

SURVEILLANCE NO. 4

Surveillance audit – Report for the Faroe Islands North East Arctic cold water prawn fishery

Maresco AS

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Objective:

The objective of this report is the fourth surveillance audit of the Faroe Islands North East Arctic cold water prawn fishery.

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GLOSSARY

Abbreviations & acronyms

CL	Carapace length
CPUE	Catch per unit effort
DCF	(EU) Data Collection Framework
DNV GL	Det Norske Veritas GL
EEZ	Exclusive Economic Zone
ERS	Electronic Reporting System
FAM	Fisheries Assessment Methodology
FAO	Food and Agriculture Organisation (of the United Nations)
FPZ	(Svalbard) Fishery Protection Zone
ICES	International Council for the Exploration of the Sea
GLM	Generalised Linear Model
HCR	Harvest Control Rule
ICES	International Council for the Exploration of the Sea
IMR	Institute of Marine Research, Norway
MSC	Marine Stewardship Council
NAFO	Northwest Atlantic Fisheries Organisation
NEAFC	North East Atlantic Fisheries Commission
NIPAG	NAFO/ICES Pandalus Assessment Group
PI	Performance Indicator
RFMO	Regional Fisheries Management Organisation
SAM	Statistical catch-at-age model
SSB	Spawning stock biomass
TAC	Total Allowable Catch
UoA	Unit of Assessment
UoC	Unit of Certification
VME	Vulnerable Marine Ecosystem
VMS	Vessel Monitoring System

Stock assessment reference points

B _{lim}	Minimum biomass below which recruitment is expected to be impaired or the stock dynamics are unknown.
B _{msy}	Biomass corresponding to the maximum sustainable yield (biological reference point); the peak value on a domed yield-per-recruit curve.
B _{trigger}	Value of spawning stock biomass (SSB) that triggers a specific management action.
F	Instantaneous rate of fishing mortality.
F _{lim}	Fishing mortality rate that is expected to be associated with stock 'collapse' if maintained over a longer time (precautionary reference point).
F _{msy}	F giving maximum sustainable yield (biological reference point).
K	Carrying Capacity
MSY	Maximum Sustainable Yield
PA	Precautionary Approach


1 GENERAL INFORMATION

Table 1 General information

Fishery name	Faroe Islands North East Arctic cold water prawn fishery	
Unit(s) of Assessment (UoA)	Species:	Northern shrimp, cold water prawn (<i>Pandalus borealis</i>)
	Stock:	Barents Sea shrimp (ICES Division I and II) / FAO 27
	Geographical area:	Barents Sea and Svalbard in FAO statistical area 27, ICES I and II
	Harvest method:	Bottom trawl with sorting grid
	Management:	<ul style="list-style-type: none"> Faroe Islands and Greenland Fisheries Management Lithuania Fisheries Management / EU Commission NEAFC Norwegian Fisheries Management (Svalbard FPZ) Russian Fisheries Management (EEZ of Russian Federation) <p>The stock is managed according to ICES advice.</p>
	Client group:	<p>The client group is represented by the following ship owners:</p> <ul style="list-style-type: none"> P/F Thor with shrimp trawler Kappin (formerly Sermilik II) P/F Havborg with shrimp trawler Havborg. P/F Líðin with shrimp trawler Arctic Viking. <p>Faroeese company P/F Framherji represented by the vessel: Akraberg Faroeese company P/F JFK Trol represented by the vessel: Sjurdarberg</p> <p>Greenland company Royal Greenland represented by the vessels: Akamalik, Qaqqatsiaq and Natarnaq Greenland company Nanoq Seafood represented by the vessel: Tasermiut</p> <p>Lithuanian company JSC Seivalas (was at certification represented by the vessel Plutonas, which was sold in August 2017)</p>
	Other eligible fishers:	The Faroese client group represents the entire Faroe Islands fishery for shrimp in the Barents Sea. If at a later date more vessels are added to the Faroe Islands shrimp fishery in the Barents Sea, their eligibility to share the certificate will be

		<p>considered upon the application. New vessels owned by the client group will automatically (subject to full compliance with MSC requirements) be eligible to share the MSC certificate.</p> <p>There are currently no Greenland or Lithuanian vessels other than the above mentioned included in the UoC. If at a later date more vessels are added to the Greenland shrimp fishery in the Barents Sea, their eligibility to share the certificate will be considered upon the application. If at a later date the vessel owners add more vessels to their fleet that fish in the Barents Sea for cold water shrimp under Greenland or Lithuanian management, they will automatically (subject to full compliance with MSC requirements) be eligible to share the MSC certificate. Vessels outside the client group in Lithuania are not eligible to share the MSC certificate.</p>	
Date certified	5 December 2013	Date of expiry	5 December 2018
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This report contains the findings of the fourth annual MSC Fisheries surveillance audit conducted for the Norway NEA cold water prawn fishery on 17-19 October and 6 November 2017.



The purpose of this annual Surveillance Report is:

1. To establish and report on any material changes to the circumstances and practices affecting the original complying assessment of the fishery;
2. To monitor the progress made to comply with any Conditions raised and described in the Public Certification Report of 5 December 2013 and in the corresponding Action Plan drawn up by the client;
3. To monitor any actions taken in response to any Recommendations made in the Public Report;
4. To re-score any Performance Indicators (PI) where practice or circumstances have materially changed during the intervening year, focusing on those PIs that form the basis of Conditions raised.

The primary focus of this surveillance report is to review the changes occurred since the previous year. For a complete picture of the fishery, this report should be read in conjunction with the Public Certification Report available for download at www.msc.org.


<https://fisheries.msc.org/en/fisheries/faroe-islands-north-east-arctic-cold-water-prawn/@assessments>

2 BACKGROUND

2.1 Stock Status

The fishery for *Pandalus borealis* in the Barents Sea and Svalbard Fishery Protection Zone (FPZ) was started by vessels from Norway in 1970, and as the fishery developed, vessels from Russia, Iceland, Greenland, Faroe Islands and the EU countries also entered the fishery. Norwegian and Russian vessels exploit the *Pandalus borealis* stock across the entire region. Norwegian vessels constitute the largest fleet, and although Russian vessels declared zero landings each year from 2009 to 2012, Russian fishing activity has started to increase again. Vessels from other countries, including those from Faroe Islands, are not permitted to fish in the Norwegian EEZ. However under a bilateral agreement, vessels from Faroe Islands have recently been allowed access to fish in Russian waters with an annual overall quota of 5000 tonnes. Vessels from Faroe Islands are therefore now permitted to fish within the Svalbard FPZ, in an area of international waters to the south east of Svalbard known as the 'Loop Hole', and in the Russian EEZ. The number of vessels permitted to fish in the Svalbard FPZ is limited by country (11 for Faroe Islands) and by an overall limit on effective fishing days (922 for Faroe Islands) set by the Norwegian authorities. Greenland vessels are permitted to fish in the Svalbard FPZ (a maximum of 5 vessels with a limit of 450 fishing days), but are not permitted to fish in the international waters of the Loop Hole. Greenlandic vessels have not recently been fishing in Russian waters, although shrimp quotas have been allocated to Qaqqatsiaq and Natarnaq (250 tonnes) in the Russian EEZ. Lithuania has an allocation of 647 fishing days in the Svalbard FPZ, of which 228 days are available to the Lithuanian Client, JSC Seivalas. Over the last few years the fishery has shown increased activity in the international zone, due to a recent eastwards shift in the main areas of shrimp distribution possibly driven by observed changes in water temperatures, and to some area closures due to high bycatches of juvenile fish.

As the fishery developed, catches reached a peak of 128,000 tonnes in 1984, but since 2000 catches have declined from around 80,000 tonnes to 20-30,000 tonnes per annum (Figure 1). Up until 2010 the majority of the landings were by Norwegian vessels, but in recent years there has been an increase in fishing effort by vessels from EU countries, Faroe Islands and Greenland, such that these countries now land approximately half of the total landings (Table 2). The decline in landings since 2000 is due to reductions in fishing effort caused by increased vessel operating costs, primarily high fuel prices, and low market prices and consequent low profitability of the fishery (NAFO/ICES, 2014). Since 2006, the total catch in the fishery has been significantly below the TAC recommended by ICES. Landings then declined further to 19,249 tonnes in 2013 and increased slightly to 20,964 tonnes in 2014. Shrimp are more widely distributed than in previous years (with less ice opening up more grounds) creating problems in locating high densities of shrimp, there were a number of areas closed to fishing in 2014 due to high bycatches of redfish, cod and haddock, and the high value and large catches of cod mean that the fleet has been targeting most effort on more profitable groundfish stocks, as shrimp fishing requires greater effort and more fuel. Since then landings have increased significantly to 34,000 tonnes in 2015 due to increased fishing effort and favourable market conditions for both raw and processed shrimps. In 2016 reduced participation by both offshore and inshore Norwegian vessels with less vessels fishing and reduced prices in 2016 due to over-supply of cold-water prawns globally, resulted in landings in 2016 for Norwegian vessels declining to around 11,000 tonnes. In contrast, landings from EU vessels in 2016 were 16,000 tonnes and were therefore similar to landings in



2015, and landings from Russia increased to 2,500 tonnes in 2016 (Table 2) (ICES, 2017a). Total landings from the fishery in 2017 are estimated to be 28,000 tonnes (ICES, 2017a).

In 2013, there were three Faroe Islands vessels licensed to fish in the Barents Sea: Havborg (OW2163), Sermilik II (OW2202) and Arctic Viking (OW2399), although in 2013 Sermilik II did not fish for shrimps. Two of these vessels use double trawls, whereas the third vessel, Sermilik II, uses only a single trawl. In 2014 an additional vessel, Ólavur Nolsøe (XPLJ) was issued with a one-year license to fish in the Svalbard FPZ and the international zone, but not in the Russian EEZ. This vessel landed only 68 tonnes of shrimps in 2014 from the international region (Loop Hole) and did not re-apply for a license to fish shrimps in 2015 or 2016. An additional vessel, Phoenix, was issued a licence in 2015 for the Svalbard FPZ only. The vessel is owned by the same company that owns Sermilik II, and applied for a license for the purpose of trying to pair trawl with Sermilik II. However the Phoenix did not land any shrimps. In 2016 the name of the vessel Sermilik was changed to Kappin.

At the end of 2016 two new vessels joined the Faroese certificate; Akraberg owned by P/F Framherji and Sjurðarberg owned by P/F JFK Trol. Akraberg entered the Faroese fleet for shrimp fishing in the Barents Sea in 2016, while Sjurðarberg started in 2015. Following expedited assessments in 2016/2017, four Greenland vessels joined the certificate - Akamalik, Qaqqatsiaq, Natarnaq and owned by Royal Greenland, and Tasermiut owned by Nanoq Seafoods. In addition, a Lithuanian vessel, Plutonas, owned by JSC Seivalas joined the certificate. The Lithuanian vessel, Plutonas, has since been sold and at present there are no Lithuanian vessels in the UoC.

Faroe Islands vessels landed 4219, 4666 and 4899 tonnes of shrimps in ICES Area I and II in 2014, 2015 and 2016 respectively, equating to approximately 20%, 14% and 17% of the overall landings from the Barents Sea stock in the respective years. Figures up to the end of September 2017 landings were 4523 tonnes, suggesting that landings may be higher in 2017 than in the last few years. In 2014, 2015 and 2016 over 80% of landings were from the Russian zone and the Svalbard FPZ, and provisional figures for 2017 show that the majority of landings have come from the Russian zone. Greenland vessels landed 1958 and 2054 tonnes of shrimps in ICES Area I and II in 2015 and 2016 respectively, equating to approximately 6% and 7% of the overall landings from the Barents Sea stock in the respective years. Provisional figures for 2017 are around 3500 tonnes suggesting a significant increase in fishing activity of Greenland vessels in 2017. In 2017, prior to being sold, the Lithuanian vessel Plutonas landed 383 tonnes of shrimps from the Svalbard FPZ.

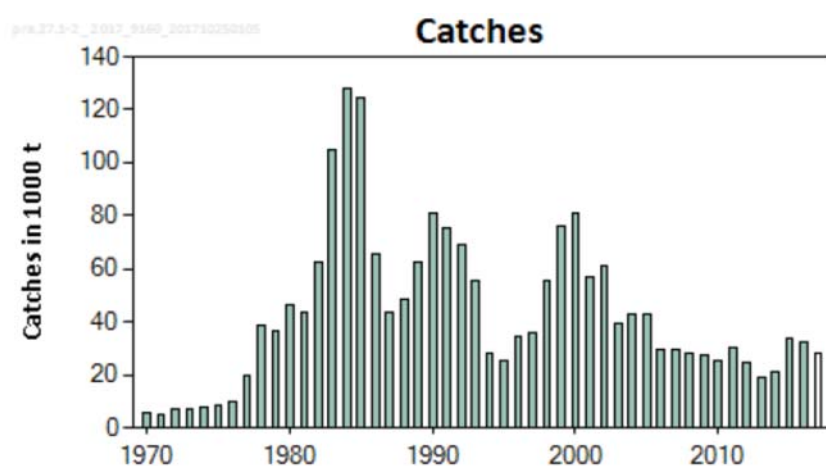



Figure 1. Total catches of *Pandalus borealis* in the Barents Sea from 1970 to 2017. The 2017 projected value is estimated based on data until July and information from the industry. (Source: ICES, 2017a).

Table 2. Shrimp in the Barents Sea: recent catches (tonnes) in relation to maximum catch recommended by ICES. * 2017 catches are projected to the end of the year. (Source: ICES, 2017a)

Year	Recommended maximum catch	Norway	Russia	Other nations	Total
2006	40 000	27352	4	2271	29627
2007	50 000	25558	192	4181	29931
2008	50 000	20662	417	7109	28188
2009	50 000	19784	0	7488	27272
2010	50 000	16779	0	8419	25198
2011	60 000	19928	0	10298	30226
2012	60 000	14158	0	10598	24756
2013	60 000	8864	1067	9336	19249
2014	60 000	10234	741	9989	20964
2015	70 000	16618	1151	16253	34002
2016	70 000	10896	2490	16223	29609
2017	70 000				28000*



The stock in the Barents Sea and Svalbard area (ICES Sub-areas I and II) is assessed along with other Northwest Atlantic Fisheries Organization (NAFO) and International Council for the Exploration of the Sea (ICES) stocks by the joint NAFO/ICES *Pandalus* Assessment Group (NIPAG). The most recent assessment was carried out at the NIPAG meeting in September 2017 (NAFO/ICES, 2017). The stock assessment model used by NIPAG is a stochastic version of a surplus production model. The model is formulated in a state-space framework and Bayesian methods are used to derive posterior likelihood distributions of the parameters (Hvingel and Kingsley, 2006). The model synthesises information from input priors including the initial population biomass in 1969, the carrying capacity (K) and Maximum Sustainable Yield (MSY), a series of shrimp catches and four independent series of shrimp biomasses (Hvingel, 2016). Further details on the methodology can be found in the most recent stock assessment report (NAFO/ICES, 2017) and Hvingel (2016).

Total reported catch from all vessels in the fishery is used as yield data. The four series of shrimp biomasses are a series of commercial catch rates and three trawl survey biomass indices. Log book data from Norwegian vessels are used in a multiplicative model to calculate standardised annual catch rate data (Hvingel and Thangstad, 2016a). The GLM model includes vessel, season, area and gear type as variables and is considered to be a good index of the biomass of shrimps over 17mm CL, i.e. of the older male and female stock combined. The standardized catch per unit effort (CPUE) declined to the lowest value of the series in 1987, but then showed an overall increasing trend until 2011. The 2012-14 values were however down significantly to below long term mean values, but in the last three years, CPUE has increased back towards the long term mean (NAFO/ICES, 2017). Norwegian and Russian shrimp trawl surveys were conducted from 1982-2004 and 1984-2005 respectively and provided indices of stock biomass, recruitment and size composition. In 2004 these two trawl surveys were superseded by the joint Norwegian-Russian ecosystem survey which surveys shrimp and monitors other ecosystem variables (Hvingel and Thangstad, 2016b). Biomass indices from all three trawl surveys used in the model have fluctuated without any obvious trend. Recruitment indices (estimated abundance of shrimp between 13 and 16mm CL) derived from Norwegian (Hvingel and Thangstad, 2016b) and Russian (Zakharov, 2014) surveys showed no major changes from 2004 to 2013.

The assessment model estimates biomass in relation to Bmsy and fishing mortality in relation to Fmsy, and considers two other reference points that ICES uses within its MSY framework for providing advice: Btrigger (50% of Bmsy), a biomass encountered with low probability if Fmsy is implemented, and Blim (30% of Bmsy), the biomass below which recruitment is expected to be impaired. The assessment also considers Flim (170% of Fmsy), the fishing mortality that would drive the stock to Blim.

The most recent assessment in 2017 (NAFO/ICES, 2017) shows that there has been no change in stock status since the original assessment. The estimated biomass has been above Bmsy since the start of the fishery in the 1970s, and the fishing mortality rate has been well below Fmsy throughout the duration of the fishery (Figure 2). Assuming a catch of 28,000 t in 2017, the assessment estimated that fishing mortality in 2017 would be 0.08 x Fmsy, and that biomass in 2018 is projected to be 1.68 x Bmsy. The assessment estimates the risk associated with exceeding the various reference points. In 2017, the risk of F being above Fmsy was 2.1%, the risk of biomass falling below Btrigger and Blim was 0.4% and 0.0% respectively, and the risk of exceeding Flim was 0.9% (NAFO/ICES, 2017). The 2017 assessment also provides model predictions of risk associated with a range of catch levels up to 350,000 t per annum. Assuming a catch of 28,000 t for 2017, catch options up to 80,000 t for 2018 have a low probability of

exceeding F_{msy} ($<10\%$) and F_{lim} ($<5\%$), or of the biomass going below $B_{trigger}$ ($<1\%$) by the end of 2018, and all are likely to maintain the stock at its current high level (NAFO/ICES, 2017). More detail of the most recent values of the various stock indices can be found in the 2017 stock assessment report (NAFO/ICES, 2017).

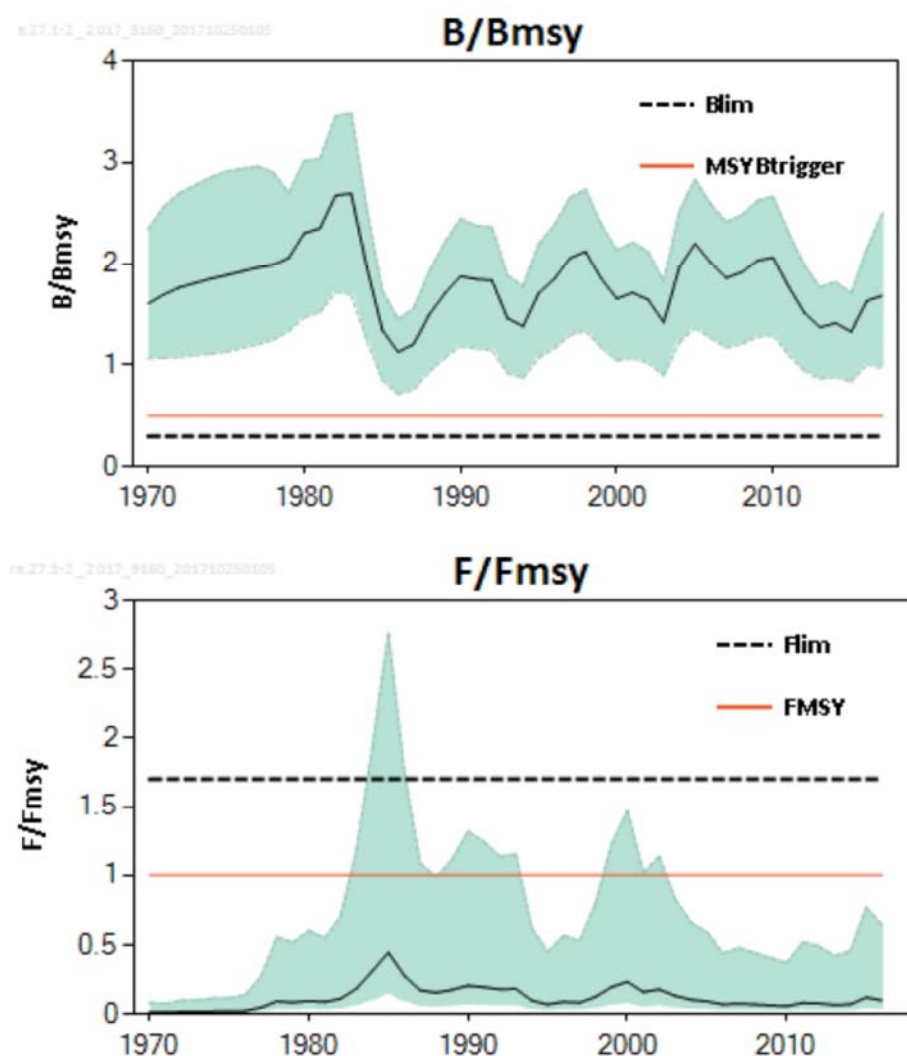


Figure 2. Estimated time series of relative biomass (B/B_{msy}) and fishing mortality (F/F_{msy}). The solid black lines are the median with 90% probability intervals. The dotted lines are the B_{lim} and F_{lim} reference points and the red lines are the $MSYB_{trigger}$ and F_{msy} reference points. (Source: ICES, 2017a).


In conclusion, the most recent stock assessment by NIPAG shows that there is no change in the status of the stock. Based on the 2017 stock assessment, ICES advises that catches of up to 70,000 tonnes in 2018 would maintain stock biomass well above B_{msy} , and move the exploitation rate a little closer to, but still well below, F_{msy} . Catches are again forecast to be much lower than 70,000 tonnes.

2.2 Impact on the ecosystem

Shrimp is caught by small-mesh trawl gear with a minimum stretched mesh size of 35 mm. The mesh size used by all UoC vessels in the cod end is 44 mm although a smaller mesh size is allowed in the Svalbard Area. All trawls are equipped with obligatory sorting grids which stream by-catch of fish out of the shrimp trawl, allowing maximum reduction of by-catch of juvenile fish. The spacing between the grid bars on the sorting grid is determined by regulation in both the Svalbard FPZ and the NEAFC Regulatory area. Under Faroe Islands legislation, the vessels are licensed only for the capture of shrimps, and as the vessels have no quota for other species such as cod, the use of an additional net (sack) to catch large fish is not permitted. Similarly the Greenland vessels and the Lithuanian vessel do not retain any other bycatch species. Temporary closing of areas in the Norwegian EEZ and Svalbard FPZ where excessive bycatch of juvenile cod, haddock, Greenland halibut, redfish or shrimp <15 mm CL is encountered also reduces bycatch. The majority of vessels operate on the soft sea bed, which causes no lasting damage to the substrate. Some vessels operate in the areas with harder substrate, and use rock-hopper gear. In both cases, trawl doors make contact with the sea bed and directly impact habitat structure. Any direct impact of the fishing gear on the habitat structure is likely to have been lower in 2013 and 2014 following reductions in fishing effort, although fishing effort increased in 2015. The Faroe Islands vessels are involved in an underwater camera project, where cameras are being installed on the trawl in order to see how it is operated. The camera also can show what impact the fishing gear has on the sea bed. Work continues under the Norwegian MAREANO Project to map sediment types across the Barents Sea and the Norwegian Sea and the project expanded further northwards in 2016 with many new transects that will map an increasing range of shrimp fishing areas. To date a comparison between MAREANO survey data and Norwegian VMS data for shrimp trawlers from 2012 to 2015 shows little or no interaction with sensitive habitats identified by the MAREANO Project. In Norway, there are several ongoing projects aimed at developing more effective and environmentally friendly trawl gear for shrimp fisheries, which are looking at improving the effectiveness of sorting grids in existing trawls and reducing the weight of the gear in order to limit impact and reduce fuel use (Modulf Overvik, Norwegian Directorate of Fisheries, pers. comm.).

At the surveillance audit the Client advised the audit team that there had been a number of areas closed on a temporary basis in the Svalbard FPZ because of high bycatches of redfish. The vessel skippers stated that these closures had an impact on their fishing activities because high catch rates of shrimps were achieved in the closed areas. The Client confirmed that there had been no new closures in the Svalbard FPZ aimed at protecting habitat. The Client also confirmed that the area of the Loop Hole that was closed in 2015 (as a precautionary measure to protect habitat features) remains closed.

Since the original certification report the UoC has been extended to cover four Greenland vessels and a Lithuanian vessel. Expedited audit reports concluded that there would be no impact on the scores concerning bycatch (2.2), ETP species (2.3) and ecosystem impacts (2.5) because the Greenland and Lithuanian vessels will operate with identical fishing gear and mesh size in the same geographic region and target the same stock as the Faroe Islands fleet that was assessed during the original assessment. In relation to retained species (2.1), at the time of the site visits information provided to the team showed that no species other than cold water prawn is retained by the Greenland and Lithuanian vessels and therefore the addition of the Greenland and Lithuanian vessels will have no impact on the scores for retained species. The expedited assessments considered that the Greenland and Lithuanian vessels might fish in different fishing areas which could have a different impact on vulnerable bottom habitats. The information




presented at the site visits however showed that the Greenland and Lithuanian vessels are likely to operate on the same fishing grounds in the Svalbard FPZ, NEAFC Zone and Russian EEZ as the Faroe Islands vessels. The Faroe Islands shrimp fleet consists of 4 or 5 vessels and so with the addition of four Greenland vessels and a Lithuanian vessel, the Unit of Certification would increase to 6 around 9-10 vessels. The total impact of the fishery was and remains therefore very limited when the total area of the Barents Sea is taken into account. The areas that are fished have generally been fished many times before which means that these areas have already been disturbed before and the fauna comprise of opportunistic, short-lived organisms.

The Faroe Islands Client and the Ministry confirmed that there had been no changes in 2017 in the fishing grounds and that no new potential impacts of the Faroe Islands shrimp fishery on the ecosystem have been identified.

2.3 Changes to the management system

The original MSC certification report provided the details of fishery management for the northeast Arctic cold water prawn fishery. No TAC has been established for this stock but the fishery is regulated by effort control, and a partial TAC (Russian zone only). Licenses are required for the Russian and Norwegian vessels and their fishing activity is constrained only by bycatch regulations (mesh size and sorting grids) and extensive use of area closures when small shrimp (< 15mm CL) or small fish (red fish, Greenland halibut, cod and haddock) are present in catches above defined limits. Faroe Islands vessels are not permitted to fish in the Norwegian EEZ and so are restricted to fishing within the Svalbard FPZ, in the NEAFC-administered international waters of the 'Loop Hole', and in the Russian EEZ. Greenland vessels are not permitted to fish in the Loop Hole, so are restricted to fishing in the Svalbard FPZ and the Russian EEZ. Lithuanian vessels are restricted to fishing in the Svalbard FPZ and the Loop Hole. Management regulations differ across the various fishing zones, and vessels require a licence to fish in all areas issued by the Faroe Islands Ministry of Fisheries and Fisheries Inspection (FVE). These licences are valid for one year only, so the Faroe Islands authorities can react rapidly to any change in stock status. Similar licences are required by the Greenland and Lithuanian vessels to fish for shrimp in the various areas.

Faroe Islands, Greenland and Lithuanian vessels are allowed to fish in the Svalbard FPZ under Norwegian regulations under which the number of vessels permitted to fish in the Svalbard FPZ is limited by country and by an overall limit on effective fishing days. Denmark is a contracting party to NEAFC, which allows Faroe Islands vessels to fish in the Loop Hole, as are Lithuanian vessels. Faroe Islands and Lithuania restrict the number of licences to fish in this area, but there is no quota and no limits on effective fishing days for Faroe Islands or Lithuanian vessels, and there is potential for new licences to be taken up in the future by other vessels wishing to fish in this area. Fishing must be undertaken as set out in the NEAFC Scheme of Control and Enforcement. There is a TAC in Russian waters for Faroe Islands vessels of 5000 tonnes per annum, recently raised from 4000 tonnes, two Greenland vessels currently have quotas of 250 tonnes each for the Russian EEZ and by-catch levels are regulated through a bi-lateral agreement between Faroe Islands and Russia. All vessels are subject to inspections by Norwegian inspectors in the Svalbard FPZ, by EU control vessels, Norwegian vessels or any other NEAFC contracting party's inspectors in the international waters, and in Russian waters, vessels must have a Russian observer on board at all times.



In all areas, Faroe Islands and Lithuanian vessels have a Vessel Monitoring System (VMS) on board and must complete electronic log books (ERS), but paper log books are also required in some of the more northerly areas of the fishery where there are no internet connections. There is currently no requirement for Greenland vessels to complete electronic log books, but they are required to provide detailed haul-by-haul data on paper records, producing daily and weekly catch reports. The respective Ministries undertake cross-checks of VMS records, log book records, landings declarations and sales notes and these cross-checks confirm that there has been no systematic misreporting of fishing activity and landings. The respective Ministries confirm that there have been no major compliance issues with UoC vessels in previous years, but in 2016 one Faroe Islands vessel was caught fishing in a closed area of the Svalbard FPZ, and there have been occasional infringements relating to incorrect completion of fishing activity records.

There have been no changes to the management system in Faroe Islands, Greenland and Lithuania in 2017. However at this year's surveillance audit, the Faroe Islands Ministry confirmed that a new Fisheries Law is likely to be implemented in 2018 and this may include changes to the methods for allocations of licenses. The respective Ministries emphasised that the status of the stock determines the short and long-term objectives, and currently no additional management measures are required due to the good state of the shrimp stock.

There have been no changes to personnel or responsibilities within the Ministries and scientific institutes in Faroe Islands, Greenland and Lithuania which would have a significant influence on the way in which the shrimp fishery is managed.

2.4 CoC considerations

The MSC Fisheries certificate (F-DNV-146646) applies only to the fishing vessels specified in Appendix 5 of this surveillance report up to the sale at point of landing (cold/freezer store or processing plant). The certificate includes vessels from Faroe Islands, Greenland and Lithuania. Two Faroese vessels; Akraberg and Sjurdarberg, owned by respectively P/F Framherji and P/F JFK Trol, joined the Faroese certificate in December 2016 (after the third surveillance audit site visit). In June 2017 one of the Maresco vessels, Havborg, was sold to Russia, and is no longer a part of the certificate. The Greenland and Lithuanian vessels were included in the certificate in April and May 2017. The Lithuanian vessel, Plutonas, was sold to Russia in summer 2017, and is no longer included in the certificate. However the Lithuanian company Seivalas is planning to buy an other vessel and this vessel will be included in the certificate if there is no differentiation in its fishing activity, license/regulation and traceability system compared to the former vessel.

From 2017 all Faroese vessels must have e-logbook. E-logbook data on catch is sent to the Fisheries Inspection (VØRN) every day, while the whole logbook is sent after landing. Apart from this no changes in the CoC were observed during the surveillance activities compared to the 3rd surveillance for the Faroese fishery or the initial certification (scope extension of the certificate) of the Greenland and Lithuanian vessels.

Land-based peeling/processing plants, as well as cold/freezer stores, that perform anything more than movement of products must have separate CoC certification in accordance with MSC Certification Requirements.

2.5 Catch data

Table 3 TAC and Catch Data

TAC	Year	2017	Amount	N/A
UoA share of TAC	Year	2017	Amount	N/A
UoC share of TAC	Year	2017	Amount	N/A
Total green weight catch by UoC	Year (most recent)	2016	Amount	4899 t
	Year (second most recent)	2015	Amount	4665 t

Note that the Greenland vessels and the Lithuanian vessel did not enter the UoC until 2017, so the figures in Table 3 above do not include landings from these vessels. Provisional Faroe Islands and Greenland landings data for 2017 up to October 2017 are 4523 and 3490 tonnes respectively, suggesting that overall landings are going to be higher in 2017 than in the previous two years.

2.6 Summary of Assessment Conditions

Table 4 Summary of Assessment Conditions

Condition number	Performance indicator (PI)	Status	PI original score	PI revised score
1	1.2.1	Behind target (Milestones revised – see Table 8)	70	Not revised
2	1.2.2	On target, milestones revised at 3 rd Surveillance Audit – see Table 9.	75	Not revised
3	2.4.3	Closed at 4th surveillance audit	75	Not revised

3 THE ASSESSMENT PROCESS

3.1 Scope of the assessment

The MSC Fisheries CR and guidance v2.0 define the Unit of Certification (UoC) (i.e., the unit entitled to receive an MSC certificate) as follows:

“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 fisheries covered by this certification are defined as described in Table 4 below.

Table 5 UoC

Fishery Name	Faroe Islands North East Arctic Cold Water Prawn
Species	Northern shrimp, cold water prawn (<i>Pandalus borealis</i>)
Geographical area	Barents Sea and Svalbard in FAO statistical area 27, ICES I and II
Method of capture	Bottom trawl with sorting grid
Stock	Barents Sea shrimp (ICES Division I and II)/FAO 27
Management	<ul style="list-style-type: none"> • Faroe Islands and Greenland Fisheries Management • Lithuania Fisheries Management / EU Commission • NEAFC • Norwegian Fisheries Management (Svalbard FPZ) • Russian Fisheries Management (EEZ of Russian Federation) <p>The stock is managed according to ICES advice.</p>
Client group	<p>The client group is represented by the following ship owners:</p> <ul style="list-style-type: none"> • P/F Thor with shrimp trawler Kappin (formerly Sermilik II) • P/F Havborg with shrimp trawler Havborg. • P/F Líðin with shrimp trawler Arctic Viking. <p>Faroese company P/F Framherji represented by the vessel: Akraberg</p> <p>Faroese company P/F JFK Trol represented by the vessel: Sjurdarberg</p> <p>Greenland company Royal Greenland represented by the vessels: Akamalík, Qaqqatsiaq and Natarnaq</p> <p>Greenland company Nanoq Seafood represented by the vessel: Tasermiut</p> <p>Lithuanian company JSC Seivalas (was at certification represented by the vessel Plutonas, but the vessel was sold in August 2017)</p>
Other eligible fishers:	<p>The Faroese client group represent the entire Faroe Islands fishery for shrimp in the Barents Sea. If at a later date more vessels are added to the Faroe Islands shrimp fishery in the Barents Sea, their eligibility to share the certificate will be considered upon the application. New vessels owned by the client group will automatically (subject to full compliance with MSC requirements) be eligible to share the MSC certificate.</p> <p>There are currently no Greenland or Lithuanian vessels other than the above mentioned included in the UoC. If at a later date more vessels are added to the Greenland shrimp fishery in the Barents Sea, their eligibility to share the certificate will be considered upon the application. If at a later date the vessel</p>

	owners add more vessels to their fleet that fish in the Barents Sea for cold water shrimp under Greenland or Lithuanian management, they will automatically (subject to full compliance with MSC requirements) be eligible to share the MSC certificate. Vessels outside the client group in Lithuania are not eligible to share the MSC certificate.
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3.2 History of the assessments

3.2.1 Summary of the original assessment

The intent of the Faroe Islands North East Arctic Cold Water Prawns fishery to become MSC certified was announced on 20 September 2012, and the fishery received its certification on 5 December 2013. Scope of certification is up to the point of landing and chain of custody commences following the sale at the point of landing.

The default assessment tree, set out in the MSC Certification Requirements, version 1.2, was used for the initial assessment. The original assessment was carried out by DNV GL Lead Auditor and Team Leader Anna Kiseleva and Principle Experts Julian Addison (Principle 1), Bert Keus (Principle 2) and Óli Samró (Principle 3). Following guidance from the client, 34 stakeholders were identified and consulted during the assessment process.

The fishery attained a score of 80 or more against each of the MSC Principles and did not score less than 60 against any of the individual MSC Criteria. In the initial certification the scores of the three Principles were:

Table 6 Principle scores – Original assessment:

Principle	Score
Principle 1 – Target Species	84,4
Principle 2 – Ecosystem	87,0
Principle 3 – Management	90,8
System	

The fishery achieved a score of below 80 against 3 scoring indicators. The assessment team has therefore set 3 conditions for continuing certification that the client is required to address. The assessment team also made one 'non-binding' recommendation.


Conditions and recommendations are presented in full in section 4 of this annual surveillance report

3.2.2

3.2.2 First annual surveillance – 2014

The first surveillance audit was performed as an on-site audit and conducted according to MSC Certification Requirements, version 1.3, 14 January 2013. The default assessment tree, set out in the MSC Certification Requirements, was used for this surveillance.

The surveillance was announced on the MSC website on 2 October 2014 followed with a supporting notice to stakeholders issued by the MSC on the same date. Direct e-mail notification was also



sent to the stakeholders that had previously been identified for this fishery, inviting interested parties to contact the audit team.

The surveillance visit for this fishery was conducted in Torshavn on 11 November 2014. Members of the original assessment team, Julian Addison, and DNV GL project manager Sigrun Bekkevold, gathered input from the various stakeholders, including the Ministry of Fisheries, Fisheries Inspection as well as from the client fishery including Maresco A/S and vessel owners and skippers.

The fishery remained in conformance with the scope criteria relating to unilateral exemption and destructive fishing practices (Certification Requirements v1.3 section 27.4.4). The fishery cannot be considered as an enhanced fishery as it does not meet the enhanced fisheries criteria required under the MSC CR 27.4.12.

There were no changes to scoring of performance indicators at the 1st surveillance audit.

3.2.3 Second annual surveillance – 2015

The second surveillance audit was performed as an on-site audit and conducted according to MSC Certification Requirements, version 1.3, 14 January 2013. The default assessment tree, set out in the MSC Certification Requirements, was used for this surveillance.

The surveillance was announced on the MSC website on 1 October 2015 followed with a supporting notice to stakeholders issued by the MSC on the same date. Direct e-mail notification was also sent to the stakeholders that had previously been identified for this fishery, inviting interested parties to contact the audit team.

The surveillance visit for this fishery was conducted in Torshavn on 3 November 2015. Members of the original assessment team, Julian Addison, and DNV GL project manager Sigrun Bekkevold, gathered input from the various stakeholders, including the Ministry of Fisheries, Fisheries Inspection as well as from the client fishery including Maresco A/S and vessel owners and skippers.


The fishery remained in conformance with the scope criteria relating to unilateral exemption and destructive fishing practices (Certification Requirements v1.3 section 27.4.4). The fishery cannot be considered as an enhanced fishery as it does not meet the enhanced fisheries criteria required under the MSC CR 27.4.12.

There were no changes to scoring of performance indicators at the 2nd surveillance audit.

3.2.4 Third annual surveillance – 2016

The third surveillance audit was performed as an on-site audit and conducted according to MSC Certification Process Requirements, version 2.0. The default assessment tree, set out in the MSC Certification Requirements version 1.2, was used for this surveillance.

The surveillance was announced on the MSC website on 11 October 2016 followed by a supporting notice to stakeholders issued by the MSC on the same date. Direct email notification was also sent to the stakeholders that had previously been identified for this fishery, inviting interested parties to contact the audit team.



The surveillance visit for this fishery was conducted in Torshavn, Faroe Islands, on 23 November 2016. Members of the original assessment team, Julian Addison, and DNV GL project manager, Sigrun Bekkevold, gathered input from the various stakeholders, including the Faroe Islands Ministry of Fisheries and Fisheries Inspection (FVE) as well as from the Faroe Islands client fishery. Julian Addison participated in the meetings remotely.

The fishery remains in conformance with the scope criteria relating to unilateral exemption and destructive fishing practices (Certification Requirements v2.0 section 7.4). The fishery cannot be considered as an enhanced fishery as it does not meet the enhanced fisheries criteria required under the MSC CR 7.4.

3.2.5 Scope extension process – 2016/2017

Following the third surveillance audit, changes in the Unit of Certification were evaluated to include firstly Greenland vessels fishing in the same areas as the Faroe Islands fleet, and secondly a Lithuanian vessel fishing in the same areas as the Faroe Islands fleet. Members of the original assessment team, Bert Keus, and DNV GL project manager, Sigrun Bekkevold undertook the scope extension for the Greenland vessels. Members of the original assessment team, Julian Addison and DNV GL project manager, Sigrun Bekkevold undertook the scope extension for the Lithuanian vessel. The assessment teams met with the Greenland and Lithuanian clients and the relevant authorities.

Following the expedited audits to assess the scope extensions, the Unit of Certification was extended to include both the Greenland vessels and the Lithuanian vessel. The scope extension reports and revised vessel lists for the Greenland vessels and the Lithuanian vessel were published on the MSC website in April 2017 and May 2017 respectively.

<https://fisheries.msc.org/en/fisheries/faroe-islands-north-east-arctic-cold-water-prawn/@assessments>

3.2.6 Fourth annual surveillance – 2017

The fourth surveillance audit was performed as an on-site audit and conducted according to MSC Certification Process Requirements, version 2.0. The default assessment tree, set out in the MSC Certification Requirements, version 1.2, was used for this surveillance.

The surveillance included the fisheries that were added to the certificate in 2017; four Greenland vessels and one Lithuanian vessel fishing for cold water prawn in the Barents Sea.

The surveillance was announced on the MSC website on 5 September 2017 followed by a supporting notice to stakeholders issued by the MSC on the same date. Direct email notification was also sent to the stakeholders that had previously been identified for this fishery, inviting interested parties to contact the audit team.

The surveillance visit for this fishery was conducted in Lithuania, Denmark and Faroe Islands 17-19 October 2017. There were also a skype meeting 6 November 2017. Members of the original assessment team for the cold water prawn certification, Julian Addison, and DNV GL project manager, Sigrun Bekkevold, gathered input from the various stakeholders, including the Faroese, Greenland and Lithuanian authorities and clients.

Table 7 shows the list of participants and issues discussed in the meetings with the clients, research institutes and the authorities.

Table 7. Site visits conducted and key issues discussed

Stakeholder	Name, Affiliation	Date	Key issues
Client representatives:			Info about client and the fishery <ul style="list-style-type: none"> History and organizational structure Fishing operations: <ul style="list-style-type: none"> Fishing season Fishing area UoC Fleet Fishing practices: <ul style="list-style-type: none"> Gears used Fishing area Fishing depth Composition of catch Info on discarding Sampling and weighting on board Closed areas Loss of fishing gear
JSC Seivalas	Vytas Ramauskas	16.10.2017	
Royal Greenland, Nanoq Seafood, Framherji & JFK Trol	Lisbeth Schönnemann-Paul, Elvar Arni Lund (by skype), Halldor Leifsson (by skype), Durita i Grotinum	18.10.2017	
Maresco A/S	Eyduun Durhuus, Arnbjørn Erholm, Johannes Joensen, Annika Zachariassen, Johan Joensen, Hans Annsias	19.10.2017	Impact on ecosystem: <ul style="list-style-type: none"> List of all by-catch of fish species: (species and quantities) By-catch of marine mammals, ETP species, birds List of commercial/non-commercial species which are usually discarded (quantities/if known) Protected or sensitive habitats within geographical range of target stock Effect of gear used on the habitat Reporting & registration of by-catch/discards Sorting/separation of by-catch Sampling Management, compliance with rules and regulations <ul style="list-style-type: none"> Fishery management plans Disputes with national / international authorities for the last 5 years. Records of sanctions and penalties in 2015, 2016 and 2017 (if any). Control & surveillance: <ul style="list-style-type: none"> VMS system Landing control Quota control Inspections on board Participation in research projects Amount and type of information provided to management bodies Cooperation with management bodies Management evaluation Chain of Custody start: <ul style="list-style-type: none"> Fishing outside UoC Review of traceability system on board and at landing Labelling of products



			<ul style="list-style-type: none">• First point of landing• First point of sale• Main products• Main markets Review of progress against conditions
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Authorities:			<ul style="list-style-type: none"> • Function, role and responsibility • Harvest strategy for the fisheries, including regulations limiting fishing effort and harvest control rules • Short-term and long-term management objectives for the fisheries • Consultation and decision-making process for the stocks in the fisheries • Stakeholder involvement in decision-making • Regulations for the fisheries in the relevant geographical area • Control, surveillance and monitoring routines/regulations applied to the fisheries in the relevant geographical area • Level of slipping/discards • Strategy for minimising or eliminating ETP by-catch • Strategy and plans for protection of sensitive habitats • Fishermen's compliance with laws and regulations. • Significant discrepancies found at landing control for the fisheries in the last year • Quota and catch data for the 3 most recent fishing seasons • Observed fishing pattern (gear used, fishing area, number of boats, fishing season) • Updated VMS data for the shrimp fisheries • Mechanisms for resolution of legal disputes • Strategy in scientific work
Ministry of Fisheries & Fisheries Inspection (Vørn) in Faroe Islands	Ulla Svarrer Wang, Meinhard Gaardlykke	19.10.2017	
Ministry of Agriculture, Fisheries Control and Monitoring Div. of Lithuania	Tomas Dambrauskis, Eglė Radaitytė	17.10.2017	
Ministry of Fisheries and Hunting & GFLK in Greenland (skype)	Esben Ehlers, Mads Nedregaard	06.11.2017	


The fishery remains in conformance with the scope criteria relating to unilateral exemption and destructive fishing practices (Certification Requirements v2.0 section 7.4). The fishery cannot be considered as an enhanced fishery as it does not meet the enhanced fisheries criteria required under the MSC CR 7.4.

3.3

3.3

3.3 Harmonisation

Two other cold water prawn fisheries in the Barents Sea, those for Norway and Estonia, have also been certified. Although the fisheries have not previously been harmonised formally, the certificate for the Norwegian fishery has been extended for a further year until March 2018 specifically to allow all three Barents Sea cold water prawn fisheries to undergo the re-certification process in 2017 using MSC Certification Requirements v2.0. This will ensure complete harmonisation including consistency of outcomes and also ensuring simultaneous milestones in the Client Action Plans.



In addition to cold water prawn fisheries, there are a number of other certified trawl fisheries in the Barents Sea and it will be necessary to harmonise the assessment of the cold water prawn fisheries with these other fisheries particularly in relation to their potential impact on habitat. An initial harmonisation meeting of P2 assessment team members was held in November 2015 by the MSC to discuss harmonisation of habitat scoring for Barents Sea trawl fisheries. The meeting centred around the reasons why there was such a variation in scores across fisheries, but no overall conclusions were drawn as to how the fisheries should be harmonised. In addition, a workshop was held in Oslo in April 2016 to discuss harmonisation under CRv2.0. The output of this workshop and future meetings will provide guidance on harmonisation of Barents Sea cold water prawn fisheries with other certified Barents Sea fisheries.

4 RESULTS

Table 8: Condition 1. Absence of limitations on fishing effort in International Waters (The 'Loop Hole')

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	1.2.1. There is a robust and precautionary harvest strategy in place	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving management objectives reflected in the target and limit reference points.	70
Condition	By the fourth annual surveillance, regulations limiting fishing effort in international waters (ICES Ia and Ib), that are responsive to the state of the stock, should be implemented to demonstrate that the elements of the harvest strategy work together towards achieving management objectives for the Barents Sea shrimp stock as a whole.		
Milestones	<p>Annual surveillance 1: Show written evidence of consultation with relevant authorities and stakeholder groups in relation to options limiting fishing effort in international waters</p> <p>Annual surveillance 2: Provide an evaluation of options considered for potential mechanisms for limiting fishing effort</p> <p>At the 2nd surveillance audit, the audit team revised the milestones for this condition as follows:</p> <p>Annual surveillance 3: Ensure that shrimp is included in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement through consultation with the relevant authorities.</p> <p>Annual surveillance 4: Implement regulations for limiting shrimp fishing effort within the NEAFC region known as the Loophole through consultation with relevant authorities.</p> <p>At the 3rd surveillance audit, the audit team revised the milestones for this condition as follows:</p> <p>Annual surveillance 4: Ensure that shrimp is included in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement through consultation with the relevant authorities.</p> <p>Annual surveillance 5, i.e. within the period of certification: Implement regulations for limiting shrimp fishing effort within the NEAFC region known as the Loophole through consultation with relevant authorities.</p>		
Client action plan	FR (Felagid Rækjuskip, Faroese Prawn Trawlers Association), representing the Maresco AS and the associated vessels, will work to express its views and recommendations on the harvest control to the Ministry of Fisheries of Faroe Islands, who is the negotiating part on behalf of Faroe Islands in NEAFC		

	<p>organs. The Ministry will use all their effort to get this issue on the agenda at NEAFC's annual meetings in order to have this settled with all member states of NEAFC. FR will continue to monitor the fishing effort in the zones and notify national administration as soon as utilization rate increase. Towards Norwegian and Russian administration, FR will during yearly, bilateral negotiations, advise all parties about its view and push them to take action in the particular area in NEAFC.</p> <p>FR will approach NGO's and open a dialog with relevant NGO's and draw their attention to the matter.</p>
Progress on Condition [Year 1]	<p>At the 1st surveillance audit in 2014, the Client reported that representations had been made to the Faroe Islands Ministry of Fisheries expressing the view that regulations are required to limit fishing effort within the international waters known as the 'Loophole', which falls under the jurisdiction of NEAFC. Within NEAFC, dialogue on conservation issues is initiated by the Coastal States. During the 1st surveillance audit, the Ministry of Fisheries confirmed that it had not yet commenced discussions with the Commission on regulation of shrimps in the Barents Sea, and the client confirmed that management of the Barents Sea shrimp fishery was not discussed at the Annual Meeting of NEAFC held from 10 to 14 November 2014. The Ministry of Fisheries cautioned that the good status of the shrimp stock would make it difficult to persuade other coastal states that the shrimp fishery needed additional management measures.</p> <p>The condition required that at the first surveillance audit written evidence should be provided of consultation with relevant authorities and stakeholder groups in relation to options limiting fishing effort in international waters. The Ministry of Fisheries confirmed at the 1st surveillance audit that it had not yet opened dialogue with NEAFC and the condition was considered therefore to be behind target.</p>
Progress on Condition [Year 2]	<p>At the 2nd surveillance audit, the Client reported that further representations had been made to the Faroe Islands Ministry of Fisheries expressing the view that regulations are required to limit fishing effort within the international waters known as the 'Loophole'. The Ministry of Fisheries informed the audit team that within NEAFC, proposals and decisions are usually made by the coastal states and that within the Danish delegation, the Faroese Foreign Ministry is the representative at NEAFC. The Ministry of Fisheries made a request to the Foreign Ministry to propose that shrimp be included within the list of species in Annex 1 (Regulated Resources) of the NEAFC Scheme of Control and Enforcement thereby ensuring that shrimps are subject to recommendations under the NEAFC Convention (see communication from Ministry of Fisheries in Appendix 3). The proposal was referred to the Permanent Committee on Control and Enforcement, and is expected to be discussed further at the NEAFC annual meeting in November 2015. The Ministry of Fisheries confirmed therefore that although dialogue has been opened, no decision has yet been made on the inclusion of shrimps in Annex 1 and therefore options for potential mechanisms for limiting fishing effort in the Loop Hole have not yet been considered. NEAFC have however introduced a new closed area within the Loop Hole in which bottom fishing is not permitted. This closure applies to all bottom fishing including shrimp trawling.</p> <p>The audit team noted that dialogue had been opened with NEAFC ensuring the 1st year milestone had been reached, but that as the proposal to include shrimp in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement had not yet been agreed, options for potential mechanisms for limiting fishing effort in the Loop Hole have not yet been considered. The 2nd</p>

	<p>year milestone had not therefore been reached and the audit team considered that the condition was behind target. The Ministry of Fisheries reiterated the view expressed at the 1st surveillance audit that the good status of the shrimp stock would make it difficult to persuade other coastal states that the shrimp fishery needed additional management measures.</p> <p>In view of the need for agreement to be reached by all contracting parties to NEAFC in order to meet this condition, the audit team acknowledged that the timescales for progress on this condition prescribed during the original assessment had been unduly optimistic. The audit team considered that progress, although slow, was being made against this condition and that remedial action was not necessary therefore. The audit team considered however that the milestones for this condition should be revised as follows:</p> <p>Annual surveillance 3: Ensure that shrimp is included in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement through consultation with the relevant authorities.</p> <p>Annual surveillance 4: Implement regulations for limiting shrimp fishing effort within the NEAFC region known as the Loophole through consultation with relevant authorities.</p>
Progress on Condition [Year 3]	<p>At the third surveillance audit, the Client stated that they had continued to lobby the Ministry to work with NEAFC to limit fishing effort in the Loop Hole area (see letter from Client to Ministry in Appendix 3 of this report). The Ministry re-iterated their view that the Faroe Islands shrimp fleet in NEAFC waters was strictly limited as was the case for all the other countries that fish for shrimp in NEAFC waters, and that in view of the good status of the shrimp stock, it would be difficult to persuade other coastal states that the shrimp fishery needs additional management measures. Despite lobbying from the Client and further attempts to lobby NEAFC to include shrimp in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement, the Ministry confirmed that no further progress had been made.</p> <p>The audit team re-acknowledged that the timescales for progress on this condition prescribed during the original assessment had been unduly optimistic, and indeed the audit team had again been over-optimistic when they revised the milestones at last year's surveillance audit, because of the long time required to implement new management measures within Regional Fisheries Management Organisations such as NEAFC. The audit team considered that, although progress was behind target, remedial action was not necessary but that the milestones for this condition should be revised as follows:</p> <p>Annual surveillance 4: Ensure that shrimp is included in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement through consultation with the relevant authorities.</p> <p>Annual surveillance 5, i.e. within the period of certification: Implement regulations for limiting shrimp fishing effort within the NEAFC region known as the Loophole through consultation with relevant authorities.</p> <p>The audit team also agreed with the Client that before the next surveillance audit the CAB should consult with MSC as to whether there was an option to carry forward this condition into the re-assessment because of the long time required to implement new management measures within Regional Fisheries Management Organisations (RFMO) such as NEAFC, particularly in cases such as the shrimp fishery where new management measures may not be a priority for the RFMO.</p>
Progress on	At this fourth surveillance audit, the various Ministries re-iterated their view

Condition [Year 4]	<p>that the Faroe Islands, Greenland and Lithuania shrimp fleet in NEAFC waters was strictly limited as was the case for all the other countries that fish for shrimp in NEAFC waters, and that in view of the good status of the Barents Sea shrimp stock, it would be difficult to persuade other coastal states that the shrimp fishery needs additional management measures. Despite lobbying from the Client and further attempts to lobby NEAFC to include shrimp in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement, the various Ministries confirmed that (as of October 2017) the inclusion of shrimp in Annex 1 had not yet occurred. Nevertheless the annual NEAFC meeting will be held in mid-November 2017 when the issue of including shrimps in Annex 1 will be raised again.</p>
Status of condition	<p>The audit team once again acknowledged that the timescales for progress on this condition prescribed during the original assessment had been unduly optimistic, and indeed the audit team had again been over-optimistic when they revised the milestones at the second surveillance audit, because of the long time required to implement new management measures within Regional Fisheries Management Organisations such as NEAFC. The audit team considered that, although progress was behind target, remedial action was not necessary but that the milestones for this condition should be revised as follows:</p> <p>Annual surveillance 5, i.e. within the period of certification: Ensure that shrimp is included in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement through consultation with the relevant authorities. Implement regulations for limiting shrimp fishing effort within the NEAFC region known as the Loophole through consultation with relevant authorities.</p> <p>The audit team acknowledged that because of the difficulties involved with implementing new management measures within Regional Fisheries Management Organisations such as NEAFC, it was unlikely that the Client group would be able to meet this condition within the period of certification. As such the CAB is currently in consultation with MSC as to whether there was an option to carry forward this condition into the re-assessment because of the long time required to implement new management measures within Regional Fisheries Management Organisations (RFMO) such as NEAFC, particularly in cases such as the shrimp fishery where new management measures may not be a priority for the RFMO.</p>

Table 9: Condition 2. Absence of harvest control rules

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	1.2.2 There are well defined and effective harvest control rules in place.	Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.	75
Condition	By the fourth annual surveillance, well defined harvest control rules shall be implemented for the shrimp stock as a whole to ensure that the exploitation rates are reduced as limit reference points are approached.		
Milestones	<p>Annual surveillance 1: Show written evidence of consultation with relevant authorities and stakeholder groups in relation to options for HCRs.</p> <p>Annual surveillance 2: Provide an evaluation of options considered for potential HCRs</p> <p>At the 2nd surveillance audit in 2015, the audit team revised the milestones for this condition as follows:</p> <p>Annual surveillance 3: Ensure that shrimp is included in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement through consultation with the relevant authorities, and through liaison with the Norwegian fishery client, provide an evaluation of options considered for potential HCRs.</p> <p>Annual surveillance 4: Implement HCR through consultation with relevant authorities.</p>		
Client action plan	<p>FR (Felagid Rækjuskip, Faroese Prawn Trawlers Association), representing the Maresco AS and the associated vessels, will work to express its views and recommendations on the harvest control to the Ministry of Fisheries of Faroe Islands, who is the negotiating part on behalf of Faroe Islands in NEAFC organs. The Ministry will use all their effort to get this issue on the agenda at NEAFC's annual meetings in order to have this settled with all member states of NEAFC. FR will continue to monitor the fishing effort in the zones and notify national administration as soon as utilization rate increase. Towards Norwegian and Russian administration, FR will during yearly, bilateral negotiations, advice all parties about its view and push them to take action in the particular area in NEAFC.</p> <p>FR will approach NGO's and open a dialog with relevant NGO's and draw their attention to the matter.</p>		
Progress on Condition [Year 1]	<p>At the 1st surveillance audit the Client reported that representations had been made to the Faroe Islands Ministry of Fisheries expressing the view that there needed to be an explicit harvest control rule for the Barents Sea shrimp fishery. A harvest control rule is likely to apply to the whole fishery, so dialogue will be required with a number of authorities. Within NEAFC, dialogue on conservation issues is initiated by the Coastal States. During the 1st surveillance audit, the Ministry of Fisheries confirmed that it had not yet commenced discussions with the Commission on a harvest control rule for the shrimp stock in the Barents Sea, and the client confirmed that management of the Barents Sea shrimp fishery was not discussed at the Annual Meeting of</p>		

	<p>NEAFC held from 10 to 14 November 2014. The Ministry of Fisheries cautioned that the good status of the shrimp stock would make it difficult to persuade other coastal states that the shrimp fishery needs additional management measures.</p> <p>The milestone at the 1st annual surveillance audit for this condition required that written evidence should be provided of consultation with relevant authorities and stakeholder groups in relation to considering options for a suitable harvest control rule. The audit team recognised that progress in meeting this condition was likely to be slow, but at the 1st surveillance audit the Ministry of Fisheries confirmed that it had not yet opened dialogue with the relevant authorities and the condition was considered therefore to be behind target.</p>
Progress on Condition [Year 2]	<p>At the 2nd surveillance audit, the Client reported that further representations had been made to the Faroe Islands Ministry of Fisheries expressing the view that there needed to be an explicit harvest control rule for the Barents Sea shrimp fishery. Implementation of a harvest control rule for the whole Barents Sea shrimp stock will require dialogue between Norway, Russia and contracting parties of NEAFC. The Ministry of Fisheries informed the audit team that within NEAFC proposals and decisions are usually made by the coastal states and that within the Danish delegation, the Faroese Foreign Ministry is the representative at NEAFC. The Ministry of Fisheries made a request to the Foreign Ministry to propose that shrimp be included within the list of species in Annex 1 (Regulated Resources) of the NEAFC Scheme of Control and Enforcement thereby ensuring that shrimps are subject to recommendations under the NEAFC Convention. The proposal was referred to the Permanent Committee on Control and Enforcement, and was expected to be discussed further at the NEAFC annual meeting in November 2015. The Ministry of Fisheries confirmed therefore that although dialogue had been opened, no decision had yet been made on the inclusion of shrimps in Annex 1 and therefore options for potential harvest control rules for the shrimp fishery had not yet been considered.</p> <p>The implementation of a harvest control rule for the Barents Sea shrimp stock will require cooperation between Norway, Russia and contracting parties of NEAFC. At the 2nd surveillance audit, the Ministry of Fisheries reported that dialogue had been opened with NEAFC on shrimp fisheries management ensuring the 1st year milestone had been reached, but that as the proposal to include shrimp in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement had not yet been agreed, options for potential harvest control rules for the shrimp fishery had not yet been considered. The 2nd year milestone had not therefore been reached and the audit team considered that the condition was behind target. The audit team noted the difficulty faced by the Client in meeting milestones for this condition as it needed action on behalf of NEAFC and the Norwegian and Russian authorities to meet the condition and that such action may not occur quickly, but recognised that the Ministry of Fisheries through the Foreign Ministry is lobbying strongly for shrimp fisheries management to be incorporated within the NEAFC Scheme of Control and Enforcement.</p> <p>The Client is aware that the largest fleet from Norway within the Barents Sea fishery has also received MSC certification and that the Norwegian fishery certification assessment also raised a condition against the absence of a well-defined harvest control rule. The third annual surveillance audit of the Norwegian fishery took place in February 2015, during which the audit team were advised that the development of a HCR is part of a wider management plan for the shrimp fishery under consideration by the Norwegian Ministry of Trade, Industry and Fisheries. The Norwegian Ministry advised that the process of developing a shrimp management plan had been initiated, but not yet finalised, and no information was available currently. During discussions</p>

	<p>the audit team recognised that the development of a HCR within a wider management plan for the Barents Sea shrimp fishery was not necessarily a priority because the fishery is regulated through effort control and area management, stock biomass estimates throughout the history of the fishery have been well above B_{msy} and that the current exploitation rate results in catches of around 20,000 tonnes when ICES advice for 2015 is that catches of up to 70,000 tonnes would maintain the current high stock biomass. The audit team noted that under such circumstances, there is scope within the new Certification Requirements v2.0 for timescales for implementing a HCR to be extended.</p> <p>In view of the need for agreement to be reached within NEAFC by all contracting parties, and between NEAFC and Norway and Russia, in order to meet this condition, the audit team acknowledged that the timescales for progress on this condition prescribed during the original assessment had been unduly optimistic. The audit team considered that progress, although slow, was being made against this condition and that remedial action was not necessary therefore. The audit team considered however that the milestones for this condition should be revised as follows:</p> <p>Annual surveillance 3: Ensure that shrimp is included in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement through consultation with the relevant authorities, and through liaison with the Norwegian fishery client, provide an evaluation of options considered for potential HCRs.</p> <p>Annual surveillance 4: Implement HCR through consultation with relevant authorities.</p>
<p>Progress on Condition [Year 3]</p>	<p>At the third surveillance audit, the Client stated that they had continued to lobby the Ministry to work with the relevant authorities to implement a harvest control rule (see letter from Client to Ministry in Appendix 3 of this report). Despite lobbying from the Client and further attempts to lobby NEAFC to include shrimp in the list of species in Annex 1 of the NEAFC Scheme of Control and Enforcement, the Faroe Islands Ministry confirmed that no further progress had been made. The audit team concurred with the Ministry's view that meeting this condition would require negotiations with NEAFC, Norway and Russia, and recognised that the development of a HCR is part of a wider management plan for the shrimp fishery under consideration by the Norwegian Ministry of Trade, Industry and Fisheries. The Norwegian Marine Resources Act provides the legislative framework within which a shrimp fishery management plan can be developed, but the audit team recognised that any management plan would also need to be agreed within international fora such as NEAFC and the Norway/Russia Commission.</p> <p>The audit team agreed therefore that work to meet this condition should be aligned with that being carried out by Norway. At the fourth surveillance audit for the Norwegian fishery in September 2016, the Ministry of Trade, Industry and Fisheries confirmed that the process of developing a shrimp management plan had been initiated, but had still not been finalised. The Norwegian Ministry confirmed that their priority is to complete the development of the management plan for the North Sea and Skagerrak shrimp fishery along with their EU counterparts because there had been recent declines in stock biomass in the North Sea and Skagerrak. The implementation of the North Sea and Skagerrak management plan is expected to provide guidance in the development of a similar management plan for the Barents Sea fishery. The Client continues to express their support for the implementation of a HCR as part of the development of a wider management plan by Norwegian authorities.</p>

	<p>The Norwegian Ministry of Trade, Industry and Fisheries had previously confirmed that a HCR, as part of a wider management plan for the shrimp fishery in the Barents Sea, will not be implemented within the period of the Norwegian certification, even taking into account the extension of the Norwegian certificate to March 2018. The assessment team concluded therefore that this condition on the Faroe Islands fishery will also not be met within the period of certification, and that this condition is therefore behind target. However the assessment team noted that the MSC has issued new guidance in relation to the timeframe required in which to meet conditions raised against PI 1.2.2 in relation to harvest control rules. The MSC has acknowledged that for certified fisheries in which the stock biomass has consistently been above Bmsy during the history of the fishery, and that F is consistently below Fmsy, additional time may be given to the Client in meeting any condition which requires the implementation of a well-defined HCR under PI 1.2.2. This additional flexibility can only be granted to fisheries that will undergo the re-certification process under MSC CRv2.0, and that any additional time required to meet the condition must not extend beyond the third annual surveillance audit of the re-certification. The audit team concluded that as biomass has been above Bmsy for the entire history of the Barents Sea fishery, that F is consistently below Fmsy, and that the fishery will commence the re-certification process in 2017 using MSC CRv2.0, it is appropriate under new MSC Guidelines to extend the deadline for meeting this condition to the third surveillance audit of the recertified fishery. The third surveillance audit would be expected to take place in 2021. The audit team emphasised to the Client that the new deadline for meeting the condition is an absolute final deadline and cannot be extended further.</p>
Progress on Condition [Year 4]	<p>At this fourth surveillance audit, the audit team confirmed that work to meet this condition had been aligned with that being carried out by Norway. At the fifth surveillance audit of the Norwegian fishery in April 2017, the Norwegian Ministry of Trade, Industry and Fisheries re-confirmed that the process of developing a shrimp management plan including a Harvest Control Rule had been initiated, but had still not been finalised. As detailed in the third surveillance audit report for the Faroe Islands fishery, the audit team concluded that as biomass has been above Bmsy for the entire history of the Barents Sea shrimp fishery, that F is consistently below Fmsy, and that the fishery will commence the re-certification process using MSC CRv2.0, it is appropriate under new MSC Guidelines to consider extending the deadline for meeting this condition to the third surveillance audit of the recertified fishery. The third surveillance audit of the recertification would be expected to take place in 2021. The Client Group continues to express their support for the implementation of a HCR, and will continue to lobby the relevant Ministries to develop a HCR in conjunction with advice from the relevant scientific institutes.</p>
Status of condition	<p>Following the extension of the deadline for this condition granted by the audit team at the third surveillance audit, this condition can be considered to be on target. The CAB is currently in discussions with MSC to agree the extension of the deadline for meeting this condition. The recertification assessment has now commenced using MSC CRv2.0 and, on agreement with MSC, this condition will be carried over into the new certificate.</p>

Table 10: Condition 3. Lack of information on by-catch of corals and sponges

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	2.4.3 Information is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types.	Sufficient data continue to be collected to detect any increase in risk to habitat (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures)	75
Condition	The fishery is required to collect sufficient information on by-catches and spatial distribution of the fishery in order to detect any increase in risk for vulnerable bottom habitats (e.g. due to changes in fishing pattern or effectiveness of the move on rule).		
Milestones	<p>Annual surveillance 1: Develop and implement procedures for monitoring and recording all by-catches of coral and sponges in every fishing haul. Provide the team with the collected data preferably with a map showing all recorded by-catches of sponges and corals. Provide the team with a map with all the VMS data on all UoC fishing vessels. Together with the team analyse the collected data to determine whether significant impacts are likely and where necessary develop appropriate management responses.</p> <p>Annual surveillance 2-4: Provide the team with the collected data preferably with a map showing all recorded by-catches of sponges and corals. Provide the team with a map with all the VMS data on all UoC fishing vessels. Show proof that appropriate management responses are taken where necessary.</p>		
Client action plan	<p>The client will through FR work closely with Havstovan as well as other scientific institutions engaged in protecting the prawn stock and fauna in the area.</p> <p>The client are willing to adjust current level of data collection program for especially corals and sponges in the NEAFC regulatory area, the Norwegian zone, Svalbard Zone and the Russian zone. A program will be implemented by using "MaxSea" Marine Navigation Software as well as other useful tracking systems which is on board each vessel. The MSCV logbook will also be used as a record for this program.</p> <p>All collected data will be provided to Havstovan for further analyzing.</p>		
Progress on Condition [Years 1 & 2]	For every fishing haul the Faroe Islands fleet will record any by-catches of coral and sponges in log books and then avoid that area in future. During the first two years following certification, the Client reported that there have been no incidences of by-catch of coral or sponges. As no by-catch of corals or sponges was observed, no data have been passed on to Havstovan. VMS data of all vessels in the UoC were provided by the Client and these patterns of fishing activity were compared with the biomass distribution of the main taxonomic groups from the joint Norwegian/Russian ecosystem survey in 2013 (Figure 3).		

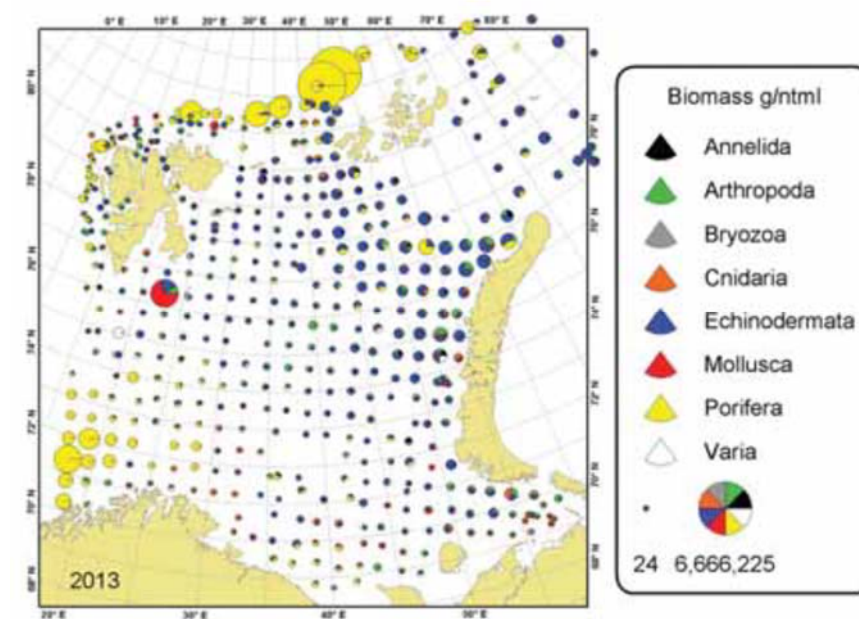


Figure 3. Biomass distribution of main taxonomic groups per station in the Barents Sea during the ecosystem survey 2013 (source: Prokhorova, 2013).

The VMS plots for the most recent years confirm that the fishery does not overlap with the highest concentration areas of the sponges. (VMS plots of fishing activity of each individual vessel in the UoC were presented to the audit team, but were not reproduced here to protect commercial confidentiality.) The Client considered that the observed zero by-catches may be a consequence of the use of the Nordmore grid with bar spacing of 22 mm that may inhibit the by-catch of sponges and corals. In addition all the Faroe Islands vessels within the UoC have CCTV cameras installed on the trawl, and the vessels' skippers confirmed that analysis of camera footage shows that the trawl had not been towed in high density areas of corals or sponges. As there have been no observed incidences of interaction of the fishery with corals and sponges, there had been no requirement to develop additional management measures.

The condition required that procedures for monitoring and recording all by-catches of coral and sponges in every fishing haul had been developed and implemented. This requirement was met at the 1st surveillance audit. In addition at both the 1st and 2nd surveillance audits the client was required to provide a map showing all recorded by-catches of sponges and corals and a map with all the VMS data on all UoC fishing vessels. As no bycatch of corals and sponges was recorded during the two years following certification, maps of bycatch were not required. Comparison of VMS data from all shrimp vessels with the biomass distribution of the main taxonomic groups from the joint Norwegian/Russian ecosystem survey in 2013 suggests that significant impacts were unlikely. There appeared to be no need therefore to introduce new management responses. The condition was considered to be on target.

Progress on Condition [Year 3]

The Faroe Islands fleet continues to record any by-catches of coral and sponges in every fishing haul. Currently the vessels will record any interactions with corals or sponges in the "other species" column of the log book. However vessel skippers noted that a record will generally only be made if any interactions with corals or sponges are observed. The Client has therefore urged the vessel skippers in future to record a "zero" interaction with corals and sponges for each haul, in the same way that a "zero" must be recorded for each haul for any catches of whales, seals or birds in the trawl.

	<p>Since certification, there have been no incidences of by-catch of coral and sponges. VMS data of all vessels in the UoC describe patterns of fishing activity which can be compared with the biomass distribution of the main taxonomic groups from the joint Norwegian/Russian ecosystem survey in 2013 (Figure 3). The VMS plots for 2016 for the Faroe Islands vessels show no change in fishing area for the vessels in the UoC, and confirm that the fishery does not overlap with the highest concentration areas of the sponges. (VMS plots of fishing activity of each individual vessel in the UoC were presented to the audit team, but are not reproduced here to protect commercial confidentiality.) The observed zero by-catches of corals and sponges would be expected within the Loop Hole area of the fishery, but would be less likely in the Svalbard FPZ fishing area. The zero by-catches may be a consequence of the use of the Nordmore grids with bar spacing of 22 mm that may inhibit the by-catch of sponges and corals, but vessel skippers confirm that analysis of camera footage shows that the trawl had not been towed in high density areas of corals or sponges.</p> <p>As no bycatch of corals and sponges was recorded during the three years following certification, maps of bycatch were not required. Comparison of VMS data from all shrimp vessels with the biomass distribution of the main taxonomic groups from the joint Norwegian/Russian ecosystem survey in 2013 suggested that significant impacts are unlikely. There appears to be no need therefore to introduce new management responses. The condition was considered to be on target at the 3rd surveillance audit.</p>
Progress on Condition [Year 4]	<p>The Faroe Islands fleet continues to record any by-catches of coral and sponges in every fishing haul. Currently the vessels will record any interactions with corals or sponges in the "other species" column of the log book. The Lithuanian vessel will record any interactions in the 'Remarks' column on their log book. Greenland vessels can include any interactions with VMEs on their log book, although it is not clear how effective this process would be in identifying interactions with VMEs. Since certification, there have been no incidences of by-catch of coral and sponges in any of the fleets, both within and outside the UoC under assessment. VMS data of all vessels in the UoC show no change in fishing area for the vessels in the UoC, and confirm that the fishery does not overlap with the highest concentration areas of the sponges. (VMS plots of fishing activity of each individual vessel in the UoC were presented to the audit team, but are not reproduced here to protect commercial confidentiality.)</p>
Status of condition	<p>As no bycatch of corals and sponges was recorded during the four years following certification, maps of bycatch were not required. Comparison of VMS data from all shrimp vessels with the biomass distribution of the main taxonomic groups from the joint Norwegian/Russian ecosystem survey in 2013 suggested that significant impacts are unlikely. There appears to be no need therefore to introduce new management responses, and as there are procedures in place to ensure that any future interactions with corals and sponges will be recorded, the audit team concluded that the condition could be closed.</p>

Table 11: Recommendation 1. Lack of observer programme for Faroe Islands shrimp vessels

Performance indicator 1.2.3	Relevant information is collected to support the harvest strategy
Score:	80
Rationale:	<p>SG 80 (a) Requirement: Sufficient relevant information related to stock structure, stock productivity, fleet composition and other data is available to support the harvest strategy.</p> <p>Rationale: Genetics studies of <i>Pandalus borealis</i> have concluded that the populations of the Barents Sea and Svalbard can be considered to be a single population (Martinez et al., 2006), and research surveys and observer programmes on some components of the fleet provide data on the size range and reproductive state of the stock. The licensing of all vessels, VMS, log books and obligatory catch returns ensure that the fleet composition is well understood. There is good information on the composition of the Faroese fleet, but the assessment team recommends that an observer programme is introduced for the Faroese fleet in the Barents Sea and Svalbard area to collect data on the catch and discards of shrimps and other species, and obtain representative samples of the size and sex distribution of shrimps.</p>
Recommendation:	The assessment team recommends that an observer programme is introduced for the Faroese fleet in the Barents Sea and Svalbard area to collect data on the catch and discards of shrimps and other species, and obtain representative samples of the size and sex distribution of shrimps.
Observations:	<p>At this 4th surveillance audit, vessel skippers confirmed that Russian observers are mandatory on Faroe Islands and Greenland vessels fishing in the Russian zone. These observers may inspect fishing gear and may undertake occasional monitoring of bycatch. Similarly the Norwegian Coastguard will check bycatch levels in the Svalbard FPZ and NEAFC areas of the fishery, but a formal observer scheme has not been implemented in the Faroe Islands, Greenland or Lithuania since the fishery was certified.</p> <p>The audit team noted that Estonia had instigated an observer programme as part of the EU Data Collection Framework (DCF), with current observer rates of 10% of all fishing trips. As the Greenland and Lithuanian vessels will fish in the same areas as the Estonian vessels, the Estonian observer programme provides a representative record of catches across the four countries.</p>

5 CONCLUSION

The fishery continues to be within the scope of the MSC fisheries standard (MSC FCR v2.0 § 7.4) according to the following determinations (MSC FCR v2.0 § 7.4):

- The target species is a fish (crustacean) and the fishery does not use poisons or explosives;
- The fishery is not conducted under a controversial unilateral exemption to an international agreement;
- 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 has mechanisms for resolving disputes and disputes do not overwhelm the fishery;
- The fishery is not enhanced or based on an introduced species.

The audit team concluded that the Faroe Islands North East Arctic cold water prawn fishery should remain certified (Table 12).

Table 12 Conclusions

Fishery	Status of certification	Comment
Faroe Islands NEA Cold Water Prawn	Certified	The assessment team concludes that the MSC Certificate for this fishery shall remain active, subject to the agreed annual surveillance schedule and progress on the remaining conditions.

The main findings by the surveillance team were:

- The fishery exploits the Faroe Islands North East Arctic cold water prawn fishery within sustainable limits, as has been the case in previous years. Stock biomass continues to be above Bmsy and fishing mortality remains below Fmsy;
- Fishing strategy, fishing gears and fishing grounds are to all practical purposes unchanged compared to previous years. VMS data and new information from the Norwegian MAREANO Project confirm that there is no significant overlap of shrimp fishing activity with sensitive habitats;
- The key management regulations are unchanged;
- Control and Enforcement activities and strategies were unchanged and no significant non-compliance has been reported;
- CoC conditions are unchanged.
- Condition 3 is closed and the revised scores for the UoCs are given in Table 13

Following the closing of Condition 3 and the re-scoring of PI 2.4.3 to 80, the revised scores are as follows:

Table 13 Summary of revised PI scores

Overall weighted Principle-level scores	UoC
Principle 1 - Target species	84.4
Principle 2 - Ecosystem	87.3
Principle 3 - Management	90.8

P	Wt	Component	Wt	Performance Indicator (PI)	Score UoC
1	1	Outcome	0.5	1.1.1 Stock status	100
				1.1.2 Reference points	80
				1.1.3 Stock rebuilding	N/A
		Management	0.5	1.2.1 Harvest strategy	70
				1.2.2 Harvest control rules & tools	75
				1.2.3 Information & monitoring	80
				1.2.4 Assessment of stock status	90
2	1	Retained species	0.2	2.1.1 Outcome	100
				2.1.2 Management	100
				2.1.3 Information	100
		Bycatch	0.2	2.2.1 Outcome	80
				2.2.2 Management	85
				2.2.3 Information	80
		ETP species	0.2	2.3.1 Outcome	85
				2.3.2 Management	90
				2.3.3 Information	80
		Habitats	0.2	2.4.1 Outcome	80
				2.4.2 Management	80
				2.4.3 Information	80
		Trophic function	0.2	2.5.1 Outcome	90
				2.5.2 Management	90
				2.5.3 Information	90
3	1	Governance and policy	0.5	3.1.1 Legal & customary framework	100
				3.1.2 Consultation, roles & responsibilities	90
				3.1.3 Long term objectives	100
				3.1.4 Incentives for sustainable fishing	100
		Fishery specific management system	0.5	3.2.1 Fishery specific objectives	80
				3.2.2 Decision making processes	80
				3.2.3 Compliance & enforcement	100
				3.2.4 Research plan	80
				3.2.5 Management performance evaluation	80

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APPENDICES

Appendix 1. Re-scoring evaluation tables

Table A.1 Original scoring of PI 2.4.3

PI 2.4.3		Information is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types	
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	There is basic understanding of the types and distribution of main habitats in the area of the fishery.
			Work by both PINRO and IMR has provided good understanding of seabed substrate types and characteristic benthic infauna in different areas of the Barents Sea.
	b	Y	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.
			The impact of trawls on different types of benthos has been well studied. Habitat mapping is ongoing and VMS data are available.
80	a	Y	The nature, distribution and vulnerability of all main habitat types in the fishery are known at a level of detail relevant to the scale and intensity of the fishery.
			Benthic mapping and sampling in the Barents Sea is carried out during an annual survey in close collaboration with Russian scientists. Annually since 2004, the Polar Research Institute of Fisheries and Oceanography- NM Knipovich (PINRO) and the Norwegian Institute of Marine Research (IMR) have had cooperation on studying and monitoring the invertebrate benthic animals, taken by bottom trawls, from the Norwegian-Russian Ecosystem Surveys covering the entire Barents Sea. The work is still ongoing.
			Benthic habitat mapping also takes place in the framework of the MAREANO project. Information from MAREANO is the main input into the benthic component of the Barents Sea integrated management plan. MAREANO provide a variety of interactive maps on their website. The areas of habitat that the MAREANO project has already mapped in detail give an indication of the level of information that is achievable, as this ambitious project continues and expands. The project has already identified main vulnerable areas. As stated above, even before this project, existing work by both PINRO and IMR provided a good understanding of seabed substrate types and characteristic benthic in fauna in different areas of the Barents Sea.
			The team has considered that general information on the distribution of invertebrate benthic species is available to a level of detail relevant to the scale and intensity of the fishery.
	b	Y	Sufficient data are available to allow the nature of the impacts of the fishery on habitat types to be identified and there is reliable information on the spatial extent of interaction, and the timing and location of use of the fishing gear.
			There is information available from VMS on the exact location of fishing activity, which allows both the spatial extent and timing to be determined. There is also sufficient data on the nature of impacts of trawl gears on

			bottom habitats. There is also some more localised (Barents Sea) research on the impacts of trawl gears. In particular, the work by S.G. Denisenko and N.V. Denisenko has strengthened understanding of the impact of bottom trawling on benthic communities in the Barents Sea.
	c	N	<p>Sufficient data continue to be collected to detect any increase in risk to habitat (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures).</p> <p>The collection of VMS data on the exact location of fishing activity will be continued. However also data on the effectiveness of the move on rule concerning VME are needed in order to make it possible to conclude that sufficient data continue to be collected to detect any increase in risk to habitat. Therefore a Condition was formulated.</p>
100	a	N	<p>The distribution of habitat types is known over their range, with particular attention to the occurrence of vulnerable habitat types.</p> <p>The areas of habitat that the MAREANO project has already mapped in detail give an indication of the level of information that is achievable. Not all areas have been covered however so it cannot be concluded that the distribution of all habitat types is known over their range.</p>
	b	N	<p>The physical impacts of the gear on the habitat types have been quantified fully.</p> <p>General impacts of bottom trawl gear have been studied, but the impacts of the shrimp trawling in the Barents Sea have not been quantified yet.</p>
	c	N	<p>Changes in habitat distributions over time are measured.</p> <p>Changes in habitat distributions may be detected in the future when the benthic surveys are repeated over time. Given the vast area that has to be covered distance between sample stations are large which make it difficult to conclude that changes in habitat distributions are measured over time.</p>
References			Denisenko N.V., Denisenko S.G. 1991. On impact of bottom trawling on benthos in the Barents Sea// Environmental situation and protection of flora and fauna of the Barents Sea. Apatity, published by Kola Science Centre of USSR Academy of Science. S. 158-164.
OVERALL PERFORMANCE INDICATOR SCORE:			75
CONDITION NUMBER (if relevant):			

Table A.1. New scoring of PI 2.4.3. Changes to rationales and scores are given in blue.

PI 2.4.3		Information is adequate to determine the risk posed to habitat types by the fishery and the effectiveness of the strategy to manage impacts on habitat types	
SG	Issue	Met? (Y/N)	Justification/Rationale
60	a	Y	There is basic understanding of the types and distribution of main habitats in the area of the fishery.
			Work by both PINRO and IMR has provided good understanding of seabed substrate types and characteristic benthic infauna in different areas of the Barents Sea.
	b	Y	<p>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.</p> <p>The impact of trawls on different types of benthos has been well studied. Habitat mapping is ongoing and VMS data are available.</p>

80	a	Y	<p>The nature, distribution and vulnerability of all main habitat types in the fishery are known at a level of detail relevant to the scale and intensity of the fishery.</p> <p>Benthic mapping and sampling in the Barents Sea is carried out during an annual survey in close collaboration with Russian scientists. Annually since 2004, the Polar Research Institute of Fisheries and Oceanography- NM Knipovich (PINRO) and the Norwegian Institute of Marine Research (IMR) have had cooperation on studying and monitoring the invertebrate benthic animals, taken by bottom trawls, from the Norwegian-Russian Ecosystem Surveys covering the entire Barents Sea. The work is still ongoing.</p> <p>Benthic habitat mapping also takes place in the framework of the MAREANO project. Information from MAREANO is the main input into the benthic component of the Barents Sea integrated management plan. MAREANO provide a variety of interactive maps on their website.</p> <p>The areas of habitat that the MAREANO project has already mapped in detail give an indication of the level of information that is achievable, as this ambitious project continues and expands. The project has already identified main vulnerable areas. As stated above, even before this project, existing work by both PINRO and IMR provided a good understanding of seabed substrate types and characteristic benthic in fauna in different areas of the Barents Sea.</p> <p>The team has considered that general information on the distribution of invertebrate benthic species is available to a level of detail relevant to the scale and intensity of the fishery.</p>
	b	Y	<p>Sufficient data are available to allow the nature of the impacts of the fishery on habitat types to be identified and there is reliable information on the spatial extent of interaction, and the timing and location of use of the fishing gear.</p> <p>There is information available from VMS on the exact location of fishing activity, which allows both the spatial extent and timing to be determined. There is also sufficient data on the nature of impacts of trawl gears on bottom habitats. There is also some more localised (Barents Sea) research on the impacts of trawl gears. In particular, the work by S.G. Denisenko and N.V. Denisenko has strengthened understanding of the impact of bottom trawling on benthic communities in the Barents Sea.</p>
	c	Y	<p>Sufficient data continue to be collected to detect any increase in risk to habitat (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures).</p> <p>The collection of VMS data on the exact location of fishing activity has continued from all vessels in the UoC every year and has been compared with the biomass distribution of the main taxonomic groups from the joint Norwegian-Russian ecosystem survey in 2013. This comparison suggested that significant impacts of the fishery on VMEs are highly unlikely. There appears to be no need therefore to introduce new management responses, and as there are procedures in place in all national fleets to ensure that any future interactions with corals and sponges will be recorded, it can be concluded that sufficient data continue to be collected to detect any increase in risk to habitat. The SG80 is met.</p>
100	a	N	<p>The distribution of habitat types is known over their range, with particular attention to the occurrence of vulnerable habitat types.</p> <p>The areas of habitat that the MAREANO project has already mapped in detail give an indication of the level of information that is achievable. Not all areas have been covered however so it cannot be concluded that the distribution of all habitat types is known over their range.</p>

	b	N	The physical impacts of the gear on the habitat types have been quantified fully.	
			General impacts of bottom trawl gear have been studied, but the impacts of the shrimp trawling in the Barents Sea have not been quantified yet.	
	c	N	Changes in habitat distributions over time are measured.	
			Changes in habitat distributions may be detected in the future when the benthic surveys are repeated over time. Given the vast area that has to be covered distance between sample stations are large which make it difficult to conclude that changes in habitat distributions are measured over time.	
References			Denisenko N.V., Denisenko S.G. 1991. On impact of bottom trawling on benthos in the Barents Sea// Environmental situation and protection of flora and fauna of the Barents Sea. Apatity, published by Kola Science Centre of USSR Academy of Science. S. 158-164.	
OVERALL PERFORMANCE INDICATOR SCORE:				80
CONDITION NUMBER (if relevant):				



Appendix 2. Stakeholder submissions

No stakeholder submissions were received which had any significant impact on scoring, rationales or conditions.



Appendix 3. Additional detail on conditions/ actions/ results

Copy of letter from the Client to the Faroe Islands Ministry urging the Ministry to work with relevant authorities to limit fishing effort in the NEAFC zone and to introduce a harvest control rule (reference Conditions 1 and 2).

FISKIMÁLARÁÐIÐ

Ministry of Fisheries

Yviri við Strond 15

FO 100 Tórshavn

16.12.2016

Harvest control rules in NEAFC area in Barents Sea and around the Svalbard.

As of to day, no harvest control rules are in a sufficient way limiting new and larger fishing effort to join current harvesters in the area.

On behalf of the Shrimp Trawlers Asssciation, Faroes, (Felagið Rækjuskip), we will strongly encourage and support any new initiatives from the Ministry of Fishieries, Faroe Islands, to be presented to NEAFC members, which could limit future harvest of shrimps in this area.

No new licenes shall be issued by any member country without all member states can achieve consensus.

We see it as a very important step to implement new harvest control rules inthe area in order to protect the stock of shrimps in the area from overfishing.

Kind regards

Felagið Rækjuskip



Appendix 4. Revised Surveillance Program

There are no proposed revisions to the surveillance program.



Appendix 5. List of member vessels

Faroe Islands:

Kappin (former Sermilik II) (OW2202)

Arctic Viking (OW2399)

Akraberg (XPLH)

Sjurdarberg (OW2408)

Greenland:

Tasermit (GR 6-395)

Akamalik (GR 6-6)

Qaqqatsiaq (GR 6-403)

Natarnaq (GR 6-325)

Lithuania:

Non at present



About DNV GL

Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organizations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping our customers make the world safer, smarter and greener.