

Three-Year Audit Template

Introduction to the tool

The three-year audit template was developed by FishChoice and is based on the FisheryProgress FIP Review Guidelines and feedback from the FisheryProgress Technical Oversight Committee. The audit template is designed to present key information about the current performance of the fishery and to verify reported progress on www.FisheryProgress.org. FisheryProgress requires the use of three-year audit template and information must be in English.

Text in italics provides additional guidance about information that should be included in each section. Text in red provide examples for possible responses.

Basic FIP information

Fill in the following table. The management authority is the regulatory authority with fishing management responsibilities; there may be multiple authorities where joint jurisdictional responsibilities occur.

Target species scientific name and common name	Lophius piscatorius (white monkfish) and Lophius budegassa (black monkfish). Both species are also referred to as 'anglerfish'.
Fishery location	Western Seas and Channel (VII b-k, VIII a/b/d)
Gear type(s)	Gillnets (trammel & entangling/gill nets)
	Demersal trawl
	Beam trawl
Catch quantity (weight)	Whole weight – 2,500 t
Vessel type(s) and size(s)	Mixed fleet using beam, bottom trawl and netters. Fleet largely split between <12ms (inshore)
	and >12ms
Number of vessels	Approximate 1,400 vessels
Management authority	English government bodies: IFCAs, MMO, Defra

Stakeholder consultation & meetings

Fill in the following table and include a high-level summary of the subjects that were discussed. Additional rows may need to be added or modified depending on number of participants and meetings completed.

Name	Affiliation	Date and Subjects Discussed
Barry Young	Brixham Trawler Agents	
Lisa Readdy	Cefas	
Paul Trebilcock	CFPO	
Gerhard Zurlutter	Coop Switzerland	
lain Glasgow	Defra	
Stella Bartolini	DEFRA	
Lauren Parkhouse	Devon IFCA	
Ed Polley	Falfish	
Mark Greet	Falfish	
Nathan de Rozarieux	Falfish	4 th September 2019
Mike Mitchell	-	Review of Principle 1, 2 and 3 actions
Andrew Pillar	Interfish	PSA analysis review
Hannah Macintyre	M&S	 Update that iVMS is being rolled out in Wales
Hubert Gieschen	MMO	
Edward Baker	MMO	
Simon Dixon	MMO	
Rachel Irish	MMO	
Joseph Prosho	Morrisons	
Rob Whiteley	Natural England	
Ally Dingwall	Sainsburys	
Gus Caslake	SeaFish	
Jim Portus	SWFPO	
Juliette Hatchman	SWFPO	<u>11th February 2020</u>
Helena Delgado-Nordmann	Tesco	 Discussion on Dover sole being added to the FIP
Clarus Chu	WWF	Review of Principle 1, 2 and 3 actions
Hayley Swanlund	WWF	Discussion on difficulty of HCR and sorting due to
Catherine Vogler	WWF Switzerland	species similarities.
Edward Baker	ММО	Update on ToR and logo development
Adam Townley	NESI	 20th July 2020 Discuss recommendations from the Cefas habitat paper

		 Identify next steps to develop a Habitat Management Plan Discussion on fleet composition VME and MPA overlap discussion Call for Code of Conduct drafting The upcoming Seafish Ecological Risk Assessment (ERA)
		 Stock status review of <i>Lophius sp.</i> and the implications for developing HCR Addition of dover sole to the FIP
Carly Elson	MMO	Review of Principle 1,2 19 January 2021
Amber Madley	NESI (Temp)	FIP membership
Cassie Leisk	New England	MSC certification process
Chloe North	Western PO	External review of FIP
Hayley Swanlund	WWF	FMP progress
		 28 January 2021 Stock status & monkfish genetics Secondary species management Habitat management plan
		 22 June 2021 Labelled monkfish markets update Client group process FisheryProgress social policy FMP update
Abigayil Blandon	WWF	 24 June 2021 P1 and P2 annual review scores ETP management plan Harvest strategy and HCR update

Summary of MSC performance indicator scores

Fill in the likely scoring category (<60, 60-79, \geq 80) for each performance indicator (PI) and provide a rationale for the score by referring to the text used in v2.0 of the MSC Standard's scoring guideposts for the related Performance Indicator.

Principle	Component	F	Performance Indicator	Current Score	Rationale and Justification
	Outcome	1.1.1	Stock status	≥80 (Lophius piscatorius) <60 (L. budegassa)	Both species underwent a stock assessment in 2020. The Lophius piscatorius had a full assessment and showed spawning stock biomass (SSB) is well above the BMSY trigger and continued to trend upwards. Fishing mortality F has been trending down for 10 years and has been below FMSY since 2017. The black-bellied anglerfish (L. budegassa) does not undergo a full assessment but recent survey showed biomass index continues to climb and F is below the FMSY proxy. Uncertainty is mainly around the sampling schemes / levels and specifically for L. budegassa related to the survey index. For L. budegassa, there is a need to find proxy reference points that take uncertainty into account. This is already achieved for L. piscatorius, as uncertainty is known and taken into account in reference points.
1		1.1.2	Stock rebuilding	N/a	
	1 Management		Harvest Strategy	≥80	A harvest strategy review compiled by Caslake & Trebilcock (2018) showed there has been a lot of work already been done on different management approaches, and it was noted that there has been a lot of work already been done on monkfish gear selectivity (both trawls and gillnets), and not much more can be done without seriously sacrificing the gear's performance. The final recommendations were reduced trawl times which were found to be acceptable by industry.
		1.2.2	Harvest control rules and tools	60-79	Species separation project initiated with Cefas to help separate the two species with initial results showing 90% accurate separation. Efforts to devise adequate HCRs recently complicated by uncertainty over the level of hybridization.

		1.2.3	Information and monitoring	≥80	The information that informs stock assessment and stock management is from commercial landings and three survey indices (EVHOE-WIBTS-Q4, IGFS-WIBTS-Q4 and SPPGFS -WIBTS-Q4). This data is sufficient on stock structure, fleets, productivity, abundance, and removals to support a precautionary harvest strategy.
			Assessment of stock status	60-79	There is some evidence that it is above PRI but it is highly weighted, so may affect overall assessment. It is possible to move towards certification but might take some time as uncertainty over stock assessment (either via genetics or formal stock assessment).
	Primary species 2	2.1.1	Outcome	≥80	For trammel & entangling/gill nets no primary species are likely to feature in the catch. All other primary species are unlikely to feature in the catch in sufficient quantities to be considered main. For demersal trawl the following species primary species are likely to feature in the catch: Megrim, Hake, Haddock. All other primary species are likely to be minor and will not affect scoring below 80, regardless of status. For Beam Trawl, Megrim is likely to be the only main primary species. However, plaice and sole also appear close enough to the 'main' threshold to warrant inclusion. All other primary species are likely to be minor and will not affect scoring below 80, regardless of status.
2		2.1.2	Management strategy	≥80	All main primary species are (by definition of being primary) managed according to reference points and informed by stock assessment, in turn informed by appropriate levels of data collection. Other elements of the management of relevance include the landing obligation, retained in UK legislation.
		2.1.3	Information	≥80	Primary species are typically explicitly mentioned in the EU Data Collection Framework Requirements, are subject to regular ICES working group review and assessments, supported by sampling and survey. These fisheries are well monitored.
	Secondary species 2.2.1		Outcome	≥80	The Productivity-Susceptibility Analysis (PSA) analysis of secondary main bycatch species was completed in 2019 (Ribeiro Santos, 2019) and has been added to the FMP. According to the PSA scores, most of the secondary species have medium risk (between 2 and 3) for all the

				three gear types. No part of the catch was classified as high risk. The species with highest of PSA scores (Medium risk) were the skates and rays species – cuckoo ray, blonde ray and undulate ray caught by gill netters. They have lower productivity than the teleost fish and have high level of spatial and ecological overlap with the fishery. However, there is sufficient evidence that suggests that these species demonstrate a resilience to fishing pressure due to their survivability potential if discarded.
	2.2.2	Management strategy	≥80	Based on PSA results, the FIP conducted a review of alternative management measures. This showed that fishery had already changed its practices and that only shorter tow times could be implemented, which industry has deemed acceptable. This review plus an analysis of post-discard survival for elasmobranchs by North 2021 indicates no further measures are required.
	2.2.3	Information	≥80	A review in 2020 concluded a need to revisit the catch composition of the fishery and Cefas – government scientific body – were commissioned to conduct the work. Based on a new report to the FIP (Ribeiro Santos, A., 2021) the landings, discards and proportion of each species and species category (Primary, Secondary, 'Out-of-scope and ETP) were assessed. The top 20 species (95% of the total catch) for each gear were provided in the report and the complete list of species was provided in excel format, as supplementary material. Sufficient information to score SG80
	2.3.1	Outcome	≥80	A detailed 'interaction log' is being trialed by the Round 2 FIPs to ensure that encounters with ETPs and habitat features (inc. those included in the new Scottish Priority Marine Features listing) that could be applied to this FIP.
ETP species	2.3.2	Management strategy	60-79	The Steering Group discussed drafting a code of practice that stipulates what vessels should do when encountering ETPs. There is still a need for an explicit management strategy that needs to be recorded in the FMP.
	2.3.3	Information	≥80	A comprehensive literature review on the post-discard survival of elasmobranchs in towed gear has been completed by Chloe North and included in the FIP's FMP.

	Habitats	2.4.1	Outcome	Bottom & beam trawls 60-79 Gillnets ≥80	Identification of interactions with common & VME habitats, and consequences for associated communities was conducted by Cefas, which used Relative Benthic Status as a main metric, showing 70% recoverability within a year. But no <12 m data, but inshore areas have been intensively studied by IFCAs. Habitat mapping fairly coarse but showed impacts mainly on gravel areas. Review by Steering Group suggested that coarse sediments not really targeted (prefer sandy, soft sediments) and that most coarse sediments tend to be protected and will be represented by MCZ network.
		2.4.2	Management strategy	Bottom & beam trawls 60-79 Gillnets ≥80	Discussions with MMO, JNCC and Natural England to better understand current and emerging VME / other habitat protection is key. From the Steering Group meetings, it was shared that vessels will abide by the regulations in place, but some MPAs have been designated but are still awaiting management measures to be implemented. Defra / MMO intends to apply management measures in all MPAs within three years. This suggests that management measures will be in place on MPAs by, say, mid 2024 and not before and that a confident pass for PI 2.4.2 may not be possible before this date.
		2.4.3	Information	≥80	It is understood from Defra that IFCAs continue to assess the need for MPA management measures in their districts – so far, over 90 MPAs have byelaws in place to protect sensitive habitats against bottom-towed fishing gear. For offshore sites (and those within 6-12nm), the MMO intends to apply management measures in all MPAs within three years.
	Ecosystem	2.5.1	Outcome	≥80	MMO provided data on the number of vessels operating the three gears. Inshore activity in Devon and Severn IFCA district monitored by iVMS for all vessels >8 m and are currently trialing technology (10 min ping rate). Now in byelaw. Notable increase in compliance. Also helping manage MPA areas e.g. whether to keep areas open or closed. Offshore vessels >12 m ping rate only 2 hours, which is insufficient for 15 min tows. OK for effort management but is limiting for habitat management.

	2.5.2		Management strategy	≥80	There is an increasing focus on ecosystem management at the UK/EU and ICES advisory level. Recent evidence for this includes the issuing of ICES of mixed fisheries advice and proposals for mixed fisheries multi-annual management plans. In addition, there is considerable focus at an UK/EU level of the marine Ecosystem. For example, the EU Marine Strategy Framework Directive requires member states to assess the current state of their seas against agreed targets for 'good environmental status' and to establish both a program of measures to meet these targets and a monitoring program to measure progress.
			Information	≥80	The Channel and Celtic Sea ecoregion is a well-studied ecosystem. Good quality information is available for key elements e.g., abiotic & biotic productivity modelling, plankton recording; CEFAS trophic work, habitat mapping & fish stock assessment. The impacts of fisheries on these elements is adequately understood e.g., habitat damage, biomass removal, species size & maturation studies, etc. And the nature of impacted communities is understood, e.g. target and bycatch spp. composition, volume & function), ETP e.g. seal & skates / rays / birds are known; Consequences can be inferred from gear studies, impact assessments (and key elements in some cases), but not many specific studies; Some spatial data, seabird and cetacean surveys, WQ assessments, hydrographic and oceanographic studies. Biodiversity assessments can show ecological risks. Information covers both fisheries-dependent and fisheries-independent variables.
	Governance and Policy	3.1.1	Legal and customary framework	60-79	Within the UK there is an effective national legal system implementing domestic fisheries law. At both a national and EU level there is an effective mechanism for the resolution of legal disputes. As a result, scoring of this PI is likely to be at the SG80 level or above.
3		3.1.2	Consultation, roles and responsibilities	60-79	Widely dispersed and commercially important stocks such as southern Celtic Seas, Bay of Biscay monkfish stock are managed at an UK/EU level as a 'pressure' (i.e. quota) stock. The process of management is relatively clear, transparent and well understood and the roles and responsibilities of those involved are clearly defined and

				understood. The process of fisheries representation is well established and representative bodies (such as NFFO in England) are formally involved in the consultative processes of management though Regional Advisory Councils.
	3.1.3	Long term objectives	≥80	The overarching objectives which are binding on all subsidiary pieces of fisheries legislation are those defined in the Fisheries Act. The Marine & Coastal Access Act 2009 which establishes the MMO, states that the organization must operate in accordance with the Government's principles of sustainable development. In 2009 the UK Government published a set of High Level Marine Objectives within "Our Seas: A Shared Resource" which further details these high-level objectives. These high-level objectives at both an EU and UK wide level which guide management decision making are fully consistent with the MSC fisheries standard and would support scoring at the SG80 level.
	3.2.1	Fishery specific objectives	60-79	Defra FMPs will look similar to the MSC template, will possibly be web-based, moving away from PDF to make them more interactive and searchable. At present the FMP lacks any definitive long-term and short-term objectives.
Fishery spec manageme		Decision making processes	60-79	Defra is preparing a 'strawman' for an FMP which is now undergoing internal consultation with the Devolved Administrations (DAs) and others. In January 2021 it was still in its early development and was for English waters only. There is also a new Defra policy working group established to discuss the big issues identified from internal feedback.
system	3.2.3	Compliance and enforcement	60-79	Monitoring, Control and Surveillance (MCS) is coordinated across the UK and EU member states. This enables vessels of different nations to be subject to appropriate levels of enforcement when fishing or landing catch in another neighboring nation. Within the UK there is an effective judicial system to impose incremental sanctions for non-compliance with fisheries management measures. There is no evidence of systematic non-compliance. Overall, it is expected that this would enable scoring at least at the SG80 level.

	Management	≥80	Reviews undertaken. For P1, intermittent independent benchmarking is undertaken by ICES working groups e.g. WKANGLER (ICES, 2018).
3.2.4	performance evaluation		For fisheries-specific management and independent review was conducted by Lisa Borges of fishfix (Portugal) in 2021 (Borges, 2021).

Workplan results

Result	Related Action on FisheryProgress	Related MSC Performance Indicator	Explanation
Independent Lophius piscatorius and L. budegassa stock review.	Stock Status and Assessment of Stock Status	1.1.1 1.2.4	During the Steering Group meeting in February 2020 there was agreement to commission Paul Medley (PM), a Principle 1 expert, to review all available monkfish stock data against the MSC Standard requirements, to draft the relevant sections of the Fishery Management Plan, and to provide recommendations on how the Steering Group could develop appropriate harvest control rules (HCRs). PM informed the Steering Group that the latest abundance index used by the ICES Working Group (ICES WG) for monkfish suggested the biomass of both species (<i>L. piscatorius</i> and <i>L. budegassa</i>) is increasing and that <i>L. piscatorius</i> - an ICES Category 1 species - could currently pass Principle 1 of the MSC Standard based on its comprehensive stock assessment. However, <i>L. budegassa</i> would not pass the Principle 1 aspects of an MSC assessment due to uncertainties from ICES around how the stock is modelled. PM explained that if fishing mortality of <i>L. budegassa</i> was maintained at MSY for a generation, then the species would meet SG60 and might pass an MSC assessment, subject to a subsequent condition.
Cefas report on feasibility of self- sampling	Harvest control rules and tools	1.2.1	In 2019 the Steering Group aligned with Rob Forster (Cefas) who was conducting a self-sampling study for the monkfish fishery. The project investigated the utility of fishing crews gathering tail lengths and skippers logging, boxing and separating the catches, with separate boxes (of the two monkfish species) landed separately to markets. The result was a report (Forster, R. (2020). Fisheries Science Partnership project: Exploring the potential to record species specific monkfish landings data. Cefas report, June 2020. 16 pp + appendices).

			The next stage is implementation of the HCR. Although on target, there is still considerable uncertainty on how to address species-specific catch accounting, especially given the specific uncertainty over the level of hybridization.
Catch composition review	Secondary species: Information	2.2.3	In the 4 th year of the FIP, the Steering Group identified a need to have updated catch composition that is reflective of the entire UoA of the FIP. Cefas were commissioned to lead on the work. Based on a new report to the FIP (Ribeiro Santos, A., 2021) the landings, discards and proportion of each species and species category (Primary, Secondary, 'Out-of-scope and ETP) were assessed. The top 20 species (95% of the total catch) for each gear were provided in the report and the complete list of species was provided in excel format, as supplementary material.
Report on ETP species interactions; report on post discard survival	ETP species outcome, management and information	2.3.3, 2.3.2, 2.3.1	A paper by Townley, A. (2019) provided industry insight and summary of possible ETP Species Interactions with the UoA of the FIP, which was built on by the Cefas paper (see above).
External review of the South West monkfish fishery management system	Fishery-specific objectives and Decision-making processes	3.2.1, 3.2.2	Due to the changing legislative landscape the FIP had undergone over the previous year due to Brexit, the Steering Group commissioned a P3 expert to review the South West monkfish fishery management system.