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Cornish Hake Gill Net Fishery



Surveillance Report

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Fishery client	Cornish Fish Producers Organisation Ltd.
Assessment Type	Fourth Surveillance



Assessment Data Sheet

Fishery name	Cornish Hake Gill Net	
Species and Stock	Northern Hake (<i>Merluccius merluccius</i>) Stock Division 3a, sub-areas 4, 6 and 7, and Divisions 8a, b, d)	
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Glossary

ASCOBANS	Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas
Cefas	Centre for Environmental Fisheries & Aquaculture Science
CFP	Common Fisheries Policy
CFPO	Cornish Fish Producers Organisation
CODA	Cetacean Offshore Distribution and Abundance in the European Atlantic
CR	Certification Requirements
ETP	Endangered, Threatened or Protected species
EU	European Union
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICES	International Council for the Exploration of the Sea
MMO	Marine Management Organisation
MSC	Marine Stewardship Council
NEPTUNE	National Evaluation of Populations of Threatened and Uncertain Elasmobranchs
P1	MSC Principle 1
P2	MSC Principle 2
P3	MSC Principle 3
PI	Performance Indicator
SCANS	Small Cetacean Abundance in the North Sea
SI	Scoring Issue
SMRU	Sea Mammal Research Unit
WGEF	Working Group on Elasmobranch Fisheries

2 Executive Summary

- 1) This fishery was certified in 2015 with five conditions of certification. Four of these conditions were closed at previous audits, and the fifth was closed at this audit.
- 2) Following harmonisation discussions with other CABs it was agreed at the Year 3 surveillance audit in February 2019 that it was necessary to raise a condition of certification relating to monitoring, control and surveillance in response to EU-wide concerns about the implementation of the Landing Obligation. The new condition has been revised at this surveillance audit in response to changes to the harmonised condition following an Independent Adjudicator's decision on an objection to another fishery assessment. The new condition is subject to the MSC's "exceptional circumstances" provisions and will extend beyond the current period of certification to any future certification of this fishery.
- 3) Progress with the conditions is briefly summarised below: -
 - a. **Condition 1:** Harvest Control Rules and Tools. **Closed** on schedule at 3rd surveillance audit.
 - b. **Condition 2:** Discarded species outcome. This condition has been **closed on target** at this surveillance audit.
 - c. **Condition 3:** Discarded species – information. **Closed** on schedule at 3rd surveillance audit.
 - d. **Condition 4:** ETP species – management. **Condition closed** on schedule in Year 1.
 - e. **Condition 5:** Ecosystems. **Closed** on schedule at 3rd surveillance audit.
 - f. **Condition 6:** Monitoring, Control & Surveillance. This condition was new at the 3rd surveillance audit and has been revised at this surveillance audit. Progress will be reviewed at future surveillance audits in the next certification period.
- 4) The spawning stock biomass (SSB) for the northern hake stock has been consistently increasing since 2006 and, despite an up-to-date inter-benchmark assessment by ICES, including revised recruitment estimates and verified discard values, causing the overall perception of the stock to worsen slightly, is still well above $MSY B_{trigger}$. Fishing mortality has decreased over the past decade and has been below F_{msy} since 2011, where it remains even with the latest assessment. Both stock status and the management response to advice, including reduced TACs, where appropriate, are favourable.
- 5) No changes in management have taken place that would detrimentally affect the performance of this fishery against the MSC standard and the fishery continues to meet the requirements of the MSC Standard.
- 6) No destructive fishing practices or controversial unilateral exemptions to an international agreement have been introduced, and the fishery is compliant with MSC requirements concerning forced and child labour.
- 7) The scores awarded for individual Performance Indicators and MSC Principles following this surveillance audit are shown in Table 8 of this report.
- 8) **MSC Certification should therefore continue** following the surveillance schedule set out in the Public Certification Report for the fishery.

3 Report Details

3.1 Surveillance information

Information about the nature of this surveillance audit, including the membership of the assessment team, is presented below.

Table 1. Surveillance Information

1	Fishery name
	Cornish Hake Gill Net
2	Surveillance level and type
	Surveillance level 6 – offsite
3	Surveillance number
	4th Surveillance X
4	Proposed team leader
	<p>Jim Andrews – Team Leader and Principle 2/3 expert</p> <p>Jim Andrews is a marine biologist with over 20 years' experience working in marine fisheries and environmental management. His previous experience includes running the North Western and North Wales Sea Fisheries Committee as its Chief Executive from 2001 to 2005, previously working as the SFC's Marine Environment Liaison Officer (from 1996-2001), and prior to that working for the English Government's nature conservation advisor, English Nature on wildlife and coastal zone management in northwest England (from 1992-1996). During his time with the SFC he was responsible for the regulation, management and assessment of inshore finfish and shellfish stocks along a 1,500km coastline, as well as assessment and management of fisheries interactions with aquatic ecosystems in this area. He has an extensive practical knowledge of fisheries and environmental management as well as the enforcement and regulation of fisheries under UK and EC legislation. Jim has formal legal training & qualifications, with a special interest in the policy, governance and management of fisheries impacts on marine ecosystems in the UK, EU and globally (this particular subject being the focus of his LLM research over the period 1997-99). He has worked as an assessor and lead assessor on more than 20 MSC certifications within the UK, in Europe and in India since 2007. In 2008 he worked with the MSC and WWF on one of the pilot assessments using the new MSC Risk Based Assessment Framework. Jim has carried out numerous MSC Chain of Custody assessments within the UK.</p> <p>Jim has passed MSC training and has no Conflict of Interest in relation to this fishery. Jim has completed the MSC RBF training in the past 3 years. Full CV available upon request</p>
Leadership Experience	Jim has carried out multiple MSC assessments as Team Lead over the last 5 years and has passed his ISO 19011:2018 lead auditor training.
5	Proposed team members
	<p>Andy Payne – Principle 1 expert</p> <p>Andy is an honours graduate of the University of London and completed post-graduate degrees at the Universities of Stellenbosch and Port Elizabeth in South Africa. He worked in Namibia for five years, South</p>

	<p>Africa for 25 years (eventually leaving in 2000 as Director of the Sea Fisheries Research Institute), and retired in 2013 from the Centre for Environment, Fisheries and Aquaculture Science (Cefas), UK, where he was first Science Area Head for Fisheries and then "roving" international fisheries consultant in which role he <i>inter alia</i> managed a large commercial contract evaluating sites for future nuclear power stations to be built in the UK, and the Fisheries Science Partnership, an initiative bringing scientists and fishers together in a common aim to produce information of use to those charged with managing Europe's fish stocks. Most of his research work was conducted in South Africa, and he has published widely in the scientific literature, mainly about fisheries management and demersal fish in particular. He was an active player in the Benguela Ecology Programme, was involved in drafting South Africa's first democratic fisheries policy (which later became enshrined as the Marine Living Resources Act), and was a leading player in the establishment of the Benguela Current Large Marine Ecosystem project and the BENguela Environment, Fisheries, Interaction, and Training (BENEFIT) project, the latter two concentrating on three countries, Angola, Namibia and South Africa. From 2003 to 2011, he was Editor-in-Chief (and from 2000 to 2003 editor) of the ICES Journal of Marine Science, was the founding editor/editor-in-chief (and now international panel member) of the (South) African Journal of Marine Science, and is Series editor of the Springer book series Humanity and the Seas. He has also conducted peer expert review of fisheries in Argentina, South Africa and the USA, and was involved in the EU's TACIS project on Sustainable Management of Caspian Fisheries, among other EU projects. He has conducted several accreditation reviews for the Marine Stewardship Council, full ones being for the Antarctic krill continuous pumping fishery (AkerBiomarine; twice, the second being a recertification assessment), a similar one for a separate Norwegian midwater trawl fishery for Antarctic krill, and another one for Russian pollock (twice), has acted as expert peer reviewer of the report on US Limited Entry Groundfish Trawl fishery recertification and for SA deepsea hake trawl fishery recertification, has led or participated in several surveillance audits for different fisheries and CABs, and has twice acted as condition-meeting evaluator for the client for the SA deepsea hake trawl fishery. Recently too, he was part of a three-man international team that formally evaluated the ICCAT Bluefin tuna research programme. Finally, he has personally written/edited one book – "Oceans of Life off Southern Africa", and lead-edited and contributed to two more – "Management of Shared Fish Stocks", and "Advances in Fisheries Science; 50 years on from Beverton and Holt", the latter two both for Cefas, and provides editorial services (including formal instruction courses in scientific writing) for a variety of clients.</p> <p>Andy has passed MSC training and has no Conflict of Interest in relation to this fishery. Full CV available upon request.</p>
Local Context	English is the local language and Jim had had numerous projects in the region.
Traceability	Jim has completed the MSC traceability module
RBF	Jim has completed the RBF training.
6	Audit/review time and location
	The offsite surveillance took place on the 10 th October 2019.
7	Assessment and review activities
	Review of all relevant data, progress on the Client Action Plan and progress with open conditions.

3.2 Background

The MSC-certified Cornish hake gill net fishery is a bottom-set gill net fishery for the European Hake, *Merluccius merluccius*, in the Celtic Sea to the west of the UK mainland and south of Ireland. The following is a brief resume of information about the hake and its fishery based on the original MSC Certification Report (Acoura Marine, 2015), to which the reader is referred if more detail is required.

3.2.1 Biology of the Target Species

European hake are widely distributed along the Continental shelf and the shelf slope in the north-eastern Atlantic from northern Norway and Iceland south to Mauritania and are most abundant at depths of 100-300 m from west of Scotland south to Gibraltar. For assessment and management purposes, ICES assumes two different stock units: the Northern stock, in Division 3a, Subareas 4, 6 and 7 and Divisions 8a, b, d (essentially, north of 44° 30' N); and the Southern stock in Divisions 8c and 9a along the Spanish and Portuguese coasts (ICES, 2009). This report concerns the Northern hake stock.

The main areas used for spawning by the Northern hake stock extend along the shelf edge from the northern Bay of Biscay to the south and west of Ireland, from February through to July (Arbault and Lacroix-Boutin, 1968; Coombs and Mitchell, 1982). Young hake descend to the seabed from May onwards and begin a demersal existence at a length of approximately 4 cm. Two major nurseries are recognised in the Northern stock area: one in the Bay of Biscay and another off southern Ireland. When three years old, hake begin to move into shallower regions of the Celtic Sea and the Bay of Biscay, but as they approach maturity, they disperse to offshore regions.

The movements of adult hake are indicated by the seasonal distributions of catches in the fishery. From December to March, the hake fishery commences in the southern Bay of Biscay and moves north, reaching the northern Bay of Biscay in March and April. Subsequently, hake appear on the shelf-edge to the west and north of the British Isles in June and July. Between August and December, the hake fishery is centred to the west and southwest of Ireland, and catch rates decline in shallower waters. A small proportion of the hake involved in these migrations will enter the deeper regions of the western English Channel. The Cornish hake fishery takes place mainly in the Celtic Sea and Western English Channel.

3.2.2 History of the Fishery

Historically, hake have been caught in a number of métiers operating in ICES Sub-areas 6, 7 and 8, mainly operating out of Spain, France, the UK and Ireland, either as a target species (lines and set nets) or as an important bycatch (trawls). Today, Spanish vessels mainly use bottom pair-trawls operating with “Nabera” Very High Vertical Opening (VHVO) nets to target hake in the Bay of Biscay, whereas French trawlers have progressively adopted twin-trawl nets. A substantial increase in landings has occurred in the northern part of the distribution area (Division 3a, and Subareas 4 and 6) in recent years.

The number of UK and Irish vessels gill netting for hake has fallen considerably since the peak of the fishery in the early-mid 1990s, when a fleet of 40 hake netting vessels operated from Newlyn. At the time of the Certification of the client fishery (in June 2015), 19 vessels were operating from Newlyn, though there were signs of a resurgence of gill netting in the Irish hake fishing fleet.

Most of the vessels in the client fleet are more than 15m in length, and all vessels > 12m are legally required to use acoustic “pingers” to mitigate cetacean interactions. The two vessels smaller than 12m also use these pingers at all times. All of the vessels in the UoC use hake nets with a mesh size greater than the 120mm legal requirement. All of the vessels work in waters shallower than 180m.

3.3 Changes in management system

The key changes in the management system since the fishery was certified in 2015 and since the 3rd surveillance audit are briefly summarised below.

3.3.1 The EU Landing Obligation

The key change in the management system for this fishery since it was certified in 2015 has been the introduction of “landing obligations” for catches taken from stocks subject to catch limits under the revised EU Common Fisheries Policy (CFP) (EU Regulation 1380/2013).

The implementation of the landing obligation in western waters has been achieved progressively through a succession of “discard plans”. The first of these was EU Regulation 2438/2015 which applied from the 1st January 2016, and required that all fishing vessels more than 12m long and which use either gill nets or tangle nets must retain on board all hake caught in ICES sub-Areas 4, 7 and EU waters of 5b. The Marine Management Organisation (MMO) published guidance for the fishing industry on the implementation of the landing obligation in this area (MMO 2015). EU Regulation 2438/2015 was repealed in 2016 and replaced by Regulation 2375/2016; which was in turn repealed and replaced by Regulation 46/2018, which expired on 31st December 2018. The landing obligation set out in the CFP now applies with full effect throughout Western Waters.

The client for this fishery, CFPO, has produced advisory notes for its members to ensure that they are aware of the requirements of the Landing Obligation (CFPO 2019), and has written directly to all members to explain these requirements directly. A copy of the Advisory Note provided to fishers using set nets is included for information in section 5.3.1 of this report.

During the period since the last surveillance audit the EU has reviewed the current status of the CFP and in particular the implementation of the landing obligation (European Commission 2018a). A key conclusion of this review was that there is limited evidence of the effective implementation of the landing obligation by Member States, and that there are concerns about the capacity of national and EU agencies to monitor and enforce compliance with the landing obligation. This finding resulted in some MSC assessments raising a condition in response to this issue.

As part of the harmonisation process (described in section 5.4 of this report), it has been concluded that the harmonised condition relating to the implementation of the landing obligation should be applied to this fishery.

3.3.2 EU Technical Regulation

A new EU Technical Regulation was introduced in June 2019 (EU 2019a). This Regulation specifies the type of fishing gear that can be used in the EU EEZ and amends or repeals existing Regulations. The audit team has reviewed this Regulation and discussed its implications with the client fishery. For this UoC the Regulation has simply consolidated and rationalised the existing technical measures and has not made any material changes that affect the operation of the fishery and its compliance with the MSC Standard.

3.3.3 EU Western Water Multi-Annual Plan

A new Multi-Annual Plan (MAP) was adopted by the EU for the “Western Waters” which include this Unit of Certification on the 19th March 2019 (EU 2019c). This Regulation establishes a new basis for managing fishing for a range of species including the northern hake stock. It also repeals the Council Regulation that established the hake recovery plan in 2004 (EU 2004).

The key change for the northern hake fishery that is introduced by the new MAP is that it formalises the use of ICES reference points for fishing mortality and biomass for determining fishing opportunities for the specified fish stocks in Western Waters; although as noted below (in section 3.6 of this report), this MAP has not been adopted by Norway.

The introduction of this MAP does not materially affect the scoring outcome in terms of either the harvest strategy or harvest control rules for this fishery. The condition relating to harvest control rules and tools was closed at the third surveillance audit. The MAP bolsters the use of ICES reference points for the management of the stock.

3.4 Changes in relevant regulations

As noted above, the key change in regulations governing this fishery has been the introduction of the EU “landing obligation”, which has applied to the hake gill net fishery since the 1st January 2016.

3.5 Changes to personnel involved in science, management or industry

No significant changes in personnel were noted. It was noted that the MMO had relocated its local office to Hayle in North Cornwall, but this was not considered by the client to have affected the level of enforcement coverage at the port of Newlyn. The MMO continue to operate a small office on the quayside in Newlyn.

3.6 Changes to scientific base of information, including stock assessments

The hake stock is still deemed by ICES to be reasonably healthy, using as an analytical basis the same length-based model that has been used for assessment since 2013, but the prognosis overall has changed since the previous ICES assessment in 2018 (ICES 2018). Most notably, there has been a decrease in the annual TAC advised (in the most recent advice dated September 2019, that for 2020). The advisory value for total catch still, however, exceeds the total annual catches (using up-to-date estimates of discards) of the stock in all years except 2015, 2016 and 2017.

There are several reasons for this situation, although the assessment itself is still based on the same information as used previously on commercial landings (the UK's England and Wales, which includes the candidate fishery, generally take only 2–3% of the annual catch of the stock by all nations), abundance information from scientific surveys, a calculated maturity ogive and natural mortality. As noted in previous annual assessments, however, incomplete discard (unwanted hake catch) information was being used, and there was uncertainty in the recruitment time-series that is largely founded on survey information, especially for 2017 when the dominating EVHOE survey was not conducted. The previous benchmark assessment for the stock was back in 2014 (ICES 2014), so an inter-benchmark assessment was conducted this year (ICES 2019a), and careful analysis there resulted in the use of a more-complete and verified discard time-series and the replacement of the previously used values of recruitment for 2017 and 2018 with the geometric mean of all recruitments from 1990 to 2016. The latter change also addressed the uncertainty in recruitment resulting from a retrospective pattern clearly identifiable in the time-series.

The outcome of the new assessment has resulted in re-estimated (generally lower or less favourable) reference points, as shown below in Table 2.

Table 2: Reference points for hake in Subareas 4, 6 and 7, and Divisions 3a, b and d, the so-called Northern stock. Weights are given in tonnes (ICES 2019b).

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger}$	56000	B_{pa}	ICES (2019b)
	F_{MSY}	0.26	Stochastic simulations on a segmented regression stock–recruitment relationship	ICES (2019b)
Precautionary approach	B_{lim}	40000	The breakpoint of the segmented regression stock–recruitment relationship	ICES (2019b)
	B_{pa}	56000	$1.4 \times B_{lim}$	ICES (2019b)
	F_{lim}	0.84	^a Fishing mortality resulting in a 50% probability of SSB falling below B_{lim}	ICES (2019b)
	F_{pa}	0.6	$F_{lim} / 1.4$	ICES (2019b)
Management plan	F_{MGT}	Not defined		
	SSB_{MGT}	Not defined		
	MAP MSY $B_{trigger}$	56000	MSY $B_{trigger}$	ICES (2019b) and EU (2019)
	MAP B_{lim}	40000	B_{lim}	ICES (2019b) and EU (2019)
	MAP F_{MSY}	0.27	F_{MSY}	ICES (2019b) and EU (2019)
	MAP range F_{lower}	0.180	Consistent with ranges resulting in no more than 5% reduction in long-term yield compared with MSY (ICES, 2019b)	ICES (2019b) and EU (2019)
	MAP range F_{upper}	0.40	Consistent with ranges resulting in no more than 5% reduction in long-term yield compared with MSY (ICES, 2019b)	ICES (2019b) and EU (2019)

A summary of the latest ICES stock assessment is given in Figure 1 below.

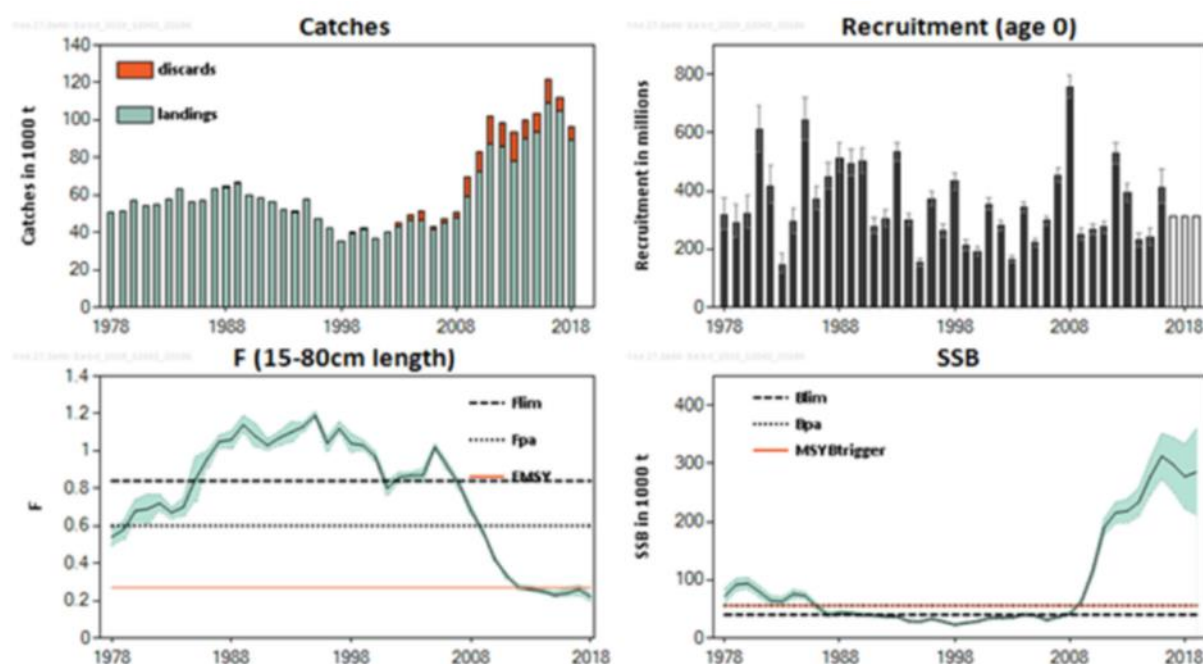


Figure 1: Summary of the stock assessment for hake in Subareas 4, 6 and 7 and Divisions 3a, b and d, the so-called Northern stock. Full discard estimates are only available from 2003. Plots show 95% confidence intervals (shaded), with confidence intervals for F derived from standard deviations calculated internally by the model for F -at-age values. The last three recruitment estimates are shown unshaded. (ICES 2019b)

ICES notes that SSB has increased substantially since 2006, peaking in 2016 before declining slightly again, and that fishing mortality (F) decreased markedly between 2005 and 2012 and remained stable below F_{MSY} since. Recruitment, though uncertain for the most recent years, has been variable, but without trend. In summary, the recent assessment shows that SSB is above $MSY B_{trigger}$, B_{pa} and B_{lim} . ICES stresses that although the recommended catch for 2020 is 26% less than that advised for 2019 (ICES 2018), the decrease is attributable in full to the rescaling of the stock size at the inter-benchmark, re-estimated lower reference points and the lower assumption for recruitment in 2017. The new total discard estimates in the latest assessment include information for the fleets where previously data were missing. Moreover, the new assessment takes into consideration a revised profile for the FR-EVHOE-WIBTS-Q4 survey to mitigate against the lack of that survey in 2017.

ICES further notes that, given the expansion of the stock into northern areas (first highlighted in ICES 2017), abundance indices, biological sampling and discard quantification for the northern area of stock distribution may be limited and requiring future consideration. There is also concern that the discarding of juvenile hake can be substantial in some areas and fleets; recently too, the discarding of larger fish has increased because of quota restrictions on some fleets (but not the client fleet), so enhanced monitoring is needed despite observations currently indicating that the quantum of observed discards has decreased. Finally, it has been noted from anecdotal information that the mean weight at length of individual hake has been decreasing since 2011, a trend now corroborated by national laboratories' data in an analysis by ICES (ICES 2019c). This matter will be investigated further in future, not least because of the influence it may have on the maturity ogive applied to the stock.

3.6.1 Harvest Strategy

The recovery plan for hake implemented in 2004, although based on target values founded on precautionary reference points that are no longer appropriate, has clearly worked, resulting in the stock now being reasonably healthy. Supporting the 2004 recovery plan were regulations and measures that still apply, including:

- a minimum landing size of 27 cm for hake caught in Subareas 4, 6, 7 and 8 and 30 cm for hake caught in Division 3a;

- a minimum mesh size of 100 mm for all otter trawlers operating in two hake nursery areas, one SW of Ireland and one in the Bay of Biscay, regardless of how much hake is being caught;
- fishing effort limits in a biologically sensitive area in the Celtic Sea.

The TAC set for the northern stock of European hake is still based on and consistent with reference points (in the current case, recently revised) applied within an MSY approach, because the EU multiannual plan has not yet been agreed and accepted by all participating nations. Moreover, the landing obligation that came into effect in 2019 and applies to all vessels fishing for TAC-regulated species in EU waters is likely having some effect on all hake catches currently being made, but with policing and total compliance-verification difficult at present, its effect on the fishery has not yet been evaluated or carried through into any formally revised harvest strategy.

3.6.2 Harvest Control Rule and Tools

Although a multiannual plan (MAP) for this hake stock in Western Waters and adjacent seas has now been agreed by the EU (EU 2019c), the plan has not yet been adopted by Norway, so cannot be used as the basis for advice on this shared stock. Therefore, the current ICES assessment and advice only gives the results according to this MAP as a catch option, with advice, as in earlier years, being provided on the basis of the MSY approach. As stated above, however, the current assessment differs from those immediately preceding it in that the reference points have been revised, for the reasons given. When and if implemented, the MAP will oblige decision-makers to set TACs within a range of F_{MSY} as defined by ICES (see Table 2 above). This range will correspond to values of F that give at least 95% of Maximum Sustainable Landings but constrained by a probability of 5% that the SSB will fall below B_{lim} . Unless the stock is above $B_{MSY\ trigger}$, F will need to be set in the lower range of F_{MSY} (that is not the case currently for this Northern hake stock). The nominal value of F_{MSY} is now 0.26 and the upper bound 0.40, so theoretically the higher value might be applied when the MAP comes into effect.

Annual landings of hake have generally been within the annually advised TAC. However, the value of total catch (landings plus discards) has as a consequence of the reference points being revised, been lowered for 2020 to 104 763 t, well below the 142 240 t advised for 2019. The total hake catch for 2018 (96 188 t) was less than the 2020 advisory figure, and it remains to be seen what the total catch is going to be in 2019. That outcome, plus any decision on what the future holds for the MAP, is likely to be highly influential in future advice on Northern hake catches.

3.7 Changed in Ecosystem interaction or management

3.7.1 Non-target species

When the fishery was certified, the main non-target retained species in the fishery were considered to be cod, pollock and haddock, with monkfish, saithe, megrim and whiting considered minor retained non-target species. The main discarded non-target species were considered to be spurdog and lesser-spotted dogfish, with porbeagle shark, lesser spotted dogfish, mackerel and edible crab considered minor discarded species.

At this surveillance audit, some more-recent information was provided to the assessment team that enabled the assessment of impacts on non-target species to be reviewed. This new information is summarised and considered below.

3.7.1.1 Spurdog¹

The status of the spurdog stock in the NE Atlantic has recently been reviewed by the ICES Working Group on Elasmobranch Fisheries (WGEF), and new advice was published by ICES in October 2019 (ICES 2019d, 2019e). The key observations from this advice is that following the 90% TAC reduction in 2010 and zero TAC from 2011 in the EU, there has been a fall in catches of this species. Both

¹ Note that although spurdog are a "prohibited species", they can be retained by some of the vessels working in this UoC, so it is more appropriate to consider them as a discarded non-target species (see section **Error! Reference source not found.** of this report for more information).

recruitment and biomass are showing an upward trend (see Figure 2). The harvest rate is estimated to be well below HRMSY.

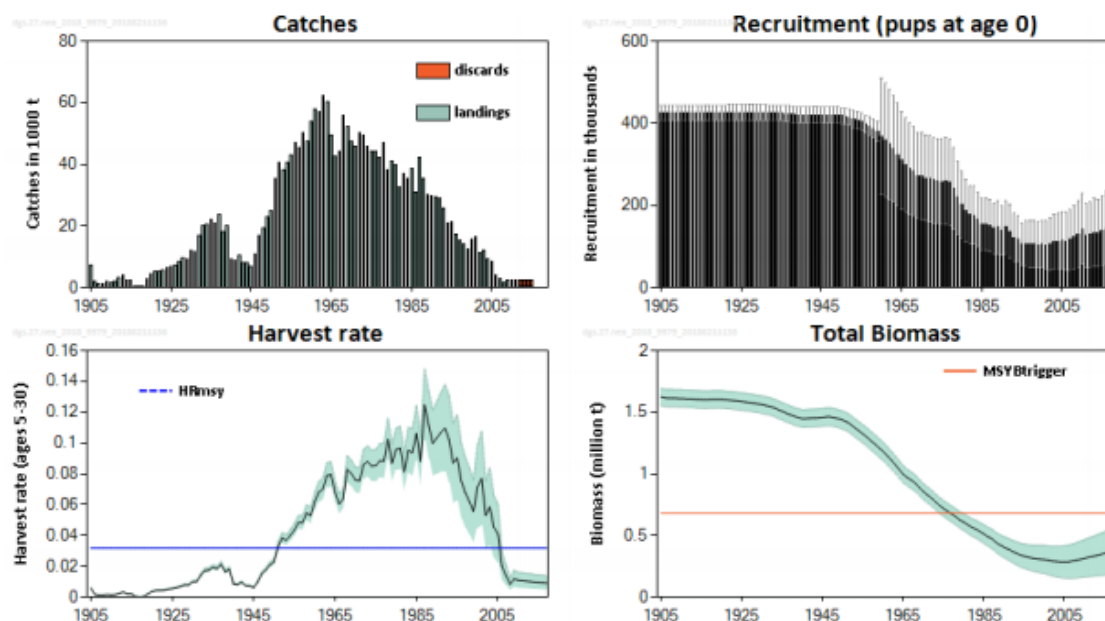


Figure 2: Summary of ICES' stock assessment of spurdog in the Northeast Atlantic, long-term trends in catches, mean harvest rate (average ages 5–30), recruitment (number of pups), and total biomass. Shaded areas reflect estimates of precision (± 2 standard deviation) and horizontal lines indicate the associated MSY levels (ICES 2019e).

ICES advisors observe that spurdog remain a bycatch in gill net fisheries, and levels of discard survival are variable and unknown (probably low). Annual landings in recent years have averaged around 320 t (2013-2017). There are anecdotal reports from fisheries across the stock area of localized increased occurrence of the species, which is supported by scientific observations from commercial fishing vessels and sampled catches from the Norwegian commercial gill net fleet over the past decade.

ICES advice is that, when the precautionary approach is applied, there should be no targeted fisheries on this stock. Annual catches at the recent assumed level (2468 t) would allow the stock to increase at a rate close to that estimated with zero catches, and any possible provision for the landing of spurdog bycatch should be part of a management plan. However, there is as yet no management plan for this stock.

3.7.1.2 New Information

Data on the catch of both target and non-target species from gill netting vessels was obtained from Cefas during this surveillance audit and the previous (second) surveillance audit. These data are summarised here.

3.7.1.2.1 CEFAS Observer reports

During 2018, Cefas observers made 9 trips aboard netting vessels working in the UoC area, and sampled fish from 105 net hauls in which hake were caught. The data gathered from analysis of the catch in hauls using the mesh sizes provides an indication of the catch composition (prior to discarding) for the different netting métiers in the UoC area, and are summarised in Table 3.

These data show that hake make up just under 80% of the catch from all gears and 85% of the retained catch. The most abundant non-target species in the catch was spurdog (4.89%) followed by haddock (4.88%). The retention of spurdog in the catch has been permitted under a derogation from the EU prohibition on landing this species in order to obtain information about the status of the spurdog stock (see section 3.7.1.2.2 of this report below).

As well as observing the catch composition, Cefas observers also record whether or not fish in their samples are likely to be retained or discarded (note that the EU landing obligation now prohibits any hake discarding in this fishery).

This information is presented in Table 3, and indicates that retention and discarding behaviour is polarized. Some species are always discarded (such as mackerel, Allis shad, common skate and cuckoo ray), whereas others are almost always retained (such as cod, anglerfish, haddock, pollock and saithe).

3.7.1.2.2 National Evaluation of Population of Threatened and Uncertain Elasmobranchs (NEPTUNE)

As part of a programme monitoring bycatch in Celtic Sea fisheries (ICES Divisions 7e–j), aimed at developing pragmatic management measures for some of the more ‘threatened’ elasmobranchs in British waters, collaboration with commercial fishers in the south-west has facilitated the collection of more detailed information on spurdog *Squalus acanthias* and porbeagle *Lamna nasus*.

Ellis et al. (2016) report on a pilot project aimed at improving the availability of fishery-dependent information for assessing the fishery and status of the stocks, in which participating fishers have been trained to collect data on catch composition. Although current regulations prevent landing of these species, a proportion of dead bycatch was retained (under dispensation) by a small number of vessels for biological sampling.

One of the three vessels participating in this study (all based at Newlyn) was an offshore netter, fishing mainly on open grounds using a combination of gill nets aimed at hake and pollock (and therefore representative of the UoC) and tangle nets aimed at anglerfish and turbot on most trips.

Spurdog frequently appeared in this vessel’s gill net catches in all months for which data were available (October to May), often taken in large quantities. For example, the estimated biomass of spurdog taken in one trip during October was higher than the retained quantity of the main target species (hake and pollock), whereas catches in four other trips equated to some 300–580 kg of spurdog per tonne of hake and pollock. Smaller catches (<30 kg of spurdog per tonne of hake and pollock) were reported on six of the trips. Catches of spurdog were highly variable, which may be related to the aggregating nature of the species and whether fishing operations coincided with the locations of any aggregation.

Although porbeagle ($n = 83$) could be reported in low numbers (1–2 fish per trip) over much of the year, the largest catches were made during trips undertaken in August and September (34 and 39 in two of the trips undertaken), confirming the seasonality of this species.

One of the other two netters used gill nets on open grounds for pollock, saithe and cod, whereas the third netter fished mainly near wrecks with gill nets, targeting pollock, saithe, cod, ling, hake and anglerfish, and also fished for turbot, hake and anglerfish with tangle nets.

This work was continued during 2017, and during 2018 Cefas published a report on the “Spurdog (Picked dogfish) By-catch Avoidance Programme” (Hetherington et al. 2018). This report demonstrated the feasibility of establishing an alternative to the current management arrangements for spurdog interactions. Fishers have also been involved in the development of a “Code of conduct” for elasmobranch bycatch which aims to promote post-capture survival of spurdog and other elasmobranchs.

3.7.1.3 Non-target species summary

On the basis of the information presented above, the only species that would be regarded as a “main” non-target species in this fishery are haddock and spurdog. Pollock, ling and cod are the more important minor retained non-target species.

In the Public Certification Report the assessment team considered cod, pollock and haddock as “main” retained species, and that the minor retained species were monkfish, saithe, megrim, whiting and ling. The “main” discarded species were considered to be spurdog and lesser spotted dogfish; porbeagle sharks, mackerel and edible crabs were considered to be “minor” discarded species.

Information has been presented about catch composition at this surveillance audit that was not available when the fishery was certified in 2015. This information has shown that the assessment team adopted

a precautionary approach in the PCR. The new information presented here therefore supports the certification findings.

The information presented here supports the re-scoring of PI 2.2.1 (see section 4.4.2 of this report).

Table 3: Observed rates of discarding and retention of different catch components in hake gill nets from Cefas observer trips in 2019. Target species (hake) is shaded. [Source: Cefas, unpubl].

Species	For all mesh sizes					
	Discarded		Retained		Total Catch	
	kg	% of species catch	kg	% of species catch	Kg	% of total catch
(EUROPEAN) MACKEREL	807.1	100.0%	0.3	0.0%	807.4	0.84%
ALLIS SHAD	9.2	100.0%		0.0%	9.2	0.01%
AMERICAN PLAICE (LR DAB)	1.1	100.0%		0.0%	1.1	0.00%
ANGLERFISH (MONK)	7.3	4.5%	154.6	95.5%	161.9	0.17%
BLACK-BELLIED ANGLERFISH	29.8	21.8%	107	78.2%	136.8	0.14%
BLACKMOUTHED DOGFISH	6.5	100.0%		0.0%	6.5	0.01%
BLUE SHARK	1.6	0.9%	180.2	99.1%	181.8	0.19%
BLUE WHITING	6.2	100.0%		0.0%	6.2	0.01%
BOAR FISH	0.3	100.0%		0.0%	0.3	0.00%
COD	10.6	0.9%	1144.3	99.1%	1154.9	1.21%
COMMON LING	44.4	3.8%	1139.2	96.2%	1183.6	1.24%
COMMON LOBSTER	5.9	29.9%	13.8	70.1%	19.7	0.02%
COMMON SKATE	228.8	100.0%		0.0%	228.8	0.24%
COMMON SPIDER CRAB	26.6	94.3%	1.6	5.7%	28.2	0.03%
CUCKOO RAY	8.5	100.0%		0.0%	8.5	0.01%
DAB	1.1	100.0%		0.0%	1.1	0.00%
EDIBLE CRAB UNSEXED	145	98.5%	2.2	1.5%	147.2	0.15%
EUROPEAN CONGER EEL	19.1	49.4%	19.6	50.6%	38.7	0.04%
EUROPEAN HAKE	2459.2	3.2%	73991.5	96.8%	76450.7	79.83%
EUROPEAN SEABASS	8.5	100.0%		0.0%	8.5	0.01%
GREAT SCALLOP	6.22	86.1%	1	13.9%	7.22	0.01%
GREATER FORKBEARD	11	100.0%		0.0%	11	0.01%
GREY GURNARD	24	43.7%	30.9	56.3%	54.9	0.06%
HADDOCK	439.3	9.4%	4231.4	90.6%	4670.7	4.88%
HORSE-MACKEREL (SCAD)	111.2	87.5%	15.9	12.5%	127.1	0.13%
JOHN DORY		0.0%	52.2	100.0%	52.2	0.05%
LESSER SPOTTED DOGFISH	636.6	65.9%	329.3	34.1%	965.9	1.01%
MEGRIM	29.3	7.4%	367.1	92.6%	396.4	0.41%
NULL	45.7	96.2%	1.8	3.8%	47.5	0.05%
NURSE HOUND	125.5	90.6%	13	9.4%	138.5	0.14%
POLLOCK	62	3.6%	1657.2	96.4%	1719.2	1.80%

Species	For all mesh sizes					
	Discarded		Retained		Total Catch	
	kg	% of species catch	kg	% of species catch	Kg	% of total catch
POOR COD	1.7	100.0%		0.0%	1.7	0.00%
RED GURNARD	7	33.3%	14	66.7%	21	0.02%
RED MULLET		0.0%	0.4	100.0%	0.4	0.00%
SAITHE	16.3	3.9%	403.8	96.1%	420.1	0.44%
SHAGREEN RAY	12	57.1%	9	42.9%	21	0.02%
SMOOTH HOUND	13.3	2.8%	463.3	97.2%	476.6	0.50%
SOLE (DOVER SOLE)	2.3	4.4%	50.1	95.6%	52.4	0.05%
SPOTTED RAY	6.2	77.5%	1.8	22.5%	8	0.01%
SPURDOG	3461.7	74.0%	1218.4	26.0%	4680.1	4.89%
TOPE SHARK	568.5	75.7%	182.3	24.3%	750.8	0.78%
TUB GURNARD	0.8	1.4%	54.8	98.6%	55.6	0.06%
TURBOT		0.0%	7.3	100.0%	7.3	0.01%
WHITING	28.7	6.8%	392	93.2%	420.7	0.44%
WHITING-POUT (BIB)	5.8	15.3%	32	84.7%	37.8	0.04%
WITCH	20	46.8%	22.7	53.2%	42.7	0.04%
Grand Total	9461.92		86306		95767.92	

3.7.2 ETP Species

3.7.2.1 Definition of ETP Species

Since this fishery was certified the MSC has made a key change in the interpretation of Principle 2 with respect to ETP species. This change is briefly explained below, and its implications for the Cornish Hake and Gill net fishery are then considered.

During 2015, the MSC provided an interpretation on the definition of ETP species within the context of the MSC Standard (MSC 2015). Species listed as “prohibited” in the annual EU TAC Regulation must subsequently be regarded as ETP species. Under Article 14 of the current Regulation (124/2019), porbeagle sharks, common skate and spurdog are included in the list of prohibited species; however, there is an exception for spurdog in the case of “catch avoidance programmes” (EU 2019b). It is therefore appropriate to regard porbeagle sharks and common skate as ETP species (and thus relevant to PI 2.3.1), as none of the UoC vessels are permitted to retain them. By contrast, vessels in the UoA are actively participating in the catch avoidance programme (see section 3.7.1.2.2 of this report) and consequently retain some spurdog while discarding the majority of the spurdog catch. It is therefore appropriate to regard spurdog as a “discarded” species (*sensu* CR v1.3) for this UoC.

A consequence of the MSC interpretation of ETP species is that catch data for all fisheries taking place in EU waters must be evaluated to see if any of the “Prohibited” species listed in Article 14 of EU Regulation 120/2019 are caught in the fishery (and indeed whether catch records are adequate to identify the capture of such species).

During the course of the site visit the assessment team discussed this list of prohibited species with the client, the Sea Mammal Research Unit (SMRU) and examined independent observer data from Cefas for evidence of interactions with the prohibited species listed in this Regulation.

The client reported that the hake fleet do not fish for nor retain on board their vessels any of the prohibited species (except from those spurdog caught and retained in accordance with the derogation

from the EU Regulations as part of the “NEPTUNE” project (described in section 3.7.1.2.2 of this report). The catch of porbeagle sharks is reported by the client to have been increasing recently, but these are all returned to the sea immediately after capture.

Data from Cefas observers in 2018 show no records of porbeagle; catches of 196.6kg of common skate, all of which were discarded (all returned to the sea), 4.4t of spurdog (mostly returned to the sea, apart from those retained under the NEPTUNE project), and 9.2kg of Allis shad. No other ETP species were encountered.

It is clear from the data provided at this 4th surveillance audit that there continue to be occasional catches of protected species in the fishery, including Allis shad and common skate. This catch composition is similar to that seen during the initial assessment of the fishery and previous surveillance audits.

3.7.2.2 Interaction with cetaceans

A summary of hake gill-net fishery interactions with cetaceans was provided to the assessment team by Allen Kingston from the Sea Mammal Research Unit (SMRU) following the site visit. He reported that SMRU monitored 54 gill net hauls on 7 observer trips over the past 12 months.

All of the monitored hauls were equipped with Acoustic Deterrent Devices (“pingers”), and no interactions were recorded with marine mammals (either cetaceans or pinnipeds).

3.8 Any developments or changes within the fishery which impact traceability or the ability to segregate between fish from the Unit of Certification (UoC) and fish from outside the UoC (non-certified fish)

No changes in the fishery that would impact on traceability or the ability to segregate UoC and non-UoC fish were reported at this audit.

3.8.1 Changes in fleet structure or operation

There has only been one change in the UoC fleet since the year 2 surveillance audit. The current list of vessels in the UoC is given below.

Table 4: List of eligible vessels for the Cornish Hake Gill Net Fishery MSC Certificate.

Vessel Name	PLN
Serene Dawn	PW 156
Amanda of Ladram	E 9
Ajax	PZ 36
Brittania V	FH 121
Harvest Reaper	PW 177
Stelissa	PZ 498
Silver Dawn	PZ 1196
Govenek of Ladram	PZ 51
Joy of Ladram	E 22
Ocean Pride	FH 24

Charisma	PW 45
Karen of Ladram	PW 3
Ygraine	SS 284

There have been no significant changes in the type of fishing gear used or fishing practices in the fishery since it was certified. It was noted that vessels may be using slightly heavier footropes on their gear to extend the period around neap tides that could be fished, and that fishers were generally fishing with larger meshed gear (to catch larger hake, and a response to market conditions and the increasing abundance of hake), but in all other respects the gear remains the same. The changes in fishing practices do not require any review of the assessment outcome.

3.9 Version Details

The versions of the fisheries program documents used for this assessment are listed in the table below.

Table 5. Fisheries program documents versions

Document	Version number
MSC Fisheries Certification Process	Version 2.1
MSC Fisheries Standard	Version 1.3
MSC General Certification Requirements	Version 2.4.1
MSC Surveillance Reporting Template	Version 2.01

3.10 Confirmation of Scope

The fishery was considered to be “in scope” for MSC certification during its initial assessment (see MSC FCP at section 7.4). The surveillance team made enquiries during this audit to confirm that the fishery remains in scope. The findings are listed below.

3.10.1 Destructive fishing practices

The client confirmed that no destructive fishing practices (explosives or poisons) are used in this fishery.

3.10.2 Controversial unilateral exemptions

No indication was given during the site visit that the fishery is subject to any controversial unilateral exemptions.

3.10.3 Enhancement activities

This is not an enhanced fishery.

3.10.4 Forced & child labour

The assessment team confirmed that fishery operators have not been prosecuted for any violations against forced labour laws. The client has submitted a Declaration on Forced and Child Labour to the MSC as required by §7.4.4.2 *et seq* of FCP v2.1.

4 Results

4.1 Surveillance results overview

4.1.1 Summary of conditions

As a result of the assessment in 2015, five conditions of certification were raised by the assessment team, and maintenance of the MSC certificate is contingent on the Cornish Hake and Gill Net fishery moving to comply with these conditions within the time-scales set at the time the certificate was issued.

The table below summarises the status of the six conditions of certification associated with this fishery following the last surveillance audit. Four conditions have been closed at earlier audits. Condition 2 (status of discarded species) has been closed at this surveillance audit; and the milestones for Condition 6 (Monitoring, Control & Surveillance) have been revised at this surveillance audit in order to harmonise the fishery with overlapping fisheries.

Table 6. Summary of conditions

Condition number	Performance indicator (PI)	Status	PI original score	PI revised score
1	1.2.2	Closed at 3 rd surveillance audit	75	80
2	2.2.1	On Target, [closed at this audit]	70	80
3	2.2.3	Closed at 3 rd surveillance audit	70	85
4	2.3.2	Closed at 1 st surveillance audit	70	80
5	2.5.3	Closed at 3 rd surveillance audit	75	90
6	3.2.3	New at 3 rd surveillance audit, updated milestones at this audit. "Exceptional Circumstances" apply to this condition. ²	90	75

² Exceptional circumstances apply (*sensu* MSC FCP v2.1 at §7.18.1.5) because even with perfect compliance with the harmonised milestones specified in the condition (which cover a period from 2020-2023) it will not be possible to achieve the SG80 level of performance within the current period of certification, which expires in June 2020.

4.1.2 Total Allowable Catch (TAC) and catch data

TAC and catch data for the fishery and client group for the last complete year of fishing (2018) are summarised in the table below. The UoA share of the TAC is that allocated to the UK in 2018. The client (UoC) share of the TAC is the amount available following swaps and transfers by the CFPO during the year. The catch data are for those vessels listed in the UoC (Table 4).

Table 7. Total Allowable Catch (TAC) and catch data

TAC	Year	2018	Amount	111,785t
UoA share of TAC	Year	2018	Amount	12,103t
UoC share of TAC	Year	2018	Amount	2,025t
Total green weight catch by UoC	Year (most recent)	2018	Amount	1,812t
	Year (second most recent)	2017	Amount	1,413t

4.1.3 Recommendations

During the initial full assessment, the assessment team also made a recommendation that would improve the performance of the fishery against the MSC Principles and Criteria. Recommendations do not have to be implemented to maintain certification, and accordingly the action taken, and timescales are at the discretion of the client.

4.1.3.1 Recommendation 1: Long term-management Plan

Progress with the recommendation raised when the fishery was certified is summarised below:-

Recommendation	This fishery is presently in transition from management under a recovery plan to management under a new long-term plan that will set out the harvest control rules for the stock. The details of this plan have not been finalised. It will be appropriate to review the relevant Performance Indicators (notably 1.2.1 and 1.2.2) after this plan is agreed and implemented.
Update	It has been noted at recent surveillance audits that the EU has consulted with ICES and has developed a new MAP which applies to the northern hake stock. This MAP is not considered to be an HCR for the entire stock because it has not been agreed by Norway. However both the EU and Norway have followed ICES advice for the stock closely over recent years, which is both consistent with the new MAP and the MSY Approach. This adherence has been reflected in the re-scoring of PI1.2.2 over the course of this period of certification, and demonstrates that good progress has been made with this recommendation.

4.2 Conditions

A review of progress against the milestones for each condition of certification is presented below. For each condition, the text shows the progress report submitted to the MSC following each surveillance audit. This text has not been altered and is presented as historical evidence of progress. The progress report for this surveillance is shown at the end of each progress report.

4.2.1 Condition 1: Harvest Control Rules & Tools

	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
Performance Indicator(s) & Score(s)	1.2.2	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	Support work to develop and adopt well-defined harvest control rules that are consistent with the harvest strategy and ensure that exploitation rates is reduced as limit reference points are approached. The HCR should be contained within a long-term management plan.		
Milestones	<p>Revised milestones following 2nd Surveillance Audit: -</p> <p>Years 1-2: Promote the adoption of well-defined harvest control rules which are consistent with the harvest strategy and ensure that the exploitation rates is reduced as limit reference points are approached.</p> <p>Resulting score: 75</p> <p>Year 3: Evidence shall be presented that a harvest control rule is being implemented that is consistent with the harvest strategy (i.e. the objective of attaining MSY specified in the EU Common Fisheries Policy or equivalent international agreements) and that would ensure that the exploitation rate is reduced as limit reference points are approached.</p> <p>Resulting score: 80</p> <p>Years 4-5: Ongoing evidence of the implementation of the harvest control rule shall be required.</p> <p>Resulting score: 80</p>		
Client action plan	<ul style="list-style-type: none"> CFPO is working closely with the NWW RAC (other Member States involved in Hake fisheries) and European Association of Fish Producers Organisation (EAPO) in the development of a long-term management plan for this stock that will include well-defined harvest control rules which are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached. CFPO actively participate in meetings with STECF to ensure their knowledge of the fisheries concerned is as accurate as possible, and that management is appropriate. 		
Progress on Condition: Year 1	The requirement in Year 1 is that the client (CFPO) supports the adoption of well-defined harvest control rules which are consistent with the harvest strategy and ensure that the exploitation rate on hake is reduced as limit reference points are approached. CFPO continues to work with the NWW RAC (as member, rapporteur and chair of hake-related discussions) and EAPO in the development of a long-term management plan for this stock, and has participated in relevant meetings with STECF, to ensure their knowledge of the		

	<p>fisheries concerned is as accurate as possible and that management is appropriate.</p> <p>The surveillance team noted (as have MRAG in their surveillance report for the DFPO) that progress with the development of a long-term management plan for this and other EU fisheries is presently delayed by disagreements between the European Parliament and Council of Ministers about the implementation of the co-decision process. This could present an obstacle to meeting the Year 3 milestone for this condition that the client (and any other fishery client in Europe) has little power to influence. However, the surveillance team also noted evidence that an appropriate set of harvest control rules are emerging that could meet the requirements of this PI even if a formal long-term management plan is not agreed. Since the certification year (2014), advice on management of the hake fishery has moved on from the Hake Recovery Plan and in 2015 and 2016 ICES (2015a, 20161a) provided catch advice based on the MSY approach: this provides a well-defined HCR based on a target fishing mortality reference point (F_{MSY}) and two SSB reference points (Blim and MSYBtrigger). The latter is intended to be at the lower range of variability of SSB expected while fishing at F_{MSY}, while the former is the point below which biomass should not decline in order not to impair reproductive capacity. Following the MSY approach, catch advice is given such that for current SSB values below MSY Btrigger, fishing mortality is linearly reduced (in proportion to the ratio of the current SSB to MSYBtrigger), implying that as Blim is approached, fishing mortality is reduced. Below Blim, special measures can be introduced to further reduce fishing mortality and thus protect reproductive capacity, and described in Articles 5 & 6 of the Recovery Plan (EU 2004).</p> <p>This (the MSY) approach essentially constitutes a long-term management plan for Northern hake (or any stock), with the objective of sustaining exploitation levels so as to achieve MSY, and having a well-defined harvest control rule that ensure that exploitation rates are reduced as limit reference points are approached.</p> <p>We note, however, that landings of hake have greatly exceeded the TACs since 2009 (due, possibly to the disconnect between the recovery plan measures and the unexpected large increase in biomass since 2008).</p> <p>Further, the surveillance team note that since this fishery was assessed, a revised Common Fisheries Policy has been implemented in the EU EEZ. One of the key objectives of the CFP is to maintain populations of harvested species above levels that can produce the MSY, by achieving a level of exploitation equivalent to F_{MSY} by 2015 (Article 2, EU Regulation 1380/2013).</p> <p>ICES consider that F_{MSY} for the northern hake stock is $F=0.28$, and that F has been below this value since 2012.</p> <p>The team consider that many of the requirements of this condition are presently met, both by the binding legal commitment set out in the CFP and through the advice provided by ICES. If the constitutional issues that are preventing the development of long-term management plans in the EU are not addressed by Year 2, it may be appropriate to revise the condition and milestones to recognise that a pragmatic and alternative solution to this condition has been achieved.</p> <p>Conclusion</p> <p>From a pragmatic perspective, the requirements of this Performance Indicator are now met by the combination of the 2004 Hake Recovery Plan coupled with the revised CFP and the response of the management system relative to advice provided by ICES using the MSY approach. However, from an administrative perspective there is little sign of progress at the EU level with a long-term management plan for this fishery.</p>
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	<p>The Year 1 requirements are that the client fishery should support the development of appropriate harvest control rules, and the evidence presented at this audit indicates that progress is on target in this regard.</p> <p>It will be important at the Year 2 surveillance audit to review the likelihood of the EU developing a long-term management plan for this fishery, and if management continues to be consistent with the MSY approach described above, whether this is in fact necessary.</p>
Progress on Condition: Year 2	<p>The comments made at surveillance audit 1 are still relevant.</p> <p>It is now clear that, as a result of constitutional issues, the development and implementation of a long-term EU management plan for hake is unlikely in the near future and, furthermore, that inclusion of such a management plan in a multi-species multi-annual plan is also unlikely within the period of certification.</p> <p>The assessment team note that the MSY approach set out in the CFP and used as the basis for ICES advice has been adhered to by the EU in its TAC determinations for 2016, 2017 and 2018. Therefore, as noted in the year 1 surveillance audit, a <i>de facto</i> harvest control rule can be considered to be "in place".</p> <p>In last year's surveillance audit the team anticipated that it may be appropriate to revise the condition and milestones in response to this situation at this year's surveillance audit. The team has considered that this would be an appropriate response to the current situation, and has drawn up a revised version of this condition (see Appendix 1 of the year surveillance report).</p> <p>The evidence available at this surveillance audits shows that the client fleet have supported the adoption of a TAC that is consistent with the harvest strategy and the harvest control rule, which meets the requirements of the Year 2 milestone for this condition.</p> <p>It is anticipated that if the TAC continues to be set at a level that is consistent with the MSY approach enshrined in the harvest strategy (EU CFP) and is based on ICES' advice following this approach, then the requirements of the revised condition are likely to be met at the next surveillance audit in 2018.</p> <p>Conclusion</p> <p>Progress is on target. The harvest control rules in place have resulted in a TAC being set for the fishery that is consistent with the harvest strategy.</p> <p>The condition and milestones have been revised as a pragmatic response to the constitutional issues that are preventing the development of a long-term management plan. If the TAC continues to be set in line with ICES advice and the MSY approach, it is likely that the SG80 requirements will be met at the third surveillance audit.</p>
Progress on Condition: Year 3	<p>The milestones for this condition were revised at the last surveillance audit following harmonisation discussions between CABs. They now require at this surveillance audit that: -</p> <p><i>Evidence shall be presented that a harvest control rule is being implemented that is consistent with the harvest strategy (i.e. the objective of attaining MSY specified in the EU Common Fisheries Policy or equivalent international agreements) and that would ensure that the exploitation rate is reduced as limit reference points are approached.</i></p> <p>Although no formal HCR has been adopted, the harvest rule now followed by ICES is to give advice is based on F_{MSY} as the maximum F. This is reduced linearly when the biomass falls below $MSY B_{trigger}$ and is zero below B_{lim}. The rule is well defined and consistent with the Precautionary and MSY Approaches.</p>

	<p>In recent years the agreed TAC has usually followed the ICES MSY HCR advice:</p> <table><tr><td>Year</td><td>ICES advice</td><td>Agreed TAC</td></tr><tr><td>2014</td><td>81846</td><td>81846</td></tr><tr><td>2015</td><td>78457</td><td>90849</td></tr><tr><td>2016</td><td>109592</td><td>108764</td></tr><tr><td>2017</td><td>123777</td><td>119765</td></tr><tr><td>2018</td><td>115335</td><td>104190</td></tr><tr><td>2019</td><td>142240</td><td>142240</td></tr></table> <p>Since 2016 managers have followed ICES advice, including the TAC for 2019.</p> <p>In response to this evidence, the assessment team has re-scored the relevant Performance Indicator (PI 1.2.2). The scoring is presented in the relevant section of this report. A new score of 80 has been awarded for this PI.</p> <p>Conclusion</p> <p>The evidence available at this surveillance audit satisfies the requirements of the year 3 milestone. Progress is considered to be on target, and following re-scoring of PI 1.2.2, this condition can now be closed.</p>	Year	ICES advice	Agreed TAC	2014	81846	81846	2015	78457	90849	2016	109592	108764	2017	123777	119765	2018	115335	104190	2019	142240	142240
Year	ICES advice	Agreed TAC																				
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2016	109592	108764																				
2017	123777	119765																				
2018	115335	104190																				
2019	142240	142240																				
Progress on Condition: Year 4	<p>There has been no material change in the status of the harvest strategy and the HCR of the fishery since the last surveillance audit was conducted in early 2019. Although the EU has adopted a new MAP for Western Waters which formalises the use of ICES reference points in the management of northern hake and other fish stocks (EU 2019c), this has MAP not been adopted by Norway. For the time being the stock is still being managed as it was previously, with the EU and Norway agreeing to set a TAC that corresponds to ICES advice.</p> <p>The most recent ICES advice confirms the findings of the previous surveillance audit, which is that managers are continuing to follow scientific advice. ICES has proposed a 26% reduction in the TAC for 2020, and the management decision on this proposal will be taken in December 2019.</p>																					
Status of condition	<p>This condition was closed at the Year 3 surveillance audit earlier in 2019. There has been no material change in the fishery or management arrangements since then. It is appropriate for this condition to remain closed.</p>																					

4.2.2 Condition 2: Discarded species outcome

	Insert relevant PI number(s)	Insert relevant scoring issue/scoring guidepost text	Score
Performance Indicator(s) & Score(s)	2.2.1	Main bycatch species are <u>highly likely</u> to be within biologically based limits or if outside such limits there is a <u>partial strategy of demonstrably effective</u> mitigation measures in place such that the fishery does not hinder recovery and rebuilding.	70
Condition	Evidence is required to show that that the partial strategy in place for managing the impact of the fishery on spurdog ensures that the fishery does not hinder the recovery or rebuilding of spurdog stocks. If the current strategy is not effective, then new management measures should be identified and adopted with a view to establishing a more effective regime.		
Milestones	Years 1-2: Design and implement a programme of monitoring work that will determine the contribution of this fishery to overall mortality of spurdog.		

	<p>Resulting score: 70</p> <p>Years 2-3: Ongoing implementation of monitoring programme.</p> <p>Resulting score: 70</p> <p>Years 4-5: Report results of monitoring programme; implement any new management measures (if necessary) that are likely to improve effectiveness of management strategy.</p> <p>Resulting score: 80</p>
Client action plan	<ul style="list-style-type: none"> • CFPO currently lead industry partners with Cefas in project NEPTUNE looking at Spur-dog and Porbeagle by-catch rates, mitigation strategies and stock data enhancement. • CFPO involved in tagging work with Cefas on an on-going basis. • CFPO involvement on number of FSP projects in recent years • CFPO vessels have an open door policy with Cefas discard observers and most if not all vessels in the Group have taken discard observers from time to time. • CFPO will work with Cefas and vessels to design and implement an appropriate discard monitoring programme for the fishery. • CFPO will test and implement new management measures, if necessary, to mitigate impacts of the fishery on spurdog.
Progress on Condition: Year 1	<p>Evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill net fishery. The information presented at this audit covers the period 2015-2016, and Cefas report an ongoing commitment to maintaining the monitoring programme.</p> <p>Results of the monitoring programme were made available to the assessment team by Cefas at this audit. The evidence provided shows that spurdog are typically a minor element of the catch (less than 2%).</p> <p>The most recent ICES assessment of spurdog status indicates that the partial strategy for managing impacts on spurdog (i.e. setting a zero TAC to prevent directed fishing) is likely to be effective and will not impede the recovery of this species. ICES (2016) provides evidence for this, in that the long-term decline in SSB has ceased and stabilized over the last decade, whilst the harvest rate has declined substantially and is estimated to be well below the MSY level.</p> <p>CFPO, Cefas, the Shark Trust, and the MMO are also working together to develop new management measures to reduce the impacts of this fishery on spurdog through real time closures. Under this scheme, 3 CFPO vessels are presently reporting any spurdog catch incidents on a daily basis to Cefas, who are then providing management advice to the vessels on how to avoid catching spurdog in subsequent hauls. Whilst participating in this project the vessels are allowed to land a small quantity of spurdog for sale (limited to 2t per month), and which are made available to Cefas for biological sampling when landed.</p> <p>Conclusion</p> <p>The evidence presented at this audit shows that a monitoring programme has already been designed and implemented for this fishery, meeting the Year 1 and Year 2 requirements. Some initial results of the monitoring programme were made available to the team, meeting part of the Year 4-5 requirements as well.</p> <p>There is evidence that work has already started on the development of new management measures (such as real-time management responses to spurdog</p>

	<p>catches), which will ultimately improve the effectiveness of the management strategy.</p> <p>Progress at this audit is therefore considered to be <u>ahead of target</u> for this condition.</p>
<p>Progress on Condition: Year 2</p>	<p>At this surveillance audit the assessment team discussed the ongoing catch monitoring and management work with the client and with Cefas. This is being conducted under the Neptune Programme (see section 3.7.1.2.2 of this report).</p> <p>The spurdog catch monitoring programme described last year remains in place and is reported to be operating successfully. In summary, vessel skippers provide daily reports of their spurdog catch to Cefas; these data are rapidly collated by Cefas to produce maps of the fishing area that show where fishing vessels have caught spurdog in the previous 24h period. The maps use a “traffic light” colour coding for 17x17km grid squares which show where spurdog have been caught.</p> <p>The maps are provided in real time to skippers and are advisory. Vessels are not prohibited from fishing in “red” squares. Spurdog are a very mobile species, and skippers often realise that a shoal is moving through an area so that there may be a significant catch of spurdog on one day followed by a negligible catch in the exact same area in the following days.</p> <p>In return for their participation in this project, the vessels are permitted to land up to 2 tonnes of spurdog per month. These spurdog can only be landed if they were already dead when they were caught. Any live spurdog must be returned to the sea. The retention and landing of spurdog is allowed under a derogation from the CFP Regulation that prohibits their retention and landing. The retained spurdog are sold and are also made available for biological sampling by Cefas.</p> <p>On the day prior to the site visit the skippers of 6 gill net fishing vessels, including 3 from the UoC, had met with Cefas and the Shark Trust to discuss progress with this initiative. Cefas observers deployed on vessel participating in this scheme have found that the catch and discarding rates recorded when observers are present are consistent with those recorded when observers are not present. Arrangements have also been made for a Shark Trust observer to be present on a fishing trip.</p> <p>The client reported that the total catch of spurdog for the vessels participating in this project between 1st November 2016 and 1st November 2017 was 90t, of which 38t were landed. Between 12 and 14t of the 52t of spurdog that were returned to the sea were dead.</p> <p>The skippers’ perception is that spurdog abundance is increasing. Catches of spurdog in hake nets are reported to be sporadic and unpredictable. The sharing of information about spurdog catches appears to be informing skippers’ fishing decisions and assisting with a reduction of accidental spurdog catches.</p> <p>Conclusion</p> <p>The evidence presented at this audit shows that the monitoring programme established in Year 1 continues to be implemented successfully. Some results of the monitoring programme were made available to the team, meeting part of the Year 4-5 requirements as well.</p> <p>There is evidence that work is continuing on the development of new management measures (such as real-time management responses to spurdog catches), which will ultimately improve the effectiveness of the management strategy.</p> <p>Progress at this audit is therefore considered to continue to be <u>ahead of target</u> for this condition.</p>

**Progress on
Condition: Year 3**

Cefas have presented evidence of ongoing monitoring of catches from the hake gill net fishery (see section 3.7.1.2 of this report).

A report on the findings of the spurdog by-catch avoidance programme has been published (Hetherington *et al.* 2018). This study has demonstrated that the use of real-time spurdog catch data from the fishery to identify areas where there is a high risk of spurdog bycatch coupled with a derogation to allow a limited quantity of dead bycatch to be landed provides a viable management option and an alternative to the prohibition set out in the annual TAC regulation.

This project has required close collaboration between fishing vessel skippers, the CFPO, scientists from Cefas and fishery managers at Defra. An illustration of the processes that have been developed to gather and analyse data and then communicate information back to the fishing fleet is provided in Figure 3.

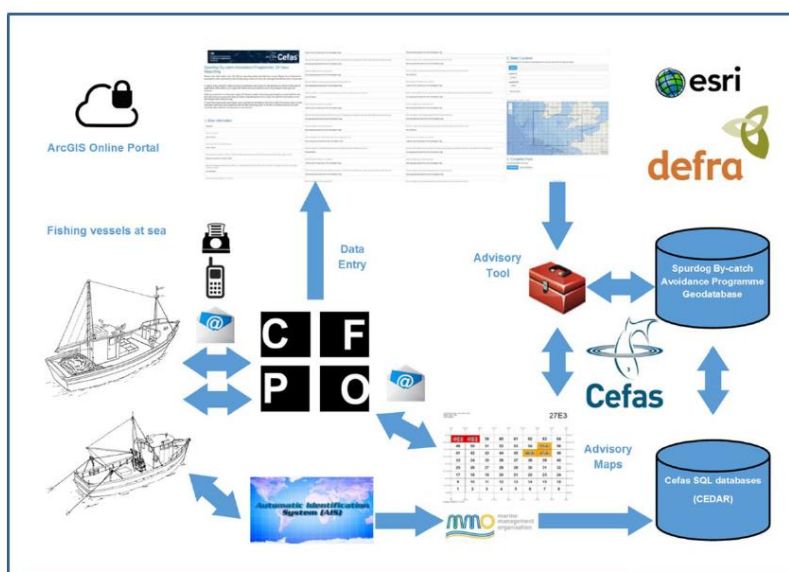


Figure 3: Schematic of the spurdog by-catch reporting and advisory tools.

Figure 3: Schematic diagram of the data communication and analysis procedures established in the spurdog bycatch avoidance programme (Hetherington *et al.* 2018).

The scope of this programme has also included studies of the spurdog movements and distribution using data storage tags; analysis of post-capture vitality of spurdog using different fishing métiers; and improved communication between scientists, managers and fishers that has developed a better understanding of fishing practices and has helped to ensure that the handling of live spurdog which are returned to the sea optimises their survival. A new code of conduct has been developed and implemented to promote best practice in the return of live spurdog to the sea.

Work on this programme is ongoing. Cefas and CFPO are working to refine the monthly landing allowance issued to vessels participating in the programme (currently set at 2t of dead spurdog per month) to take account of the higher catches reported during the winter months (October – April).

Future work has also been planned to further reduce the number of significant bycatch events; to develop the bycatch advisory tool so that it is predictive rather than reactive; and to rollout this approach more widely, both within the Celtic Sea and in other UK sea areas.

Conclusion

The evidence presented at this surveillance audit shows that a report has been produced which presents the results of bycatch monitoring in the fishery. This

	<p>report evaluates the management measures that have been trialled and adopted by some of the CFPO vessels in the unit of certification. This progress is ahead of target for Year 3 of certification.</p> <p>The Year 4-5 milestones are largely met. The assessment team considers that it would be appropriate to review progress at the Year 4 audit before formally closing this condition.</p>
Progress on Condition: Year 4	<p>At this surveillance audit Cefas presented additional information which shows that monitoring of catches and discards from the fishery is still being carried out (see update in section 3.7.1.2 of this report). This information shows that the catch composition reported in 2018 was similar to that seen in previous years, with the proportion of spurdog in the catch remaining low, and none of the non-target species making up more than 5% of the catch.</p> <p>The information presented at this annual surveillance audit, coupled with the report of the bycatch monitoring work (Hetherington <i>et al.</i> 2018 described in the progress report for Year 3 above), meets all of the requirements of the Year 4-5 milestone requirements.</p>
Status of condition	<p>The assessment team has rescored PI2.2.1 using the information that has been provided by Cefas (see section 3.7.1.2 of this report) and has concluded that this condition can be closed on schedule.</p>

4.2.3 Condition 3: Discarded species information

	Insert relevant PI number(s)	Insert relevant scoring issue/scoring guidepost text	Score
Performance Indicator(s) & Score(s)	2.2.3	Sufficient data continue to be collected to detect any increase in risk to main bycatch species (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the strategy).	70
Condition	Action should be taken to establish a discard monitoring programme for the fishery that is capable of detecting any increase in risk to the main bycatch species.		
Milestones	<p>Years 1-2: Design and implement a discard monitoring programme for this fishery.</p> <p>Resulting score: 70</p> <p>Years 2-3: Ongoing implementation of monitoring programme; start of annual reporting.</p> <p>Resulting score: 80</p> <p>Years 4-5: Ongoing monitoring and reporting of discarding from the fishery.</p> <p>Resulting score: 80</p>		
Client action plan	<ul style="list-style-type: none"> CFPO will work with Cefas to design and implement an appropriate discard monitoring programme for the fishery CFPO will work with Cefas to ensure that data collected from this discard monitoring programme are collated and the results provided annually to relevant parties. 		
Progress on Condition: Year 1	Evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill net fishery. The information presented at this audit covers the period 2015-		

	<p>2016, and Cefas have indicated their ongoing commitment to maintaining the monitoring programme.</p> <p>Results of the monitoring programme were made available to the assessment team by Cefas at this audit. The evidence provided shows that spurdog are typically a minor element of the catch (less than 2%), and that all of the spurdog caught in the fishery are returned to the sea (apart from on the 3 vessels now participating in the real-time closure programme).</p> <p>The information provided from this monitoring programme to date has been in the form of raw data; no annual reports have yet been produced. The condition does not, however, require the production of annual reports of monitoring activity and findings until Years 2-3 of certification.</p> <p>Conclusion</p> <p>The evidence presented at this audit shows that a monitoring programme has already been designed and implemented for this fishery, meeting the Year 1 and Year 2 requirements.</p> <p>Some initial results of the monitoring programme were made available to the team, indicating that prospects for meeting the annual reporting requirements in Years 2-3 are good.</p> <p>Progress at this audit is therefore considered to be on target for this condition.</p>
Progress on Condition: Year 2	<p>Further evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill net fishery. The information presented at this audit covers the 2017, and Cefas have indicated their ongoing commitment to maintaining the monitoring programme under the EU's Data Collection Regulation.</p> <p>Results of the monitoring programme were made available to the assessment team by Cefas at this audit. The evidence provided shows that spurdog are typically a minor element of the catch (around 2%), and that all of the spurdog caught in the fishery are returned to the sea (apart from catches on the vessels participating in the NEPTUNE programme).</p> <p>The information provided from this monitoring programme to date has been in the form of raw data; no formal report has been produced. The condition does not, however, require the production of annual reports of monitoring activity and findings until Years 2-3 of certification.</p> <p>Conclusion</p> <p>The evidence presented at this audit shows that a monitoring programme continues to be implemented for this fishery, meeting the Year 1 and Year 2 requirements.</p> <p>Some initial results of the monitoring programme were made available to the team. A report of monitoring results has not yet been produced. This milestone relates to Years 2 & 3 of the period of certification.</p> <p>Progress at this audit is therefore considered to be on target for this condition.</p> <p>At the Year 3 surveillance audit in 2018 the assessment team anticipate that it should be possible to rescore this PI and close the condition if an annual report on catch monitoring is available.</p>
Progress on Condition: Year 3	<p>Further evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill net fishery. The information presented at this audit covers the 2018, and Cefas have indicated their ongoing commitment to maintaining the monitoring programme under the EU's Data Collection Regulation.</p>

	<p>Results of the monitoring programme were made available to the assessment team by Cefas at this audit. The evidence provided shows that spurdog are typically a minor element of the catch (around 2%), and that all of the spurdog caught in the fishery are returned to the sea (apart from catches on the vessels participating in the NEPTUNE programme).</p> <p>As noted in the report on progress with Condition 2 above, a report has been produced by Cefas on the bycatch of spurdog in this fishery since the last surveillance audit (Hetherington <i>et al.</i> 2018). This report demonstrates that a monitoring and management programme has been successfully established that enables real-time monitoring and management of risk to this species.</p> <p>Conclusion</p> <p>The provision of a report summarising progress with bycatch monitoring and avoidance meets the requirements of the Year 3 milestone. The assessment has re-scored PI 2.2.3 and this condition has been closed, on target.</p>
Progress on Condition: Year 4	<p>Further evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill net fishery (see section 3.7.1.2.1 of this report).</p> <p>The evidence provided shows that the level of observer coverage has been maintained, and that catch composition reported in 2018 was similar to that seen in previous years. The proportion of spurdog in the catch remained low, and none of the non-target species made up more than 5% of the catch (see Table 3 of this report).</p>
Status of condition	<p>The evidence presented at this surveillance audit shows that ongoing monitoring of the fishery continues to provide information relevant to this PI, and supports the decision to close the condition at the previous surveillance audit.</p>

4.2.4 Condition 4: ETP Species Management

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	2.3.2	There is <u>evidence</u> that the strategy is being implemented successfully.	70
Condition	Evidence should be provided to demonstrate the successful implementation of the management strategy for reduction of ETP species interactions with the fishery.		
Milestones	<p>Years 1: Work with the appropriate management authority (MMO) and observers (SMRU) to gather information that demonstrates the effective implementation of ETP bycatch reduction measures (i.e. the use of pingers on nets).</p> <p>Resulting score: 80</p> <p>Years 2-5: Ongoing monitoring of implementation of management measures.</p> <p>Resulting score: 80</p>		
Client action plan	<ul style="list-style-type: none"> CFPO vessels have been involved in acoustic pinger trials for over 10 years. We have worked collaboratively with SMRU on developing and testing various pinger designs/models. All vessels in the Groups have been issued and actively use DDD acoustic deterrents. 		

	<ul style="list-style-type: none"> CFPO vessels all have an open door policy on Cetacean Observers and all have carried an observer at least once. As custodians of the marine environment all of our skippers are committed to minimising any cetacean by-catch and are willing to take all necessary and practicable steps to ensure this. Monitoring has shown that cetacean by-catch levels are minimal in the fishery, and CFPO will continue to monitor the effectiveness of pingers as a management tool. CFPO will work with MMO to ensure that the Group demonstrably use pingers on all Hake nets
Progress on Condition: Year 1	<p>Evidence has been presented by the SMRU at this surveillance audit to demonstrate the effectiveness of acoustic deterrents (pingers) at reducing the incidence of cetacean bycatch in hake gill nets. Observations conducted by SMRU observers indicated that pingers can reduce the bycatch level of harbour porpoise by over 80%.</p> <p>Information from MMO inspections of fishing vessels indicates that the use of pingers is now established throughout the fleet. The CFPO reported to the surveillance team that one vessel received a warning for not having adequately charged the batteries in the pingers attached to fishing gear while in harbour. No incidents of non-compliance with the EC Regulations that require the use of pingers have been detected.</p> <p>The progress to date meets the requirements of the Year 1 milestone for this condition, and it is therefore appropriate to re-score this Performance Indicator.</p> <p>The evidence of monitoring of pinger use by the fleet by the MMO, coupled with ongoing monitoring of bycatch rates by SMRU suggests that the fishery should meet the Year 2-5 milestone commitments, which will be reviewed at future surveillance audits.</p> <p>Conclusion</p> <p>Progress with this condition is on target. In response to the progress made in the first year of certification and in accordance with the milestones, the assessment team has re-scored the relevant Performance Indicator (see first surveillance report) and has concluded that a score of 80 is now appropriate, and that this condition can now be closed.</p> <p>At future surveillance audits the assessment team will continue to keep this aspect of the fishery under review to ensure that the commitments anticipated by the milestones for Years 2-5 are attained.</p>
Progress on Condition: Year 2	<p>The client reports that pingers continue to be used by all UoC vessels, in accordance with the EU Regulations that require this. There have been no incidents of non-compliance with these Regulations.</p> <p>The Sea Mammal Research Unit reported at this surveillance audit that the level of compliance with the requirement to use "pingers" is good. This is reflected in low observed catches of cetaceans in this fishery.</p> <p>Conclusion</p> <p>The evidence of good compliance with legislation requiring the use of pingers, coupled with SMRU observations of good compliance with the requirement to use pingers and low levels of cetacean bycatch in the fishery, demonstrates that the requirements of Year 2-5 milestones for this condition are being met.</p> <p>The team considers that the decision to close the condition in the first year of certification remains appropriate.</p>

Progress on Condition: Year 3	<p>The client reported again that pingers continue to be used by all UoC vessels, in accordance with the EU Regulations that require this. There have been no incidents of non-compliance with these Regulations.</p> <p>The Sea Mammal Research Unit reported at this surveillance audit that the level of compliance with the requirement to use "pingers" is good. This is reflected in low observed catches of cetaceans in this fishery (1 harbour porpoise and 2 common dolphins recorded in 6 observer trips during 2018).</p> <p>Conclusion</p> <p>The evidence of good compliance with legislation requiring the use of pingers, coupled with SMRU observations of good compliance with the requirement to use pingers and low levels of cetacean bycatch in the fishery, demonstrates that the requirements of Year 2-5 milestones for this condition are being met.</p> <p>The team considers that the decision to close the condition in the first year of certification remains appropriate.</p>
Progress on Condition: Year 4	<p>The client reported again that pingers continue to be used by all UoC vessels, in accordance with the EU Regulations that require this. There have been no incidents of non-compliance with these Regulations.</p> <p>The Sea Mammal Research Unit reported at this surveillance audit that the level of compliance with the requirement to use "pingers" is good. This is reflected in the absence of any records of marine mammal catches (of either cetaceans or pinnipeds) in the fishery in the past 12 months.</p>
Status of condition	<p>The evidence of good compliance with legislation requiring the use of pingers, coupled with SMRU observations of good compliance with the requirement to use pingers and low levels of cetacean bycatch in the fishery, demonstrates that the requirements of Year 2-5 milestones for this condition are being met.</p> <p>The team considers that the decision to close the condition in the first year of certification remains appropriate.</p>

4.2.5 Condition 5: Ecosystems

	Insert relevant PI number(s)	Insert relevant scoring issue/scoring guidepost text	Score
Performance Indicator(s) & Score(s)	2.5.3	Sufficient data continue to be collected to detect any increase in risk level (e.g. due to changes in the outcome indicator scores or the operation of the fishery or the effectiveness of the measures).	75
Condition	Action should be taken to establish a discard monitoring programme for the fishery that is capable of detecting any increase in ecosystem risk level resulting from changes in the quantity and identity of the main bycatch (discarded) species.		
Milestones	<p>Years 1-2: Design and implement a discard monitoring programme for this fishery.</p> <p>Resulting score: 70</p> <p>Years 2-3: Ongoing implementation of monitoring programme; start of annual reporting.</p> <p>Resulting score: 80</p> <p>Years 4-5: Ongoing monitoring and reporting of discarding from the fishery.</p>		

	Resulting score: 80
Client action plan	<ul style="list-style-type: none"> CFPO will work with Cefas and vessels to design and implement an appropriate discard monitoring programme for the fishery CFPO will work with Cefas to ensure that data collected from this discard monitoring programme are collated and the results provided annually to relevant parties
Progress on Condition: Year 1	<p>Evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill net fishery. The information presented at this audit covers the period 2015-2016, and Cefas have indicated their ongoing commitment to maintaining the monitoring programme.</p> <p>Results of the monitoring programme were made available to the assessment team by Cefas at this audit.</p> <p>The information provided from this monitoring programme to date has been in the form of raw data; no annual reports have yet been produced. The condition does not, however, require the production of annual reports of monitoring activity and findings until Years 2-3 of certification.</p> <p>Conclusion</p> <p>The evidence presented at this audit shows that a monitoring programme has already been designed and implemented for this fishery, meeting the Year 1 and Year 2 requirements.</p> <p>Some initial results of the monitoring programme were made available to the team, indicating that prospects for meeting the annual reporting requirements in Years 2-3 are good.</p> <p>Progress at this audit is therefore considered to be on target for this condition.</p>
Progress on Condition: Year 2	<p>Evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill-net fishery. The information presented at this audit covers 2017 (following on from the 2015-16 data presented at the first surveillance audit), and Cefas have indicated their ongoing commitment to maintaining the monitoring programme.</p> <p>Results of the monitoring programme were made available to the assessment team by Cefas at this audit.</p> <p>The information provided from this monitoring programme to date has been in the form of raw data; no formal reports have been produced. The condition does not, however, require the production of annual reports of monitoring activity and findings until Years 2-3 of certification.</p> <p>Conclusion</p> <p>The evidence presented at this audit shows that a monitoring programme continues to be implemented for this fishery, meeting the Year 1 and Year 2 requirements.</p> <p>Some initial results of the monitoring programme were made available to the team. A report of monitoring results has not yet been produced. This milestone relates to Years 2 & 3 of the period of certification.</p> <p>Progress at this audit is therefore considered to be on target for this condition.</p> <p>At the Year 3 surveillance audit in 2018 the assessment team anticipate that it should be possible to rescore this PI and close the condition if an annual report on catch monitoring is available.</p>

<p>Progress on Condition: Year 3</p>	<p>Further evidence was provided at this surveillance audit to demonstrate that the client is working in partnership with Cefas to monitor catch composition in the hake gill net fishery. The information presented at this audit covers 2018, and Cefas have indicated their ongoing commitment to maintaining the monitoring programme under the EU's Data Collection Regulation.</p> <p>Results of the monitoring programme were made available to the assessment team by Cefas at this audit. The evidence provided shows that spurdog are typically a minor element of the catch (around 2%), and that all of the spurdog caught in the fishery are returned to the sea (apart from catches on the vessels participating in the NEPTUNE programme).</p> <p>As noted in the report on progress with Condition 2 above, a report has been produced by Cefas on the bycatch of spurdog in this fishery since the last surveillance audit (Hetherington <i>et al.</i> 2018). This report demonstrates that a monitoring and management programme has been successfully established that enables real-time monitoring and management of risk to this species.</p> <p>Conclusion</p> <p>The provision of a report summarising progress with bycatch monitoring and avoidance meets the requirements of the Year 3 milestone. The assessment has re-scored PI 2.5.3 and this condition has been closed, on target.</p>
<p>Progress on Condition: Year 4</p>	<p>At this surveillance audit Cefas provided further evidence of ongoing monitoring of the fishery by observers. The findings of the observer programme are consistent with that seen in previous years, with a low proportion of non-target species in the catch. The evidence is that all spurdog caught are returned to the sea, apart from by the vessels participating in the bycatch avoidance programme.</p>
<p>Status of condition</p>	<p>The evidence presented at this surveillance audit shows that ongoing monitoring of the fishery continues to provide information relevant to this PI, and supports the decision to close the condition at the previous surveillance audit.</p>

4.2.6 Condition 6: Monitoring, Control & Surveillance

This condition was initially raised at the 3rd surveillance audit following harmonisation discussions with other Conformity Assessment Bodies. The condition was part of a harmonised response across all of the fisheries that overlap with the "North Sea Joint Demersal Fisheries" MSC assessment.

In the period since the 3rd surveillance audit, the condition and its milestones for the North Sea Joint Demersal Fisheries assessment have been revised by the CAB for that fishery in order to comply with the Remand Notice of the Independent Adjudicator in response to objections raised to that fishery assessment.

It is important to note that this condition reflects a general concern about the monitoring of compliance with the EU Landing Obligation throughout the EU EEZ. It does not indicate a specific concern about the Cornish hake gill net fishery or the work of the enforcement agencies in the UK. Now that the changes to the condition have been finalised it will be possible to review the status of this fishery with respect to the condition and its milestones following Year 1 of the revised condition (i.e. during 2020).

Lloyds' Register have determined that "exceptional circumstances" apply to this condition (*sensu* MSC FCP v2.1 at §7.18.1.5). This requirement is met because even with perfect compliance with the harmonised milestones specified in the condition (which cover a period from 2020-2023) it will not be possible to achieve the SG80 level of performance within the current period of certification, which expires in June 2020. The condition will therefore be extended to cover any subsequent re-certification of the fishery and to ensure a harmonised timeline and outcome with respect to other MSC-certified fisheries for this species.

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	3.2.3	<i>Sla: A monitoring, control and surveillance system has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.</i>	75
Condition	Evidence should be provided that the MCS-system has demonstrated an ability to enforce relevant management measures, strategies and rules, key among which is the Landing Obligation (LO).		
Milestones	<p>Year 1 [2020]:</p> <p>The client must present a detailed plan to demonstrate that the monitoring, control and surveillance mechanisms work together to enforce relevant management measures, strategies and/or rules, key among which is the LO.</p> <p>Though the plan will likely be developed in collaboration with national authorities, it does not need to rely on the national authorities for implementation. The client should nevertheless detail how it will engage with the authorities on implementation and improvement of the monitoring, control and surveillance mechanisms pertaining to the LO.</p> <p>(Score: 75)</p> <p>Year 2 [2021]:</p> <p>The client will provide evidence from national authorities of monitoring, control and surveillance mechanisms, particularly with a focus on the implementation of the LO..</p> <p>(Score: 75).</p> <p>Year 3 [2022]:</p> <p>The client will provide evidence from national authorities of monitoring, control and surveillance mechanisms, particularly with a focus on the implementation of the LO.</p> <p>(Score: 75).</p> <p>Year 4 [2023]:</p> <p>At the fourth surveillance audit, the client will provide evidence that it has implemented the plan fully and is judged to be compliant with the requirements of the LO, based on evidence from national authorities of monitoring, control and surveillance mechanisms.</p> <p>(Score: 80).</p>		
Client action plan	<p>Year 1-3 (2019-2022):</p> <p>The client will provide evidence from national authorities of monitoring, control and surveillance mechanisms working together to ensure enforcement of management measures, strategies and/or rules, particularly with a focus on the implementation of the landing obligation.</p> <p>Year 4 (2023):</p> <p>The client will provide evidence from national authorities of fishermen compliance with management measures, strategies and/or rules in form of example</p>		

	inspection reports with an overview of infringement, sanctions etc. and/or presentations of changing landing patterns for fishermen
Progress on Condition: Year 1	<p>The condition was introduced at the 3rd surveillance audit (in February 2019) and has been revised at this 4th surveillance audit (November 2019).</p> <p>At the 3rd surveillance audit the client produced a client action plan and secured the support of the relevant agencies to provide evidence of monitoring and compliance by the UoC vessels with the EU Landing Obligation.</p> <p>It is not appropriate to review progress with this condition at this 4th surveillance audit, following the substantial changes that have been made to the detailed wording of the milestones required by the MSC harmonisation process. Progress will be reviewed during the re-assessment of the fishery in 2020 and at future surveillance audits.</p>
Status of condition	This is a revised condition with a Year 1 milestone in 2020. Progress cannot yet be evaluated, but it will be reviewed during the proposed re-assessment of the fishery and in any subsequent surveillance audits.

4.3 Overall Performance Indicator Scores

Table 8: Scores awarded for Performance Indicators and overall Principle-level scores for the Cornish hake gill net fishery. Original scores are shown along with the “current” scores following this surveillance audit. Yellow shading indicates scores of less than 80 for which a condition of certification has been generated.

Principle	Component	Fishery		Cornish Hake	
		Assessment / Source		Original	Current
		Conformity Assessment Body		Lloyd's Register	
		UoC Spatial extent (ICES)		VIIe, VIIf, VIIg, VIIh, VIIj, VIIk	
		Date		11/06/2015	This report
		PI	Performance Indicator (PI)		
One	Outcome	1.1.1	Stock status	100	100
		1.1.2	Reference points	90	90
		1.1.3	Stock rebuilding	NA	NA
	Management	1.2.1	Harvest strategy	90	90
		1.2.2	Harvest control rules & tools	75	80
		1.2.3	Information & monitoring	80	80
		1.2.4	Assessment of stock status	90	90
Two	Retained species	2.1.1	Outcome	85	85
		2.1.2	Management	90	90
		2.1.3	Information	90	90
	Bycatch	2.2.1	Outcome	70	80
		2.2.2	Management	80	80
		2.2.3	Information	75	85
	ETP species	2.3.1	Outcome	90	90
		2.3.2	Management	70	80
		2.3.3	Information	80	80
	Habitats	2.4.1	Outcome	90	90
		2.4.2	Management	90	90
		2.4.3	Information	80	80
	Trophic function	2.5.1	Outcome	80	80
		2.5.2	Management	90	90
		2.5.3	Information	75	90
Three	Governance and policy	3.1.1	Legal & customary framework	100	100
		3.1.2	Consultation, roles & responsibilities	100	100
		3.1.3	Long term objectives	100	100
		3.1.4	Incentives for sustainable fishing	80	80
	Fishery specific management system	3.2.1	Fishery specific objectives	80	80
		3.2.2	Decision making processes	90	90
		3.2.3	Compliance & enforcement	90	75
		3.2.4	Research plan	80	80
		3.2.5	Management performance evaluation	80	80

Overall weighted Principle-level scores	Cornish Hake	
	Original	Current
	11/06/2015	This report
Principle 1 - Target speci PI 1.1.3 Not scored PI 1.1.3 Scored	89.4 NA	90.0 NA
Principle 2 - Ecosystem	82.3	85.3
Principle 3 - Management	89.5	88.0

4.4 Re-scoring Performance Indicators

4.4.1 Original Scoring PI 2.2.1

2.2.1: Bycatch (Discarded) species status: The fishery does not pose a risk of serious or irreversible harm to the bycatch species or species groups and does not hinder recovery of depleted bycatch species or species groups.		
SG60	SG80	SG100
<p>Main bycatch species are <u>likely</u> to be within biologically based limits, or if outside such limits there are mitigation <u>measures</u> in place that are <u>expected</u> to ensure that the fishery does not hinder recovery and rebuilding.</p> <p>If the status is poorly known there are measures or practices in place that are expected result in the fishery not causing the bycatch species to be biologically based limits or hindering recovery.</p>	<p>Main bycatch species are <u>highly likely</u> to be within biologically based limits or if outside such limits there is a <u>partial strategy</u> of <u>demonstrably effective</u> mitigation measures in place such that the fishery does not hinder recovery and rebuilding.</p>	<p>There is a <u>high degree of certainty</u> that bycatch species are within biologically based limits.</p>
Scoring comments		
<p>The MSC consider that “main” bycatch species are those that make up 5% or more of the total catch. The assessment team can also consider other species as “main” bycatch if there is good reason to do so (for instance if their life history or current stock status means that any fishery-related mortality could adversely affect the species concerned). This is particularly important for a number of elasmobranch species that are, technically, not ETP species.</p> <p>For the purposes of this assessment, the recent FSP studies of the Cornish Gill net vessel MV Charisma identified the following bycatch species that either form more the 5% of the catch or which warrant scrutiny within this assessment. Although the catch composition shown in Table 8 are expressed in numbers rather than weight, it is apparent that cod and haddock represent 5% or more of the catch for the FV Charisma (fishing with hake nets) and would therefore be considered as “main” retained species (as above).</p> <p>Of the bycatch species that were discarded, only lesser-spotted dogfish and spurdog would be considered main bycatch species, whilst edible crab, mackerel and porbeagle shark are considered minor by-catch species that are caught in more than insignificant quantities.</p> <p>Spurdog: The spurdog stock unit extends across the NE Atlantic, and the most recent assessment undertaken by ICES indicates a strong decline in spurdog total biomass to around 15% of pre-exploitation levels, which appears to have been driven by relatively high exploitation levels. Though fishing mortality appears to have declined in recent years, biomass has declined to record low level in recent years and ICES advice is that, to allow the stock to rebuild, catches should be reduced to the lowest possible level in 2013 and 2014.</p> <p>There has been a ban on landing spurdog since 2010. Landings data from 2009 (the last full year when landings of spurdog were permitted, with only a maximum landing size of 100 cm in effect) indicate that the CFPO netting fleet landed a total of 50.8 t of spurdog. Since fishing practices and gear have not changed significantly since 2009, the assumption is that a quantity of spurdog similar to this is now discarded from the fishery. Variation in length of soak time did not appear to have an impact upon the numbers of spurdog caught nor on survival rates (to discarding), which were consistently high, with 283</p>		

(73%) returned to the sea alive. It is reported that spurdog are often found on the same grounds as hake, which limits the potential for mitigation. The fleet report that spurdog capture is sporadic, and that moving nets to avoid the spurdog is ineffective: by the time that the nets are hauled and the problem has been identified, the spurdog have moved to another area.

Lesser spotted dogfish: There is no assessment available for lesser spotted dogfish: this is not a commercially important species and appears from surveys to be abundant. Discards are known to survive well.

Porbeagle shark: Assessments of the NE Atlantic porbeagle stock were carried out in 2009 by the joint ICCAT/ICES meeting. The BSP model- demonstrated that the population continued to decline slightly after 1961 and estimated a relative 2008 biomass (to that in 1961) as between 0.54 and 0.78 and the relative 2008 fishing mortality rates (to F_{MSY}) of between 0.72 and 1.15. The ASP model estimated the 2008 relative spawning-stock fecundity (to SSF_{MSY}) at between 0.21 and 0.43 and the relative fishing mortality rate (to F_{MSY}) at between 2.54 and 3.32. The conclusion was that current biomass is below B_{MSY} and that recent fishing mortality is near or possibly above F_{MSY}.

ICES continues to advise on the basis of the precautionary approach that no fishing for porbeagle should be permitted, landings of porbeagle should not be allowed, and a rebuilding plan should be developed for this stock. No reference points have been proposed for this. Since 2012, EC Regulations 23/2010, 57/2011 and 44/2012 have prohibited fishing for porbeagle in EU waters and, for EU vessels, to fish for, to retain on board, to tranship and to land porbeagle in international waters. The Norwegian and Faroese fisheries have ceased and have not resumed.

Mackerel: The NE Atlantic mackerel stock is estimated to be well above BMSY_{trigger} and B_{pa}, though fishing mortality in 2011 was above both MSY and precautionary levels. No update assessment was available for 2013, but ICES Reported that catches of mackerel have been increasing since 2005 and have been around 900 kt since 2010, and that the mackerel egg survey index show a doubling of the SSB since 2004, and a 30% increase from 2010 to 2013.

Edible crab: Cefas uses catch and effort data from the fishery and the size structure of crabs in the landings to estimate exploitation levels and abundance indices and an analytical perspective on stock status including reference points. The status of the stock of edible crab around SW England is good, with spawning stock and exploitation level around the level required to produce MSY.

Score: 70

Although it is likely that both spurdog and porbeagle sharks are outside B_{lim}, there has been a management response (setting of a zero TAC, ban on landings etc) to this. Thus, some main bycatch species are likely to be outside biologically based limits, but there is a partial strategy of mitigation measures in place that are expected to ensure that the fishery does not hinder recovery and rebuilding of these very widely dispersed stocks (cover whole of NE Atlantic). However, given the continuing bycatch (and associated mortality) of both species in the hake gill net fishery, and the considerable time it will take to show that recovery is occurring, it cannot at the moment be said that they are demonstrably effective. These elements would score 60.

It is highly likely that lesser spotted dogfish are within biologically safe limits, and mackerel and edible crab are all highly likely to be within biologically safe limits (BMSY_{trigger}), with a high degree of certainty for mackerel (these elements would return scores of 80, 100 and 100 respectively).

Since all elements meet SG 60, and some achieve higher performance at or above SG80, but some do not meet SG 80 and require intervention to make sure they get there, a score of 70 is indicated (CR v1.3, Table C2).

Audit Trace References

Bendall et al., 2012; Babcock and Cortes 2012; ICES, 2012A; ICES 2013d; IUCN, 2010; section 6.3.2 of this assessment.

4.4.2 Revised Scoring PI 2.2.1

PI 2.2.1		The fishery does not pose a risk of serious or irreversible harm to the bycatch species or species groups and does not hinder recovery of depleted bycatch species or species groups.		
Scoring Issue		SG 60	SG 80	SG 100
a	Guide post	Main bycatch species are <u>likely</u> to be within biologically based limits, or if outside such limits there are mitigation measures in place that are <u>expected</u> to ensure that the fishery does not hinder recovery and rebuilding.	Main bycatch species are <u>highly likely</u> to be within biologically based limits or if outside such limits there is a <u>partial strategy of demonstrably effective</u> mitigation measures in place such that the fishery does not hinder recovery and rebuilding.	There is a <u>high degree of certainty</u> that bycatch species are within biologically based limits.
	Met?	Y	Y	
	Justification	<p>When the fishery was certified in 2015 it was considered that all of the species that may have been discarded by the fishery apart from spurdog (<i>Squalus acanthias</i>) and porbeagle sharks (<i>Lamna nasus</i>) were highly likely to be within biologically based limits. These two species were considered to be outside such limits, and the SG60 level of performance was achieved because there were measures in place that were expected to ensure that the fishery would not hinder recovery and rebuilding.</p> <p>It is now appropriate to review both the current status of the main discarded species and the management measures presently in place in the review of scoring against this PI.</p> <p>In the period since the fishery was certified, the EU Landing Obligation (LO) has been introduced. This requires that all fish species subject to catch limits (TACs) are retained aboard fishing vessels and landed, rather than being discarded. The LO has been phased in gradually, and came into full effect for the UoC area on 1st January 2019. The implications of the LO for netting vessels working in the UoC are summarised in an advisory note that has been produced by the client fishery (CFPO 2019), a copy of which is appended in section 5.3.1 of this report.</p> <p>The most recent observer data provided by Cefas (Table 3) shows the catch composition of vessels working in the UoC and the discarding behaviour aboard these vessels. These data show that discarding and retention behaviour is consistent with the regulatory requirements applying to the fishery: for instance all common skate are returned to the sea in accordance with their status as a “prohibited” species.</p> <p>The Cefas observer data indicates that only two of the non-target species make up 5% or more of the catch: haddock and spurdog. The majority of the haddock are retained (and are thus not considered here). Most of the spurdog are discarded, and are thus relevant to this PI.</p> <p>During 2015, the MSC provided an interpretation on the definition of ETP species within the context of the MSC Standard. (MSC 2015) Species that are listed as “prohibited” in the annual EU TAC Regulation must subsequently be regarded as ETP species. Under Article 14 of the current Regulation (124/2019), both porbeagle sharks and spurdog are listed as prohibited species; however there is an exception for spurdog in the case of “catch avoidance programmes” (EU 2019b). It is therefore appropriate to regard porbeagle sharks as an ETP species (and thus relevant to PI2.3.1), since none of the UoC vessels are permitted to retain this species. By</p>		

PI 2.2.1		The fishery does not pose a risk of serious or irreversible harm to the bycatch species or species groups and does not hinder recovery of depleted bycatch species or species groups.			
		<p>contrast, vessels in the UoA are actively participating in the catch avoidance programme (see section 3.7.1.2.2 of this report) and consequently retain some spurdog while discarding the majority of the spurdog catch. It is therefore appropriate to regard spurdog as a “discarded” species (<i>sensu</i> CRv1.3) for this UoC.</p> <p>Spurdog are evaluated below with respect to the scoring guideposts for this PI.</p> <p>Spurdog:</p> <p>The status of the spurdog stock in the NE Atlantic has recently been reviewed by the ICES Working Group on Elasmobranch Fisheries (WGEF), and new advice was published by ICES in October 2019 (ICES 2019d, 2019e). The key observations from this advice is that prohibitions on landing spurdog have resulted in a dramatic fall in catches, and that both recruitment and biomass are showing an upward trend (see section 3.7.1.1 & Figure 2 of this report).</p> <p>The only biomass reference point defined for the stock is $MSY B_{trigger}$. The harvest rate is well below HR_{MSY} and is also considered to be below HR_{pa} & HR_{lim}.</p> <p>The most recent ICES advice provide evidence of both an increase in spurdog recruitment and biomass. The trends for both indices and their associated probabilities mean that it is both likely (SG60) and highly likely (SG80) that the spurdog population is currently within biologically based limits.</p>			
b					
	Guide post	If the status is poorly known there are measures or practices in place that are expected result in the fishery not causing the bycatch species to be biologically based limits or hindering recovery.			
	Met?	NA			
	Justification	This SI is not considered to be applicable to this fishery, as both the discarding practices of the UoC and status of the discarded species is known.			
References		Section 3.7.1 of this report. (MSC 2015, CFPO 2019, EU 2019b, ICES 2019d, 2019e)			
OVERALL PERFORMANCE INDICATOR SCORE:					80
CONDITION NUMBER (if relevant):					NA

4.4.3 Original Scoring PI 3.2.3

<u>3.2.3: Compliance and enforcement - Monitoring, control and surveillance mechanisms ensure the fishery's management measures are enforced and complied with.</u>		
SG60	SG80	SG100

<p>Monitoring, control and surveillance <u>mechanisms</u> exist, are implemented in the fishery under assessment and there is a reasonable expectation that they are effective.</p> <p>Sanctions to deal with non-compliance exist and there is some evidence that they are applied.</p> <p>Fishers are <u>generally thought</u> to comply with the management system for the fishery under assessment, including, when required, providing information of importance to the effective management of the fishery.</p>	<p>A monitoring, control and surveillance <u>system</u> has been implemented in the fishery under assessment and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.</p> <p>Sanctions to deal with non-compliance exist, are <u>consistently applied</u> and thought to provide effective deterrence.</p> <p><u>Some evidence exists</u> to demonstrate fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery.</p> <p>There is no evidence of systematic non-compliance.</p>	<p>A <u>comprehensive</u> monitoring, control and surveillance system has been implemented in the fishery under assessment and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.</p> <p>Sanctions to deal with non-compliance exist, are consistently applied and <u>demonstrably</u> provide effective deterrence.</p> <p>There is a <u>high degree of confidence</u> that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the fishery.</p>
Scoring comments		
<p>There is a high degree of enforcement and control and in this fishery, which has increased recently in response to identification of substantial under-reporting, which recent changes and improvements in overall monitoring, control and surveillance have been designed to address. Enforcement includes use of satellite VMS, patrol vessels and aerial surveillance, checked against landings data and paper trails (such as the new catch certificates required by IUU regulations). All landings are weighed at designated points of landing.</p> <p>Agreements have been reached by the EC to address concerns about IUU fishing. Enforcement, management and compliance information is now being shared between organisations to create a comprehensive monitoring, control and surveillance system.</p> <p>Non-compliance is dealt with by the relevant national authorities through their criminal justice systems, using agreed and tested procedures.</p> <p>The assessment team interviewed the Marine Management Organisation (MMO), which is responsible for inspecting landings by the CFPO vessels in the UK. Compliance by this fleet with the relevant regulations is reported to be excellent.</p> <p>The client fleet have provided information on quota uptake by their vessels which demonstrates compliance with quota regulations at the national level.</p>		
Score: 90		
The fishery meets all of the SG80 requirements and the first and third of the SG100 requirements.		
Audit Trace References		
Section 7.3.3; EC, 2009a, b; ICES advice 2010; I8, I10, I13		

4.4.4 Revised Scoring PI 3.2.3

Note: the overall scoring outcome below is harmonised with other fisheries. The scoring justification has been adapted to suit the circumstances of the Cornish Hake Gill Net Fishery, resulting in a slightly higher score than that awarded for North Sea fisheries.

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with.		
Scoring Issue		SG 60	SG 80	SG 100
a	MCS implementation			
	Guide post	Monitoring, control and surveillance mechanisms exist, and are implemented in the fishery and there is a reasonable expectation that they are effective.	A monitoring, control and surveillance system has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.	A comprehensive monitoring, control and surveillance system has been implemented in the fishery and has demonstrated a consistent ability to enforce relevant management measures, strategies and/or rules.
	Met?	Y	N	N
	Justification	<p>The fishery takes place in EU waters. EU legislation establishes a framework of legislation establishing rules and also provisions for the monitoring, control and surveillance of fishing activities. These are implemented at the EU and Member State level. A summary of the systems in place for monitoring, control and surveillance is provided here.</p> <p>1. European Union Monitoring, Control & Surveillance Systems</p> <p>The basis for the EU enforcement system is the Control Regulation (1224/2009). The Regulation applies to all activities covered by the CFP carried out on the territory of member states or in EU waters, and by EU fishing vessels or nationals of a member state. It is the responsibility of the EU Member States to make sure that the rules agreed under the CFP are enforced.</p> <p>Fisheries controls play a central role in encouraging compliance, deterring fraud and ensuring sustainable fishing. Some of the substantial requirements of the Control Regulation are that Member States operate VMS and AIS systems, that they make use of fishing logbooks (vessels > 10m) or electronic logbooks (vessels > 12m).</p> <p>The European Fisheries Control Agency (EFCA), set up in 2005 and operational since 2007, has the mission "to promote the highest common standards for control, inspection and surveillance under the CFP". "Its primary role is to organise coordination and cooperation between national control and inspection activities so that the rules of the CFP are respected and applied effectively." The Agency, in cooperation with the European Border and Coast Guard Agency and the European Maritime Safety Agency, each within its mandate, supports the national authorities carrying out coast guard functions.</p> <p>EFCA coordinates the implementation of the Specific Control and Inspection Programme (SCIP). In order to meet the objective of the uniform and effective application of conservation and control measures rules in the NS SCIP area, the EFCA provided, in collaboration with the Member State concerned, a specific organisational framework for operational coordination of control activities in this area, known as a Joint Deployment Plan (JDP). The Western Waters JDP (WW JDP) has been in operation since 20125 with the participation of Denmark, Estonia,</p>		

PI 3.2.3	Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with.
	<p>France, Germany, Ireland, Latvia, Lithuania, the Netherlands, Poland, Portugal, Spain and the United Kingdom which collaborate in the implementation of these conservation and control measures through the system of joint campaigns based on permanent year-round control and inspection activities (EFCA 2019).</p> <p>Joint campaigns are planned, implemented and assessed each year in close cooperation between the Member State concerned and the EFCA at the regional level, to ensure achievement of the compliance with the conservation and control measures in force.</p> <p>The most recent JDP campaign reports for Western Waters indicate that a coordinated campaign of inspections of fishing vessels was carried out at sea; however no records of inspections of hake catches either at sea or on landing are reported (EFCA 2018a, 2018b).</p> <p>The Control Regulation allows “Union Inspectors” to be nominated. These inspectors are described on the EFCA website as:-</p> <p><i>“Union inspectors are mandated, under EU legislation, to carry out inspection and surveillance of fishing activities in European Union waters, outside the zones under the sovereignty of Member States, and in international waters” (EFCA website).</i></p> <p>The first Union Inspectors were nominated in 2011, their number reached 1924 from Member States and 46 from ECFA and DG MARE in 2016 (ECFA Annual Report 2016). At the end of 2017 ECFA announced the charter of a fisheries patrol vessel, the Lundy Sentinel, that will be deployed in 2018 in international, EU and third country waters.</p> <p>In addition the EU has adopted the EU Regulation to prevent, deter and eliminate illegal, unreported and unregulated fishing (IUU) (Council Regulation (EC) No 1005/2008), which entered into force on 1 January 2010. Each Member State shall take appropriate measures, in accordance with Community law, to ensure the effectiveness of that system.</p> <p>2. National Monitoring, Control & Surveillance Systems</p> <p>The national fisheries control agencies in England is the Marine Management Organisation (MMO) and the Inshore Fisheries and Conservation Authorities (IFCAs). The MMO is a government agency with responsibility for fishing throughout the English EEZ. The IFCAs are regional inshore fisheries management authorities with responsibility for fisheries and environmental management up to 6 nautical miles offshore. The Cornwall Inshore Fisheries & Conservation Authority has jurisdiction over inshore waters around Cornwall.</p> <p>The MMO has a regional office in Hayle in Cornwall and an office at Newlyn, the main port in Cornwall and the location for most of the landings from the Cornish hake gill net fishery. Over the course of the certification of the fishery the MMO has demonstrated an effective ability to enforce management strategies, measures and rules; at the most recent surveillance audit the MMO provided a reported that showed a capacity to detect and respond to a range of offences (over the past 2 years 7 offences have been detected, most of which were associated with overshoots of bycatch allowances).</p> <p>One of the most significant changes to the management of EU fisheries has been the introduction of the “Landing Obligation” established by Article 15 of the 2013 CFP Regulation. The Landing Obligation has been implemented gradually over the past few years through a succession of “Discard Plans”. The last Discard Plan ended on 31st December 2018, and Landing Obligation is now fully operational throughout the EU EEZ.</p>

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with.		
		<p>The implementation of the Landing Obligation by control agencies is being monitored throughout the EU. In its most recent review of the state of play with the implementation of the CFP, the European Commission reported that it is not currently possible to determine whether the Landing Obligation has resulted in a change in discard quantities; in many areas the fishing practices are described as “<i>business as usual</i>” (European Commission 2018a).</p> <p>Within the UK, the House of Lords European Union Committee has recently held an Inquiry into the implementation and enforcement of the EU landing obligation (House of Lords 2019). After interviewing a wide range of stakeholders from the fishing industry, enforcement agencies and environment NGOs, the inquiry found that:-</p> <p>19. <i>Although the landing obligation has applied to a number of UK fish stocks since 2015, we heard no evidence that fishers have been complying with it. Little attempt appears to have been made to enforce the landing obligation’s requirements thus far, allowing the discarding of fish to continue.</i></p> <p>[...]</p> <p>30. <i>With only a few weeks until it [the landing obligation] was due to come into force, witnesses to this inquiry did not believe the UK was in a position to implement the landing obligation.</i></p> <p>The CFPO consider that the Landing Obligation has little impact on the hake gill net fishery. This view is based on the fact that the gear used and areas fished tends to result in a catch of larger fish; and gill nets result in a good quality catch. This view is supported by data from recent Cefas observer trips which suggests that discarding of species that are covered by the Landing Obligation is typically low (see Table 3 of this report); however the same evidence indicates that discarding has been taking place at this low level since the Landing Obligation applied to the fishery.</p> <p>3. Conclusion</p> <p>The MSC has issued an interpretation to Conformity Assessment Bodies on how to consider the Landing Obligation (MSC 2019). This indicates that for PI3.2.3 evidence is required of <u>both</u> the practice of discarding in the fishery and the provision of data.</p> <p>The existence of a well established monitoring, control and surveillance system with a local presence and the capacity to monitor the activities of the fleet provides a reasonable expectation that enforcement of management measures will be effective, meeting the SG60 requirements for this SI.</p> <p>Whilst there is anecdotal evidence of good practice in this Unit of Certification, there is not presently sufficient evidence available to demonstrate that the monitoring, control and surveillance system in place has the ability to enforce the EU Landing Obligation. The SG80 and 100 requirements are not met.</p> <p>A condition of certification has been raised in response to this finding.</p>		
b	Sanctions			
	Guide post	Sanctions to deal with non-compliance exist and there is some evidence that they are applied.	Sanctions to deal with non-compliance exist, are consistently applied and thought to provide effective deterrence.	Sanctions to deal with non-compliance exist, are consistently applied and demonstrably provide effective deterrence.

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with.		
	Met?	Y	Y	N
	Justifi- cation	<p>Sanctions to deal with non-compliance are set out in EU and national legislation. The EU Control Regulation (1224/2009) sets out the framework for ensuring compliance and for determining appropriate sanctions (Article 89 <i>et seq</i>). and detailed rules for implementing these sanctions are set out in EU Regulation 404/2011.</p> <p>The UK government has each made legislation to transpose the sanctions and controls set out in the CFP and its daughter Regulations into enforceable national legislation (the Sea Fishing (Enforcement and Miscellaneous Provisions) Order 2015, made under the Sea Fisheries Act 1981) (UK Government 1981, 2015).</p> <p>Under this legislation, statutory bodies in each UK can enforce CFP and national fisheries legislation, and fishermen may be subject to fines, confiscation of catches and equipment, and also suspension of fishing licences (under the CFP “points system” for a period of 2 months (for 18 penalty points) incrementally increasing to suspension for a year (for 72 penalty points).</p> <p>The MMO ensures consistent application of regulations and sanctions by issuing a “Blue Book” of consolidated and up-to date legislation to all UK Fishery Officers and by providing adequate training to all Fishery Officers (MMO 2019).</p> <p>Evidence of the consistent application of sanctions and evidence of deterrence is provided by the Western Waters Joint Deployment Plan. The JDP requires the secondment of enforcement officers between Member States.</p> <p>The MMO have provided some evidence that sanctions are applied to the fishery, meeting the SG60 requirements. The low incidence of non-compliance indicates that the sanctions available provide some deterrent, meeting the SG80 requirements.</p> <p>In view of the concerns raised at the national level about the level of compliance with the EU landing obligation, it is not possible to conclude that the sanctions available demonstrably provide an effective deterrent, so the SG100 requirements are not met.</p>		
c	Compliance			
	Guide post	Fishers are generally thought to comply with the management system for the fishery under assessment, including, when required, providing information of importance to the effective management of the fishery.	Some evidence exists to demonstrate fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery.	There is a high degree of confidence that fishers comply with the management system under assessment, including, providing information of importance to the effective management of the fishery.
	Met?	Y	Y	N
	Justifi- cation	<p>Evidence has been provided by the MMO which indicates that fishers from the UoC comply with the management system under assessment. Catch and landings data are provided as required under EU and national legislation.</p> <p>In addition to this, the UoC fleet works in partnership with scientists from Cefas and the Sea Mammal Research Unit (SMRU) to gather data about the interaction of the fishery with non-target and ETP species.</p> <p>There is therefore some evidence available to demonstrated compliance with the management system and the provision of information important to the effective management of the fishery, meeting the SG60 and SG80 requirements.</p>		

PI 3.2.3		Monitoring, control and surveillance mechanisms ensure the management measures in the fishery are enforced and complied with.			
		SG100 is not considered to be met because of the concerns (detailed in Sla above) about compliance with the EU Landing Obligation.			
d	Systematic non-compliance				
	Guide post		There is no evidence of systematic non-compliance.		
	Met?		Y		
	Justification	On the basis of the information presented above, there is no evidence of systematic non-compliance by the vessels in the Unit of Certification.			
References		(UK Government 1981, 2015, EC 2008, 2009, EU 2013, EFCA 2018a, 2018b, 2018c, 2019, European Commission 2018a, 2018b, House of Lords 2019, MMO 2019, MSC 2019)			
OVERALL PERFORMANCE INDICATOR SCORE:					75
CONDITION NUMBER (if relevant):					

4.5 Revised Conditions

4.5.1 Condition 6 – Monitoring, Control & Surveillance

This condition was initially raised at the 3rd surveillance audit following harmonisation discussions with other Conformity Assessment Bodies. The condition was part of a harmonised response across all of the fisheries that overlap with the “North Sea Joint Demersal Fisheries” MSC assessment.

In the period since the 3rd surveillance audit, the condition and its milestones for the North Sea Joint Demersal Fisheries assessment have been revised by the CAB for that fishery in order to comply with the Remand Notice of the Independent Adjudicator in response to objections raised to that fishery assessment.

The original condition and the revised condition are set out below. The scoring of PI3.2.3 for this fishery is presented in section 4.4.4 of this report. The scoring for this fishery is based on the specific characteristics of this fishery, which differ from the North Sea fisheries: specifically, it is considered that for the Cornish hake fishery the requirements of Sla are not met at SG80, but the requirements of the other Scoring Issues are all met (by contrast the North Sea fisheries are considered not to meet Sla, Slc and Sld of this PI).

It is important to note that this condition reflects a general concern about the monitoring of compliance with the EU Landing Obligation throughout the EU EEZ. It does not indicate a specific concern about the Cornish hake gill net fishery or the work of the enforcement agencies in the UK. Now that the changes to the condition have been finalised it will be possible to review the status of this fishery with respect to the condition and its milestones following Year 1 of the revised condition (i.e. during 2020).

Lloyds' Register have determined that “exceptional circumstances” apply to this condition (*sensu* MSC FCP v2.1 at §7.18.1.5). This requirement is met because even with perfect compliance with the harmonised milestones specified in the condition (which cover a period from 2020-2023) it will not be possible to achieve the SG80 level of performance within the current period of certification, which expires in June 2020. The condition will therefore be extended to cover any subsequent re-certification of the fishery and to ensure a harmonised outcome with respect to other MSC-certified fisheries for this species.

4.5.2 Original Condition (PI 3.2.3)

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	3.2.3	<i>Sla: A monitoring, control and surveillance system has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.</i>	75
Condition	Evidence should be provided that the MCS-system has demonstrated an ability to enforce relevant management measures, strategies and rules. It should also be evident that fishers comply with the management system under assessment, including, when required, providing information of importance to the effective management of the fishery.		
Milestones	<p>Year 1-3 (2019-2022):</p> <p>The fishery must provide evidence that the monitoring, control and surveillance mechanisms work together to form part of a system and demonstrate an ability to enforce relevant management measures, strategies and/or rules, key amongst which is the Landing Obligation (Score: 75)</p> <p>Year 4 (2023):</p> <p>At the annual surveillance audit, the fishery must provide evidence that demonstrates that fishers comply with the management system under assessment, key among which the Landing Obligation (Score: 80)</p>		
Client action plan	<p>Year 1-3 (2019-2022):</p> <p>The client will provide evidence from national authorities of monitoring, control and surveillance mechanisms working together to ensure enforcement of management measures, strategies and/or rules, particularly with a focus on the implementation of the landing obligation.</p> <p>Year 4 (2023):</p> <p>The client will provide evidence from national authorities of fishermen compliance with management measures, strategies and/or rules in form of example inspection reports with an overview of infringement, sanctions etc. and/or presentations of changing landing patterns for fishermen</p>		

4.5.3 Revised Condition (PI 3.2.3)

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	3.2.3	<i>Sla: A monitoring, control and surveillance system has been implemented in the fishery and has demonstrated an ability to enforce relevant management measures, strategies and/or rules.</i>	75
Condition	Evidence should be provided that the MCS-system has demonstrated an ability to enforce relevant management measures, strategies and rules, key among which is the Landing Obligation (LO).		

<p>Milestones</p>	<p>Year 1 [2020]:</p> <p>The client must present a detailed plan to demonstrate that the monitoring, control and surveillance mechanisms work together to enforce relevant management measures, strategies and/or rules, key among which is the LO.</p> <p>Though the plan will likely be developed in collaboration with national authorities, it does not need to rely on the national authorities for implementation. The client should nevertheless detail how it will engage with the authorities on implementation and improvement of the monitoring, control and surveillance mechanisms pertaining to the LO.</p> <p>(Score: 75)</p> <p>Year 2 [2021]:</p> <p>The client will provide evidence from national authorities of monitoring, control and surveillance mechanisms, particularly with a focus on the implementation of the LO.</p> <p>(Score: 75).</p> <p>Year 3 [2022]:</p> <p>The client will provide evidence from national authorities of monitoring, control and surveillance mechanisms, particularly with a focus on the implementation of the LO.</p> <p>(Score: 75).</p> <p>Year 4 [2023]:</p> <p>At the fourth surveillance audit, the client will provide evidence that it has implemented the plan fully and is judged to be compliant with the requirements of the LO, based on evidence from national authorities of monitoring, control and surveillance mechanisms.</p> <p>(Score: 80).</p>
<p>Client action plan</p>	<p>Year 1-3 (2019-2022):</p> <p>The client will provide evidence from national authorities of monitoring, control and surveillance mechanisms working together to ensure enforcement of management measures, strategies and/or rules, particularly with a focus on the implementation of the landing obligation.</p> <p>Year 4 (2023):</p> <p>The client will provide evidence from national authorities of fishermen compliance with management measures, strategies and/or rules in form of example inspection reports with an overview of infringement, sanctions etc. and/or presentations of changing landing patterns for fishermen</p>
<p>Progress on Condition: Year 1</p>	<p>The condition was introduced at the 3rd surveillance audit (in February 2019) and has been revised at this 4th surveillance audit (November 2019).</p> <p>At the 3rd surveillance audit the client produced a client action plan and secured the support of the relevant agencies to provide evidence of monitoring and compliance by the UoC vessels with the EU Landing Obligation.</p> <p>It is not appropriate to review progress with this condition at this 4th surveillance audit, following the substantial changes that have been made to the detailed wording of the milestones required by the MSC harmonisation process. Progress will be reviewed during the re-assessment of the fishery in 2020 and at future surveillance audits.</p>

Status of condition	This is a revised condition with a Year 1 milestone in 2020. Progress cannot yet be evaluated, but will be reviewed during the proposed re-assessment of the fishery and in any subsequent surveillance audits.
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4.5.4 Letter of support from enforcement agencies

A letter of support for the Client Action Plan for the new condition of certification was received from the MMO in April 2019 and is reproduced below.

From: "Youell, Martyn" <Martyn.Youell@marinemanagement.org.uk>
Date: 12 April 2019 at 09:55:53 BST
To: Paul <paul@cfpo.org.uk>
Cc: "Hoskin, Richard" <Richard.Hoskin@marinemanagement.org.uk>, "Dixon, Simon" <simon.dixon@marinemanagement.org.uk>
Subject: MMO support for MSC Hake

Dear Paul

You have asked the Marine Management Organisation (MMO) to support the Cornish Fish Producers Organisation (CFPO) in the MSC certification of their Cornish Hake Fishery.

Along with devolved administrations, the MMO is the national authority in the UK responsible for the implementation of the common fisheries policy of the European Union, which is based on the principle of sustainable fisheries. The responsibilities of the MMO include fisheries management and fisheries control. As part of this role, and within its legal capacity, MMO is willing to assist the CFPO in the process of MSC certification.

This can be done by providing information such as statistics and reports, as required by the certification body, allowing the information can be provided legally. The MMO is also available to the certification body for questions of fishery regulation and control.

In this context, the MMO is prepared to provide publicly available information about control and enforcement with regard to the Common Fisheries Policy. The MMO is also prepared to clarify this information in a conversation.

Best regards

Martyn

The Marine Management Organisation (MMO) The information contained in this communication is intended for the named recipient(s) only. If you have received this message in error, you are hereby notified that any disclosure, copying, distribution or taking action in reliance of the content is strictly prohibited and may be unlawful. Whilst this email and associated attachments will have been checked for known viruses whilst within MMO systems, we can accept no responsibility once it has left our systems. Communications on the MMO's computer systems may be monitored and/or recorded to secure the effective operation of the system and for other lawful purposes.

5 Appendices

5.1 Evaluation processes and techniques

5.1.1 Site visits

A Skype discussion with the client representative (Paul Trebilcock) and the assessment team was held on the 10th October. Two weeks before the skype discussion the client submitted material relevant to the audit.

5.1.2 Stakeholder Participation

A total of 21 stakeholder organisations and individuals having relevant interest in the assessment were identified and notified, via e-mail, of surveillance process. This e-mail highlighted the potential process for engagement in the surveillance, if desired. In addition, the interest of others not appearing on this list was solicited through the postings on the MSC website.


No stakeholders came forward requesting a meeting with members of the assessment team during the site visit.

5.2 Stakeholder input

No written input from stakeholders was received during this surveillance audit.

5.3 Additional detail on Conditions/ Actions/ Results








5.3.1 CFPO: Landing Obligation Advisory Note for net fishermen



LANDING OBLIGATION ADVISORY NOTE

Gear: Area 7 Gill, Tangle and Trammel Net Fisheries.

General All catches of quota species (regardless of size) must be kept on board, landed and Principles: will count against your quota uptake, except where the exemptions below apply.

WHAT YOU CAN DISCARD IF NECESSARY:	WHAT YOU MUST CONTINUE TO DISCARD: <small>(To be returned as quickly & carefully as possible)</small>
 Any non-quota species	 Any bass in excess of your permitted landing limits (refer to your licence) or undersized.
 Under <i>de minimis</i> exemption you can discard a small % of certain species because it is recognised as difficult to completely avoid unwanted catches (these will not count against your quota uptake). These species are: Dover sole d-g (inclusive)	 Prohibited Species including porbeagle , common skate , angel shark and spurdog (unless you are part of spurdog real time management scheme). Refer to licence for full list.
 Under High Survival exemption - fish to be returned as quickly and carefully as possible (these will not count against your quota uptake) Skates and Rays in area 7 e-k Plaice in area 7 d-g (inclusive)	 Bluefin tuna - Dead bluefin tuna must be reported to MMO for advice on disposing ashore for scientific purposes
 Damaged fish (these will not count against your quota uptake) Any fish damaged by predators/disease or parasites/lice – it is the skipper/crew that decide if a fish is damaged or not.	<div style="background-color: #000000; color: white; padding: 10px;"> IN YOU HAVE A LOG BOOK YOU MUST RECORD: <ol style="list-style-type: none"> 1 Any non-quota species discards greater than 50kg 2 Any <i>de minimis</i> discards 3 High survival discards 4 Damaged discards </div>

The full Landing Obligation guidance is available from the MMO website (<https://www.gov.uk/government/publications/landing-obligation-2019-rules-and-regulations>) or contact CFPO for further guidance.

5.4 Harmonised fishery assessments

There are four MSC-certified fisheries prosecuting the Northern European hake stock and one fishery in assessment (see Table 9). Brief details of each fishery are provided below:

- The **Cornish Hake gill net fishery** was certified on 11th June 2015 and is the subject of this surveillance audit.
- The **Norway North Sea Demersal fishery** was certified on 11th June 2018 (DNV-GL 2018). An expedited audit report has subsequently been published for North Sea cod, but no surveillance activities for hake have been conducted since the fishery was certified. The cod component of this fishery was suspended on 24th October 2019. A surveillance audit announcement was published on 30th October 2019.
- The **SFSAG Northern Demersal Stocks fishery** was first certified on 22nd October 2010 (as SFSAG North Sea Haddock) and subsequently re-certified on 3rd July 2018 (ME Certification 2018). An expedited audit report was conducted in September 2019, resulting in the suspension of the UoC for whiting. An annual surveillance audit was announced on 4th October 2019.
- The **Joint Demersal fisheries in the North Sea and adjacent waters fishery** was certified on 31st October 2018. The Public Certification Report spans 4 volumes (CU-Pesca 2019a, 2019b, 2019c, 2019d). A notice was issued concerning the suspension of the cod and whiting UoCs on 28th October 2019.

Details of all of the relevant hake fisheries in the MSC programme are shown in Table 9. The scores awarded for each Performance Indicator for each of the fisheries are shown in Table 10.

A harmonisation discussion between the CABs for the MSC-certified hake fisheries took place on the 19th February 2019.

Table 9: List of northern hake fisheries currently in the MSC fishery certification programme [Source: MSC website].

Fishery	Species	Gear types	Locations	MSC status	CAB	PIs to Harmonise
Cornish hake gill net	Hake (European) (<i>Merluccius merluccius</i>)	Gill nets And Entangling Nets	Northeast Atlantic (FAO Area 27)	Certified	Lloyd's Register	Principle 1 & 3
Norway North Sea demersal	Cod (Atlantic) (<i>Gadus morhua</i>), Haddock (<i>Melanogrammus aeglefinus</i>), Hake (European) (<i>Merluccius merluccius</i>), Saithe (<i>Pollachius virens</i>)	Gill nets And Entangling Nets - Gill nets Hooks And ...	Northeast Atlantic (FAO Area 27)	Certified (Cod UoCs suspended on 24 th October 2010).	DNV	Principle 1 & 3
Joint demersal fisheries in the North Sea and adjacent waters	Tusk(=Cusk) (<i>Brosme brosme</i>), Cod (Atlantic) (<i>Gadus morhua</i>), Megrin (<i>Lepidorhombus whiffiagonis</i>), Anglerfishes nei (<i>Lophiidae</i>), Haddock (<i>Melanogrammus aeglefinus</i>), Whiting (<i>Merlangius merlangus</i>), Hake (European) (<i>Merluccius merluccius</i>), Ling (<i>Molva molva</i>), Nephrops (<i>Nephrops norvegicus</i>), Prawn (northern) (<i>Pandalus borealis</i>), Plaice (European) (<i>Pleuronectes platessa</i>), Saithe (<i>Pollachius virens</i>), Sole (<i>Solea solea</i>)	Miscellaneous Gear	Northeast Atlantic (FAO Area 27)	Certified (Cod and whiting UoCs suspended on 29 th October 2019)	MEC	Principle 1 & 3
SFSAG Northern Demersal Stocks	Haddock (<i>Melanogrammus aeglefinus</i>), Whiting (<i>Merlangius merlangus</i>), Hake (European) (<i>Merluccius merluccius</i>), Plaice (European) (<i>Pleuronectes platessa</i>), Saithe (<i>Pollachius virens</i>)	Seine Nets - Boat or vessel seines - Danish seines...	Northeast Atlantic (FAO Area 27)	Certified (Whiting UoC suspended on 24 th October 2019)	MEC	Principle 1 & 3

Table 10: Summary of scores awarded for each Performance Indicator for the MSC-certified fisheries affecting the Northern hake stock. Yellow shading indicates scores of less than 80, which are associated with conditions of certification.

Principle	Component	CR Version		1.3				2.0
		Fishery		Cornish Hake		Norway North Sea Demersal	SFSAG Northern Demersal	Joint Demersal Fisheries
		Assessment / Source		Original	Current	Original	Original	PCR (P2 shown for North Sea Set Nets)
		Conformity Assessment Body		Lloyd's Register		DNV-GL	CU-Pesca	CU-Pesca
		UoC Spatial extent (ICES)		VIIe, VIIf, VIIg, VIIh, VIIj, VIIk		IIIa & IV	IIIa, IV, VI, VII, VIIIa, VIIIb, VIIIc	IIIa & IV
		Date		11/06/2015	This report	11/06/2018	03/07/2018	30/10/2019
		PI	Performance Indicator (PI)					
One	Outcome	1.1.1	Stock status	100	100	100	100	100
		1.1.2	Reference points	90	90	100	90	
		1.1.3	Stock rebuilding	NA	NA	NA	NA	NA
	Management	1.2.1	Harvest strategy	90	90	95	85	85
		1.2.2	Harvest control rules & tools	75	80	75	75	80
		1.2.3	Information & monitoring	80	80	100	100	100
		1.2.4	Assessment of stock status	90	90	95	100	100
Two	Retained species	2.1.1	Outcome	85	85	85	75	80
		2.1.2	Management	90	90	90	75	85
		2.1.3	Information	90	90	90	80	85
	Bycatch	2.2.1	Outcome	70	80	80	80	80
		2.2.2	Management	80	80	95	80	80
		2.2.3	Information	75	85	85	80	80
	ETP species	2.3.1	Outcome	90	90	80	75	75
		2.3.2	Management	70	80	85	75	75
		2.3.3	Information	80	80	80	65	75
	Habitats	2.4.1	Outcome	90	90	100	75	85
		2.4.2	Management	90	90	90	75	75
		2.4.3	Information	80	80	95	80	75
	Trophic function	2.5.1	Outcome	80	80	100	90	90
		2.5.2	Management	90	90	95	100	85
		2.5.3	Information	75	90	95	95	100
Three	Governance and policy	3.1.1	Legal & customary framework	100	100	95	100	95
		3.1.2	Consultation, roles & responsibilities	100	100	100	100	100
		3.1.3	Long term objectives	100	100	100	100	100
		3.1.4	Incentives for sustainable fishing	80	80	100	100	
	Fishery specific management system	3.2.1	Fishery specific objectives	80	80	90	90	80
		3.2.2	Decision making processes	90	90	100	100	85
		3.2.3	Compliance & enforcement	90	75	100	95	70
		3.2.4	Research plan	80	80	80	90	
		3.2.5	Management performance evaluation	80	80	90	90	80

Table 11. Overlapping fisheries supporting information

Supporting information	
<ul style="list-style-type: none"> - Describe any background or supporting information relevant to the harmonisation activities, processes and outcomes. 	
Was either FCP v2.1 Annex PB1.3.3.4 or PB1.3.4.5 applied when harmonising?	Yes
Date of harmonisation meeting	19 th February 2019
If applicable, describe the meeting outcome	
<p>The appropriate approach to harmonisation of scores across these fisheries, based on the harmonisation discussions, is summarised below:-</p> <ul style="list-style-type: none"> • Principle One: all fisheries prosecute the same hake stock, so scores should be harmonised. All of the other CABs agreed that at their next surveillance audit they would revise the score awarded for PI1.2.2 and increase it to 80. This scoring has been adopted in the “Joint Demersals” fishery assessment. It is anticipated that the Norway North Sea Demersal fishery and the SFSAG Northern Demersal Stocks fishery will harmonise with this scoring during the surveillance audits that have been announced in October 2019. Some minor scoring differences remain in P1 which reflect both local differences between fisheries and also the use of different versions of the MSC Standard. • Principle Two: there is a spatial overlap between the Cornish Hake fishery and the SFSAG demersal fishery, but the two fisheries use different gear types. There is no spatial overlap between the Cornish Hake fishery and the other fisheries, with which there are also differences in gear types, and differences in the stocks of P2 elements affected by each fishery. It is therefore not considered that the P2 scores for this fishery need to be harmonised with the other fisheries. • Principle Three: all of the fisheries are located in the EU EEZ and are therefore subject to the EU Common Fisheries Policy which establishes the overall foundation for management and governance of the fishery. Fishery-specific objectives for the hake stock are set out in the proposed Western Waters Multi Annual Plan, a final version of which was considered by the European Parliament Fisheries Committee on 23rd January 2019 and which is due to be implemented shortly (European Commission 2018c, European Parliament 2018a, 2018b, 2019). It is therefore appropriate to harmonise Principle 3 scores with other fisheries, although the team notes that in the case of PI3.2.3 (Compliance and enforcement), the level of compliance monitoring can vary considerably between fishing métiers and geographic areas. 	

Table 12. Scoring differences Principle 1

Performance Indicators (PIs)	Cornish Hake Gill Net	Joint North Sea Demersal
PI 1.1.1	100	100
PI 1.2.1	90	85
PI 1.2.2	80	80
PI 1.2.3	80	100
PI 1.2.4	90	100

Table 13: Scoring differences Principle 3

Performance Indicators (PIs)	Cornish Hake Gill Net	Joint North Sea Demersal
PI 3.1.1	100	95
PI 3.1.2	100	100
PI 3.1.3	100	100
PI 3.1.4	80	N.A.
PI 3.2.1	80	80
PI 3.2.2	90	85
PI 3.2.3	75	65
PI 3.2.4	80	80
PI 3.2.5	80	N.A.

Table 14. Rationale for scoring differences

If applicable, explain and justify any difference in scoring and rationale for the relevant Performance Indicators (FCP v2.1 Annex PB1.3.6)
<p>There are some minor scoring differences for MSC Principle 1 which are largely attributable to differences in the version of the Standard used for the overlapping fisheries.</p> <p>For PI3.2.3 there are some minor differences in scoring which do not result in a materially different outcome (the overlapping fisheries both have a condition of certification. These differences are associated with the different character of the Cornish gill net fishery for hake in the Celtic Sea and the multiple métiers used in the North Sea that are assessed in the JDF assessment.</p>
If exceptional circumstances apply, outline the situation and whether there is agreement between or among teams on this determination
<p>Lloyds' Register have determined that "exceptional circumstances" apply to the condition for PI3.2.3 (<i>sensu</i> MSC FCP v2.1 at §7.18.1.5). This requirement is met because even with perfect compliance with the harmonised milestones specified in the condition (which cover a period from 2020-2023) it will not be possible to achieve the SG80 level of performance within the current period of certification, which expires in June 2020. The condition has therefore been extended to cover any subsequent re-certification of the fishery and to ensure a harmonised timeline and outcome with respect to other MSC-certified fisheries for this species.</p>

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