2001. Trawling disturbance can modify benthic production processes. J. Animal Ecol. 70, 459-475. http://onlinelibrary.wiley.com/doi/10.1046/j.1365- 2656.2001.00504.x/pdf Kaiser, M.J., K. R. Clarke, K.R., Hinz, H., Austen, M.C.V., Somerfield, P.J., Karakassis, I. 2006. Global analysis of response and recovery of benthic biota to fishing. Marine Ecology Progress Series. Vol. 311: 1–14, 2006. CoralFISH project. Ecosystem based management of corals, fish and fisheries, in the deep waters of Europe and beyond. http://www.emodnet.eu/ Brylinski, Gibson and Gordon Jr., 1994 Krost et al., 1990 Churchill, 1989 Tuck et al., 1998 Fonteyne, 2000 Smith, Papadopoulou and Diliberto, 2000 Humborstad et al.,2004 Grekov, A.A and Pavlenko, A.A, 2011. A comparison of longline and trawl fishing practices and suggestions for encouraging the sustainable management of fisheries in the Barents Sea, — Moscow-Murmansk, World Wide Fund For Nature (WWF), 50p.						fishing of Nature		
OVER	ALL PEF	RFORMANC	E INDICATOR SCORE	: DT					
		Scoring elen	nent	SG60	SG80	SG100)		
		Muddy habit	ats	Y	Y	Ν			
		Sandy habita	ats	Y	Y	Ν			
		Gravel patch	es	Y	Y	N			80
C		Cold water c	orals	Y	Y	Ν			
S		Sponge aggi	egations	Y	Y	N			
Horse mussel be		el beds	Y	Y	N				
Minor habitats Y					Y	N			
OVER	ALL PEF	RFORMANC	E INDICATOR SCORE	: LL					
		Scoring elen	nent	SG60	SG80	SG100)		100
		Muddy habit	ats	Y	Y	Y			

PI 2.4.1	The UoA does not cause serie and function, considered on governance body(s) respons where the UoA operates.	ous or ir the basi ible for	reversil s of the fisherie	ble harm area cov s manag	to habitat str vered by the ement in the a	ructure area(s)
	Sandy habitats	Y	Y	Y		
	Gravel patches	Y	Y	Y		
	Cold water corals	Y	Y	Y		
	Sponge aggregations	Y	Y	Y		
	Horse mussel beds	Y	Y	Y		
	Minor habitats	Y	Y	Y		
OVERALL PE	RFORMANCE INDICATOR SCORE	: Jiggs			4	
	Scoring element	SG60	SG80	SG100]	
	Muddy habitats	Y	Y	Y		
	Sandy habitats	Y	Y	Y		
	Gravel patches	Y	Y	Y		100
	Cold water corals	Y	Y	Y		
	Sponge aggregations	Y	Y	Y		
	Horse mussel beds	Y	Y	Y		
	Minor habitats	Y	Y	Y		
CONDITION	NUMBER (if relevant):					N/A

Evaluation Table for PI 2.4.2 – Habitats management strategy

PI 2	.4.2	There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats.				
Scoring Issue		SG 60	SG 80	SG 100		
а	Manager	ment strategy in place				
	Guide post	There are measures in place, if necessary, that are expected to achieve the Habitat Outcome 80 level of performance.	There is a partial strategy in place, if necessary, that is expected to achieve the Habitat Outcome 80 level of performance or above.	There is a strategy in place for managing the impact of all MSC UoAs/non-MSC fisheries on habitats.		
	DT	Y	Y	Ν		
	LL	Y	Y	Y		
	Jiggs	Y	Y	Y		
	Justifi	All Gears and all flags				
Jiggs Justification		The area regulations apply to an insting in the Paroese 2016, 1.6. all grounds Where tusk and ling are fished. Enforcement of area restrictions is conducted by the Faroese Coast Guard surveillance, furthermore, mandatory VMS surveillance applies to all major vessels, i.e. all vessels operating outside the 12 nm zone. Compliance with these regulations is high. The Faroese grounds have been fished for many centuries and trawled for more than a century. The grounds are very well known and also scientifically mapped not least through the BIOFAR progamme, Bruntse and Tendel (2001), but also through more recent programmes (see Figure 35). There is no general management plan but the Faroese legislation include a strategy for protection of the Faroese Grounds, the strategy is constructed around the Faroese consultative management system that inter alia introduce closed areas and other area restrictions, e.g. non-trawlable zones. However, there is no explicit code of practice and therefore the strategy is classified as a 'partial strategy'. The comparation of the closed areas in 2002 (see Figure 39) and the closed areas in 2017 (see Figure 40)demonstrates the significant increment in area restrictions in Faroese waters, which mostly affect to bottom trawls. Most of these closures are in the western part of the islands (where most of the VME are located), and some other in southern and eastern areas. Should new VMEs be identified, the Faroese consultation system include provisions for establishing additional closures. The approach is to map and establish closed areas whenever a VME is recognised, e.g. through data from the industry or from Havstovan's survey. Thus, the partial strategy based on closures and mapping, include a mechanism by which to consider a habitat that might be a VME. As the grounds are well mapped additional closures is relevant mainly if additional benthic groups are added to the list of VME indicator species.				
		VMS maps (see Figure 36 fishing activity takes place Plateau. This area is dom commonly encountered ha) shows that the clear majo in the Eastern part of the Fa ninated by sandy and muc bitat, Also, most other area	prity of the demersal trawl proese Islands, in the Faroe Idy grounds, which is the s around the Faroe Islands		

PI 2.4.2	There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats.
	where trawling is permitted is dominated by sandy and muddy habitats (see Figure 35)
	Regulation on fishing activities prohibits all trawling activity inside the 12 nautical miles Territorial Sea of the Faroe Plateau with a derogation for small boat trawlers 10-15 small trawlers (< 500 Hp) targeting flatfish in the summer time. Thus, 60% of the Faroe Plateau at depths of less than 200 m is closed to trawling for most of the year. Furthermore, there are four large areas outside the Faroe Plateau 12 nm baseline which are closed throughout the year to all trawling, as trawling at waters shallower than 200 m is forbidden. Thus, there are measures in place that makes it highly unlikely that the demersal trawl fishery will reduce structure and function of the commonly encountered habitats to a point where there would be serious or irreversible harm.
	VMEs
	The VMEs are well known in the Faroese waters through extensive mapping not least through the BIOFAR progamme, Bruntse and Tendel (2001), but also through more recent programmes (see Figure 38). Furthermore, the Faroese Grounds being trawled for a century are very well known to the industry.
	Three habitats of special concern have been identified. These are coral reefs, sponge aggregations and horse mussel beds (see Figure 38). The distribution of horse mussels around Faroe Islands is limited to three main areas (Dinesen & Bruntse, 2001) which are mostly located inside the 12 nautical miles limit. Most trawling fishing activity takes place in north-eastern waters (see Figure 36) the current set of closures makes encounters with VME highly unlikely.
	Furthermore, trawling is prohibited inside the 12 nautical miles limit providing an indiscriminate protection of potential VMEs in these areas.
	There are 3 MPA in Faroese waters which were designed to protect coral reefs. Any type of fishing is prohibited inside these areas, including pelagic fishing. There is a specific designed strategy to protect coral reefs. As regards sponge aggregations, these are normally found at depth ranges of 250-1300 m. Deep-sea sponges have similar habitat preferences to cold-water corals, and hence are often found at the same location (and thus protected by the closure of <i>Lophelia pertusa</i> reefs) (see OSPAR Commission 2010c: Background Document for deep sea sponge aggregations. Biodiversity Series. 46 pages. https://www.ospar.org/documents?d=7234 See page 5). All identified horse mussel beds fall inside the 12 nautical miles limit area where trawling is forbidden, so the strategy to forbid trawling within this limit does effectively protect them.
	Thus, there are measures in place that makes it highly unlikely that the demersal trawl fishery may reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm.
	Minor Habitats
	The mapping has concentrated on the major features of the habitats on the Faroese grounds and hence the evidence for minor habitats is there less information available.
	Long Lines and Jiggs
	Small Long line vessels and jiggs are allowed inside the 12 nm zone. Larger long liners fish tusk and ling only outside that line.
	Habitat impact by long lines and jiggs are far less than those of the demersal trawls actually jigs does not have bottom contact at all. There is thus very little impact by these gears on the commonly encountered habitats. This is supported by Grekov and Pavlenko 2011 research on the impact of Russian longlines in the Barents Sea.
	The three areas closed because of coral occurrence are closed to all fishing including long lining and jiggs. As regards the longline fleet and the jigging fleet,

PI	2	.4.2	There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats.				
			it is indeed considered that the Faroese strategy regarding the management of impacts on the different habitats equally serves to achieve the Habitat Outcome 80 level. Moreover, the design of the fishing gears with either slightly (or not at all for jigging vessels) touches the seafloor serves as well as a strategy to avoid such impacts.				
			Scoring				
			There is a partial strategy established for regulating impact by fishing on the Faroese grounds:				
			 FCR v2.0 In scoring issue (a) at the SG80 level, the "partial strategy" for a UoA that encounters VMEs shall include, at least, the following points: !! a. Requirements to comply with management measures to protect VMEs (e.g., designation of closed areas). b. Implementation by the UoA of precautionary measures to avoid encounters with VMEs, such as scientifically based, gear- and habitat-specific move-on rules or local area closures to avoid potential serious or irreversible harm on VMEs. 				
			The surveillance of the Faroese Coast Guard and VMS surveillance together with a high degree of compliance with these regulations meet requirement a) for all gears				
			A move-on rule is only relevant for the demersal trawl component of the Faroese tusk and ling fisheries (UoC 1&4). Long lines and jiggs (UoC 2, 3, 5 &6) do not generate indication of an encounter with VMEs. Fishing practise within the Faroese trawler fleet is to avoid encounters with VMEs in particular corals as these damages the trawl.				
			There is a move-on practise within the fleet. Fishing practise dictates that the next haul be taken well away from the spot where an encounter with corals or sponges is recorded. Such practise –considered hypothetical – was confirmed by skippers at the site visit. This in the sense of FCR v2.0 SA3.14.2.3b constitutes a 'commonly accepted' move-on rule.				
			There is an elaborate system of closed areas in particular non-trawlable zones based on an extensive scientific mapping (e.g. BIOFAR and more recent surveys). This knowledge together with skipper intension to avoid VMEs makes such encounters highly unlikely. There is a 'commonly accepted' move-on practise among the Faroese fleet based on skippers' intentions to avoid such grounds although this has no legal basis.				
			The comprehensive set of closed areas and vessels behaviour suggest that there is little chance of serious impact on VMEs. There are several measures in place that provide the desirable protection. SG60 is met for all gears.				
			Demersal trawls : The team considers that there a partial strategy in place designated to ensure that the demersal trawl fleet does not cause irreversible harm to the different habitats involved.				
			This partial strategy is expected to achieve the habitat outcome 80 level as prescribed in PI 2.4.1 both for the commonly encountered habitats (major parts of the Faroese grounds are closed to trawling) and for the VMEs (VMEs are well known and there exist explicit closures of these areas). The minor habitat areas are small. Thus, there are measures in place that makes it highly unlikely that the demersal trawl fishery may reduce structure and function of the VME habitats to a point where there would be serious or irreversible harm. SG80 is met. SG100 is not met for because there is no full fletched strategy for demersal trawl impact in place. Besides the closures in place, part of the strategy rely on the fishing				

PI 2	.4.2	There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats.				
		industry's intentions to avo the minor habitats than is i	id VMEs. Furthermore, there required for a full strategy.	e are is less information for		
		Long lines and jiggs: SG80 is met as there is a partial strategy in place to protect both for the commonly encountered habitats (these gears have low impact on benthic habitats. This is supported by Grekov and Pavlenko 2011) and for the VMEs (VMEs are well known and there exist explicit closures of these areas). SG60, SG80 and SG100 are met for both of the gears because of the low impact by these gears and the strategy to close particular areas to all fiching.				
b	Manager	nent strategy evaluation				
	Guide post	The measures are considered likely to work, based on plausible argument (e.g. general experience, theory or comparison with similar UoAs/habitats).	There is some objective basis for confidence that the measures/partial strategy will work, based on information directly about the UoA and/or habitats involved.	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the UoA and/or habitats involved.		
	DT	Y	Y	N		
	LL	Y	Y	Y		
	Jiggs	Y	Y	Y		
	cation	As explained above, the strategy to protect nabrats is manny based in area closures, either for the demersal trawl activity or to all fishing activity. This area closures serve to protect the seafloor from the impacts of the fishing activity. VMS systems are mandatory in all vessels in UoC 1, UoC 4, UoC2 and UoC 5 (demersa trawlers and large longlines) and serve to identify whether the UoCs comply fish area restrictions. Marine and aerial surveillance is carried out by the Faroese Coasi Guard in order to enforce the accomplishment of these measures. The different area closures have been identified with the BIOFAR project, which continues to map Faroese fishing grounds. Besides, the <u>NovasArc</u> project (Nordic Project on Vulnerable Marine Ecosystem and Anthropogenic Activities in Arctic and Sub-Arctic Waters) aims to map the distribution of VME in Norwegian, Icelandic and Faroese waters with underwater cameras. Results of both projects should be available by 2019 and should lead to new management measures if needed. The broad information on the habitats involved and the real-time information or the location of the vessels give confidence that the partial strategy will work, as new measures can be implemented if the need for them is identified. SG60 and SG80 are met by all UoCs. The impacts that the demersal trawl fleet has on non-protected fishing grounds prevents UoC1 and UoC4 from achieving SG100. However, the fact that the fishing gears used by the longline fleet and by the jigging fleet have minimal or nul impacts on the fishing grounds gives a high degree of confidence that the strategy to avoid such impacts will work. SG100 is met for UoC 2, UoC 5, UoC 3 and UoC				
С	Manager	nent strategy implementation	n			
	Guide post		There is some quantitative evidence that the measures/partial strategy is being implemented successfully.	There is clear quantitative evidence that the partial strategy/strategy is being implemented successfully and is achieving its objective, as outlined in scoring issue (a).		
			T V	N V		
	LL		Ŷ	Y		

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PI 2	.4.2	There is a strategy in place that is designed to ensure the UoA does not pose a risk of serious or irreversible harm to the habitats.					
	Jiggs		Y	Y			
	Justifi cation	fishing and landing activity), the small ratio of infringements by the tusk and ling fisheries (with none reported in the past recent years), and the severe consequences of entering a closed or regulated area (fishing gears allowed to work inside trawl area closures shall electronically report the area entering and the targeted catch) which can lead to lose the fishing license for one month if failing to give such prior advice serves as a clear quantitative evidence that the strategy is implemented successfully. SG80 is met for all UoCs. As there is not clear quantitative evidence that habitats recover after closures or how long do they take to recover, as that would require a historical series of seabed habitats maps, it is not possible to determine if the partial strategy carried out by demersal trawlers is achieving its objective. SG100 is not met for UoC1 nor UoC4. The minimal or null seafloor interactions of the longline and jigging fishing fleet serves to justify that the objective of not hindering bottom grounds is achieved. UoC 2, UoC 5, UoC3 and UoC 6 reach SG100.					
d	Complia fisherie	ance with management re s' measures to protect VM	equirements and other MS 1Es	SC UoAs'/non-MSC			
	Guide post	There is qualitative evidence that the UoA complies with its management requirements to protect VMEs.	There is some quantitative evidence that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non- MSC fisheries, where relevant.	There is clear quantitative evidence that the UoA complies with both its management requirements and with protection measures afforded to VMEs by other MSC UoAs/non- MSC fisheries, where relevant.			
	DT	Y	Y	Y			
	LL	Y	Y	Y			
	Jiggs	Y	Y	Y			
Justifi cation Conversations with the Coast Guard and infringements statistics served as clear quantitative evidence to ascertain that Faroese vessels co- management requirements and mandatory protection measures d protect VME. All fishing vessels fishing in the area have to comply with management measures (as there are no voluntary protection measures other vessels in Faroese waters). The team considers that the good knowledge on the habitats types along with the strong enforcement s sufficiently good to make it not relevant to establish other protection measures the different UoCs in the area, SG60, SG80 and SG100 are met by all U				s statistics serve the team roese vessels comply with on measures directed to re to comply with the same ection measures defined by ers that the good level of rg enforcement system are her protection measures by are met by all UoCs.			
Refer	ences	the different UoCs in the area. SG60, SG80 and SG100 are met by all UoCs. <u>NovasArc</u> project (Nordic Project on Vulnerable Marine Ecosystem and Anthropogenic Activities in Arctic and Sub-Arctic Waters CoralFISH project. Ecosystem based management of corals, fish and fisheries, in the deep waters of Europe and beyond. Study areas: Region 2: Iceland. <u>http://www.eu-fp7-coralfish.net.</u> <u>http://biofar.fo/</u> Directorate of Fisheries stakeholder meeting Havstovan stakeholder meeting Grekov, A.A and Pavlenko, A.A, 2011. A comparison of longline and trawl fishing practices and suggestions for encouraging the sustainable management of fisheries in the Barents Sea, — Moscow-Murmansk, World Wide Fund For Nature (WWF), 50p.					

PI 2.4.2	There is a strategy in place that is designed to ensure the UoA doe pose a risk of serious or irreversible harm to the habitats.	es not			
	UN Workshop – Implementation of UNGA Resolutions 64/72 and Addressing impacts of bottom fishing on VMEs and Long-Term Sustaina deep- sea fish stocks. 2-4 August 2016, New York City, <u>http://www.un.org/depts/los/reference_files/Presentations/PPT/Segmentations/PPT/S</u>	66/68: ability of , USA. <u>4/RF.pd</u>			
	FAO fisheries and Aquaculture Report. FIAF/R1178. Report of the FAO w on encounters protocols and impact assessments for deep-sea fisheries beyond national jurisdiction. Norway, 2015. ISSN 207 http://www.fao.org/3/a-i6452e.pdf, page 13.	orkshop in areas 0-6987.			
	FAO Fisheries and Aquaculture Technical Paper 595. Vulnerable Marine Ecosystems, Processes and practices in the high seas. Rome, 2016. ISSN 2070-7010. <u>http://www.fao.org/3/a-i5952e.pdf</u> . page 44.				
	MSC interpretations website (<u>http://msc-info.accred</u> <u>services.com/questions/move-on-rules-at-sg60-for-pi2-4-2a/</u>). Figu Decision key chart.	ditation- ure 1:			
OVERALL PER	FORMANCE INDICATOR SCORE: DT	85			
OVERALL PERFORMANCE INDICATOR SCORE: LL100					
OVERALL PER	FORMANCE INDICATOR SCORE: Jiggs	100			
CONDITION N	UMBER (if relevant):	N/A			

PI 2.4.3		Information is adequate the UoA and the effectiv habitat.	e to determine the risk po reness of the strategy to r	sed to the habitat by manage impacts on the			
Scoring Issue		SG 60	SG 80	SG 100			
а	Informat	ion quality					
Guide post		The types and distribution of the main habitats are broadly understood . OR If CSA is used to score PI 2.4.1 for the UoA: Qualitative information is adequate to estimate the types and distribution of the main habitats.	The nature, distribution and vulnerability of the main habitats in the UoA area are known at a level of detail relevant to the scale and intensity of the UoA. OR If CSA is used to score PI 2.4.1 for the UoA: Some quantitative information is available and is adequate to estimate the types and distribution of the main habitats.	The distribution of all habitats is known over their range, with particular attention to the occurrence of vulnerable habitats.			
	DT	Y	Y	Ν			
	LL	Y	Y	N			
	Jiggs	Y	Y	Ν			
	Justifi cation	fi The Mapping European Seabed Habitats portal (www.searchmesh.net) pro accurate information on the distribution of the different habitats in Eurowaters, including Faroese EEZ. Vulnerable habitats are identified and mapped the OSPAR Commission (www.ospar.org). The CoralFISH project (http://euroralfish.net/) works in assessing the interaction between cold water corals and fisheries. The BIOFAR Programme (Investigations on the marine benthic for the Faroe Islands) has provided detailed maps on the distribution of main vulnerable habitats in Faroese EEZ. Bruntse and Tendal (2001) report or assemble of benthic invertebrates in Faroe Islands also provides a deta description on the location of VME present in the area. Vulnerable habitats such as coral reefs, sponge aggregations and horse m beds are identified and protected either by closed areas or by designated a where demersal trawling is forbidden. The nature, distribution and vulnerabil the main habitat types is known at a level of detail relevant to the scale intensity of the fishery. SG60 and SG80 are met by all UoCs. According to Nove introduction, there is still room for improvement on the location of vulnerable habitates are been when the scale intensity of the still room for improvement on the location of vulnerable habitates.					
b	Informat	tion adequacy for assessmer	nt of impacts				
	Guide post	Information is adequate to broadly understand the nature of the main impacts of gear use on the main habitats, including spatial overlap of habitat with fishing gear. OR If CSA is used to score PI 2.4.1 for the UoA:	to allow for identification of the main impacts of the UoA on the main habitats, and there is reliable information on the spatial extent of interaction and on the timing and location of use of the fishing gear. OR	the gear on all habitats have been quantified fully.			

Evaluation Table for PI 2.4.3 – Habitats information

PI 2	.4.3	Information is adequate the UoA and the effectiv habitat.	Information is adequate to determine the risk posed to the habitat by the UoA and the effectiveness of the strategy to manage impacts on the habitat.			
		Qualitative information is adequate to estimate the consequence and spatial attributes of the main habitats.	If CSA is used to score PI 2.4.1 for the UoA: Some quantitative information is available and is adequate to estimate the consequence and spatial attributes of the main habitats.			
	DT	Y	Y	Ν		
	LL	Y	Y	Ν		
	Jiggs	Y	Y	Y		
c	Justifi cation Bruntse and Tendal (2001) report on the assemble of benthic invertebrate Faroe Islands provides a detailed description on the location of VME present in area. Similar information is collected by the EMODNET, OSPAR, and BIC programmes which serve to identify the main and vulnerable habitats in the reg The BIOFAR programme has identified where fishing has had an effect on seabed and seabed habitats, and this information has been used to identify established area closures to protect habitats and communities in critical ar Webster (2016) thesis on benthic trawling impacts on sponge communities al for the identification of the main impacts that bottom trawling may have different habitat types. Hiddink et al (2017) analyse the impact and recovery r of benthic habitats after bottom trawling disturbance. VMS records give deta information on the spatial and timing of interactions between the different fis gears and the seabed. SG60 and SG80 are met for all fishing gears. As the physical impacts of all demersal trawlers and longline vessels (with limited expected impact) in all habitats types have not been quantified fully SG can't be granted for these gear types (UoC 1, UoC 4, UoC 2 and UoC 5). As for jiggers, the physical impacts that these gears may have on habitats is unless in cases of gear loss, which is very unlikely. SG100 is met for jiggers (3 and UoC6)					
	Guide post		Adequate information continues to be collected to detect any increase in risk to the main babitats	Changes in habitat distributions over time are measured.		
	DT		Y	N		
	LL		Y	N		
	Jiggs		Y	N		
	Justifi cation Information on habitat types on Faroese fishing grounds is collected thr different means: by research vessels from Havstovan, which analyse all sp (including benthic species) that are taken by research vessels during dem trawling activity, by the BIOFAR programme, which is focused on the benthic f of Faroese waters, or by more general programs such as the CoralFish project EMODNET mapping, or the OSPAR identification of threatened hab Information regarding the position of fishing vessels is collected via real time All collected information serves to identify the impacts of the fishery on vulne habitats, and provide for more protection measures if needed. SG80 is met f UoCs. The <u>NovasArc</u> project (Nordic Project on Vulnerable Marine Ecosystem Anthropogenic Activities in Arctic and Sub-Arctic Waters) is expected to mo all coral reefs areas with underwater cameras by 2019. However other fin grounds are not monitored in such detailed. Besides, the lack of historical ree					

PI 2.4.3 Information is adequate to determine the risk posed to the habitat by the UoA and the effectiveness of the strategy to manage impacts on thabitat.					
	difficulty the possibility of measure changes in habitat distribution over SG100 is not met for any UoC.	er time.			
	Directorate of Fisheries stakeholder meeting				
	Havstovan stakeholder meeting				
	<u>NovasArc</u> project (Nordic Project on Vulnerable Marine Ecosyste Anthropogenic Activities in Arctic and Sub-Arctic Waters).	m and			
	CoralFISH project. Ecosystem based management of corals, fish and fish the deep waters of Europe and beyond http://eu-fp7-coralfish.net/objective	eries, in <u>ves.php</u>			
	Mapping European Seabed Habitats portal: <u>www.searchmesh.net</u> .				
	The European Marine Observation and Data Network: <u>http://emodnet.eu/</u>	-			
	Hiddink J.G., Jennings, S., Sciberras, M, C.L. Szostek, Hughes, K.M., Ellis, N., Rijnsdorp, A.D., McConnaughey, R.A., Mazor, T., Hilborn, R., Collie, J.S., Pitcher, C.R., Amoroso, R.O., Parma, A.M., Suuronen, P., Kaiser, M.J. (2017) Global analysis of depletion and recovery of seabed biota after bottom trawling disturbance. PNAS (Proceedings of the National Academy of Sciences of the United States) Vol 114, nº 31. http://www.pnas.org/cgi/doi/10.1073/pnas.1618858114				
	OSPAR Commission: https://odims.ospar.org/maps/298				
References	Webster, C. 2016. Impacts of benthic trawling on sponge community composition around Western Iceland. MSc Thesis. University College London (UCL). <u>http://neafc.org/closures/mid-atlantic</u>				
	Bruntse, G. & Tendel, O.S. (2001) <i>Marine biological investigations and assemblages of benthic invertebrates from the Faroe Islands (Lophelia pertusa</i> and other cold water corals in the Faroe area: pp 22–32). Kaldbak Marine Biological Laboratory, The Faroe Islands. <u>www.vliz.be/imisdocs/publications/217806.pdf</u> WGECO, 2002. Report of the Study Group on Mapping the Occurrence of Cold-				
	ICES CM 2002/ACE:05; Ref: E, M http://www.ices.dk/reports/ace/2002/sgcor02.pdf	WGECO.			
	Jensen, A.& Fredriksen, R. 1992. The fauna associated with the bankforming deepwater coral <i>Lophelia pertusa</i> (Scleractinaria) on the Faroe shelf. <i>Sarsia</i> 77:53–69. Mortensen, P.B., Hovland, M., Brattegard, T. & Farestveit, R. (1995). Deep water bioherms of the Scleractinian coral <i>Lophelia pertusa</i> (L.) at 64° N on the Norwegian shelf: structure and associated menafauna. <i>Sarsia</i> 80: 145–158				
	Dinesen, G. & Bruntse, G., 2001. <i>Modiolus modiolus</i> beds. In <i>Marine biological</i> <i>investigations and assemblages of benthic invertebrates from the Faroe Islands</i>				
	www.searchinesh.net www.ospar.org http://eu-fp7-coralfish.net/				
	http://biofar.fo/	80			
OVERALL PER		8U 80			
OVERALL PER		80			
OVERALL PER	ORMANCE INDICATOR SCORE: Jiggs	85			
CONDITION N	UMBER (if relevant):	N/A			

PI 2.5.1	The UoA does not cause serious or irreversible harm to the key elements of ecosystem structure and function.					
Scoring Issue	SG 100					
a Ecosyste	em status					
Guide post	The UoA is unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	The UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.	There is evidence that the UoA is highly unlikely to disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm.			
DT	Y	Y	Partial			
LL	Y	Y	Partial			
Jiggs	Y	Y	Partial			
Justifi cation	Justifi cation According to MSC FCR v2.0, serious or irreversible harm to structure or fun means changes caused by the UoA that fundamentally alter the capacity o habitat or ecosystem to maintain its structure and function. For the ecosy, component, this is the reduction of key features most crucial to maintaining integrity of its structure and functions and ensuring that ecosystem resilience productivity is not adversely impacted. This includes, but is not limited permanent changes in the biological diversity of the ecological community and ecosystem's capacity to deliver ecosystem services. Zeller and Reinert (2004) study on fishing effort restrictions in the Faroe Isl includes a detailed description of the different trophic levels for the diffe species in the area, using an Ecopath and Ecosim model. According www.fishbase.org, tusk trophic level is 3.9 and ling trophic level is 4.4. Tro levels of other species in the area are described in the Ecopath and Ecosim m giving the following levels: saithe (4.1), cod (4.1), other un-described dem fish (4.0) and un-described deep-water fish (4.2), haddock (3.6), Greer halibut (3.6), redfish (3.7), squid (3.6)- As for pelagic species trophic levels for blue whiting (3.6), mackerel (3.7), herring (3.4) and other pelagic fish (Only toothed mammals present a higher trophic level (4.7), while seabirds baleen whales have similar trophic levels (3.8 and 4.0, respectively). It is therr concluded that tusk and lings position in the trophic chain is relatively high shared with other species. Havstovan has a wide range of research programs, including different resec trips (Spring survey, Summer survey, Deep water survey, pelagic sur Greenland halibut survey) undertaken with its own research vessel ("Ma Heinasson") which monitor the changes in the different stocks and in ecosystem through the years. This information is used to give scientific advi the Ministry of Fisheries who regulates the fishing opportunities according to Faroese law on commercial fishing. Havstovan research					

Evaluation Table for PI 2.5.1 – Ecosystem outcome

PI 2	.5.1	The UoA does not cause serious or irreversible harm to the key ele of ecosystem structure and function.	ements	
		with the high biomass of both stocks, serves to give confidence that the UoA is highly unlikely to create trophic disturbances that would disrupt the key elements underlying ecosystem structure and function to a point where there would be a serious or irreversible harm. Other stocks in the catch composition (such as saithe) are also in a safe biological situation while the bad situation of cod and haddock stocks can't be fully attributed to the tusk and ling fishery, as there are other environmental factors which contribute to this situation. SG60 and SG80 are met by all LIOCS		
This is further supported by the fact that there has not been associated, major ecosystem disruption since the fishery comme these factors are considered to represent some evidence (but not the fishery is highly unlikely to disrupt the key elements under structure and function to a point where there would be a seriou harm, and so SG100 is considered to be partially met. A partial sco to all UoCs.			oparent, ogether, ve) that osystem eversible is given	
References		Stakeholder meeting with Havstovan.Zeller, D. and Reinert, J. 2004. Modelling Spatial Closures and Fishin Restrictions in the Faroe Islands Marine Ecosystem. Ed Modelling 172(2):403-420ICES2008FaroePlateauecosystem <or></or> or http://www.ices.dk/sites/pub/Publication%20Reports/Advice/2008/2008/ 4.2%20Faroe%20plateau%20ecosystem%20overview.pdfICES2017WGECOReport of the Working Group on the Ecosystem Ed FishingFishingAhttp://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group% rt/acom/2017/WGECO/wgeco2017.pdf	<u>g Effort</u> <u>cological</u> verview. <u>4.1-</u> ffects of ctivities. <u>20Repo</u>	
OVER	OVERALL PERFORMANCE INDICATOR SCORE: DT90			
OVERALL PERFORMANCE INDICATOR SCORE: LL 9			90	
OVER	ALL PERI	ORMANCE INDICATOR SCORE: Jiggs	90	
COND	DITION N	UMBER (if relevant):	N/A	

PI 2	PI 2.5.2 There are measures in place to ensure the UoA does not pose a risk serious or irreversible harm to ecosystem structure and function.			
Scoring Issue		SG 60	SG 80	SG 100
а	Manager	nent strategy in place		
	Guide post	There are measures in place, if necessary which take into account the potential impacts of the fishery on key elements of the ecosystem.	There is a partial strategy in place, if necessary, which takes into account available information and is expected to restrain impacts of the UoA on the ecosystem so as to achieve the Ecosystem Outcome 80 level of performance.	There is a strategy that consists of a plan , in place which contains measures to address all main impacts of the UoA on the ecosystem, and at least some of these measures are in place.
	DT	Y	Y	N
	LL	Y	Y	N
	Jiggs	Y	Y	N
	cation	different fisheries may hav fishing effort regime and th or spawning grounds and habitats, paying especial at limitations are also regula (replaced in December 201 and landing obligation was mandatory for vessels above and UoC5. Jigging vessels in Research undertaken by H and support the annual IG species (including saithe, to levels consistent with long The different management aspects and impacts of the restrain the impacts that to are met by all UoCs. Although one of the goals this has not been detailed Management Plan prevents	ve on the ecosystem, include the seasonal or real-time close extensive permanent closed the dunder the protection of ated under the Commercia 7 by the Act on the Manager implemented in 2012. VMS ve 20 meters, covering all ve n UoC3 and UoC6 are normal avstovan serves to monitor CES stock assessments and usk and ling), in order to pro- term sustainability. Itemasures in place, designed fishing activity, are consider the UoA may have on the en- of Havstovan is developing a d as yet. The lack of this F s all UoCs from achieving SG	ding measures such as the ures to protect juvenile fish d areas to protect different coral reefs. Gear and mesh al Fisheries Act (28/1994) ment of Marine Resources), and electronic logbook are essels in UoC1, UoC4, UoC2 ally smaller than 20 meters. the different fishing stocks d reviews for the different vide fishing advice on catch ed to manage the different red as a partial strategy to cosystem. SG60 and SG80 a Faroes ecosystem model, faroese specific Ecosystem f100.
Ь	Manager	ment strategy evaluation		
	Guide post	The measures are considered likely to work, based on plausible argument (e.g., general experience, theory or comparison with similar fisheries/ ecosystems).	There is some objective basis for confidence that the measures/partial strategy will work, based on some information directly about the UoA and/or the ecosystem involved	Testing supports high confidence that the partial strategy/strategy will work, based on information directly about the UoA and/or ecosystem involved
	DT	Y	Υ	Ν
	LL	Y	Υ	Ν
	Jiggs	Y	Y	Ν

Evaluation Table for PI 2.5.2 – Ecosystem management strategy

PI 2	.5.2	There are measures in p serious or irreversible h	lace to ensure the UoA de arm to ecosystem structu	oes not pose a risk of Ire and function.
	Justifi cation	The landing obligation, the fishing effort regime, the comprehensive collection of information of fishing removals, the research undertaken by Havstovan (both on the status of many fish stocks but also on the mapping of benthic areas and study of benthic organisms) and by other environmental institutions such as the Natural History Museum and NAMMCO, the effective enforcement system and the immediate answer given to the presence of juveniles in catch composition (which would lead to a real-time short-time closures for two weeks), along with the extensive mapping of the distribution of the different habitats and the existing protected areas for the protection of the coastal areas, the spawning fish or vulnerable ecosystems all contribute to minimize the adverse effects of the fishing activity, giving an objective basis for confidence that the strategy will work. The lack of testing on this partial strategy along with the improvable stock status of certain fish species (such as cod in the Faroe Plateau and the Faroe Bank and the haddock stock) and unlikely protection of certain sponge communities prevent the fishery from gaining SG100. SG60 and SG80 are met by all UoCs.		
С	Manage	ment strategy implement	tation	
	Guide post		There is some evidence that the measures/partial strategy is being implemented successfully .	There is clear evidence that the partial strategy/strategy is being implemented successfully and is achieving its objective as set out in scoring issue (a).
	DT		Y	Y
	LL		Ŷ	Ŷ
	Jiggs		Y	Y
	Justifi cation	Fishing effort regime is base endeavour to give advice a sustainability. Havstovan si Atlantic fish stocks of inte gears used and catch give hindering t the fish stocks. The different fisheries m considerable period. As obligation, use of electron protect spawning grounds habitats and the mandato measures are enforced by the high degree of complia reported in the past recent ecosystem features is un BIOFAR, NAMMCO or the N Although some ecosystem low but stable, puffin popu fishery), the ecosystem as the Faroese marine ecosystem met by all UoCs.	sed on advice from ICES and and set catch levels that are upports ICES with respect to rest to Faroese vessels. The es confidence that these ad nanagement measures ha mentioned above, these ic logbook, fishing effort reg or juvenile fish, spatial clo ry use of VMS for vessels a Faroese enforcement agenc nce and low ratio of infringe t years). Besides, comprehe idertaken by different age latural History Museum. components are not in their ulation is decreasing but thi such is in a good situation, stem being stressed or suffe	d Havstovan, both of which e consistent with long-term assessing many North East e stability of fishing areas, vices are working to avoid ve been in place for a measures include landing gime, temporal closures to osures to protect different above 20 meters. All these ies which are satisfied with ments by the fishery (none nsive research on different ncies such as Havstovan, best situation (cod stock is s is not attributable to the and there is no evidence of ring. SG80 and SG100 are
References Stakeholder meetings with the client, Havstovan, the Natural Histor Ministry of Fisheries and the Coast Guard. Faroese Regulation 67 from 16 May 2012 (Landing obligation). ICES 2017 advice for cod in the Faro http://ices.dk/sites/pub/Publication%20Reports/Advice/2017/2017		atural History Museum, the igation). the Faroe Plateau. 2/2017/2017/cod.27.5b1.p		

PI 2.5.2	There are measures in place to ensure the UoA does not pose a ris serious or irreversible harm to ecosystem structure and function.	k of		
	ICES 2017 advice for cod in the Faroe http://ices.dk/sites/pub/Publication%20Reports/Advice/2016/2016/cod-fa	Bank. Irb.pdf		
OVERALL PERFORMANCE INDICATOR SCORE: DT				
OVERALL PERFORMANCE INDICATOR SCORE: LL				
OVERALL PERFORMANCE INDICATOR SCORE: Jiggs				
CONDITION N	UMBER (if relevant):	N/A		

PI 2	.5.3	There is adequate knowledge of the impacts of the UoA on the ecosystem.			
Scoring Issue		SG 60	SG 80	SG 100	
а	Informat	tion quality			
	Guide post	Information is adequate to identify the key elements of the ecosystem.	Information is adequate to broadly understand the key elements of the ecosystem.		
	DT	Y	Y		
	LL	Y	Y		
	Jiggs	Y	Y		
	Justifi cation	Key elements of the Fa productivity, predator-prey stocks, endangered specie fishery takes place) have b 2001; Zeller and Reinert 20 (Havstovan) and other in (Faroese Fisheries Laborat from these studies is adec ecosystem in this area. SG	roese ecosystem (such as y relationships, target and es present in the area or th een studied through differen 004) and also by the the Faro istitutions which also cond cory, NAMMCO, Natural Hist quate to broadly understand 60 and SG80 are met by all	s primary and secondary main bycatch species fish e main habitats where the t models (<i>Zeller and Freire,</i> e Marine Research Institute luct research in the area ory Museum). Information d the key elements of the UoCs.	
b	Investig	ation of UoA impacts			
	Guide post	Main impacts of the UoA on these key ecosystem elements can be inferred from existing information, but have not been investigated in detail.	Main impacts of the UoA on these key ecosystem elements can be inferred from existing information, and some have been investigated in detail .	Main interactions between the UoA and these ecosystem elements can be inferred from existing information, and have been investigated in detail.	
	DT	Y	Y	Y	
	LL	Y	Y	Y	
	Jiggs	Y	Y	Y	
	Justifi cation	The long-established comprehensive and long-term research programmes gather fundamental information on all aspects of the Faroese marine environment (e.g. temperature, salinity, currents, habitat distribution and bottom trawl impacts) and biological processes (primary and secondary production, trophic relationships, predator-prey relationships which are explored in ecosystem models, including fish removals by the fishery of all target, bycatch and endangered species and biological analysis of the stock status of affected species). Environmental research has linked the strength of the sub-polar gyre to primary production, recruitment and productivity of fish stocks. Research on Faroese ecosystem has been carried out for many years. These research programs and associated monitoring of the marine environment, primary production, fish stocks, birds and marine mammals all contribute towards detecting any risk or adverse environmental effects. The team concludes that main interactions of the UoA on the different ecosystem elements can be inferred and brown the adverse environmental effects.			
с	Understa	anding of component functio	ns	,	
	Guide post		The main functions of the components (i.e., P1 target species, primary, secondary and ETP species and Habitats) in	The impacts of the UoA on P1 target species, primary, secondary and ETP species and Habitats are identified and the	

Evaluation Table for PI 2.5.3 – Ecosystem information

DNV GL – Report No. 2017-027, Rev. 2 – <u>www.dnvgl.com</u> MSC Full Assessment Reporting Template V2.1 – issued 8 April 2015 Template approval date:

PI 2	.5.3	There is adequate knowledge of the impacts of the UoA on the ecosystem.		
			the ecosystem are known .	main functions of these components in the ecosystem are understood .
	DT		Y	Ν
	LL		Y	Y
	Jiggs		Y	Y
	Justifi cation	Impacts of the fishery on quantified and monitored. a broad knowledge of the in and on each of the differ research trips per year to habitats. As regards longlines and impacts on habitats. But d and the benthic species live where the catch is sorted discarded and there are no difficult to identify, qua information from Havstova and the main functions in scored in the habitat descri It is therefore concluded the are identified and that the are understood. However, habitats in the ecosystem are not yet identified nor of species. Longlines and jug trawlers reach SG80 due to species in common habitat	target, primary, secondary Different ecosystem models npacts that the UoA has on the erent ecosystem elements. To study fishing impacts on jiggers, it was concluded emersal trawl gears do have ring there. Demersal trawler by the crew. During this se to records of these interacting ntify, or investigate. How an research projects on the the ecosystem of its complication section and habitat PI at effects on target, primary, main functions of these con- although the main function are known, impacts on non- quantified, as there is no re to the lack of detailed informs.	y or ETP species are fully (mentioned in SIa) provide he tusk and ling populations Havstovan undertakes 5 ecosystem elements and that these gears have no e an impact on the seafloor is haul the catch on board, orting, benthic species are ons, so these impacts are vever, there is sufficient affected common habitats ponents, as described and secondary and ETP species in the ecosystem is of the different impacted -vulnerable habitat species cording of affected benthic id SG100, while demersal mation on affected benthic
d	Informat	ion relevance		
	Guide post		Adequate information is available on the impacts of the UoA on these components to allow some of the main consequences for the ecosystem to be inferred.	Adequate information is available on the impacts of the UoA on the components and elements to allow the main consequences for the ecosystem to be inferred.
	DT		Y	Y
	LL		Y	Y
	Jiggs		Y	Y
	Justifi cation	The long-established and I of information (such as fish ETP species or benthic had different components and considered adequate to all components and elements met by all UoCs.	ong-term research program hery removals, ecosystem me bitats) that ensures compre d elements of the ecosys ow the main consequences of the ecosystem to be infe	mes have built a database odelling, fishing impacts on hensive knowledge on the tem. This information is of the UoA on the different rred. SG80 and SG100 are
	Monitori	ng		

PI 2.5.3		There is adequate knowledge of the impacts of the UoA on the ecosystem.			
e	Guide post	Adequate data continue to be collected to detect any increase in risk level.	Information is a to support development strategies to ecosystem impact	dequate the of manage s.	
	DT	Y	Y		
	LL	Y	Y		
	Jiggs	Y	Y		
	Justifi cation	The research programs and associated monitoring a environment, primary production, fish stocks, birds a habitats all contribute towards detecting any risk of adv Detailed information obtained though landing obliga sampling, VMS tracks on fishing grounds, Havstovan a fishing stocks, Havstovan research trips and program communities and mapping of Faroese EEZ seable Programme), Coast Guard enforcement system and mo monitoring of marine mammals and bird populations (b History Museum, respectively), studies on climate ch waters (Astthorssona et al., 2007), is considered adeq in risk level and to support the development of strate impacts. SG80 and SG100 are granted for all UoCs.	and survey of the and marine mamm erse environmental ation, landing reco nd ICES advice on o mes, sampling on ad and habitats (nitoring of protecte y NAMMCO and the nange impacts in a uate to detect any gies to manage eco	marine effects. rds and different benthic BIOFAR d areas, Natural adjacent increase osystem	
ReferencesStakeholder meeting with the Natural History Museun ICES Advice 2008, bt http://www.ices.dk/sites/p 4.2%20Faroe%20plateau% Zeller, Dirk & Reinert, Jáku Restrictions in the Faroe Isla 420. 10.1016/j.ecolmodel.2 Zeller, D. and Freire, K.200 the Faroe Islands (ICES Are Faroese Fisheries Laborator) Waters http://www.hav.fo/index.p =155 Astthorssona, O.S., Gislaso		Stakeholder meeting with the client, the Ministry of Pthe Natural History Museum and Havstovan.ICES Advice 2008, book 4: Faroe Plateauhttp://www.ices.dk/sites/pub/Publication%20Reports//4.2%20Faroe%20plateau%20ecosystem%20overviewZeller, Dirk & Reinert, Jákup. (2004). Modelling SpatialRestrictions in the Faroe Islands Marine Ecosystem. Eco420. 10.1016/j.ecolmodel.2003.09.020.Zeller, D. and Freire, K.2001. <u>A North East Atlantic mthe Faroe Islands (ICES Area Vb): Input data.Faroese Fisheries Laboratory. 2002. Workshop on EcosWatershttp://www.hav.fo/index.php?option=com_content&via=155Astthorssona, O.S., Gislasona, A., Jonssona, S. 2007.Icelandic marine ecosystem. Deep-Sea Research II 54</u>	climate variability (2007) 2456–2477	verview. <u>4.1-</u> ng Effort 72. 403- <u>odel for</u> age 207. <u>Faroese</u> <u>Itemid</u> <u>and the</u>	
OVER	ALL PERI	ORMANCE INDICATOR SCORE: DT		95	
OVER	ALL PERI	FORMANCE INDICATOR SCORE: LL		100	
OVER	ALL PERI	ORMANCE INDICATOR SCORE: Jiggs		100	
COND	ITION N	UMBER (if relevant):		N/A	

Principle 3: All UoCs.

Evaluation Table for PI 3.1.1 – Legal and/or customary framework

PI 3	.1.1	 The management system exists within an appropriate legal and/or customary framework which ensures that it: Is capable of delivering sustainability in the UoA(s); and Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and Incorporates an appropriate dispute resolution framework. 		
Scorin Issue	ng	SG 60	SG 80	SG 100
а	Compati	bility of laws or standards w	ith effective management	
	Guide post	There is an effective national legal system and a framework for cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2	There is an effective national legal system and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2.	There is an effective national legal system and binding procedures governing cooperation with other parties which delivers management outcomes consistent with MSC Principles 1 and 2.
	Met?	Y	Y	Ν
	Justifi cation	The Faroe Islands is part of 1948, including full autono has a well-established sysi 1994 Commercial Fisherie Management of Marine Res the Government of the F (Fiskimálaráðið) has the po while scientific advice is (Havstovan) and enforcem Service (Vørn – Fiskiveiðief to decide the number of fish (Løgtingið – in Danish: authorized to issue formal Through the Act on the Ma orders and parliamentary the different government management outcomes tha met. However, the 'which `[able] to deliver' criterion management framework h stocks such as cod and had	the Kingdom of Denmark, b omy in all matters related to tem for fisheries manageme s Act (replaced in Decembe cources) and a plethora of su aroe Islands (Landsstýri), ower to issue executive orde produced by the Faroe I nent taken care of by the na tirlitið), both subordinate to hing days each season rests v Lagting), which, of course, law. anagement of Marine Resour decisions, binding procedure al agencies involved are i at are consistent with MSC F delivers' criterion for a 100 for an 80 score) is not met, as not ensured sustainable ddock over time. SG100 is no	but has had home rule since of fisheries management. It ent in place, codified in the er 2017 by the Act on the upporting legislation. Under the Ministry of Fisheries rs to regulate the fisheries, Marine Research Institute ational Fisheries Inspection the Ministry. The authority with the Faroese Parliament , also is the state organ rces, the running executive es for cooperation between n place, able to produce Principles 1 and 2. SG 80 is o score (as opposed to the since the general Faroese management of important ot met.
b	Resolutio	on of disputes		
	Guide post	The management system incorporates or is subject by law to a mechanism for the resolution of legal disputes arising within the system.	The management system incorporates or is subject by law to a transparent mechanism for the resolution of legal disputes which is considered to be effective in dealing with most issues and that is appropriate to the context of the UoA.	The management system incorporates or is subject by law to a transparent mechanism for the resolution of legal disputes that is appropriate to the context of the fishery and has been tested and proven to be effective .
	Met?	Y	Y	Y

PI 3	.1.1	 The management system exists within an appropriate legal and/or customary framework which ensures that it: Is capable of delivering sustainability in the UoA(s); and Observes the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood; and Incorporates an appropriate dispute resolution framework. 				
	Justifi cation	At national level in the Faroe Islands, there is an effective, transparent dispute resolution mechanism in place, as fishers can take their case to court if they do not accept the rationale behind an infringement accusation by enforcement authorities or the fees levied against them. Verdicts at the lower court levels can be appealed to higher levels. The system has been tested and proven to be effective. SG 100 is met.				
с	Respect	for rights				
	Guide post	The management system has a mechanism to generally respect the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management system has a mechanism to observe the legal rights created explicitly or established by custom of people dependent on fishing for food or livelihood in a manner consistent with the objectives of MSC Principles 1 and 2.	The management has a mechan formally commi legal rights explicitly or est by custom of dependent on fis food and liveliho manner consiste the objectives of Principles 1 and 2	system ism to t to the created ablished people hing for od in a nt with of MSC	
	Met?	Y	Y	Y		
	Justifi cation	Among the objectives in the is to ensure economic sust from fisheries. The Faroe I of traditional users are refle is based on historical fishin two thirds Faroese owned a management system form established by custom of p people dependent on fishin	e Faroese Act on the Manage tainability and secure optime slands is highly dependent of ected in the current distribution og. Fishing vessels under Fara and subject to taxation in the hally commits to the legal of eople dependent on fishing g for food in the Faroe Islan	ement of Marine Re al socio-economic on fisheries, and th tion of quota share roese flag must be Faroe Islands. He rights created expl for livelihood (ther ds), and SG 100 is	esources benefits le rights s, which at least nce, the icitly or e are no met.	
		Commercial Fisheries Act (28/1994), Faroese Parliame	nt, 1994		
		Faroese Act on the Manage Faroe Islands Fisheries & A Future Ministry of Fisheries	ement of Marine Resources, I quaculture: Responsible Mar s (undated)	December 2017. nagement for a Sus	tainable	
References		Hegland, T.J. and C.C.E. H System for the Faroe Isla Sustainability', <i>Maritime St</i>	opkings, 'Towards a New Finner, 'Towards a New Finner, 'Towards' a New Finner, 'Towards' a New Finner, 'Towards' New York, 'Towards' a New Finner, ' New Finner, 'Towards' a New Finner, 'Towards' a New Finner, 'Towards' a New Finner, 'Towards' a New Finner, 'To New Finner, 'Towards' a New Finner, 'Towards' a New Finner, 'Towards' a New Finner, 'Towards' a New Finner, 'To	sheries Effort Mana nd the Meaning of 40152-014-0012-7	igement Fishing 7, 2014	
		Interviews with representa Inspection Service during t	tives of the Faroese Ministry he site visit	v of Fisheries and F	isheries	
		Websites of the Faroese Ministry of Fisheries (<u>www.fisk.fo</u>) and Fisheries Inspection Service (<u>www.vorn.fo</u>)				
OVER	ALL PERI	FORMANCE INDICATOR SO	CORE:		95	
COND	ITION N	UMBER (if relevant):			N/A	

Evaluation Table for PI 3.1.2 – Consultation, roles and responsibilities

		The management system has effective consultation processes that are open to interested and affected parties.			
PI 3	.1.2	The roles and responsib involved in the manager relevant parties	ilities of organisations an nent process are clear an	d individuals who are d understood by all	
Scoring Issue		SG 60	SG 80	SG 100	
а	Roles an	d responsibilities			
	Guide post	Organizations and individuals involved in the management process have been identified. Functions, roles and responsibilities are generally understood .	Organizationsandindividuals involved in themanagementprocesshavebeenidentified.Functions,rolesandresponsibilitiesareexplicitlydefinedandwellunderstoodforkeyareasofresponsibilityandinteraction.interaction.	Organizations and individuals involved in the management process have been identified. Functions, roles and responsibilities are explicitly defined and well understood for all areas of responsibility and interaction.	
	Met?	Y	Y	Y	
	Justifi cation	The functions, roles and r fisheries management are Marine Resources and supp governance functions are and the Fisheries Inspection the management process; during site visit, the function areas of responsibility and	esponsibilities of all actors explicitly defined in the A porting legislation. As laid ou split between the Parliamen on Service. Different user gr see SI 3.1.2.b) below. A ons, roles and responsibilities interaction. SG 100 is met.	in the Faroese system for act on the Management of at under SI 3.1.1.a) above, t, the Ministry of Fisheries oups are well integrated in according to our interviews are well understood for all	
b	Consulta	tion processes			
	Guide post	The management system includes consultation processes that obtain relevant information from the main affected parties, including local knowledge, to inform the management system.	The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of the information obtained.	The management system includes consultation processes that regularly seek and accept relevant information, including local knowledge. The management system demonstrates consideration of the information and explains how it is used or not used .	
	Met?	Y	Y	Ν	
	Justifi cation	The Faroe Islands has a cooperation between gove codified in the Act on the legislation. Consultations t advisory committees, inclu consultative meetings on individual, company of pro Fishermen's Association. Th are revised or new regula fisheries research institute and stakeholders. They ar basis, and they also seek a guota recommendations. In	long tradition of continuo ernment agencies and user Management of Marine Res take place both through a r uding one overarching Advis specific issues. Fishermen oducer organization (PO) lev here is also a written hearing ations introduced, a procect Havstovan interacts with bo re consulted by the Ministry dvice from the fishing indus raveling around the country	us consultation and close -group organizations, now ources and supplementary number of formal standing sory Board, and in focused can be represented at an rel, or through the Faroese process before regulations dure required by law. The th management authorities of Fisheries on a regular try in connection with their to explain the rationale for	

		The management system has effective consultation processes that a open to interested and affected parties.				
PI 3.1.2		The roles and responsib involved in the manager relevant parties	ilities of organisations an nent process are clear an	d individuals who d understood by	are all	
		their recommendations. Th in fisheries.	ere are no NGOs in the Faro	es that engage the	mselves	
		All stakeholders report consultation processes to be inclusive and transparent, with management authorities displaying consideration of the information obtained. SG 80 is met. Some stakeholders express satisfaction with the extent to which management authorities explain how the information is used or not used, while some think there is room for improvement here. Hence, SG 100 is not met.				
с	Participa	tion				
	Guide post		The consultation process provides opportunity for all interested and affected parties to be involved.	The consultation provides oppo and encouragen all interested and parties to be in and facilitates effective engagen	process prtunity nent for affected nvolved, their nent.	
	Met?		Y	Y		
	Justifi cation	As follows from SI 3.1.2 b) above, the consultation processes provide opportunity for all interested and affected parties to be involved at both national and international level. All stakeholders consulted during the assessment report that management authorities actively facilitate their involvement, for instance through formal invitations to take part in meetings, and more widely by seeking the advice of stakeholders on their own initiative, not just responding to queries. SG 100 is				
		Commercial Fisheries Act (28/1994), Faroese Parliame	nt, 1994		
		Faroese Act on the Manage	proese Act on the Management of Marine Resources. December 2017.			
		Faroe Islands Fisheries & Aquaculture: Responsible Management for a Sustainable Future, Ministry of Fisheries (undated)				
References		Hegland, T.J. and C.C.E. Hopkings, 'Towards a New Fisheries Effort Management System for the Faroe Islands? - Controversies around the Meaning of Fishing Sustainability', <i>Maritime Studies</i> 13: 12, doi:10.1186/s40152-014-0012-7, 2014				
		Interviews with representa vessels, the Faroese Mar Fisheries and the Fisheries	atives of the client, includin ine Research Institute (Ha Inspection Service during th	g captains on thein ovstovan), the Min ne site visit	r fishing listry of	
	Website of the Faroese Fishermen's Association (<u>www.fiskimannafelag.fo</u>)					
OVER	ALL PERI	FORMANCE INDICATOR S	CORE:		95	
COND	CONDITION NUMBER (if relevant): N/A					

PI 3.1.3		The management policy has clear long-term objectives to guide decision-making that are consistent with MSC fisheries standard, and incorporates the precautionary approach.				
Scorii Issue	ng	SG 60	SG 80	SG 100		
а	Objectiv	es				
	Guide post	Long-term objectives to guide decision-making, consistent with the MSC fisheries standard and the precautionary approach, are implicit within management policy.	Clear long-term objectives that guide decision-making, consistent with MSC fisheries standard and the precautionary approach are explicit within management policy.	Clear lo objectives that decision-making, consistent with fisheries standard precautionary ap are explicit with required management poli	ng-term guide MSC and the oproach, nin and by cy.	
	Met?	Y	Y	Y		
	Justifi cation	The objective of Faroese fisheries management is to conserve and utilize marine fish stocks in order to ensure biological and economic sustainability and secure optimal socio-economic benefits from fisheries. The precautionary approach is not mentioned explicitly in the Commercial Fisheries Act (now replaced by the Act on the Management of Marine resources), but the explicit requirement to protect marine resources and take the best scientific knowledge into account equals the requirements of the precautionary approach, as laid out in the FAO Code of Conduct. Since these principles are codified in formal law, their application is required by management policy. SG 100 is met.				
		Commercial Fisheries Act (28/1994), Faroese Parliame	nt, 1994 (1996)		
		Faroese Act on the Manage Faroe Islands Fisheries & A Future, Ministry of Fisherie	ement of Marine Resources, quaculture: Responsible Mar s (undated)	December 2017. nagement for a Sus	tainable	
References Hegland, T.J. an System for the Sustainability', M Interviews with Service during th		Hegland, T.J. and C.C.E. H System for the Faroe Isla Sustainability', <i>Maritime St</i> Interviews with the Faroe Service during the site visit	opkings, 'Towards a New Fi ands? - Controversies arour <i>rudies</i> 13: 12, doi:10.1186/s se Ministry of Fisheries an t	sheries Effort Mana nd the Meaning of ;40152-014-0012-7 d the Fisheries In:	agement Fishing 7, 2014 spection	
	Website of the Faroese Ministry of Fisheries (<u>www.fisk.fo</u>)					
OVER	ALL PERI	ORMANCE INDICATOR S	CORE:		100	
COND	ITION N	UMBER (if relevant):			N/A	

Evaluation Table for PI 3.1.3 – Long term objectives
PI 3	.2.1	The fishery-specific management system has clear, specific objectives designed to achieve the outcomes expressed by MSC's Principles 1 and 2.				
Scorii Issue	ıg	SG 60	SG 80	SG 100		
а	Objectiv	es				
	Guide post	Objectives , which are broadly consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are implicit within the fishery-specific management system.	Short and long-term objectives, which are consistent with achieving the outcomes expressed by MSC's Principles 1 and 2, are explicit within the fishery-specific management system.	Well defined measurable sho long-term obje which are demo consistent with a the outcomes ex by MSC's Principle 2, are explicit wi fishery-specific management syst	and ort and ectives, nstrably chieving pressed es 1 and thin the rem.	
	Met?	Y	Y	Partial		
	Justifi cation Short and long-term objectives consistent with achieving the outcome Principles 1 and 2 are explicit in the Faroese Act on the Management Resources and supporting legislation applicable to the fisheries under ass This includes objectives to maintain fish stocks at sustainabl operationalized as MSY (here: both target stocks and other retained spe protect other parts of the ecosystem, such as coral reefs and vulnerab habitats. The Faroe Islands/Denmark is member of the main regional orga of relevance to the fishery under assessment: the North East Atlantic Commission (NEAFC), the OSPAR Commission on protection of th environment and the North Atlantic Marine Mammals Commission (NAM an additional layer to national regulations, specific objectives are found a decisions and recommendations of these commissions. SG 80 is met. P1 objectives are well-defined and measurable and demonstrably consist achieving the outcomes expressed by MSC's principles, but this is to a less the case with the P2 objectives. Hence, a partial score is achieved at S this PI		ving the outcomes the Management of isheries under asses at sustainable other retained spec- teefs and vulnerable main regional organ orth East Atlantic F protection of the Commission (NAMM ctives are found als SG 80 is met. monstrably consist but this is to a lesses a schieved at SG	of MSC f Marine ssment. levels, ies) and e marine nizations Fisheries marine ICO). As so in the ent with er extent 100 for		
		Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic (NAMMCO Agreement), 1992				
			28/1994), Faroese Parliame	nt, 1994 (1996) 2017.		
References		Convention for the Protection (OSPAR Convention), 1992	on of the Marine Environmen	t of the North-East	Atlantic	
		Convention on the Future N (NEAFC Convention), 1980	Multilateral Cooperation in N	orth-East Atlantic F	isheries	
OVER	ALL PERI	FORMANCE INDICATOR S	CORE:		90	
COND	ITION N	UMBER (if relevant):			N/A	

Evaluation Table for PI 3.2.1 Fishery-specific objectives

Lvalu			Decision-making pr	OLESSES
PI 3.2.2		The fishery-specific mar making processes that r objectives, and has an a fishery.	agement system include esult in measures and sti ppropriate approach to a	s effective decision- rategies to achieve the ctual disputes in the
Scorii Issue	ıg	SG 60	SG 80	SG 100
а	Decision	-making processes		
	Guide post	There are some decision- making processes in place that result in measures and strategies to achieve the fishery- specific objectives.	There are established decision-making processes that result in measures and strategies to achieve the fishery- specific objectives.	
	Met?	Y	Y	
	Justifi cation	Established decision-makir evolved over several decad Act as well as in the new resources – ensuring that s the fishery-specific object number of fishing days. T other aspects of the fisheri issues licenses and is respo a) above). The system in groups (see SI 3.1.2 b) ab	ng procedures at national le des and was codified in the (December 2017) Act on t strategies are produced and ives. The Parliament make he Ministry of Fisheries issu es management, while the F onsible for the enforcement of cludes extensive consultation ove). SG 80 is met.	evel in the Faroe Islands – 1994 Commercial Fisheries the Management of Marine measures taken to achieve s annual decisions on the les executive orders on all fisheries Inspection Service of regulations (see SI 3.1.1 on mechanisms with user
b	Respons	iveness of decision-making	processes	
D	Guide post	Decision-making processes respond to serious issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take some account of the wider implications of decisions.	Decision-making processes respond to serious and other important issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.	Decision-making processes respond to all issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions.
	Met?	Y	Y	N
	Justifi cation	According to our interviews procedures respond to ser monitoring, evaluation or b through the arenas for reg the public, through formal both regular and ad hoc co addition, there is close institutions. Both scientists government agencies are feel that the authorities' re policy options take adequa of view, these consultations also to the legitimacy of th identified issues that have have not been compreher since this was identified as	s during the site visit, the e ious and other important is or groups with an interest in ular consultations between of meetings in the Fisheries insultation with the industry contact between authoritie and user-group representat open to any kind of input a sponse is transparent and t ite account of their advice. Is contribute to enhanced qua e regulations. SG 80 is met. not been responded to in a sively recorded although s a challenge. SG 100 is not	stablished decision-making sues identified in research, the fishery. This is ensured governmental agencies and Advisory Board, as well as and other stakeholders. In es and scientific research ives claim that the relevant t any time. They generally imely and that the ensuing From the authorities' point ality of decision-making and There are, however, a few timely manner – e.g., birds several years have passed met.
	Use of p	recautionary approach		

Evaluation Table for PI 3.2.2 – Decision-making processes

PI 3	.2.2	The fishery-specific mar making processes that r objectives, and has an a fishery.	agement system include esult in measures and sti ppropriate approach to a	s effective decision- rategies to achieve the ctual disputes in the
с	Guide post		Decision-making processes use the precautionary approach and are based on best available information.	
	Met?		Y	
	Justifi cation	Decision-making processe national fisheries research precautionary approach; se	s are based on relevant institute Havstovan, and ma ee PI 3.1.3 above. SG 80 is	scientific research by the anagement is based on the met.
d	Account	ability and transparency of n	nanagement system and dec	cision-making process
	Guide post	Some information on the fishery's performance and management action is generally available on request to stakeholders.	Information on the fishery's performance and management action is available on request, and explanations are provided for any actions or lack of action associated with findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.	Formal reporting to all interested stakeholders provides comprehensive information on the fishery's performance and management actions and describes how the management system responded to findings and relevant recommendations emerging from research, monitoring, evaluation and review activity.
	Met?	Y	Y	Y
	Justifi cation	The Ministry of Fisheries su fisheries management sys Inspection Service and Ha the public on request. In th authority are accounted fo from research, monitoring, information is conveyed a interested stakeholders, f relevant stakeholders. Com and catches is readily avail The same is true for decis published online immedia management action and re In the opinion of the asse reporting' in the context, a written reports or even em	bmits annual reports to the stem. Other involved agence vstovan, produce annual re- nese reports, actions taken or r, including those proposed evaluation and review activ- to the frequent meetings be- rom which minutes are pro- nprehensive information, inclu- able on the website of the Fi sions on real-time closure of ately. This is a typical ex- sponse to issues identified is essment team, such online s it is clearly a more timely we ails. SG 100 is met.	Parliament on behalf of the iies, such as the Fisheries ports that are available to or not taken by the relevant on the basis of information vity. More importantly, this etween authorities and all oduced and distributed to luding statistics, on quotas isheries Inspection Service. of fishing areas, which are xample of information of n research and monitoring. publication equals 'formal way of communication than
e	Approac	h to disputes		
	Guide post	Although the management authority or fishery may be subject to continuing court challenges, it is not indicating a disrespect or defiance of the law by repeatedly violating the same law or regulation necessary for the	The management system or fishery is attempting to comply in a timely fashion with judicial decisions arising from any legal challenges.	The management system or fishery acts proactively to avoid legal disputes or rapidly implements judicial decisions arising from legal challenges.

PI 3.2.2		The fishery-specific management system includes effective decision- making processes that result in measures and strategies to achieve the objectives, and has an appropriate approach to actual disputes in the fishery.				
		sustainability for the fishery.				
	Met?	Y	Y	Y		
	Justifi cation	The national management When occasionally taken to complies with the judicial d works proactively to avoid groups at the regulatory le possible for regulations ar Regulatory and enforceme infringements. Only the mo and possible transfer to the	authority is not subject to concept of the subject to concept by fishing companies, lecision in a timely manner. I legal disputes through the to vel (see PI 3.1.2 above), ensured other management decises and authorities offer advice to set serious cases are subject to court system. SG 100 is management subject to the court system.	ontinuing court cha the management a The management a ight cooperation wi suring as high legiti ions (see PI 3.2.3 o the fleet on how to prosecution by th et.	illenges. iuthority iuthority th user- macy as below). to avoid ne police	
		Commercial Fisheries Act (28/1994), Faroese Parliame	nt, 1994 (1996)		
		Faroese Act on the Management of Marine Resources, December 2017.				
References		Interviews with representatives of the client, including captains on their fishing vessels, the Faroese Marine Research Institute (Havstovan), the Ministry of Fisheries, the Fisheries Inspection Service and the National History Museum during the site visit				
		Website of the Faroese Ministry of Fisheries (<u>www.fisk.fo</u>) and Fisheries Inspection Service (<u>www.vorn.fo</u>)				
OVER	ALL PERI	FORMANCE INDICATOR S	CORE:		95	
COND	CONDITION NUMBER (if relevant): N/A			N/A		

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with.			
Scorii Issue	ng	SG 60	SG 80	SG 100	
а	MCS imp	blementation			
	Guide post	Monitoring, control and surveillance mechanisms exist, and are implemented in the fishery and there is a reasonable expectation that they are effective.	A monitoring, control and surveillance system has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	A comprehensive monitoring, control and surveillance system has been implemented in the fishery and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.	
	Met?	Y	Y	Y	
h	Met? Y Y Y Justifi cation Monitoring, control and surveillance is taken care of by the Faroese Fishe Inspection Service, in collaboration with other states' enforcement authorities. enforcement system includes reports from the vessels, physical inspections at and in harbor, as well as information exchange between the various countr enforcement authorities. Fishing vessels are required to keep a logbook and report catches to the Fishe Inspection Service on a daily basis. Electronical logbooks have been introduced all vessels above 15 BT (in practice all vessels that do not deliver their catch ev day), and VMS is obligatory. The Fisheries Inspection Service carries out 300- inspections per year in the Faroese Economic Zone. It has two inspection vess at its disposal, and there is at any time a vessel from the Royal Danish N present in Faroese waters, which also enforces Faroese fisheries regulations. (of the Faroese inspection vessels has a helicopter on board, which enal inspectors to conduct impromptu inspections. The Ministry of Fisheries also has own helicopter, which can be used for fishery inspections. At-sea inspecti include control of the catch from the last haul, the fishing gear and fish in holds. The inspectors have the possibility to close an area with too much juve or bycatch for a period of up to two weeks (real-time closure). All landings h to be reported 12 hours in advance in order to give the inspectors the possib to check the landed catch. Both landing and at-sea control is conducted usin risk-based framework aimed at utilizing resources to optimize compliance at given moment. As follows, there are a number of possibilities for enforcement authorities physically check whether the data provided by fishers through self-reporting correct. In addition, VMS data enabl		by the Faroese Fisheries nforcement authorities. The physical inspections at sea even the various countries' ort catches to the Fisheries is have been introduced for not deliver their catch every Service carries out 300-350 has two inspection vessels on the Royal Danish Navy e fisheries regulations. One on board, which enables stry of Fisheries also has its ections. At-sea inspections shing gear and fish in the rea with too much juvenile closure). All landings have the inspectors the possibility ontrol is conducted using a optimize compliance at any enforcement authorities to through self-reporting are ether area restrictions are ve monitoring, control and ry and has demonstrated a sures; see SI 3.2.3 c) below		
D	Sanction				
	Guide post	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.	Sanctions to deal with non-compliance exist, are consistently applied and demonstrably provide effective deterrence.	
	Met?	Y	Y	Y	
	Justifi cation	The Faroese enforcement sanctions ranging from ter	system uses a graduated nporary withdrawal of licens	sanctioning system, with e, confiscation of gear and	

Evaluation Table for PI 3.2.3 – Compliance and enforcement

PI 3	.2.3	Monitoring, control and management measures	surveillance mechanisms in the fishery are enforce	ensure the d and complied with.
		fines to formal prosecution and possibly permanent withdrawal of license. If the fishers do not accept the fines issued by the enforcement or prosecution authority, they can take the case to court. The decision of a lower-level court can then be appealed to higher-level courts. For a first-time offence, a warning is given if the infringement is not of a very		
		serious nature. If it is repeated, the license will normally be withdrawn and/or the fishing gear will be confiscated. The duration of the withdrawal depends on the seriousness of the infringement, but typically the license will be withdrawn for a two-week period. If the offence is repeated again, a fine will be introduced in addition to the withdrawal of the license or the case will be brought to court.		
		The comprehensive enforce level of compliance (see sanctions, makes it reaso deterrence. SG 100 is met.	ement system (see SI 3.2.3 SI 3.2.3 c)), including the nable to assume that the	a)) combined with the high consistent application of system provides effective
С	Complia	nce		
	Guide post	Fishers are generally thought to comply with the management system for the fishery under assessment, including, when required, providing information of importance to the effective management of the	Some evidence exists to demonstrate fishers comply with the management system under assessment, including, when required, providing information of importance to the offective management of	There is a high degree of confidence that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the
		fishery.	the fishery.	fishery.
	Met?	Y	Y	Ν
	Justifi cation	 According to the Fisheries Inspection Service, there have been no infringements in the fishery in recent years. While inspection statistics are confidential in the Faroese enforcement system, the assessment team has not come across information that gives us reason to question the high level of compliance. As follows from SIs 3.2.3 a) and b) above, the fishery has in place a comprehensive system for monitoring, control and surveillance, including daily reporting, VMS data and physical checks of fishing operations, catch and gear, which makes it reasonable to conclude with a high degree of confidence that fishers actually comply with regulations. This includes providing information that is important to the effective management of the fishery, such as catch information to the scientific research institute Havstovan. 		
	legitimacy- and communication-related mechanisms, various forms of norm- legitimacy- and communication-related mechanisms have also proven to b effective in delivering compliance in fisheries. In the Faroe Islands, there is degree of social control in the small coastal communities from which the fisher takes place, and the high level of user-group involvement (see PI 3.1.2 above may provide regulations with a degree of legitimacy that increases fishermen' inclination to comply with them. The same applies to the relationship betwee fishermen and enforcement officers, which is reported to be good. Inspector approach the fishermen in a respectful manner and provide guidance on how t avoid infringements, thus taking a more consultative role in addition to the traditional policing role towards the fishing fleet.			
		Hence, evidence of a compliant behaviour exists, and SG 80 is met. Since publicly available inspection and infringement statistics are not produced for the fishery, however, the documentation is not sufficient to conclude with a high degree of confidence that this is the case. SG 100 is not met.		
		Hence, evidence of a comp available inspection and in however, the documentati confidence that this is the	liant behaviour exists, and S fringement statistics are no on is not sufficient to concl case. SG 100 is not met.	G 80 is met. Since publicly t produced for the fishery, ude with a high degree of

1

PI 3.2.3		Monitoring, control and management measures	surveillance mechanisms in the fishery are enforce	ensure the d and complied v	vith.
d	Guide post		There is no evidence of systematic non- compliance.		
	Met?		Y		
	Justifi cation	As follows from SI 3.2.3 compliance in the fishery.	c) above, there is no evi	dence of systema	tic non-
		Faroe Islands Fisheries & Aquaculture: Responsible Management for a Sustainable Future, Ministry of Fisheries (undated)			
		Email correspondence with representatives of the Faroese Fisheries Inspection Service			
Refer	ences	Gezelius, S.S. (2003/2012), Regulation and Compliance in the Atlantic Fisheries, Dordrecht: Springer			
		Hønneland, G. (2013), <i>Making Fishery Agreements Work</i> , Cheltenham: Edward Elgar			
		Interviews with representatives of the client, the Faroese Ministry of Fisheries and Fisheries Inspection Service during the site visit			
		Website of the Faroese Fish	neries Inspection Service (<u>w</u>	<u>ww.vorn.fo</u>)	
OVER	ALL PER	FORMANCE INDICATOR S	CORE:		95
COND	ITION N	UMBER (if relevant):			N/A

	evalu	ation					
		There is a system of mo	nitoring and evaluating the	ne performance of the			
PI 3	.2.4	insnery-specific management system against its objectives.					
		There is effective and tin system.	There is effective and timely review of the fishery-specific management system.				
Scorii	ng	SG 60	SG 80	SG 100			
Issue							
а	Evaluation	on coverage					
	Guide	There are mechanisms in	There are mechanisms in	There are mechanisms in			
	post	place to evaluate some	place to evaluate key	place to evaluate all parts			
		specific management	specific management	or the fishery-specific management system.			
		system.	system	management by beenin			
	Met?	Y	Y	Ν			
	Justifi	The main management b	odies, such as the Ministry	of Fisheries, the Fishery			
	cation	Inspection Service and Ha	vstovan, review their achiev	vements, albeit in a rather			
		informal manner, the prece	eding year when they produce the Inspection Service, run	e plans and targets for the			
		in the continuous risk a	nalysis that takes place i	n deciding where to put			
		enforcement efforts at an	y given time. The Parliam	ent also conducts its own			
		reviews of how the fisherie	es management system wor by the Fisheries Advisory	ks on a year-to-year basis.			
		regulatory measure is intro	oduced. The Auditor Genera	I reviews the effectiveness			
		of management bodies in	financial terms. The Fishe	eries Inspection Service is			
		certified according to the IS	SO 9001 quality managemer	it system standard. Hence,			
		SG 80 is met.	ent system are subject to a	mechanism of review, and			
		It is a principal challenge to	o claim that `all' parts of a fisl	neries management system			
		are subject to review, but i	t seems reasonable to expec	t some sort of a formal and			
		holistic evaluation of the sy	stem as such to be in place f	or SG 100 to be met, which			
b	Internal	and/or external review					
5	Guide	The fishery-specific	The fishery-specific	The fishery-specific			
	post	management system is	management system is	management system is			
		subject to occasional	subject to regular	subject to regular			
		internal review.	internal and occasional external review.	internal and external review.			
	Met?	Y	Y	Ν			
	Justifi	The fishery-specific manage	gement system is subject to	various forms of internal			
	cation	self-evaluation within the f	Faroese bodies of governance ar basis. Honco, the required	ce (see SI 3.2.4 a) above);			
		these take place on a regular basis. Hence, the requirement for a 100 score is met as far as <i>internal</i> reviews are concerned, but to achieve a score above 60 some					
		level of external review must also be in place, on an occasional (SG 80) or regular					
		(SG 100) basis.					
		According to the MSC Fishe	eries Standard, 'external' doe	es not mean 'international',			
		interpretation 'how externa	es management system? (S al' this needs to be. It is for	natter of instance, unclear whether			
		the reporting of the Mini	stry of Fisheries to the Pa	arliament should count as			
		external. Admittedly, these	e bodies of governance are	part of the executive and			
		legislative branches of gove	ernment, respectively. On the	e other hand, lines between			
		the Faroe Islands, and the	Parliament's continuous follo	ow-up of the working of the			
		ministries arguably stops s	hort of formal review.				

Evaluation Table for PI 3.2.4 – Monitoring and management performance evaluation

DT 2	2.4	There is a system of monitoring and evaluating the performance of fishery-specific management system against its objectives.	f the	
PI 5.	2.4	There is effective and timely review of the fishery-specific manage system.	ement	
		This SI, as opposed to SI 3.2.4 a), does not ask about the <i>extent</i> of (covering some/key/all parts of the management system), but rather about <i>frequency</i> and whether they are internal or external to the management Hence, various forms of evaluation can be taken into consideration under even if they do not comprise the entire management system (the 'holistic required to score a 100 at SI 3.2.4 a). But some level of interrelationship is these PIs must be assumed, so that external reviews of only per components of the management system should not automatically lead to a score on the external review indicator (whether 'occasional' for SG 80 or 'for SG 100). Hence, the Faroese system for fisheries management is reviewed by the country's Auditor General, but the reviews only comp financial aspects of the system, so in this context it does not quality as a external review (cf. the argument above). The same applies to the review attached to the Fisheries Inspection Service's ISO 9001 certification. Her part of the management system (the main enforcement body) is evaluate regular basis, but only for peripheral aspects of its working, seen in the confisheries management.	reviews but their system. r this PI c' review between eripheral positive regular' regularly rise the regular scheme re a key red on a ontext of	
		However, in preparation of a major review of Faroese fishery regulations in for 2017 (but not implemented as per September that year), the Par initiated a comprehensive review of the management system in 2016. The committee had members from management authorities, the fishing indus science, but also independent experts such as lawyers and economists. occasional external review of the management system takes place, and S met.	planned rliament e review stry and At least 56 80 is	
		Although it can be debated how often (and at what specific intervals) review be carried out to meet the SG 100 requirement of 'regular' external review conclude that it is not met here. External evaluations seem to be conduct when particular circumstances, such as the revision of the major fisher require this. To quality as a regular external review, there would have system in place under which reviews are commissioned notwithstanding circumstances.	ws must ews, we ted only ries act, to be a external	
		Interviews with representatives of the Faroese Marine Research I (Havstovan), Ministry of Fisheries and Fisheries Inspection Service during visit	institute site the	
Refere	ences	<i>Nordic Experience of Fisheries Management</i> , TemaNord 2009: 579, Nordic of Ministers, 2009	Council	
		Websites of the Faroese Ministry of Fisheries (<u>www.fisk.fo</u>) and F Inspection Service (<u>www.vorn.fo</u>)	isheries	
OVERALL PERFORMANCE INDICATOR SCORE:80				
COND	CONDITION NUMBER (if relevant): N/A			

Appendix 1.2 Risk Based Framework (RBF) Outputs

The RBF Has not been used in this assessment.

Appendix 1.3 Conditions

Performance 1.2.2 Ling (Condition 1) Indicator Score 60 Rationale Sia SG80 Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY. Sib SG80 The HCRs are likely to be robust to the main uncertainties. Sic SG80 Available evidence indicates that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs. Condition The fishery for ling shall be subject to well-defined HCRs. These HCRs shall meet objectives consistent with PI 1.1.1 and include provision for reducing exploitation pressures if the stocks fall below PRI reference points. It shall be demonstrated that the HCR is robust to the main uncertainties and implementation shall include monitoring that can demonstrate that the tools in use are appropriate and effective. Milestones Year 1: The Client shall present a draft for a HCR that meets requirements consistent with SG80 requirement Year 2: The HCR shall be consulted with all involved parties. The HCR shall be revised to reflect input from these hearings. Year 3: The HCR shall be adopted for ling in 5.b. Year 4: The HCRs shall be implemented. **Client action** The Ministry of Fisheries together with the Faroe Marine Research Institute (FAMRI) has begun the work on developing a management plan. The time plan frame is not known except that the Faroese Marine Resource Act stipulates that Management Plans are effective from 1 January 2019. The industry will request that the Ministry and FAMRI get the management plan effective as soon as possible. The Marine Resource Act requires that Management Plans are consistent with objectives laid down in MSC Principle PI 1 and PI 2. The Management Plan when implemented is expected to meet the criteria for SG80 for PI 1.2.2a and PI 1.2.2b. When the Management Plan is effectively implemented The CAB will score the Plan versus PI 1.2.2a and PI 1.2.2b (FCR v 2.0) **Year 1**: The client will formally approach the relevant authorities and seek an invitation to take part in a consultations group and the development of a management plan. If invited, the Client will contribute to the development of a precautionary plan. The Client will present documentation on the interaction between the Client and the Authorities. No rescoring is expected. Year 2, 3 and 4: At the surveillance audits the Client will present documentation on progress with development and implementation of the management Plan. The client will continue to repeat action taken in year 1 until the management plan is effectively implemented. When the Management Plan has been effective implemented the PI 1.2.2a and PI 1.2.2b will be rescored and the condition hopefully closed. **Consultation on** The development of the Management Plan will be done by HAVSTOVAN and condition the Faroese Ministry. This work is underway. The Marine Resource Act obliges the Faroese Ministry to develop and implement Management plans in 2018. Hence the cooperation is assured. The Faroese management system is built on close cooperation between authorities and the industry and the required support and consultations are an integral part of the management system cf section 3.5.5. Hence there is no support letter.

Performance Indicator	1.2.2 Tusk (Condition 2)
Score	60
Rationale	 Sia SG80 Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY. Sib SG80 The HCRs are likely to be robust to the main uncertainties. Sic SG80 Available evidence indicates that the tools in use are appropriate and effective in achieving the eveloptication levels required under the HCRs.
Condition	The fisheries for tusk shall be subject to well-defined HCRs. These HCRs shall meet objectives consistent with PI 1.1.1 and include provision for reducing exploitation pressures if the stocks fall below PRI reference points. The tusk (NEA) is fished by several Parties (EU, Norway, Faroe Islands) and a joint approach to management is required. It shall be demonstrated that the HCR is robust to the main uncertainties and implementation shall include monitoring that can demonstrate that the tools in use are appropriate and effective.
Milestones	 Year 1: The Client shall present documentation of an initiative to the relevant authorities for the development of a HCR that that is consistent with SG80 requirements. The HCR shall apply to the full UoA and thus include consultations with all Parties involved in the fishery including EU and Norway. Year 2: The Client shall present documentation that HCR has been consulted with all involved parties including non-Faroese fisheries exploiting tusk (NEA). Year 3: The HCR shall be discussed at the appropriate international forum for tusk (NEA). Year 4: The HCR shall be implemented.
Client action plan	The Ministry of Fisheries together with the Faroe Marine Research Institute (FAMRI) has begun the work on developing a management plan. The time frame is not known except that the Faroese Marine Resource Act stipulates that Management Plans are effective from 1 January 2019. The industry will request that the Ministry and FAMRI get the management plan effective as soon as possible. The Marine Resource Act requires that Management Plans are consistent with objectives laid down in MSC Principle PI 1 and PI 2. The Tusk stock is a shared with EU and Norway. The Client will seek for an agreement for the countries involved through the relevant Faroese authorities. The Management Plan when implemented is expected to meet the criteria for SG80 for PI 1.2.2a and PI 1.2.2b. When the Management Plan is effectively implemented The CAB will score the Plan versus PI 1.2.2a and PI 1.2.2b (FCR v 2.0)
	 Year 1: The client will formally approach the relevant authorities and seek an invitation to take part in a consultations group and the development of a management plan. If invited, the Client will contribute to the development of a precautionary plan. The Client will present documentation on the interaction between the Client and the Authorities. No rescoring is expected. Year 2, 3 and 4: At the surveillance audits the Client will present documentation on progress with development and implementation of the management Plan. The client will continue to repeat action taken in year 1 until the management plan is effectively implemented. When the Management Plan has been effective implemented the PI 1.2.2a and PI 1.2.2b will be rescored and the condition hopefully closed.
Consultation on condition	The development of the Management Plan will be done by HAVSTOVAN and the Faroese Ministry. This work is underway. The Marine Resource Act obliges

Table 55 Conditions 2 (missing HCR for tusk)

DNV GL – Report No. 2017-027, Rev. 2 – <u>www.dnvgl.com</u> MSC Full Assessment Reporting Template V2.1 – issued 8 April 2015 Template approval date:

the Faroese Ministry to develop and implement Management plans in 2018.
Hence the cooperation is assured The Faroese management system is built
on close cooperation between authorities and the industry and the required
support and consultations are an integral part of the management system, cf
section 3.5.5.Hence there is no support letter.

Table 56: Condition 3 (Information to support the ETP management of UoA).

Performance	Relevant information is collected to support the management of UoA impacts on
Indicator	ETP species, including:
	 Information for the development of the management strategy;
	 Information to assess the effectiveness of the management strategy; and
	Information to determine the outcome status of ETP species.
Score	70
Rationale	PI 2.3.3 (a) SG80: Some quantitative information is adequate to assess the
	UoA related mortality and impact and to determine whether the UoA may be a
	threat to protection and recovery of the ETP species.
	The available data from loopooks, landing statistics and interviews with fishers
	support that the probability of FTP catches and associated fatal impacts on
	these populations is negligible but is not considered adequate to fully assess
	the impact and SG80 is not met.
Condition	The Client shall work together with Haystovan and the Faroese Natural
Condition	Museum to provide a quantitative estimate of the impact that the three LIoCs
	make on the FTP populations, notably sea birds. Data should be adequate to
	contribute to the estimate trends and status of the sea bird populations.
Milestones	Year 1: The Client shall present a plan agreed with Haystovan and the
	Faroese Natural Museum. The plan shall provide quantitative data that allow
	an assessment of the impact on the ETP populations.
	p-p
	Year 2-4: The Client shall present data collected from the fisheries together
	with an assessment of the impact on the ETP populations.
Client action plan	Year 1 (2019)
	The focus will be on sea birds and sea mammals and includes the following actions:
	Increase awareness among the captains that they in 2019 must focus especially on catch of seabirds and sea mammals
	Equip the captains and ships with appropriate identification keys to ensure that identification is correct.
	Collect data from log books, supplemented with data from the
	Marine Research Institute or the Museum
	The Marine Research Institute/The Natural Museum analyses the
	collected data and produces a short report assessing the importance
	of the catch for the total stock for each bird and mammal species.
	The size of the impacted stock, is available on the website of the Norwegian Polar Institute (The Barents Sea Portal)
	Voar 2-4
	Data will be presented as collected through the steps from year 1

Consultation on	The client will need to contact research institutions such as Havstovan and
condition	the Faroese Natural Museum.

There are 3 recommendations for the fishery.

Table 57: Recommendations.

Recommendation number	PI	Recommendation		
1	2.1.3	It is recommended that catches of redfish and grenadiers are specified to the species level (if possible).		
2	2.2.2	It is recommended that the client considers the sustainability of the bait stocks when purchasing bait species.		
3	2.2.3	It is recommended that interactions with elasmobranchs (sharks, rays and skates) and with all bird species are recorded.		

APPENDIX 2 PEER REVIEW REPORTS

Peer Reviewer Information						
Contact Name	First	PR B	Last			

Fishery Assessment Details						
Fishery	Faroe Islands Ling and Tusk					
Peer Review College contact details						
Peer Review Due Date	29 March 2018					

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Date of issue: 8 October 2014	© Marine Stewardship Council, 2014

Summary of Peer Reviewer Opinion

Has the assessment team arrived at an appropriate conclusion based on the evidence presented in the assessment report?	Yes/No Yes	CAB Response
Justification:		Thanks.
Overall, the conclusions of this report are sound an based on appropriate evidence. Some specific exce noted in the comment sections.	d eptions are	

Do you think the condition(s) raised are appropriately written to achieve the SG80 outcome within the specified timeframe? [Reference: FCR 7.11.1 and sub-clauses]	Yes/No Yes	CAB Response
<u>Justification:</u> The time lines for Condition 1 and 2 are reasonable client plan to work with the Ministry and FAMRI to p their achievement.	e, as is the promote	<u>Acknowledged.</u>

If included: Yes/No CAB Response Do you think the client action plan is sufficient to close the conditions raised? Yes/No CAB Response [Reference FCR 7.11.2-7.11.3 and sub-clauses] Yes Yes Justification: Yes Acknowledged. The actions required to close the conditions lie with the Ministry of Fisheries and FAMRI and are therefore out of the client's direct control. Within that constraint the client plan is sufficient to close the two conditions. Acknowledged.

Performance Indicator Review

Please complete the appropriate table(s) in relation to the CAB's Peer Review Draft Report:

- For reports using one of the default assessment trees (general, salmon or enhanced bivalves), please enter the details on the assessment outcome using Table 1.
- For reports using the Risk-Based Framework please enter the details on the assessment outcome at

Table 2.

• For reports assessing enhanced fisheries please enter the further details required at Table 3.

Document: Peer Reviewer Template, v2.0

Date of issue: 1 October 2014 File: MSC_peer_reviewer_template_v2.doc
 Table 1 For reports using one of the default assessment trees:

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
1.1.1	Ling (UoC1,2,3) Yes Tusk NEA (UoC 4,5,6) Yes	Yes Yes	NA Yes	Ling (UoC1,2,3) In part a, remove "makes" from final sentence Tusk NEA (UoC 4,5,6) Add ICES to WGDEEP 2017 ref.	Done
1.1.2	All UoC NA	NA	NA		

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Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
1.2.1	Ling (UoC1,2,3) Yes Tusk NEA (UoC 4,5,6) Yes	Yes	NA Yes	Ling (UoC1,2,3) part a is an excellent explanation Tusk NEA (UoC 4,5,6) As with ling, part a is an excellent explanation References: should Faroese Fishing Act be changed to The Act on the Management of Marine Resources? I don't see it in the report list of references. The Norwegian Marine Resources Act also appears to be missing from report references.	The official name of the Faroese Act is "Løgtingslóg nr. 161 frá 18. desember 2017 um fyrisiting av sjófeingi" <u>http://www.Logir.fo</u> No English translation of the full Act has been identified The Reference list has been updated

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
1.2.2	Ling (UoC1,2,3) Yes Tusk NEA (UoC 4,5,6) Yes	Yes Yes	Yes Yes	Ling (UoC1,2,3) Part a: should Fishing Act be changed to The Act on the Management of Marine Resources? (both in text and references) Citation for this act appears to be missing from the report's list of references. Tusk NEA (UoC 4,5,6) Same comment as for ling	The citation has been changed to "Faroese Act on the Management of Marine Resources" Reference list updated
1.2.3	Ling (UoC1,2,3) Yes Tusk NEA (UoC 4,5,6) Yes	Yes Yes	NA	Tusk NEA (UoC 4,5,6) Part a: final text beginning "SG100 met list…" is unclear	The text has been clarified

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
1.2.4	Ling (UoC1,2,3) Yes Tusk NEA (UoC 4,5,6) Yes	Yes Yes	NA	Ling (UoC1,2,3) Part e: meaning of (Benchmark) is unclear. Citation? Tusk NEA (UoC 4,5,6) Part e: because the 2018 external review is to be scheduled and has not yet occurred, SG100 has been only partially met. Although this would change the evaluation of SG100 it is unlikely that it would change the score overall, which already reflects the failure to achieve the 100 level for two elements.	Score remains unchanged. The text of the Ling and Tusk section PI 1.2.4.e has been clarified. There are internal review in the WGDEEP subgroup that prepare the assessment and external review in the approval procedure within WGDEEP and in ACOM. Some external review is done through the annual discussions on management with the Faroese fishing industry. The stocks are subject to ICES benchmarks but the stocks assessment have not yet been through this process.
2.1.1	Yes	Yes	NA	Part a: a good thorough explanation and justification of score	The rationale of PI2.1.1.a has been modified to take into account PR A comments and the results of the Faroese saithe report. The score of PI 2.1.1 has been lowered from 90 to 80 for the demersal trawl UoCs. Scores of longline and jigging UoCs remains unchanged.
2.1.2	Yes	Yes	NA	Part a: replace "Iceland" with Faroe Islands" References: citations should include the Commercial Fisheries Act and gear regulations.	Mistake amended and references added. Besides, additional text has been added to PI 2.1.2.a and PI 2.1.2.b to better justify the score. Score remains unchanged.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
2.1.3	Yes	Yes	NA	Part c: Line 1: "information is collected" Line 3: change "assignation" to "assignment" Final sentence needs clarification References section: Add ICES stock assessment	Amendements made and references added. Besides, additionI text has been included in PI 2.1.3.a to better justify the score. Scoring remains unchanged.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
2.2.1	Yes	Yes	NA	Part a: para 4 "researches" should be "researchers" para 5: sentence 1: change to " there are no records of either released elasmobranchs or entangled birds." Part b: para 2 "researches" should be "researchers" para 2: line 2: change to "identification of possible interacting species makes it difficult to determine either the level of interactions or the possible damage to the different species." para 4: line 1, insert "it" after "available" References: are there any stock assessments or other population studies of fulmars and other birds that can be inserted here?	Amendements made and reference regarding bird species has been added. A reference to Ramsar website has been included. Background information on the different bird species was taken from the website. Fulmars are now considered as a main secondary species. The rationale of PI 2.2.1 has been changed but scoring remains the same.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
2.2.2	Yes	Yes	NA	References Include cites to annual reviews of birds and elasmobranchs? Is there a reference to anything that notes the absence of shark finning that can be cited?	The team can not provide the required references of elasmobranchs as the conclussions in the report are result of personal comments of Havstovan researchers. A reference has been added in relation to bird interactions (Olsen, 2008) The rationale of PI 2.2.2.a and PI 2.2.2.c has been modified to strengthen the SG80 score. Scoring remains unchanged.
2.2.3	Yes	Yes	NA	References section should include Havstovan reports on bird population status and bird interactions with gear	The team can not provide the required references of elasmobranchs as the conclussions in the report are result of personal comments of Havstovan researchers. A reference has been added in relation to bird interactions (Olsen, 2008). The rationale of SI a,b,and c has been reviewed and strengthen to support the given scores. The score of PI 2.2.3.b has been lowered for the longline UoCs. Scoring of other UoCs remains unchanged.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
2.3.1	Yes	Yes	NA	 part a: cites needed for regulation 67 (2012) and ETP species part b: it would be helpful to know how gear/species interactions are monitored. Do fishermen have a disincentive to record these in logboks? part c: is there any research on longline/marine mammal interactions that can be cited? Re information from Havstovan on bird/longline interactions: are there any reports that can be cited? If the links are to cites noted above it would be hlepful to have them identified. 	SI a is now scored as not relevant. Additional text has been added in all SI to clarify the occurrence of ETP interactions. Following PR A comments, the overall score of PI 2.3.1 has been lowered from 95 to 80 for all UoCs. The rationale of all SI has been reviewed. As regards PR B questions, fishermen don't have neither incentives nor disincentives to record ETP interactions. Information from Havstovan comes from personal comments at the stakeholder meeting. Unfortunately the team wan't given any published information on elasmobranchs to use as reference. A reference to bird interactions (Olsen, 2008) was included in the secondary species PI. References have been reviewed.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
2.3.2	No for part b Yes for all others	See comments for parts a,b	NA	part a, para 3: statements about rays and skates bycatch seem inconsistent with the ban on discards part b: unclear why this is not relevant, given the presence of portbeagle References: add Madelman and Farrington (2007)	There is an exemption to the landing obligation which allows for the release of elasmobranchians if these have a chance of survival. There isn't any kind of punishment if landing dead elasmobranchs. PI 2.3.2.b is not relevant as PI 2.3.2.a has been scored. Reference has been added. Following PR A comments, the overall score of PI 2.3.2 has been lowered from 90 to 85 for all UoCs. The rationale of Sia and Sic has been reviewed
2.3.3	Yes	? re parts a and b	NA	Unclear whether justification for parts a and b is consistent with 2.3.2 c	The score of PI 2.3.2.c has been lowered from 100 to 80. The rationale of PI 2.3.3.a has been reviewed and the scoring of PI 2.3.3.a has been lowered from 80 to 60. A condition on PI 2.3.3. has been set following MSC TO comments to the saithe report.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
2.4.1	Yes	Yes	NA	part a: para 1: should "cameras" be "chambers"? final para: is there any positive evidence (e.g. gear impact or gear loss studies) to support SG100? Conclusion is supported because SG100 refers to "highly unlikely" but it would helpful if research could be cited. part b: same question about whether there is positive evidence to support the lack of impact on habitat, particularly for lost longline gear.	Thanks. Text amended from cameras to chambers. Additional text and reference have been added to support SG100 for jiggings and longlines. The rationale of all SI has been reviewed and the scoring element approach has been used, following harmonization with the faroese saithe report. Final score remains unchanged.
2.4.2	Yes	Unclear for part b	NA	part a: trawl exclusion areas should have accompanying citation last para: "move on rules" needs clarification and perhaps a cite part b: text supports the conclusion that area closures as a partical strategy will work	There are no mandatory move on rules in this fishery, but a high proportion of closed areas to protect VME species. The rationale of PI 2.4.2.a has been strengthen to justify the SG80 score. Scoring remains unchanged.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
2.4.3	Yes	Yes	NA		Following harmonization with the Faroese saithe assessment report, the score of PI 2.4.3.a has been lowered from 100 to 80. The overall score of PI for all UoCs has been lowered as follows (for demersal trawlers, score has decreased from 85 to 80; for longlines, score has decreased from 85 to 80; and for jiggers, score has decreased from 95 to 85).
2.5.1	Yes	Yes	NA	References Gaard et al, Jákupsstovu et al. not cited in text of justification	References reviewed. Scoring remains unchanged.
2.5.2	Yes	Yes	NA	part b, lines 6 and 7: text in parentheses needs clarification line 15: "improvable" should be "unknown"	Amended. Scoring remains unchanged.
2.5.3	Yes	Yes	NA	References Gaard et al, Jákupsstovu et al. not cited in text of justification	References reviewed. Scoring remains unchanged.
3.1.1	Yes	Yes	NA		
3.1.2	Yes	Yes	NA	part b: "production organization" should be "producer organization"	Thanks to the reviewer for niticing this. The text has been revised.

Performance Indicator	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
3.1.3	Yes	Yes	NA		
3.2.1	Yes	Yes	NA		
3.2.2	Yes	Yes	NA	 part e, final sentence: insert "are subject" after "serious cases" References Add the Act on the Management of Marine Resources A cite to the act should also be added to the main reference list of the report 	This has been added.
3.2.3	Yes	Yes	NA		
3.2.4	Yes	Yes	NA		

Table 2 For reports using the Risk-Based Framework:

Performance Indicator	Does the report clearly explain how the process(es) applied to determine risk using the RBF has led to the stated outcome? Yes/No	Are the RBF risk scores well- referenced? Yes/No	Justification: Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response:
1.1.1				
2.1.1				
2.2.1				
2.3.1				
2.4.1				
2.5.1				

 Table 3 For reports assessing enhanced fisheries:

Does the report clearly evaluate any additional impacts that might arise from enhancement activities?	Yes/No	CAB Response:
Note: Justification to support your answers is only required where answers given are 'No'.		
Justification:		

Optional: General Comments on the Peer Review Draft Report (including comments on the adequacy of the background information if necessary) can be added below and on additional pages

Peer Reviewer Information						
Contact Name	First	PR A	Last			

Fishery Assessment Details				
Fishery	Faroese tusk and ling fishery			
Peer Review College contact details				
Peer Review Due Date	a.s.a.p.			

Summary of Peer Reviewer Opinion

Has the assessment team arrived at an appropriate conclusion based on the evidence presented in the assessment report?	No	CAB Response
<u>Justification:</u> There are a variety of serious issues identified in the which should be addressed before the report proce More details are provided against each of the PIs, b	Acknowledged. The rationale and scoring of different PI has been reviewed.	

Do you think the condition(s) raised are appropriately written to achieve the SG80 outcome within the specified timeframe? [Reference: FCR 7.11.1 and sub-clauses]	No	CAB Response
Justification: The conditions are on the same issue (PI 1.2.2) budrafted differently. The CAP for ling will not meet the milestones set (but then I think the milestones are inadequate). The milestones for tusk are better, buddress only SIa and SIb, when SIc is also scored. More details are provided against the two PIs, below	t they are le t they both at 60. w.	The situation differs between Faroese Ling and Faroese Tusk. Faroese ling is a local stock under Faroese sovereignty while the tusk is shared stock with Norwegian and EU fisheries components. Hence the conditions will be different. The conditions have been edited to include also Sic and the following has been added "It shall be demonstrated that the HCR is robust to the main uncertainties and implementation shall include monitoring that can demonstrate that the tools in use are appropriate and effective." The standard requirements for an adopted HCR include demonstration e.g. through computer simulations of robustness and Havstovan as noted is working on this aspect. The monitoring required is already existing as noted in scoring 1.2.3. Hence the CAP remains unchanged.

If included:

Do you think the client action plan is sufficient	No	CAB Response	
to close the conditions raised?	NO		
[Reference FCR 7.11.2-7.11.3 and sub-clauses]			
Justification:		The revised Act on Marine Resource	
		Management requires the development	
I note there is no letter of support provided from Fai	and implementation of Management		
managers, and the CAP reads as if no support has yet been		plans and thus the ministry is by law	
sought. This would be contrary to requirements with respect to		obliged to support the fulfilment of the	
accepting a CAP (7.11.3).		conditions. The support sought is	
		standard in the Faroese fisheries	
Other details are provided against the two PIs below.		management system where there is	
		close cooperation between the ministry	
		and the industry. This cooperation is	
		noted in the description of the	
		management system, see Draft Report	
		section 3.5.3 and as experienced in	
		several other assessments. This	

cooperation is a given built into the Faroese management system. The relevant sections in the conditions have been updated. This close cooperation is presented in section 3.5.5.

Performance Indicator Review

Document: Peer Reviewer Template, v2.0

Date of issue: 1 October 2014 File: MSC_peer_reviewer_template_v2.doc Table 1 For reports using one of the default assessment trees:

Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
1.1.1 Ling	Yes	Yes	N/A	Nothing to add	
1.1.2 Ling	Ling stock not rebuilding, so not scored			N/A	
1.2.1 Ling	Yes	No	N/A	The introduction (Section 3.3.2.4 states: "There is no formal management plan for the ling fishery nor are there a HCR for Faroese ling. The fishery is regulated by fishing days in a group of vessels that also target cod, haddock and saithe", and the scoring text also states: "This means that the effort limits are set through a compromise of concerns for cod, haddock, saithe and the considerations for the status of the ling stock are of minor importance. The upper limits of the fishing days are not reached for the pair	Scoring remains unchanged. The strategy aims at achieving MSY objectives and there are tools available to regulate the fishery if the stock development cast doubt if this objective is achieved. The description in section 3.3.2.4 is a historic review of the situation up to the adoption of the revised Fisheries Act (Act on Marine Resources) on 18 December 2017). 2018 is

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Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
				 trawlers and long liners, about 20% of the trawler days and about 40% of the long liner days are unused in recent years Under current conditions the strategy is expected to achieve management objectives reflected in PI 1.1.1 i.e. MSY strategy." I'll also point to scoring text for PI 1.2.2 Slc, where it is stated: "Experience with other Faroese stocks (cod, haddock) where the same effort regulation is applied indicates that the tools are not effective in achieving the exploitation rates required." Overall, this indicates that the healthy status of ling is essentially down to good luck – if the cod, haddock and saithe stocks were all healthy and days were fully utilised (i.e., not 'current conditions'), then there is little if anything that would prevent ling from being overfished. Essentially, irrespective of the condition on PI 1.2.2 (HCR), it is not at all clear that the harvest stratey for ling is "responsive to the state of the stock", as required at SIa, SG80. A score of SG60 ("The harvest strategy is expected to achieve stock management objectives") may be appropriate, but the text from PI 1.2.2 SIc makes that less clear than might be expected 	an intermediate year with a trasnfer between the old and the new regime. From 2018 onwards the law now requires a management plan as a precondition for the fishery. The historic management has been sufficient to achieve a healthy status of the ling stock (but not the cod and haddock stocks) and a theoretical discusion of how management would have reacted under different biological conditions is irrelevant. The bottom line is that the actual status of the stock is good and that this is combined with existing possibilities to react if the stock falls below PRI reference points. As long as everything is fine and provided you have the tools in the law and the political will to use them there is no reason to blame the fishery or management. The status of the cod and haddock stocks are however a concern as it demonstrates that the political will to use the existing tools to rebuild a potential depleted stock is not fully present.

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Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
				for an MSC fishery.	The strategy is responsive to the annual assessment presented by Havstovan. The annual assessments are presented to the Faroese fishing industry and to the management authorities and on that basis the authorities have ample opportunity to regulate the fishing pressure e.g. through the fishing days, specific regulations for the ling fishery or otherwise. Because the stock has been increasing there has been no reason to introduce more strict restrictions.
1.2.2 Ling	Yes	Yes	Νο	The scoring text and score (60) are appropriate. Regarding the condition, the milestones provide an expectation that the client will develop, consult on, adopt and implement one or more HCRs, while the CAP indicates that the Ministry will be working on the development of a management plan, that is expected to meet PI 1.2.2a and 1.2.2b. Essentially, this mismatch means that if the client meets the CAP, they wll not meet the milestones.	This is based on the unfortunate language usage where the management plan (the broader concept) is mixed with the more narrow issue of the HCR. The apparent inconsistency between the scoring of PI 1.2.1a and PI 1.2.2a is a well-known problem. Here the approach has been to interpret the strategy as the general framework, which is in place, and the HCR the specific element of setting an overall limit

Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
				 Further, the CAP does not actually refer to HCRs, which is a concern given the focus of the condition. Then, even if the CAP was aligned with the milestones, year 1 states: "The <u>client will formally approach</u> the relevant authorities and seek an invitation to take part in a consultations group and the development of a management plan. <u>If invited</u>, the Client will contribute to the development of a precautionary plan." (my emphasis), which suggests that there has not yet been any consultation with the managers who would be required to adopt and manage against any new HCR. The lack of a letter from the Ministry in support of the CAP adds to this concern, which relates to 7.11.3 of the CRv.2.0: "The CAB shall not accept a client action plan if" Finally, PI 1.2.2 SIa, SIb and SIc were all scored at 60. However, the condition and CAP refer only to SIa and SIb, so irrespective of any of the other concerns listed above, the condition and CAP is deficient with respect to SIc. Overall, the Condition and the CAP are not aligned, it's not clear that the Ministry will support the work, and the 	on the fishery, which as a side remark may currently not be necessary. This distinction is the basis of many disputes on where to set conditions on 1.2.1, 1.2.2 or both. The text tries to make the difference but apparently with only limited success. The core of the management plan is the HCR and the management plan and HCR are in many respects synomous. As noted in the answer to the general comment, the Faroese fisheries management system is integrated with extensive consultations with the industry., see also Draft report sections 3.5.3 and 3.5.5. The management plan may be technically developed by the authorities based on significant input from Havstovan or it may be developed in a wider group. However, the adoption of the plan will only be done following extensive hearing in particular with the industry. The comment is therefore only relevant to the process of

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Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
				Condition is deficient – this requires another look.	developing the plan; the plan will go through subsequent scrutiny in any case. The condition lacked as noted by both reviewers reference to PI 1.2.2 Sic This has been corrected.
1.2.3 Ling	Yes	No	N/A	 Sla is scored at 100 ("A comprehensive range of information is available"), but the introduction states: "However, age data are not available and therefore an analytical assessment is not possible." A score of 80 is reasonable ("Sufficient relevant information is available"), but not 100. 	Score readjusted to 80,SG100 is not met for PI 1.2.3a. Justification text is updated, The report text is unfortunately imprecise and has been edited and is now "However, while age data are available and an exploratory analytical stock assessment is presented by ICES WGDEEP (ICES 2017) the quality of these data led ICES to conclude that the better approach to the assessment and advice is based on the survey trends."
1.2.4 Ling	Yes	Yes	N/A	Nothing to add	
1.1.1	Yes	Yes, but an	N/A	The score seems fair, but the text of SIa ("Stock biomass in	Scoring remain unchanged. The text has

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Tusk		edit is appropriate		2016 is estimated to be 1.5 times above the estimated BMSY, and above its 95% credible interval (CI) <i>limits. Since the stock is assessed to be 1.5 above BMSY with</i> <i>a 95% CI</i> ") is not consistent with the text for SIb ("the SPiCT model is based on commercial cpues and its results should be taken with care as cpues may not necessarily reflect stock trends. Therefore, there is no high degree of certainty that the stock is above MSY and SG 100 is not met."). An edit to one or other for consistency is appropriate.	been amended and the inconsistency removed.
1.1.2 Tusk	Tusk stock not rebuilding, so not scored			N/A	
1.2.1 Tusk	Yes	No	N/A	In comparison to ling, the wide area over which the tusk stock extends provides additional complexity but also additional confidence that the harvest strategy overall should achieve management objectives.	Score remain unchanged. The harvest strategy is overall to achieve MSY criterion and the elements of the strategy (stock assessment, limitations in the fleet capacity,

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				 Nevertheless, I have a slight uneasiness about whether SG80 is met ("elements work together to achieve stock management objectives reflected in PI 1.1.1 SG80") given that tusk is something of a bycatch species in most fisheries and is therefore at risk if another more commercially important, concomitant species was to be exploited more heavily. I have no problem with SG60 being met ("The harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1 SG80."), but the team also apparently has reservations about SG80, because the scoring text for PI 1.2.2 states: "Although there is no comprehensive joint harvest control rule for tusk (NEA) the various fisheries management schemes that apply, all adhere to the MSY objective and it is expected that the management combined achieve stock management objectives." I.e., PI 1.2.2 points to only SG60 being met at PI 1.2.1 SIa. This needs to be resolved. Note that SIf comments on discard bans for Norwegian and EU 	 technical measures) all work towards this aim. The consideration noted in the answer to the general comment is pertinent in this case, the fishery in its current state does not overexploit the stock, there are measures in place that if required can be introduced should the interest in tusk fishing change. The new Faroese Act on Marine Resource Management provides potentially for even more strict regulations. The apparent inconsistency between the scoring of PI 1.2.1a and PI 1.2.2a is a well-known problem. Here the approach has been to interpret the strategy as the general framework, which is in place, and the HCR the specific element of setting an overall limit on the fishery, which as a side remark may currently not be necessary. Sif: Thank you for the comment that has

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				vessels – this is not relevant if they are not part of the UoA (noting that Tables 21 and 22 indicate these other vessels may be included in the UoA, but everywhere else it does not appear that they area).	been noted in the justification.
1.2.2 Tusk	Yes	Νο	No	 The scoring text and score (60) are appropriate. Regarding the condition, some but not all of the comments against ling PI 1.2.2 apply here. Firstly, in contrast to ling, the milestones and CAP for tusk appear to be aligned, albeit that the fist sentence of the Year 1 milestone is a little confusing where it says "<i>The Client shall evidence of an initiative to the relevant authorities for the development of a HCR</i>"– I think this is just a typo, though, and that it is intended to be something like: "<i>The client shall provide evidence of an initiative by the relevant authorities to develop an HCR</i>". Assuming my interpretation is correct, I both appear to indicate that the client will be looking to the Ministry to develop a management plan that meets PI 1.2.2 SIa and SIb; so that is fine and apporpriate. 	Concerning the condition, the missing element in harvest strategy is the Harvest control rule. Therefore the condition is set against PI 1.2.2. Other elements of the harvest strategy, i.e. stock assessment, considerations of the stock status and the regulatory elements all exist. The typo as indicated by the reviewer has been corrected The text is now "shall present documentation" I apologise for the error. As noted above the Faroese fisheries system is interwoven with very close contacts between industry and management and the issue is only if the industry will be involved with developing the MP proposal or not. The industry is prepared to contribute if this is

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				 However, again, the CAP does not refer specifically to HCRs, and again the condition gnerlaly does not mention SIc, which must be addressed as well as SIa and SIb, given it was also scored at SG60. Finally, I am again drawn to 7.11.3 of the CRv.2.0: "The CAB shall not accept a client action plan if", given that the CAP, year 1, states: "The <u>client will formally approach</u> the relevant authorities and seek an invitation to take part in a consultations group and the development of a management plan. <u>If invited</u>, the Client will contribute to the development of a precautionary plan." (my emphasis). Together with the lack of a letter from the Ministry in support of the CAP, this again suggests that there has not yet been any consultation with the managers who would be required to adopt and manage against any new HCR. Overall, the Condition and the CAP appear to be aligned, but it is not clear that the Ministry will support the work, and the Condition is deficient – as such, this also requires another look. 	found to be the better approach. The language used in the CAP makes the management plan and the HCR synonymous. The inistry is obliged to support the development of a management plan/HCR through the provisions in the Marine Resource Act.

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1.2.3 Tusk	Yes	Yes (but see comment)	N/A	 Sla as scored at 80, with the comment that "information on natural mortality generally is missing", but the subsequent text seems to contain a typo, where the final line says "SG100 met list information available (ICES stock definition,)." I support a score of 80 but not 100. Otherwise, nothing further to add. 	Score is at SG80. The text has been clarified cf comment for reviewer B.
1.2.4 Tusk	Yes	Yes	N/A	Nothing to add	
2.1.1	No	No	N/A	Three important points to start: 1) Firstly, a key issue here is that only one year of data has been used in assessing the fishery – 2016. This is contrary to MSC guidance and means that the requirements for determining whether a species is main or minor have not been considered appropriately (see see SA 3.4.2 and GSA 3.4.2). For example,, GSA 3.4.2 states: <i>"This should include taking into account the variability of the catch composition over the last five years or fishing seasons and recognizing that some species might be 'main' some years but not in others The overall intent when designating 'main' species, is that there should be a good understanding of the long-term average</i>	 Data from 2012 onwards was provided by the client. These data were reviewed by the CAB which checked that there was a similar catch composition and catch proportion over the years. For clarity reasons only year 2016 was used. GSA 3.4.2 states that the variability of the catch composition over the past 5 years shall be taken into account, but it does not explicity mention that those 5 years have to

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				catch composition of P2 species of the UoA before the PCDR is released; and further, that teams are confident that the species compositions, as well as their respective catch volumes, are unlikely to change over the lifetime of the certificate." 2) Secondly, for Faroes Bank cod, the report states: "ICES advices that there should be zero catch in each of the years 2017, 2018, and 2019, as it is likely that the stock will need to take several years before any possible recovery. The Faroe Bank has been closed to fishing since 2009." However, ICES 2017 (haddock advice: http://ices.dk/sites/pub/Publication%20Reports/Expert%20Gro up%20Report/acom/2017/NWWG/07- NWWG%20Report%202017%20Sec%2005%20Faroe%20had dock.pdf) states: "Most of the landings are taken from the Faroe Plateau; the 2016 landings from the Faroe Bank (Sub-Division 5.b.2), where the area shallower than 200 m depths has been closed to only about 111 t (Tables 5.1 and 5.2)." However, closing the water shallower than 200 m is clearly not the same as closing the entire Bank to fishing (for example, given that trawling in water shallower than 200 m is	 be used when calculating catch proportions. As mentioned above, data from 2012 onwards was provided to the team showing similar catch composition and abundance. This was taken into account but not reflected in the text. A line has been added in the text next to catch composition tables to clarify this. 2. According to ICES advice for Faroe bank cod, landings of Faroe bank cod in 2015 were 17 tones, and all were result of the jigging fishing activity. There is no data of later dates. While jigging vessels are allowed to enter the Faroe Bank certain times of the year, the Faroe Bank is closed for trawlers and longlines at depths shallower than 200m, as the peer reviewer states. We have now included New figures in the report (See Figure 25 and 26) which show the bathymetry of the

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				also prohibited on the Plateau). Please clarify if any cod are taken by the fleet on the Bank while pursuing other species – this could change the outcome scores considerably as there is a good argument that Bank cod could/should be considered 'main' if they are taken in more than negligible quantities given their parlous state. My further investigation was concerning, in that the ICES Faroes Bank cod report 2017 (http://ices.dk/sites/pub/Publication%20Reports/Expert%20Gro up%20Report/acom/2017/NWWG/05- NWWG%20Report%202017%20Sec%2003%20Faroe%20Ban K%20Cod.pdf) states: "The landing estimates are uncertain because since 1996 vessels are allowed to fish both on the Plateau and on Faroe Bank during the same trip, rendering landings from both areas uncertain. Given the relative size of the two fisheries, this is a bigger problem for Faroe Bank cod than for Faroe Plateau cod, but the magnitude remains unquantified for both. The ability to provide advice depends on the reliability of input data. If the cod landings from Faroe Bank are not known, it is difficult to provide advice." Therefore, management scores (including for the second pat of Pl 2.1.1 SG60 and SG80) are questioned.	bank and also the area covered in ICES area Vb2 (which is much bigger than the bank itself). Additional information has been added on regulation 30/2018, which establishes which are the geographical limits to trawling and longline in the Faroese bank, and which cover an area bigger than the 200 m description. In the hypothetical case that all catches of bank cod where the responsibility of the jigging vessels by the client (which is not the case), these would account for less than 2% of the total catch. VMS and Coast Guard control serve to ensure that longlines and trawlers do not enter closed areas. In any case, ICES 2017 advice states that all catches from the bank are due to the jigging activity. While VMS maps for 2016 show

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				 3) Thirdly, element scoring does not appear to have been undertaken. This is a requirement (CR 7.10.7). Further comments can ony be provided on the basis of the information presented, which is inadequate. 	 some vessels entering ICES area Vb2, they enter the limits of this area, away from the bank itself. 3. As regards the use of the scoring element approach, the report has been modified to show that each fish species is scored individually. On a precautionary apprach, final score for each UoC (fishing gear) is the lowest of the scores of the different fish taken by that UoC. Specifically, the score of 2.1.1.a has been lowered for the demersal trawl UoCs. Final score for PI 2.1.1 demersal trawl UoCs has decreased from 90 to 80.
				<u>Trawl UoCs</u> Cod is not scored as a main retained species. Notwithstanding the issue of Bank cod (see above), the status of even Plateau cod is a concern, with SSB below Blim since 2005 (see text P.48 and Figure 22), and F more than double Fmsy for the majority of even the recent time series (Figure 23). At 3.76%	 Trawls UoC: Faroe Plateau cod is now considered as a main species for all UoCs.

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				(Table 32), cod is not an automatic main species, but this UoC took more than 1,000 t in 2016 (noting, again, that 2016 is the only year of data presented and teams "should use a precautionary approach to determine whether species shall count as 'main" (GSA3.4.2)). Also "In all cases teams may still designate species as main, even though it falls under the designated weight thresholds of 5% or 2%, as long as a plausible argument is provided as to why the species should warrant that consideration. For example, a stock might be in such a poor state, that all impact by the UoA is important enough to consider, even in cases where the catch proportion is so low that it would normally be classified as a minor species" I would argue that Faroes cod (Plateau or not) is a very good example of just such a species. The same comments apply as for trawl, but also it is noted that the fishery is scored 80 in part (largely?) on the basis of that "a new management plan which is at present being drafted for cod and haddock stocks. The Faroe Bank is closed to fishing to protect the Faroe Bank cod stock." However, scoring 80 on the basis of something that has not yet been drafted is not	 Longline UoCs: Additional information has been added to justify the SG80 score for Faroe Plateau cod and haddock.

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				 appropriate (the demonstrably effective strategy must be 'in place'). Another key issue here (i.e., PI 2.1.1 SIa) is that the 80 requirement is for a 'strategy', which is considered met. However, in PI 2.1.2 SIa, the fishery is scored at SG80, only, for having a 'partial strategy' in place ("<i>The team considers that the different measures already implemented serve as a partial strategy to manage cod and haddock stocks However, the different measures do not confirm a complete strategy"</i>). This is a clear contradiction that must be resolved. 	 The inconsistency has been reviewed and the measures in place are now considered as a strategy to manage cod and haddock stocks.
				Further, there is no consideration of the strategy being in place for all MSC UoAs that categorise the species as main, which is also required. I also come back to the question of whether or not the Bank is actually closed – it is not clear that it is actually closed, nor that catches can be distinguished if some fishing does occur outside the 200m contour.	7. As regards all MSC UoAs in the area, in this case it is only the present UoA which shall be taken into consideration. The only other demersal MSC fishery taking place in Faroese waters is the saithe fishery, which has been assessed by the same assessment team and which has the same client, the same vessels in the UoA with the same catch composition.

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				Haddock F is coming down but has been above Fmsy since the start of the time series in 1959 (based partly on a F=0.45 exploitation strategy, apparently – see ICES advice). Whether or not the catches are below advice levels, though, F is still well above FMSY, so it appears that this has been scored 80 because of a management plan that has not yet been drafted (noting again that PI 2.1.1 Sla requires a strategy to be in place, which PI 2.1.2 Sla indicates is not the case). As for cod, this is not appropriate, and this is again no consideration of the strategy being in place for all MSC UoAs that categorise the species as main, which is also required.	 8. At present catches of haddock are above Fmsy but below Fpa. Additional information has been added in the text which is the strategy in place to manage cod and haddock stocks. As mentioned above, there are no other MSC UoAs to consider.
				Jiggers/small longline UoCs. Two points – Firstly, I question whether the ICES advice shows cod and haddock to have been 'fluctuating at levels around B lim' – this isn't what the report indicates in the introduction. Secondly, back to cod and the provision of only 2016 data. Essentially, it is not clear that the Bank stock is not being exploited, or has not been exploited in the recent past. If it is being exploited or has been exploited recently, at a minimum this should be assessed not dismissed. I note that at least some jigging has been permitted on the Bank in recent years.	 Jiggings: The sentence on Faroe Plateau cod and haddock has been modified to specify that SSB has been just below B lim for the past years, rather than fluctuating at levels around B lim. While jigging is allowed in the Faroese bank at certain times of the year, even if all cod catches in the Faroe bank were responsibility of the jigging vessels in the UoA, these

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				A score of 80 is questioned. Overall, I think there are some serious issues with the assessment of main primary species that need to be addressed.	would represent a 0.85 of the jiggings catch (well below the 2% limit to be considered as main species). Landings of all cod by jigging vessels in 2015 were 2079 tons. ICES advice 2017 states that all landings in 2015 (this is, 17 tons) were responsibility of jigging vessels. While the rationale has been reviewed, scoring remains unchanged.
				On minor species, I would agree that a score of 100 is not warranted for any of the UoAs overall, but element scoring may have allowed the team to give credit for some minor elements.	10. Minor species: According to MSC interpretations website, the teams can decide to group minor species as a single unit to score. This is made clear in the text.
				Intriguingly, though, I note that cod is not listed in the minor species for the trawl UoAs, but is listed in Table 47 (Scoring elements for all UoCs) as a 'main' species. It is also listed in PI 2.1.2 as a 'main' species ("Main primary species for the	The scoring elements table has been reviewed. These approaches have been harmonised with the Faroese saithe fishery.

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				different UoCs are saithe, Faroe Plateau cod, haddock") It seems like the team intended at some point to score cod as a main? I would agree that this is appropriate!	
2.1.2	No	Νο	N/A	I question the scoring text where it is stated that " <i>Both cod and haddock stocks are in a poorer situation at levels around Blim.</i> " Dealing only with Plateau cod (noting it is not clear that the dismissal of Bank cod is appropriate), the report states (P.48): " <i>The spawning-stock biomass (SSB) has been below Blim since 2005</i> ", while for haddock it states (P. 50): " <i>The spawning-stock biomass (SSB) has decreased since 2003 and is estimated to have been below Blim since 2010, except in 2017</i> ". Given that the F has also been well above Fmsy for both stocks since the start of the time series (Figure 23, Figure 29), determining that " <i>There is a partial strategy in place that is expected to maintain or to not hinder rebuilding of the main primary species at/to levels which are highly likely to be above the point where recruitment would be impaired"</i> is not met.	The text has been reviewed. Additional text has been added in 2.1.2 to specify which is the partial strategy in place and why it is expected to work. Specifically, different management measures have been in place since 1987, and catches of cod and haddock have significantly decreased in the past years, as direct fishing for both species is forbidden. Besides, F levels for haddock are consinstent with F pa, although not yet with Fmsy.
				In fact, given that SG60 still requires that the measures are expected to maintain or not hinder rebuilding of main species, it is a question as to whether SIa SG60 is met.	The quota system will be implemented in January 2019. The text has been reviewed to describe the different management measures in place since 1987.

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				It also seems very unlikely that SIb SG80 (there is some objective basis for confidence that the measures/partial strategy will work) is met. I note that the statement " <i>The different measures implemented</i> <i>are successful in maintaining the Faroe Plateau cod and</i> <i>haddock stocks at levels consistent with Blim without closing</i> <i>the fishery</i> " is essentially 'damning with faint praise'. However, given that F has been well above Fmsy for the entire time series, and B has been below BLim since 2005 for cod and 2010 for haddock (except 2017), it also isn't accurate. I note that the new management plan is an irrelevance with respect to scoring, as it is yet to be drafted.	That comment has been deleted.
				For SIe, the text appears to indicate that the scoring of 'not relevant' has been undertaken on the basis that the primary species are all commercially targeted, therefore there is no unwanted catch " <i>There is no unwanted catch of main primary</i> <i>species as they all have a commercial value. Moreover, some</i> <i>main primary species as saithe are the targeted species for the</i> <i>demersal trawling fleet.</i> " However, this is not the intent of the SI at all, and it is noted that almost every fishery will have some unwanted catch, even of targeted species – the intent	Regarding SIe (unwanted catch), this approach has been taken in other MSC certified fisheries. For the fishery under assessment, cod, haddock and also redfish can also be considered as unwanted catch as the intention of trawlers is to catch saithe while the intention of longlines is to catch tusk and ling. However, all species in the catch composition have a price and therefore

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				here is to ensure that any wastage is minimised. No good evidence (a landings obligation doesn't qualify as good – see Table GSA5) has been provided to indicate that there is no wastage.	they are not really unwanted, but maybe un- preferred. In the team's view, Table GSA5 relates to the reliability of different data collection methods, not to the implementation an enforcement of management measures such as the landing obligation which ensures that all fish is landed (and sold). Moreover, the enforcement system ensures, through random inspections both in the sea and at landing ports, that landing records are accurate. The score hasn't been changed. The approach is harmonised with the saithe fishery.
2.1.3	No	No	N/A	Sla is scored 100 on the basis that there is a landing obligation in place "The landing obligation serves to provide verifiable quantitative information on the impact of Faroese vessels on the different species." However, GSA3.6.3 indicates this is inadequate to score the fishery at even 80, where it states: "Generally, having only one form of data collection with a high level of potential bias or other limitation (e.g., logbooks or interviews with fishermen) by itself should not be enough to	Sia: The landing obligation is enforced by an inspection program with low infractions. This serves to support that these records are accurate. There are no concerns at the Directorate of Fisheries that there might be any misreporting of primary species in the landing records. Additional text has been added in PI 2.1.3.a

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				meet SG80 – additional information sources that compensate for the limitations would also need to be provided and assessed (see examples of information sources and how they could be combined in GSA3.6.3)." I note that Table GSA5 then lists "Enforced mandatory retention of all catch with full dockside monitoring" under Column B, which is titled: "Column B (lower level of verifiability, higher bias)"	to better justify the score, paying special attention to research undertaken by Havstovan (which can be considered as independent research projects or programs, under column A (higher level of verifiability), Table GSA5.
				The fact that Hastovan conducts research surveys is useful, and may provide the contextual information to support a score of 80 for SIa, but not more, given that it is the impact of the UoA that is being scored. In general, though, I would expect there to be some level of independent observation of the fishery itself, not a proxy, and some analysis of the representivity of the coverage if it is undertaken at a low level. In the absence of observer coverage to verify the landings data, it really isn't clear that the landings data are any good at all.	There is no observer programe in the Faroese fisheries(and this is not a requirement by MSC FCR), but random inspections both at the fishing vessel and at landing ports with a low level of infringements. Consultations with enforcement authorities showed no concerns regarding compilance with the different management measures, including landing records. The score hasn't been changed.
2.2.1	No	No	N/A	Sla is listed as N/A, with the comments for birds that " <i>In any case, and according to proxy data given by Havstovan, the team considers that neither elasmobranchs nor birds would</i>	Fulmars are now considered as a main secondary species.

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				account for 5% or more of the catch.". However, SA3.7.1.2 states: "For species that are defined as 'out of scope' (amphibians, reptiles, birds, mammals) that are not classified as ETP, all species impacted by the UoA shall be considered 'main'.", and GSA 3.7.1 clarifies with "Out of scope species (birds, reptiles, amphibians, mammals) are always considered a main species regardless of their total catch volume. " So, all the non-ETP birds (i.e, not just fulmars) have to be treated as 'main'. This will impact the scoring of PIs 2.2.2 and 2.2.3, also.	Neither Havstovan nor the Natural History Museum (with a Department on birds) mentioned any other species apart from fulmars at the time of the site visit. Both institutions have been contacted after receiving peer reviewer comments to verify that this is the situation, which has been confirmed again by both institutions. The tusk and ling demersal trawlers, longline and jigging fisheries do not cause concern to these institutions in relation to possible impacts to other species apart from fulmars (and both institutions agree on the good status of the fulmar population).

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				Then, there is a further issue that requires clarification. The report states: "Since the implementation of the landing obligation by Faroese management authorities there is no discarding of fish species. All species are landed and recorded (with the exception of certain elasmobranchs species which are released alive but for which there are no records of interactions)." However, which elasmobranchs are permitted to be released and which are not?? I ask because there appears to be quite conflicting information – in some places all elasmobranchs can be released, in others all fish must be retained and reported, in others (e.g. 2.3.1) all porbeagle must be retained. How do we know if there are species which are vulnerable and might be above 2%, so being automatic main species, or of particular concern and therefore main even at	This does not mean that it has never happened, or that it will never happened, but the team considers unrealistic to assess and score all bird species just in case of hypothetical impacts. The same rationale can be given as regards possible or hypothetical impacts with other seconadry or ETP species. As regards elasmobranchs, according to comments at the Directorate of Fisheries, it is allowed to release elasmobranchs when there is a chance of survival. There is no punishment for landing dead elasmobranchs.

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				less than 2% if treated in a precautionary basis? I also note that PI 2.5.2 mentions that " <i>During this sorting, benthic species are discarded and there are no records of these interactions, so these impacts are difficult to identify, quantify, or investigate.</i> " Of course, species such as crabs, non-commercial fish species and other benthic organisms all potentially qualify as secondary species, and it is apparent that there are simply no data on these species at all.	Benthic species are considered under the habitat section, while non-commercial fish species are considered either at primary or secondary species.
				Penultimate point – there is no information in scoring provided on the source of bait species, and relatively little in the introduction. However, Atlani-Scandian herring and North East Atlantic mackerel are definitely primary species not secondary, so they are being scored in the wrong place. Patagonian squid may also be managed depending on source. In any case, how were the bait quantities calculated? Was this a back of an envelope calculation by the team, an estimate from the client, is it based on a industry survey, or are fishers required to record bait use on logbooks? It is presented as a definite figure but I suspect there is a level of guesswork involved. As such, and because bait use may change annually, it may require that some species are considered main species	There is limited information regarding bait species, however available information has been added. The client provided the kilos and species spent for the past 2 years, and the calculations of if these species were main or minor secondary species were made by the team. Atlanto-Scandian herring and NEA mackerel are now considered as primary speceis, while Pacific saury and Patagonian squid remain as secondary species. All bait species continue to be considered as minor species. Fishermen are not required to record bait used in the logbook.

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Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
				if an appropriate level of precaution is given to scoring species as 'main' (GSA3.4.2). Although not applicable here, given the bird bycatch, for future reference with respect to the comment " <i>As there are no main</i> <i>secondary species to consider, the scoring of this SG is N/A</i> ", team members may also wish to refer to SA3.2.1.	Regarding the reference to SA3.2.1, point noted. The rationale at PI 2.2.1, 2.2.2 and 2.2.3 has been reviewed. Scoring of PI 2.2.1 remains unchanged.
2.2.2	No	No	N/A	As noted against PI 2.2.1, non-ETP bird species have to be 'main' secondary species, so the scoring comment " <i>As there</i> <i>are no main secondary species to consider SG80 is met by</i> <i>default by all UoCs</i> " is automatically incorrect. I would not expect the fishery to meet SG80 for this PI when scored correctly, with particular concerns over SIa given there is no observer coverage on the vessels and there is no incentive for fishers to report even if there is a requirement (which there does not appear to be in the Faroes), and over SIe given there is no knowledge of how many birds are taken in the different fisheries and there surely hasn't been a regular review of alternative measures to minimise unwanted catch.	Fulmars are now considered as main secondary species. As regards other bird species, please see comment above on 2.2.1. Additional information has been added to clarify that bird populations are studied by ornitologist at Havstovan and also at the Natural History Museum. Interactions of fishing vessels and bird species are also studied by these institutions. Regarding Sia, the MSC FCR does not require the mandatory use of observers to meet the

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Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
				Sle is also a serious concern. The introduction states "Estimations were given that over 20 birds may get entangled in each large longline vessel per day. Most of these birds would be Northern fulmars".	SG80 requirements, and the team considers the research undertaken by the different institutions as enough. Regarding Sie, according to Havstovan, the catch of fulmars is of no concern to the population due to the good status of the population. Nevertheless, this information has been cross checked again with Havstovan to find out that the 20 fulmars entanglement is a worst case scenario situation which may happen in Spring or Summer. Normal catches are much lower. The team has been directed to the following publication (available at http://www.hav.fo/PDF/Ritgerdir/2008/Sjovar mal2008.pdf) Olsen, B. 2008. Havhestur druknar á línu (Fulmars are drowning on longlines). Sjóvarmál 2008, Fiskirannsóknarstovan, Tórshavn p. 7-9. This publication estimates bird interactions (and again it refers to fulmars) with the

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				Where is the evidence that a review of alternative measures of any kind has been undertaken? I do not believe that SG60 is met.	Faroese long line fleet to be between 5000- 25000 individuals per year, well below our previous estimation of 20 birds per day. The impacts (and the consideration of these as important or negligible) of fishing vessels on bird populations is reviewed by Havstovan, the Natural History Museum, and also by the Directorate of fisheries if needed. Scoring of PI 2.2.2 remains unchanged.
2.2.3	No	No	N/A	As noted previously, non-ETP birds must be treated as 'main' species. As such, scoring here is incorrect.	As mentioned above, fulmars are now considered as main secondary species. The reasons for not considering all bird and elasmobranchs species present in Faroe Islands as main secondary species is given above under 2.2.1.
				Existing text indicates that the fishery will not meet 80 overall, for example for SIa where it is stated "However, there are no records by the fleet of such interactions, only estimations by Havstovan who assess the impact of the UoA on these species as low and of no concern. Estimations on interactions and	The reviewer is rigth in pointing that there is misreporting of bird and elasmobrachns species, but such recording is not mandatory in the Faroese system (although is possible as there is room for that in the electronic

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				evaluation of their impact on the different stocks are sufficient to justify SG60 and SG80 are met by all UoCs." This is clearly adequate to meet SIa SG60 at best.Note, here, I would be extremely surprised if information on bird interactions in the fishery was deemed adequate "to support a partial strategy to manage main secondary species." (i.e., SIc, SG80). Logbooks invariably don't capture all the data on interactions with non- target species such as birds, marine mammals and turtles, even if there is a statutory requirement (which there does not appear to be in the Faroes) – an independent data collection process is invariably required.	logbook). The reviewer is also right in pointing out that there is no observer programe in the Faroe Islands (which, although reccomended, is not mandatory in the MSC FCR). The team considers that information collected by the different research agencies is enough to meet the SG80 scores. The rationale of SI a,b,and c has been reviewed and strengthen to support the given scores. The score of PI 2.2.3.b has been lowered for the longline UoCs. Scoring of other UoCs remains unchanged.
2.3.1	No	No	N/A	To note – SIa is not scored if there are no limits, which I think is the case here - see SA3.10.1 and SA3.10.1.1 Also to note, I don't think the Faroe Islands is a party to the AEWA on its own, and my brief look did not confirm whether or not it is affiliated through Denmark, but then GSA3.1.5.2 states: " <i>Neither the flag state of the UoA, nor the state in which</i> <i>fishing takes place, need be a signatory to this agreement for it</i> <i>to be applicable to MSC certified UoAs.</i> "	Sia is now scored as Not relevant. Final score of PI 2.3.1 remains unchanged. As Denmark is a signatory country of AEWA and also AEWA is listed in FCR SA 3.1.5.2, birds species listed in AEWA are now considered as ETP species.

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				In this regard, Table 35 is titled 'Bird species present in Faroe islands and their IUCN status – this with respect to secondary bird species. However, a brief check indicates that Northern gannet, black guillemot, Arctic tern and Great skua are listed on the AEWA, so I think these should be listed as ETP species as well as species such as the ivory gull and Leach's storm petrel, which are already listed as ETP under Table 37.	Tables 35 and 37 have been modified accordingly.
				A related point is that the scoring text starts with " <i>ETP species</i> are those recognised by national legislation or listed in <i>Appendix 1 of CITES</i> ", but these are not the only criteria through which species are considered ETP (SA3.1.5.1).	The text at PI 2.3.1.a has been amended.
				Then, the scoring text states: " <i>All catches by Faroese vessels must be landed, according to the landing obligation implemented by Regulation 67 in 2012.</i> " However, this contradicts the information earlier which says, for example, that some elasmobranchs can be released.	There is an exception to the landing obligation which encourages the releasement of elasmobranchs if alive.
				Also, the fact that the Directorate of Fisheries "monitors all landings by the Faroese fleet and has reported no concern regarding the impacts that the fishery may have on this or other ETP species." should give the team no confidence that	Is true that all data on catch composition would be better reported if there was observer coverage. However, mandatory observer coverage doesn't grant the

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				the fisheries do not catch ETP species. Essentially, why would the Assessment Team expect fishermen to retain and report bird or marine mammal interactions faithfully when these species are of very little if any value, catches raise environmental concerns and could lead to constraints on activity, and when there are no independent observers around to check on them?!? The lack of independent observer coverage and lack of any data on non-fish species (see PI 2.2.3 – "However, there are no records by the fleet of such interactions, only estimations by Havstovan who assess the impact of the UoA on these species as low and of no concern") confirms that the Assessment Team has no way to confirm the quantities of different ETP species are retained and reported. SG80 simply cannot be met! That is also to ignore the potential for warp-strike / warp wrapping mortalities, which are well-known issues for seabirds in some fisheries (see the South African hake assessment report and and the New Zealand hoki assessment report for examples of how significant these issues can be for seabirds). Such events would never be detected from landings data, even with pefect reporting from fishers.	recording of all inconvinient information. In the team's view, research by research institutions gives a reliable qualitative and quantitative proxy of expected interactions. As regards possible wrap mortalities, in the view of the ornitologists at Havstovan and the Natural History Museum, only expected interactions are with fulmars (due to the distance of the fishing boat to the shore), and these are considered under PI 2.2.

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				Note that SIa ("This is in concordance with other interviewed stakeholders, such as the Marine Research Institute (Havstovan) and the Natural History Museum, which have also reported that expected interactions of the tusk and ling fisheries (with the associated different fishing gears) with ETP species is null.") contradicts in a serious way SIb ("Although some interactions may be expected between the longline fleet and different bird species, according to comments by Havstovan, these would be mostly with fulmars, which are not considered as an ETP species."). Finally on SIb, this states: "According to the different stakeholders met during the site visit, direct interactions of the different fishing gears are highly unlikely. Should this happen, these would be recorded in the electronic logbook which has recently added an entry for interactions with marine mammals and birds." However, this is a clear and serious contradiction with text from PI 2.3.2 SIa, which states: "Electronic logbooks have recently been introduced to record interactions with marine mammals and birds, although Havstovan shows some concern that these	the different UoAs, nor estimation of such interactions. As regards reporting of interactions, and as expressed in the report, vessels have the facilities to record such interactions in the logbook, although so far they are not soing so. A recommendation has been set to start reconding such interactions.

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				are not been appropriately used to record all bird interactions." Could the Assessment Team please reconsider this, noting that I don't think it should be of any surprise that ETP species interactions are not well-reported in electronic logbooks when there are no other data to compare against?!	
				With respect to SIc, to note I would consider 'injuries and entanglements' to be direct effects, not indirect.	The team has considered as direct effects as those that result in short-term mortalities and as indirect effects those that do not result in short-term mortalities.
				Also, with respect to SIc, I caution the Assessment Team in commenting that " <i>Regarding longlines, … while birds should be scared by tori lines.</i> " Indeed, they can be effective if well constructed, well flown, and the weather conditions are conducive. However, even perfectly flown Tori lines may not completely eliminate bird interactions, and they can be ineffective or have reduced effectiveness for any number of reasons, including that they are not used (where is the evidence that Tori lines are flown in all weathers by all vessels when setting?) or are not being flown effectively??	The Peer reviewer is right to point that there is no visual evidence that tori lines are always used in an appropiate way. However one of the reasons given by Havstovan regarding the limited interactions by fulmars (which finally was much lower than the 20 birds per day origially considered) is the right use of tori lines and the general deployment of the bait at dark hours.

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				Finally, SIc also notes: "The low number of recorded fatal interactions with marine mammals" But which records are these – which species?? Earlier in SIa we are told that interactions with ETP species are 'null'??	Just to clarify, fishermen are expected to report interactions with ETP species (also whales) and so far there isn't any type of punishment for those situations. Moreover, whaling is not only allowed but a cultural heritage in the Faroe Islands, therefore interactions with whales wouldn't necessarily be something to hide as in other European countries. Regardless of such records, and according both to Havstovan and to the National History Museum (who actively participates at NAMMCO meetings), such interactions with marine mammals are not expected due to different reasons (marine mammals behaviour, location of the fleet, size of the bait/catch which would be too small to atract their attention,). There are no specific records of interactions by the UoAs, but records by the Natural History Museum by the different fleets in Faroese waters. According to Bjarni Mikkelsen, from the National History

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				Essenitally, I simply do not believe that there are no interactions with ETP bird and mammal species, and the team has insufficient evidence to score the fishery at 80 for direct effects, never mind 100. The Assessment Team needs to reconsider this scoring.	Museum, there are other Faroese fisheries (mainly pelagic) which may be cause of concern as regards interactions with marine mammals, but this is not the case for the tusk and ling demersal trawl, longline and jigging fishery. Specifically, the NAMMCO 2018 report by the bycatch working group makes recommendations for different fisheries in Faroese waters, but none to the UoAs. (more information at NAMMCO SC/25/12, page 7. The document is not published yet: https://nammco.no/topics/sc-working-group- reports/) Overall, the score of PI 2.3.1 has been lowered from 95 to 80 for all UoCs. The rationale of all SI has been reviewed and additional reference were added from Olsen 2008 and NAMMCO SC/25/12.
2.3.2	No	No	N/A	Given my concerns with PI 2.3.1, I am absolutely confident that there is not a strategy in place for ETP species in these	The team considers that there is a partial strategy in place implemented by Faroese

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				fisheries. This for the very simple reason that there is simply no way to meet the requirements of a strategy, which include that there are "mechanisms for the modification fishing practices in the light of the identification of unacceptable impacts." If there are no data, how can unacceptable impacts be identified? I note here that Tori lines are volunatry, only. As such, I am even more confident in my comment in SIa regarding the likelihood of bird interactions. What percentage of the hooks deployed annually are deployed under Tori lines? The fact that there are "3 designed RAMSAR sites in the Faroe Islands to protect bird species" is something to commend the	authorities which prevents interactions with these species and promotes monitoring of these populations. The overall score of PI 2.3.2 has been lowered from 90 to 85 for all UoCs. The rationale of Sib and Sic has been reviewed (now Sib is scored instead of Sia), and the score of Sic has been lowered from 100 to 80. Regarding the peer reviewer questions, data is collectec by research agencies. When unacceptable impacts are found, these are made available to management authorities, together with reccomendations in possible mitigation measures or fishing patterns. The team is not aware of which is the porcentage of the fleet using tori lines, but again, according to HAvstovan and to the client, these are generally used. Impacts on seabirds is not an issue for the fishery. As the peer reviewer highlights, birds

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				Faroes for, but does nothing to protect the birds when they fly out to sea. I question whether this comprises any part of the UoAs' strategy to protect ETP species.	continue to be unprotected when out in the sea, but at least they are protected when in land. The establishement of Ramsar sites is seen as part of the Faroese strategy on bird protection, together with research undertaken on the status of the different populations and the impacts of fishing (and bird hunting) on bird populations. It shall be reminded here that interactions of the UoAs with bird species is not considered an issue by ornitologist at Havstovan.
				The report states: "There were no landing of elasmobranchs other than portbeagles in the past two years. Madelman and Farrington (2007) concluded that elasmobranchs have a high post capture survival rate." But, we already know that landings and catches are different things, certainly with respect to ETP species, and Madelman & Farrington looked at the estimated short-term discard mortality of spiny dogfish in trawls, only, which cannot be scaled-up to long-term survival for all elasmobranchs from all fishing activity. In fact, there is evidence that porbeagle are one of the species that is more vulnerable to capture and post-capture morality – Campana has done some work on this, for example.	The vulnerability of portbeagle to capture is probably the reason of why there are landings of portbeagle but not of other elasmobranchs with higher survival rates. Fishermen are allowed to release elasmobranchs if individuals have a chance to survive.

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				I note that SIa is scored but SIb is not scored. This is incorrect when there are no limits in place – the alternate (SIb) should be scored (SA3.11.2). I do not think there are any limits in place for Faroese fishing.	Si b has now been scored instead of Sia.
				Scoring for SIc states: "ICES, NAMMCO and the Natural History Museum conduct monitoring of fish, marine mammals and bird populations in Faroese waters. Besides, through landing records there is accurate information on interactions of the Faroese fleet with ETP species, if any." But the highlighted text (my emphasis) simply cannot be correct – it is simply not justified?? Even the "Havstovan shows some concern that these [electronic logbooks, which have only just been introduced – when??] are not been appropriately used to record all bird interactions."	Havstovan is right in its concern that there is misreporting of bird interactions, as their own research shows so. However these interactions are only expected to be with fulmars. The Faroese Natural History Museum conducts research on interactions by the different Faroese fleets, which afterwards delivers to NAMMCO. In any case, a recommendation has been raised at PI.2.2. to improve recording of such interactions, and a condition has been set in PI 2.3.3. to improve the recording of these interactions.
Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
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				Then, SIc is scored at 100, which requires that " quantitative analysis supports high confidence that the strategy will work." What evidence is there to support this scoring? The report simply states: "Both monitoring of populations and records of interactions (if any) serves to quantitatively analyze with a high degree of confidence that the strategy to avoid interactions is working, as shown in records showing minimal interactions, if any." But the Assessment Team doesn't appear to know which ETP species are being taken in the fishery, and in what numbers (or haven't reported the species and numbers if they are known), so there is no way this can be met?	The score of Sic has been lowered from 100 to 80. The assessment team took into consideration ETP species and expected interactions following guidance from Havstovan and the Natural History Museum.
				Similarly, in no way does simply stating "The lack of casualties associated to the Faroese fleet and the lack of concern of Havstovan and the Natural History Museum as regards the impacts that the tusk and ling fisheries may cause on ETP species" serve to justify SG80 and SG100 is met for all UoCs.	As for Sid, SG100 requires that there is clear evidence that the strategy is implemented successfully and achieving its objective. The different measures taken at a national level and the low level of expected impacts (as confirmed by Havstovan and the National History Museum) serve to justify that the strategy is achieving its objective.
				Noting that the introduction states "Estimations were given that over 20 birds may get entangled in each large longline vessel	The estimation on bird interactions (already scored at PI 2.2) or interactions with bird

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				per day. Most of these birds would be Northern fulmars", Sle (review of alternative measures) is simply not met. Landings data CANNOT be considered reliable with respect to ETP species, so basically there are no data on which species are being taken in the fishery, nor what the numbers are, so there is no way to evaluate impacts. The idea of Sle is to minimise unwanted catch. There is no evidence that this is being done, nor that a review of measures has been undertaken. SG60 is not met.	ETP species (such as other ETP bird species or marine mammals or elasmobranchs) is evaluated by Havstovan and the National History Museum, whom, when relevant, communicate to the fishing authorities (or to NAMMCO) their concerns regarding fishing impacts on ETP species, together with recommendations for mitigation measures of such impacts. The latest review of impacts of the Faroese fishing activity on marine mammals took place at NAMMCO in April 2018 (where the impacts by other Fishing fleets was highlighted, but not by the UoAs). Alternative measures to avoid such impacts are taken and reviewed when appropiate. Scoring remains unchanged.
				I believe scoring for this PI should be reconsidered.	As mentioned above, the overall score of PI 2.3.2 has been lowered from 90 to 85 for all UoCs. The rationale of Sia and Sic has been reviewed, and the score of Sic has been lowered from 100 to 80.

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2.3.3	No	No	N/A	Clearly, my opinion is that there is no way that SG80 can be met for this PI. Part of the justification states: "… <i>information collected through</i> <i>the recently implemented electronic logbook (with an entry for</i> <i>marine mammals and for birds) provides reliable quantitative</i> <i>information to assess with a high degree of certainty the UoA</i> <i>related mortality and impact and to determine whether the UoA</i> <i>may be a threat to protection and recovery of ETP species.</i> "	The rationale of PI 2.3.3.a has been reviewed. The scoring of SI a has been lowered to 60 and a condition has been set in PI 2.3.3 As mentioned above, the assessment team relies in the research by Havstovan and other research institutions such as the National History Museum and NAMMCO. This has been clarified in the rationale, however a condition has been set.
				However, again I point back to the introduction that states "over 20 birds may get entangled in each large longline vessel per day." If there is reliable, quantitative data, these should show catches in the longliners, but we have seen no evidence that any birds are reported at all. How does the 'over 20 birds per day' compare with the landings data or the logbook data? What about the smaller longliners that can operate closer to shore. What about the warp strikes or wraps that may result in birds not being brought aboard the boat but still result in (cryptic) mortality?	Additional information on birds entanglements (as reported in 2.2.1) has been added to the report (see Olsen 2008). To the team's knowledge (and supported by stakeholders interviews with Havstovan and the Natural History Museum) interactions with ETP species are not an issue for any of

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				Again, SG80 is not met, and I question that SG60 " <i>Qualitative</i> <i>information is</i> adequate to estimate <i>the UoA related mortality</i> <i>on ETP species</i> ", noting that the issue here is not 'is the population doing OK?' (i.e., something that can be evaluated through a stock / population assessment), it is 'how many are caught by the UoA?'. At best, it is indicated that there is very rough, qualitative information on large longline vessel catches of fulmar (not ETP), but there is nothing on other bird species or marine mammals. Again, I believe scoring for this PI should be reconsidered.	the UoAs. Research by independent institutions show that there aren't expected interactions of ETP species with any of the UoAs. The scoring of PI 2.3.3. has been reviewed and lowered from 80 to 70.
2.4.1	No	Mostly	N/A	To note: 'cooling cameras' is not a term I recognise – please check? With respect to SIa, I don't necessarily disagree with the scoring, but the report states: " <i>Bottom trawling affects benthic</i> <i>habitats through relocation of shallow burrowing infaunal</i> <i>species to the surface of the seafloor, and by resuspension of</i>	Cooling chambers. Amended. The rationale at Sia has been reviewed.

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				surface sediment.", and this provides a somewhat incomplete picture, however. For example, Kaiser et al. 2006 states: "In addition to the associated by-catches of non-target species, the fishing process causes varying levels of disturbance to the seabed that alters seabed complexity, removes, damages or kills biota, and reduces benthic production, and thereby can lead to substantial changes in benthic community structure and habitat". Consideration of these additioanl impacts should help to strengthen the rationale for a SG80 score for trawling.	
				VME scoring points to Figure 36; this shows 'species sensitivie to tralwing impacts', but the figure has no key so it is not possible to determine which habitats are found where.	The key for figure 36 (now Figure 38) was hidden behind the figure. Apologies for that. It's now visible.
				 Figure 35 then shows OSPAR threatened and declining habitats, but the figure is poor quality and it is again not possible to see clearly which species are found where. Figure 37 shows current and past locations of Lophelia in Faroese waters, indicating that this species is widespread. Text referencing Bruntse and Tendel 2001 states that 	We agree that the OSPAR Figure (previously 35, now renumbered as Figure 37) is of poor quality, but that is what is available at OSPAR website.
				distribution tends to be limited to depths of 200-400 m.	Figure 36 (now Figure 38) effectively shows sponges in the East (and South East) of the

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				Bruntse and Tenel is a very useful report, and includes the Figure 36 and its key (below). A comparison of the habitat maps (Figure 36 and 37) with the areas closed to trawling (Figure 38) suggests that much of the Lophelia to the west and south is within closed areas, but areas to the south east are open. Apparent sponge areas to the east are also open.	Faroe Islands. However trawling activity concentrates in the Northeast fishing grounds, so there is no overlap, or very limited if any. The scoring for sponges remains unchanged.

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Perfor manc e Indica tor	Has all available relevant information been used to score this Indicator? (Yes/No)	Does the information and/or rationale used to score this Indicator support the given score? (Yes/No)	Will the condition(s) raised improve the fishery's performance to the SG80 level? (Yes/No/NA)	Justification Please support your answers by referring to specific scoring issues and any relevant documentation where possible. Please attach additional pages if necessary. Note: Justification to support your answers is only required where answers given are 'No'.	CAB Response
				 Based on the maps, the use of trawl gear, and the extent of the areas closed to trawling, I think scoring for Lophelia (and other shallow water VME-forming species) is OK (although see management). However, it is not so clear that scoring for sponge communities is appropriate. The report states: "Small patches of sponge aggregations are distributed both inside the MPA C1 (designated to protect coral reefs but which also holds sponge communities) and outside fishing restriction areas. These patches, found primarily in the depth range of ca. 300-750 m, are however very small and are located in the Western waters, while most of the fishing activity takes place in North Eastern waters. In any case, skippers will always tend to avoid fishing in these areas as taking sponges means loose of time and fish, and therefore, of money" However, I would argue that Figure 36 indicates that the most extensive areas of sponge are in the east, in areas deeper than 200m, that are open to trawling. I note P.6 of the Bruntse and Tendel report states: "Faroese fishermen have told us about single sponges that are more 	

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				 than 1 meter in diameter and sometimes almost too heavy for a man to lift. In some areas up to 20 tons of sponges can be caught in a single trawling, the net being virtually filled up and so loaded that there is a danger of damage during the on board hauling." I believe that Figure 34 (Location of the Faroese demersal trawl fleet activity) shows only four plots from individual vessels (ie., not the fleet), and there is no information on the time period that these plots represent (1 year?), so it is not clear that the data are representative. 	Figure 34 (now Figure 36) shows the plot of the fishing activities of 4 different trawlers in 2016. The client facilitated the location of all its longline and trawling vessels for the 2016 year, however the team decided to include only those more representative of the different fishing grounds, in order not to include plots of different vessels which go to the same fishing grounds.
				Because of the limited protection offere to sponge, the clear potential for impacts, and the limited information on trawling extent, it is not clear that SG80 is met for SIb. Please review the rationale and strengthen if possible.	The rationale of all SI has been reviewed and the scoring element approach has been used, following harmonization with the faroese saithe report. Final score remains unchanged.
2.4.2	No	No	N/A	For UoAs that have the potential for damage VMEs, SA	There are no mandatory move on rules in

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				 3.14.2.2 requires that a partial strategy for habitat includes "Implementation by the UoA of precautionary measures to avoid encounters with VMEs, such as scientifically based, gear- and habitat-specific move-on rules or local area closures to avoid potential serious or irreversible harm on VMEs." Even at SG60, SA3.14.2.3 requires measures to include "Implementation by the UoA of precautionary measures to avoid encounters with VMEs, based on commonly accepted move-on rules." Unfortunately, the report does not mention that there are move-on rules in place for the trawl fleet for VME habitats, or for the longline fleet (although there is some evidence that longlining does not seriously impact deep water corals except in very intensively fished areas). It is mentioned in the introduction at 3.5.6 (and elsewhere) that "The inspectors have the possibility to close an area with too much juvenile or bycatch for a period of up to two weeks (real-time closure)", but this is not the same as a move-on rule for VMEs. However, for the trawl fleet at least, if these are not in place, the UoA must fail. 	this fishery, but a high proportion of closed areas to protect VME species. The rationale of PI 2.4.2.a has been strengthen to justify the SG80 score regardless of the existence or not of move on rules. Scoring remains unchanged.

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2.4.3	Yes	Yes	N/A	Nothing to add.	Following harmonization with the Faroese saithe assessment report, the score of Pl 2.4.3.a has been lowered from 100 to 80, as according to NovasArc, there is still room for improvement on the location of vulnerable habitats. The overall score of Pl for all UoCs has been lowered as follows (for demersal trawlers, score has decreased from 85 to 80; for longlines, score has decreased from 85 to 80; and for jiggers, score has decreased from 95 to 85).
2.5.1	Yes	Mostly	N/A	While I don't disagree with the score, the comment that " along with the high biomass of both stocks, serves to give confidence that the UoA is highly unlikely to create trophic disturbances" indicates that the impact of the fisheries as a whole have not been considered fully. Essentially, tusk and ling comprise only small components of each fishery, with other species making up much larger percentages of the catch in every UoA (roughly 94% (trawl), 61% (longlines) and 95% (jiggers) is something other than these two species). As such, their status cannot give very much confidence that the UoAs are unlikely to create trophic	Additional text has been added to PI 2.5.1.a, specifying that there are other stocks in the catch composition (such as saithe) which are also in a safe biological situation while the bad situation of cod and haddock stocks can't be fully attributed to the tusk and ling fishery, as there are other environmental factors which contribute to this situation. Scoring remains unchanged.

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2.5.2	Yes	Mostly	N/A	disturbance. A rethink is appropriate. SIc is scored at 100 and requires that "There is clear evidence	As mentioned in PI 2.5.2.a, the different
				that the partial strategy/strategy is being implemented successfully and is achieving its objective as set out in scoring issue (a). " It is not clear from SIa or SIc, though, what the objective is, and therefore how it is assessed that the objective is being met?	management measures in place, designed to manage the different aspects and impacts of the fishing activity, are considered together as a partial strategy to restrain the impacts that the UoA may have on the ecosystem. Each one of these management measures has a different objective (to protect juvenile fish, to protect coral reefs,). Sic asks for evidence that this partial strategy (or management measures) are effectively implemented, as it is (according to the Directorate of Fisheries) and achieving its overall objective. While each management measure has a different objective, the overall objective is that the Faroese marine ecosystem mantains a healthy status. There are no concerns from ICES nor from other research institutions regarding the Faroese marine ecosystem. Scoring remains unchanged.

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2.5.3	Yes	Mostly	N/A	I wil simply comment that the scores here are very high given the absence of independent data to verify UoA-related impacts on elements (SId), and to support the development of ecosystem strategies (SIe). A score of 80 seems more appropriate for these SIs.	The score of Sie is mostly based on Havstovan's (considered as an independent agency) research on the different components of the ecosystem. The text and scoring have been reviewed but remains at 100.
3.1.1	Yes	Yes	N/A	Nothing to add	
3.1.2	Yes	Yes	N/A	Nothing to add	
3.1.3	Yes	Yes	N/A	Nothing to add	
3.2.1	Yes	Yes	N/A	Nothing to add	
3.2.2	Yes	Yes	N/A	Nothing to add	
3.2.3	Yes	No	N/A	The report states: "While inspection statistics are confidential in the Faroese enforcement system, the assessment team has not come across information that gives us reason to question the high level of compliance."	Although there is an interrelation between the comprehensiveness of the enforcement system, the application of sanctions and the actual level of compliance, the latter is

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				I point back to the concerns over reporting seabird and marine mammal bycatch, and the comment from Hastovan that data on these species are not being reported in electronic logbooks. The lack of observer coverage is also noteworthy. With the question over data submisison on electronic logooks, and with no way to verify catches (not landings), should these UoAs score 100 for SIa and SIb, and if the issue is fleet wide then is there in fact evidnece of systematic non-compliance?	scored primarily under SIc, not SIa or Sib. The MSC Fisheries Standard does not give any specific guidance as to what <i>level</i> of compliance is required to conclude that fishers 'comply with the management system under assessment'. Nor would that be reasonable since the absence of infringements in inspection statistics might as well imply that inspectors are not competent (or willing) enough to detect non-compliance, or that they focus attention on those parts of the fishery where compliance is highest. Hence, compliance statistics can only give an indication, and must be seen in relation to other factors, such as the comprehensiveness of the enforcement system, the legitimacy of the management system as such, assumptions on the reliability of data provided by the enforcement authorities and other anecdotal evidence of compliance. It is the qualitative judgment of the assessment team that the

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					requirement that fishers 'comply with the management system' is met in this fishery – this does not imply that no infringements take place (which is probably not the case in any fishery), but that most rules are generally respected. The requirement that fishers provide information of importance to the effective management of the fishery is definitely met. So the question remains whether fishers are 'generally thought to comply' (required for a 60 score), whether 'some evidence exists' that they comply (required for an 80 score), or whether there is 'a high degree of confidence' that they comply (required for a 100 score). Clearly <i>some evidence exists</i> since the enforcement bodies confirm that that is the case; hence SG 80 is met. However, since publicly available inspection and infringement statistics are not produced for the fishery the documentation is not sufficient to conclude with a high degree of confidence that this is the case. SG 100 is not met. This score is

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					harmonized with other Faroese fisheries and other fisheries in the region. It should also be noted that inspections by Coast Guards in general is preferred to observer coverage in the Nordic countries (including impromptu inspections by helicopter), largely due to the high number of vessels in these countries (in some countries in the thousands), which makes it difficult (i.e. very costly) to have observers on board all vessels. Hence, 'surprise inspections' is used as an alternative. The harmonized score for these fisheries is 80 or 100, depending on the availability of public inspection records.
3.2.4	Yes	No	N/A	For SIb, the report notes "It is a matter of interpretation 'how external' this needs to be. It is, for instance, unclear whether the reporting of the Ministry of Fisheries to the Parliament should count as external. Admittedly, these bodies of governance are part of the executive and legislative branches of government, respectively. On the other hand, lines between the two branches can become blurred in small management systems such as in the Faroe Islands, and the Parliament's	The team agrees with the reviewer that it is dubioius whether the continuous follow-up by Parliament should count as 'external review', which is also noted in the justification. However, as also noted, a major external review was carried out in 2017, so the SG 80 requirement of 'occasional external review' is met. 'Regular external reviews' are only

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				continuous follow-up of the working of the ministries arguably stops short of formal review." Certinaly, I agree that it is not clear that the Parliament's 'continuous follow-up' meets the expectation here. A separate, distinct review process is more what I have seen and expect in other systems, and if scoring is undertaken on a precauitonary approach then I would argue that a condition is appropriate for SIb.	required for a 100 score.

Optional: General Comments on the Peer Review Draft Report (including comments on the adequacy of the background information if necessary) can be added below and on additional pages

- The Executive Summary notes that the assessment is for ling and tusk fished with pair trawl, long line, jigs and gill nets, but the UoA tables (Tables 7 and 8) list just semi-pelagic demersal trawl, longline and jigging. Amended. Gillnets are not included in the UoA.
- 2) Tables 7 and 8 show just two UoAs, while Table 9-14 show six proposed UoCs (albeit that they all show that the gear is semi-pelagic demersal trawl, only). I presume there are meant to be six UoAs, and six UoCs, with all combinations of ling and tusk and the three gear types? Right. Amended.
- 3) UoCs 1 3 (Tables 9 11) are identical ling, Vb and VIa, semi-pelagic demersal trawl....? Amended
- 4) UoCs 4 6 (Tables 12 14) are also identical tusk, Vb ad Vla, semi-pelagic demersal trawl...? Amended
- 5) I note that 'semi-pelagic demersal trawl' is not a term I recognise, and is in fact something of an oxymoron. Is this a semi-pelagic gear that is used demersally, a demersal trawl that has been adapted to fly, or something else? Note that the 'Fishing fleets' section of the UoC Tables [and Section 3.2.2] indicate that "*This certification* [assessment] *applies exclusively to the fleet of* [pair and single vessel] *demersal trawlers* ...", both of which suggest the gear is simply a demersal trawl? Amended. Is single and pair demersal trawlers.
- 6) It is not clear why Tables 15-20 are included at this stage? They appear to be repeats (albeit that these do correctly list the different gear types) of Tables 9-14. I'd suggest deleting Tables 9-14, given that those include errors with respect to gear type. They are included because UoCs may change during the certification process. Tables 9-14 have been amended. Tables 15 -20 remain.

7) I note that Tables 7 and 8 (UoAs) state: "Other eligible fishers are defined as Faroese vessels fishing for tusk within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau and using the gears defined above.", while Section 3.1.2.1 (Final other eligible fishers) states: "Other eligible fishers are defined as Faroese vessels that do not belong to the client group and which fish for tusk or ling within ICES Division Vb1 and Vb2 – Faroe Bank and Faroe Plateau using semi-pelagic trawls, long lines and jigs." However, Section 3.1.3 states: "Where non-Faroese fisheries operate within the Faroese EEZ, these fish under a quota allocation.", and then Tables 21 and 22 show data for "Total catch all fleets (UOA)" Of course, if there are non-Faroese vessels fishing (and Table 21 (cont) and Table 22 (cont) show that there are), then these are not apparently part of the UoA! So, something is incorrect in these early sections, and needs to be corrected.

Tables 21 and 22 have been amended and the reference to UoA in them has been deleted.

- 8) Minor point, but Word appears to have suffered some formatting issues due to cross-referencing using hyperlinks to figures and tables. A thorough check through to reinsert the cross-references would allow the authors to remove a lot of empty space in the report. Formatting is updated
- 9) Figure 34. It is not clear if these maps of VMS activity are for individual vessels, or groups of vessels. Also, how representative are they of the UoA as a whole if they do not show all vessels? The CAB was given the VMS maps for all fishing activity in 2016 for all trawlers and longlines, and chose to include those more representative of the different fishing grounds in the report.
- 10) Figure 36 (The distribution of benthic habitats and species sensitive to trawling impacts.) has no key, and it would be very useful. Amended.
- 11) It would also be useful for readers to include a map of the Faroese region, including main features such as the Faroes Bank, Faroes Bank Channel, Faroes Plateau, etc. A map has been included in the primary species section which shows the topography of the region.
- 12) At several points in the section on habitat interactions, specific reference is made to the association or otherwise of VME features to saithe. This does not appear relevant to a ling and tusk fishery assessment. Demersal trawlers specifically target saithe, not tusk and ling which are taken as bycatch. That's why the habitat section focuses on where the saithe may be abundant.
- 13) In Table 47, the only lists primary, secondary and ETP elements, but there are also scoring elements for habitats and ecosystem that should be included. Amended.
- 14) In Table 47, the only ETP species listed is Porbeagle. The report notes there are seabird (not just fulmars) and marine mammal interactions, so these species should be included as appropriate. Other ETP species are not included as the team is not aware of interactions with any other ETP species.
- 15) The report states: "Point of intended change of ownership of product: Processing plants, fishing ports or fishing auctions where registration of landings is carried out and weights registered." But then it also states: "Point from which subsequent Chain of Custody is required: When landing takes place at auction houses, these do not need a separate CoC, as they do not take ownership of product but merely serve as facilitators of trade". Clearly, something is not correct here. In any case, if the fish is not subject to CoC through the auction houses, then there would be a need for appropriate traceability checks to be undertaken through the auction, where risk of substitution or mixing is likely to be considerable. As stated in the report, Chain of Custody would be required for further processing activities. It is expected that the catch is guarded while in the fishing auction.

APPENDIX 3 STAKEHOLDER SUBMISSIONS

(REQUIRED FOR FR AND PCR)

APPENDIX 4 SURVEILLANCE FREQUENCY

Three conditions apply for this fishery at the moment. The Assessment Team considers that the necessary information to verify closing of condition 1 and 3 can be collected off-site during the first year and possibly at an on-site visit during year two. Closing condition 2 is likely to take longer. The need to carry out on-site verification during year two will be considered after the first surveillance audit

Table 58 Timing of surveillance audit

Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
1	ТВС	August 2019	Scientific advice to be released in June 2019, proposal to postpone audit to include findings of scientific advice

Table 59 Fishery Surveillance Program

Surveillance Level	Year 1	Year 2	Year 3	Year 4
Level III	Off -site surveillance audit	On-site surveillance audit	Off-site surveillance audit	On-site surveillance audit & re-certification site visit

APPENDIX 5 OBJECTIONS PROCESS

(REQUIRED FOR THE PCR IN ASSESSMENTS WHERE AN OBJECTION WAS RAISED AND ACCEPTED BY AN INDEPENDENT ADJUDICATOR)

The report shall include all written decisions arising from an objection.

(Reference: FCR 7.19.1)

APPENDIX 6 VESSEL LIST

The list of fishing vessels remains as listed in the revised list of 24.03.2017.

Number	Name	Name or	Demersal	Longline	Jigging
		number	trawl		00 0
KG	Grønanes	Grønanes	Х	х	х
KG	Polarhav	Polarhav	X		
KG	Safir	Safir	X		
KG	Smaragd	Smaragd	Х		
KG	Skoraberg	Skoraberg	Х		
KG	Stjørnan	Stjørnan	Х		
KG	Vestmenningur	Vestmenningur	Х		
KG	Vesturtúgvan	Vesturtúgvan	Х		
	Bakur	Bakur	X		
	Falkur	Falkur	Х		
	Heykur	Heykur	Х		
	Lerkur	Lerkur	Х		
	Rankin	Rankin	Х		
	Rókur	Rókur	X		
	Stelkur	Stelkur	X		
TG 600	Suðringur	OW2203	X		
TN 1420	Ametyst	OW2383	Х		
TG 665	Breiðanes	OW2489	Х		
TG 664	Hamranes	OW2490	Х		
	Jaspis	Jaspis	Х		
TG 405	Niels Pauli	OW2341	Х		
TG 304	Steintór	OW2380	Х		
SA 450	Eysturbúgvin	OW2487	Х		
VN 459	Vesturbúgvin	OW2493	Х		
TN 1429	Sardis	OW2305	Х		
TN 1428	Topas	OW2298	Х		
KG 7	Jákup B	XPZC		Х	
KG 9	Klakkur	XPPR		Х	
KG 477	Kvikk	OW2426		X	
KG 910	Núpur	XPZB		X	
KG 476	Pison	XPZI		Х	
	Fagranes	OW2327			Х
	Karlamagnus	XPLV			Х
	Havsbrún	XPXD			Х
	Joselyn	OW2236			Х
	Kallanes	OW2027			Х
	Líðhamar	XPTR			Х
	Norðsøki	XPUF			Х
	Sigurfari	OW/2008			Х

Table 60 List of vessels for the Faroese tusk and ling fishery (as in 24.03.2017)

About DNV GL

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