

Marine Stewardship Council (MSC) 2852 First Annual Surveillance Audit

The SPSG, DPPO, PFA, KFO & Compagnie des Pêches St Malo Northeast Atlantic Blue Whiting pelagic trawl fishery

On behalf of

Scottish Pelagic Sustainability Group (SPSG) Danish Pelagic Producers Organisation (DPPO) Pelagic Freezer-Trawler Association (PFA) Killybegs Fishermen's Organisation (KFO) Compagnie des Pêches de St Malo (CDPSM)

> Prepared by ME Certification Ltd

SEPTEMBER 2017

Authors:

Hugh Jones Jo Gascoigne Mike Pawson Sophie Des Clers



ME Certification Ltd 56 High Street, Lymington Hampshire SO41 9AH United Kingdom Tel: 01590 613007 Fax: 01590 671573 E-mail: info@me-cert.com Website: www.me-cert.com



Contents

Cor	NTENTS	1			
GLC	DSSARY	3			
1	GENERAL INFORMATION	5			
1	.1 Background	9			
2	ASSESSMENT PROCESS	. 10			
3	RESULTS	. 11			
3	.1 Vessel information	. 12			
	3.1.1 UoC 1 – PFA	12 13 13			
3	.2 Principle 1	. 14			
	3.2.1 UoC 1 – PFA	18 19 19			
3	.3 Principle 2	. 20			
	3.3.1 Retained	23 24			
3	.4 Principle 3	. 25			
4	TRACEABILITY	. 26			
4	.1 Overview	. 26			
4	.2 Details by UoC	. 29			
5	HARMONISATION	. 31			
6	EVALUATION RESULTS	. 32			
6	.1 Principle Level Scores	. 32			
6	.2 Summary of Scores	. 32			
7	CONDITIONS				
Res	SCORE OF PI 1.2.2 – HARVEST CONTROL RULES AND TOOLS	. 35			
8	CONCLUSIONS				
9	REFERENCES				
10	APPENDICES				
1	0.1 Appendix 1 – Rescoring of Performance Measures	. 39			
	Rescore of PI 1.2.1 – Harvest Strategy	39			



Res	score of PI 1.2.2 – Harvest control rules and tools	. 43
10.2	Appendix 2 Client Action Plan for conditions 2 and 3.	.47
10.3	Appendix 3 Harmonisation meeting MEC and DNV	51
10.4	Appendix 3 - SPSG exceptional events sheet.	.52



Glossary

Term/acronym	Definition	
ACOM	ICES Advisory Committee	
BIM	Bord Iascaigh Mhara - Irish Sea Fisheries Board	
Вмзу	Equilibrium total biomass at MSY	
САВ	Conformity Assessment Body	
CDPSM	Compagnie des Pêches de Saint Malo	
CFP	Common Fisheries Policy	
CoC	Chain of Custody	
CPUE	Catch per Unit of fishing Effort	
CR	MSC Certification Requirements	
DCF	Data Collection Framework	
DPPO	Danish Pelagic Producers Organisation	
EAPO	European Association of Fish Producers Organisations	
EEZ	Exclusive Economic Zone	
EFCA	European Fisheries Control Agency	
ETP	Endangered Threatened or Protected species	
EU	European Union	
F	Fishing mortality	
Fmsy	Fishing mortality resulting in MSY	
HCR	Harvest Control Rule	
IBPBLW	ICES Inter-Benchmark Protocol for Blue Whiting	
IBWSS	ICES International Blue Whiting Spawning Stock Survey	
ICES	International Council for the Exploration of the Sea	
ITQ	Individual Transferable Quota	
IUU	Illegal, unreported and regulated fishing	
JDP	Joint Deployment Plan (EFCA MCS)	
KFO	Killybegs Fishermen's Organisation Ltd	
MCS	Monitoring, Control and Surveillance	
MEC	ME Certifications Ltd.	
MSC	Marine Stewardship Council	
MSY	Maximum Sustainable Yield	





Term/acronym	Definition	
MSFD	Marine Strategy Framework Directive	
NEAFC	North East Atlantic Fisheries Commission	
PELAC	Pelagic Advisory Council	
PFA	Pelagic Freezer-Trawler Association	
PO	Producer Organisation	
RA	Regulatory Area (NEAFC)	
RSW	Refrigerated Sea Water	
SPFA	Scottish Pelagic Fishermen's Association	
SPSG	Scottish Pelagic Sustainability Group	
SSB	Spawning stock biomass	
STECF	Scientific, Technical and Economic Committee For Fisheries	
TAC	Total Allowable Catch	
UoC	Unit of Certification	
UNCLOS	United Nations Law of the Sea	
VMS	Vessel Monitoring System	
WG	Working Group	
WGWIDE	ICES WG on Widely Distributed Stocks	
WKBWMS	ICES Workshop on Blue Whiting Long Term management Strategy Evaluation	
WGIPS	ICES WG on International Pelagic Surveys	
WW	Western Waters	



1 General Information

Fishery name	Blue Whiting (Micromesistius poutassou) in the Northeast Atlantic			
Unit(s) of Assessment (UoA)	Species – Blue Whiting (<i>Micromesist</i> Geographical range of fishing oper Subareas 1-9, 12, and 14) Stock – ICES Subareas 1-9, 12, and	ge of fishing operations – Northeast Atlantic (ICES and 14)		
	Management – North East Atlar agreement between EU, Norway, management systems of EEZs fished	celand and the Faroes National		
	Client group – Pelagic Freezer-Trawler Association (PFA) – The Netherlands On behalf of Pelagic Freezer-Trawler Association (PFA) Danish Pelagic Producers Organisation (DPPO) Killybegs Fishermen's Organisation (KFO) Scottish Pelagic Sustainability Group (SPSG) Compagnie des Pêches de Saint Malo (CDPSM)			
Date certified	03 Feb 2016 Date of e	xpiry 02 Feb 2021		
Surveillance level and type	Surveillance level 3 (FCV1.3), Year 1 off-site surveillance audit, (see site visit notification for rationale).			
Date of surveillance audit	12 th – 18 th February 2017			
Surveillance stage	1st Surveillance			
	2nd Surveillance			
	3rd Surveillance			
	4th Surveillance			
	Other (expedited etc.)			
Surveillance team	Lead assessor: Dr Jo Gascoigne Assessor(s): Dr Hugh Jones Dr Sophie Des Clers and Dr Mike Pawson			
CAB name	ME Certification Ltd			
CAB contact details	Address	56 High Street Lymington SO41 9AH, UK		
	Phone/Fax	+44 (0)1590 613007		
	Email	Hugh.jones@me-cert.com		
	Contact name(s)	Hugh Jones		
Client contact details	Address	PFA Louis Braillelaan 80 2719 EK Zoetermeer The Netherlands		
	Phone/Fax	+45 61 66 09 78		
	Email	gbalsfoort@pelagicfish.eu		
	Contact name(s)	Gerard J. van Balsfoort		



MSC Fisheries Surveillance Report Template V 1.0 (16th March 2015)



UoC1 – PFA

Species	Blue Whiting (Micromesistius poutassou)	
Geographical range	Northeast Atlantic (ICES Subareas 1-9, 12, and 14)	
Method of capture	Pelagic trawl	
Stock	ICES Subareas 1-9, 12, and 14	
Management System/s	North East Atlantic Fisheries Commission Joint agreement between EU, Norway, Iceland and the Faroes National management systems of EEZs fished and client vessel flag states.	
Client group Pelagic Freezer-Trawler Association (PFA) – The Netherlands		
Other eligible fishers	None	

UoC2 – DPPO

Species Blue Whiting (Micromesistius poutassou)	
Geographical range	Northeast Atlantic (ICES Subareas 1-9, 12, and 14)
Method of capture	Pelagic trawl
Stock	ICES Subareas 1-9, 12, and 14
Management System/s	North East Atlantic Fisheries Commission Joint agreement between EU, Norway, Iceland and the Faroes National management systems of EEZs fished and client vessel flag states.
Client group	Danish Pelagic Producers Organisation (DPPO)
Other eligible fishers	None

UoC3 – KFO

Species	Blue Whiting (Micromesistius poutassou)	
Geographical range	Northeast Atlantic (ICES Subareas 1-9, 12, and 14)	
Method of capture	Pelagic trawl	
Stock	ICES Subareas 1-9, 12, and 14	
Management System/sNorth East Atlantic Fisheries Commission Joint agreement between EU, Norway, Iceland and the Faroes National management systems of EEZs fished and client vessel states.		
Client group Killybegs Fishermen's Organisation Ltd (KFO) - Ireland		
Other eligible fishers None		



UoC4 – SPSG

Species	Blue Whiting (Micromesistius poutassou)	
Geographical range	Northeast Atlantic (ICES Subareas 1-9, 12, and 14)	
Method of capture	Pelagic trawl	
Stock	ICES Subareas 1-9, 12, and 14	
Management System/s North East Atlantic Fisheries Commission Joint agreement between EU, Norway, Iceland and the Faroes National management systems of EEZs fished and client vessel states.		
Client group	Scottish Pelagic Sustainability Group Ltd (SPSG) - UK	
Other eligible fishers	None	

UoC5 – CDPSM

Species Blue Whiting (Micromesistius poutassou)	
Geographical range	Northeast Atlantic (ICES Subareas 1-9, 12, and 14)
Method of capture	Pelagic trawl
Stock	ICES Subareas 1-9, 12, and 14
Management System/s	North East Atlantic Fisheries Commission Joint agreement between EU, Norway, Iceland and the Faroes National management systems of EEZs fished and client vessel flag states.
Client group	Compagnie des Pêches de Saint Malo - France
Other eligible fishers	None

Note that these five UoCs pursue the same target stock with the same fishing gear (mid-water trawl) in the same broad fishing area, but there are some differences in fishing and management operations that justify five separate UoCs.

1.1 Background

Blue whiting (*Micromesistius poutassou*) is a small pelagic gadoid species that is widely distributed in the North-eastern Atlantic. It is a streamline fish that rarely exceeds a length of 40 cm, and has a slender silver-coloured body with a slightly bluish dorsal tint. The species is oceanic and benthopelagic, inhabiting the continental slope and shelf down to depths of 600 m. It may make daily nocturnal vertical migrations to the surface. High concentrations are found at spawning time along the edge of the continental shelf to the west of the British Isles, Rockall Bank and Faroe Plateau and is fished at depths between 300 and 600 m. It is a shared and widely distributed stock straddling the EEZ of several countries and international waters beyond 200 nm. The fishery was developed by the Soviet Union in the 1960s and by Norway in the early 1970s followed by the Faroe Islands and countries from the EU, and eventually Iceland in the 1990s. Historically, blue whiting was an important source of fishmeal, but a larger part is now sold for human consumption.

For EU vessels, the fishery mostly takes place early in the year in European waters to the west and northwest of the British Isles and Ireland and in international waters, and possibly later in the year through negotiated access to Faroes and Norwegian waters and on the High Seas in the North East Atlantic Fisheries Commission (NEAFC) Regulated Area (RA) outside national jurisdictions.

The annual ICES blue whiting TAC advice refers to the entire 'combined' blue whiting stock in the N E Atlantic, ICES subareas 1 to 9, 12 and 14 (Table 1).

There are three blue whiting TAC areas to which the EU member states have access. The principle quota area is referred to as WHB/1x14 and is fished through mainly subarea 6, with some also caught in subareas 4, and 7. In addition to this principle area supplementary blue whiting quota for some member states, which can only to be taken in the waters of the Faroe Islands, is available because of bilateral quota exchange. This blue whiting is referred to as WHB/2a4axf. Finally, Spain and Portugal, which are not part of this assessment, have rights to fish for southern blue whiting (ICES Division 8c) under blue whiting TAC area WHB/8c3411. Out of the blue whiting quota available to the EU (30.5 % TAC between 2007 and 2015, and approximating 45% since 2016 following NEAFC (2013) estimations) originating from the coastal states negotiations, the EU distributes its overall blue whiting share among WHB/1x14 and WHB/8c3411. After that the EU transfers part of its WHB/1x14 quota to Norway (110,000 tonnes in 2017 this is 0.5% of the coastal states agreed share per annum) and part to the Faroe Islands (9,000 tonnes in 2017). And the EU receives some blue whiting back from Faroe Islands (2,500 tonnes in 2017), which is referred to as WHB/2a4axF.



 Table 1. Blue Whiting ICES advice and catch statistics for subareas 1-9,12 and 14 from 2012-2017 in tonnes (ICES, 2016a). * No agreed TAC by the Coastal States, sum of unilateral quotas.

Year	ICES Advice	Predicted Catch corresponding to ICES Advice	TAC	ICES Catch	Official Catches
2012	Follow the agreed management plan	391,000	391,000	376,000	385,300
2013	Follow the agreed management plan	643,000	643,000	614,000	628.200
2014	Follow the agreed management plan	948,950	1,200,000	1,148,000	1,155,300
2015	Follow the agreed management plan	839,890	1,260,000*	1,391,000	1,396,200
2016	MSY approach	≤776,400	1,147,000*	1,147,000	-
2017	MSY approach	≤1,342,330		-	-

2 Assessment Process

This report represents the findings of the Year 1 Surveillance audit for the SPSG, DPPO, PFA, KFO & Compagnie des Pêches St Malo Blue Whiting Fishery. The fishery was certified on the 03rd February 2016 by ME Certification under five certificates (Table 2). The fishery was certified with two conditions.

 Table 2. Certificate number for the North East Atlantic Blue Whiting fishery.

UoC	Client	Certificate Number
1	PFA	MEC-F-040
2	DPPO	MEC-F-041
3	KFO	MEC-F-042
4	SPSG	MEC-F-043
5	CDPSM	MEC-F-044

MEC announced the Year 1 Surveillance audit on the 10th January 2017 with the Year 1 Off-Site Surveillance scheduled for completion in the week beginning 12th February 2017 by the MEC Team leader Hugh Jones (P2) and assessors Jo Gascoigne (P1) and Sophie des Clers (P3).

Date	Client	Client Representatives	Assessors
13/02/17	CDPSM	Jérôme Nouis	Dr Hugh Jones
		Romain Soisson	Dr Sophie des Clers
15/02/17	SFSG	Ian Gatt	Dr Hugh Jones
			Dr Sophie des Clers
16/02/17	PFA	Gerard van Blasfoort	Dr Hugh Jones
			Dr Sophie des Clers
20/02/17	DPPO	Lise Laustsen	Dr Hugh Jones
		Esben Sverdrup-Jensen	Dr Sophie des Clers
24/02/17	KFO	Sean O Donoghue	Dr Hugh Jones
		Olga Cassidy	Dr Sophie des Clers

The audit was completed under the process requirements as specified under Version 2.0 of the MSC Fisheries Certification Requirements. The audit used the standard requirements



relating to the MSC Principles and Criteria Standard Version 2.0 and the MSC Fisheries Certification Requirements & Guidance Version 1.3.

The findings of this Year 1 Surveillance are described in this report.

No stakeholder submissions were received in response to the announcement of the Year 1 Surveillance. Instead the Assessment Team contacted the client in a series of telephone conversations to;

- Discuss any changes to the fishery and its management including those to management systems, regulation and relevant personnel.
- Discuss any changes to the scientific base of information such as stock assessments.
- Discuss any developments or changes within the fishery impact that may impact on traceability and the ability to segregate MSC from non-MSC products.
- Discuss any other significant changes in the fishery

Specific evidence that would be needed was also requested. The findings of this process are set out in Section 2 below.

3 Results

The fishery was originally certified against MSC Certification Requirements V1.3 and under the 'criteria to determine surveillance score' (Table C3) scored 3, which indicated a 'Normal' surveillance level, i.e. 4 on-site surveillance audits, equating to the default 'Level 6' under V2.0. However, the assessment team feel that a surveillance level of 4, i.e. 2 on-site surveillance audits and 2 off-site surveillance audits are adequate to meet the circumstances of the conditions levied at this fishery (Table 4, Section 7). The rationale is that the conditions on the fishery all concern the same issue; the tools used to implement the harvest control rule (i.e. the quota allocation system), the effectiveness of the coastal states agreement and its dispute resolution system. All of these can be assessed by the team through phone calls and there is nothing to be gained by being there in person on this occasion. Additionally, given that there are five international clients, significant cost will be incurred by the clients in coordinating a site visit.

	Surveillance Category	Year 1	Year 2	Year 3	Year 4
Score from CR Table C3	Normal Surveillance	Offsite surveillance	On-Site surveillance	Offsite surveillance	On-Site Surveillance and Re- assessment

Table 4 Deviced committees	ashadula far tha Narth	Cost Atlantia Dive	
Table 4. Revised surveillance	schedule for the North	East Atlantic Blue	e whiting fishery.



3.1 Vessel information

Vessel information is updated for 2017 for each UoC below.

3.1.1	UoC 1 – PFA

Vessel Name	Vessel Registration (PLN)	Overall length (metres)	Catch holding method	Gear type	Flag
Afrika	SCH 24	126	Freezer	Pelagic Trawler	NL
Zeeland	SCH 123	113.97	Freezer	Pelagic Trawler	NL
Annie Hillina	ROS170	86.33	Freezer	Pelagic Trawler	DE
Annelies llena	KW174	144.6	Freezer	Pelagic Trawler	DE
Alida	SCH 6	100	Freezer	Pelagic Trawler	NL
W. van der Zwan	SCH 302	142.5	Freezer	Pelagic Trawler	NL
Carolien	SCH 81	126.22	Freezer	Pelagic Trawler	NL
Frank Bonefaas	SCH 72	119	Freezer	Pelagic Trawler	NL
Cornelis Vrolijk	H 171	113.97	Freezer	Pelagic Trawler	UK
Wiron 5	PH 1100	55.6	Freezer	Pelagic Trawler	UK
Wiron 6	PH 2200	55.6	Freezer	Pelagic Trawler	UK
Sandettie	FC 716999	86	Freezer	Pelagic Trawler	FR
Prins Bernhard	FC-716900	88.14	Freezer	Pelagic Trawler	FR
Jan Maria	BX791	125.53	Freezer	Pelagic Trawler	DE
Maartje Theadora	ROS171	140.8	Freezer	Pelagic Trawler	DE
Helen Mary	ROS785	116.7	Freezer	Pelagic Trawler	DE
Margiris	KL855	136.12	Freezer	Pelagic Trawler	Lithuania
Label Normandy	FC934228	51	Freezer	Pelagic Trawler	FR
Dirk Dirk	KW172	95	Freezer	Pelagic Trawler	NL

3.1.2 UoC 2 - DPPO

In any given year approximately seven or eight vessels will target blue whiting from the fleet list below.

Vessel Name	Vessel Registration (PLN)	Home Port	Overall length (metre)	Catch holding method
Cattleya	E 349	Esbjerg	69.6	RSW
Rockall	E 532	Esbjerg	54.44	RSW
Beinur	HG 62	Hirtshals	78	RSW
Ruth	HG 264	Hirtshals	87.8	RSW
Asbjorn	HG 265	Hirtshals	75.4	RSW
Isafold	HG 333	Hirtshals	76.3	RSW



Vessel Name	Vessel Registration (PLN)	Home Port	Overall length (metre)	Catch holding method
Junior	HG 365	Hirtshals	55.95	RSW
Themis	S 144	Skagen	48.55	RSW
Gitte Henning	S 349	Skagen	75.9	RSW
Ceton	S205	Skagen	62.6	RSW
Astrid	S264	Skagen	69.95	RSW
Lingbank	HM379	Hanstholm	41.81	RSW

3.1.3 UoC 3 – KFO

Vessel Name	Vessel Registration (PLN)	Home Port	Overall length (metre)	Catch holding method	Gear type
Aine	SO734	Killybegs	48.6	RSW	Pelagic Trawler
Antarctic	D97	Killybegs	50.7	RSW	Pelagic Trawler
Atlantic Challenge	D642	Killybegs	59	RSW	Pelagic Trawler
Brendelen	SO709	Killybegs	64.6	RSW	Pelagic Trawler
Carmarose	SO555	Killybegs	27	RSW	Pelagic Trawler
Colmcille	G186	Killybegs	27.05	RSW	Pelagic Trawler
Father Mckee	SO708	Killybegs	64.6	RSW	Pelagic Trawler
Felucca	SO108	Killybegs	58	RSW	Pelagic Trawler
Girl Stephanie	G190	Killybegs	45	RSW	Pelagic Trawler
Neptune	SO715	Killybegs	48.6	RSW	Pelagic Trawler
Olgarry	SO591	Killybegs	40.4	RSW	Pelagic Trawler
Pacelli	D383	Killybegs	40.4	RSW	Pelagic Trawler
Paula	D165	Killybegs	62.6	RSW	Pelagic Trawler
Sheanne	SO716	Killybegs	61.6	RSW	Pelagic Trawler
Vigilant	SO109	Killybegs	53.06	RSW	Pelagic Trawler
Western Endeavour	D653	Killybegs	71	RSW	Pelagic Trawler
Westward Isle	G185	Killybegs	41.1	RSW	Pelagic Trawler

3.1.4 UoC 4 – SPSG

Vessel Name	Vessel Registration (PLN)	Home Port	Overall length (metre)	Catch holding method	Gear type
Adenia	LK193	Whalsay & Skerries	61.9	RSW	Pelagic Trawler
Altaire	LK429	Northmavine	76.4	RSW	Pelagic Trawler
Antares	LK419	Whalsay & Skerries	78.0	RSW	Pelagic Trawler



Vessel Name	Vessel Registration (PLN)	Home Port	Overall length (metre)	Catch holding method	Gear type
Antartic II	LK145	Whalsay & Skerries	61.9	RSW	Pelagic Trawler
Challenge	FR226	Fraserburgh	65	RSW	Pelagic Trawler
Charisma	LK362	Whalsay & Skerries	70.7	RSW	Pelagic Trawler
Chris Andra	FR228	Fraserburgh	71.2	RSW	Pelagic Trawler
Christina S	FR224	Fraserburgh	72	RSW	Pelagic Trawler
Forever Grateful	FR249	Fraserburgh	64	RSW	Pelagic Trawler
Havillah	N200	Klikeel	49	RSW	Pelagic Trawler
Kings Cross	PD365	Fraserburgh	78.0	RSW	Pelagic Trawler
Lunar Bow	PD265	Peterhead	69.3	RSW	Pelagic Trawler
Ocean Quest	BF77	Fraserburgh	61.5	RSW	Pelagic Trawler
Ocean Venture	FR77	Fraserburgh	61.5	RSW	Pelagic Trawler
Pathway	PD165	Peterhead	66.6	RSW	Pelagic Trawler
Quantus	PD379	Peterhead	65.5	RSW	Pelagic Trawler
Research W	LK62	Whalsay & Skerries	70.7	RSW	Pelagic Trawler
Resolute	BF50	Fraserburgh	64	RSW	Pelagic Trawler
Serene	LK297	Whalsay & Skerries	71.7	RSW	Pelagic Trawler
Stefanie-M	N265	Klikeel	49.2	RSW	Pelagic Trawler
Sunbeam	FR487	Fraserburgh	56.2	RSW	Pelagic Trawler
Taits	FR227	Fraserburgh	70.6	RSW	Pelagic Trawler
Unity	FR165	Fraserburgh	44.9	RSW	Pelagic Trawler
Zephyr	LK394	Whalsay & Skerries	72.8	RSW	Pelagic Trawler

3.1.5 UoC 5 - CDPSM

Vessel Name	Vessel Registration (PLN)	Home Port	Overall length (metre)	Catch holding method
Joseph Roty II	SM 199 078	Saint Malo	90.55	Surimi paste pelagic freezer trawler

3.2 Principle 1

The client group expressed significant concerns about the reliability of the survey data which underpinned the blue whiting stock assessment (International blue whiting spawning stock survey (IBWSS), particularly from 2015, suggesting that despite strong catch data the survey had been impacted by weather off the west coast of the British Isles and this resulted in unrepresentative SSB estimates. MSE modelling from the WKWBMS workshop (ICES, 2016h) highlighted that 'The stock assessment depends primarily on a single acoustic index of abundance that in the past has had obvious year effects. This has led to notable retrospective revisions in estimates of stock size and fishing mortality (F).'

The 2016 IBWSS showed an increase in total stock biomass of 108% with a corresponding increase in spawning stock biomass (SSB) compared to the 2015 estimate (Mortensen et al.,



2016). The age structure of the 2016 estimate was considered representative of the actual age structure of the stock, with the dominant age classes appearing in the expected proportions, which was not the case in 2015.

The inter-benchmark protocol in 2016 resulted in agreed usage of a new SAM model option, which accounts for correlation in observations (ICES, 2016b). The benchmarking group also concluded that preliminary age-disaggregated catches from the first two quarters in the assessment year were preferable over only catches from quarter 1 and age classes 1 and 2 from the IBWSS were to be included in the assessment. This gives a more realistic F in the intermediate year (ICES, 2016b).

Following the inter-benchmark protocol, WGWIDE 2016 (ICES, 2016c) concluded that 'Although the addition of preliminary in-year catches does not reduce the retrospective pattern, it provides a more realistic *F* in the intermediate year, potentially reducing the uncertainty in the short-term prediction. The index from the IBWSS in 2016 showed a level close to 2014, suggesting that the 2015 survey index might have been an underestimate.'

The 2016 ICES stock assessment indicates that SSB of blue whiting has increased since 2010 and is well above MSY $B_{trigger}$ (Figure 1). F has been greater than F_{MSY} since 2014 but in 2016 is lower than in 2015 (Figure 1). The advice for 2017 is a considerable increase in TAC compared to the advice given for 2016 up to 1,342,330 tonnes (ICES, 2016d). This is mainly due to the large 2013 and 2014 year classes entering the fishery in 2017, which the 2016 assessment estimates to be much more abundant than assumed in 2015 (ICES, 2016a). Figure 2 shows ICES' perception of the stock status of blue whiting in subareas 1–9, 12, and 14 and its exploitation relative to reference points.

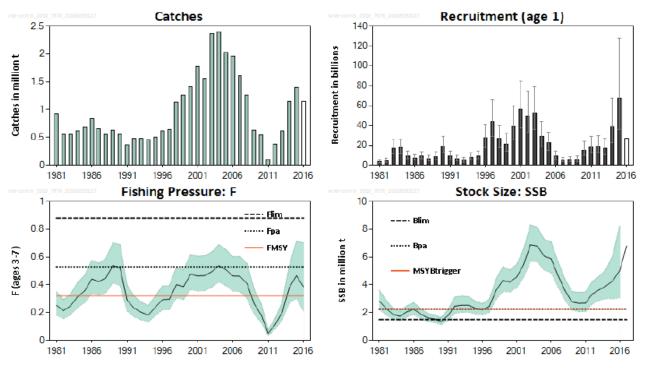


Figure 1. Blue Whiting in subareas 1–9, 12, and 14 (Northeast Atlantic) summary of stock assessment (ICES, 2016a).



	Fishing pressure			Stock size							
		2014	2015		2016			2015	2016		2017
Maximum sustainable yield	FMSY	8	•	\mathbf{O}	Above		MSY B _{trigger}	\bigcirc	\bigcirc	0	Above trigger
Precautionary approach	F _{pa} , Flim	\bigcirc	\bigcirc	\bigcirc	Harvested sustainably		B _{pa} , B _{lim}	\bigcirc	\bigcirc	\bigcirc	Full reproductive capacity
Management plan	F _{MGT}	-	-	-	Not applicable		SSB _{MGT}	-	-	-	Not applicable

Figure 2. Summary of Blue Whiting in subareas 1–9, 12, and 14 (Northeast Atlantic). State of the stock and fishery relative to reference points (ICES, 2016a).

Following the abandonment of the 2009 long-term management plan, there was a large industry effort to secure a more innovative management system with assistance from the client group and Norwegian scientists, which was put to the Coastal States. This proposal was ultimately rejected, but a new long-term management strategy was presented after considerable efforts by ICES, which included an inter-benchmark protocol (ICES, 2016e), blue whiting long-term management strategy evaluation (WKWBMS) (ICES, 2016f), review of ecosystem changes (WGWIDE, ICES 2016d) and ICES advice response to NEAFC's special request for an evaluation of long term management strategy (ICES, 2016g).

The final amended model resultant from the WKWBMS workshop concluded 'that a B_{lim} of 1.5 million tonnes and a B_{pa} of 2.25 million tonnes was still appropriate and should remain unchanged, but re-evaluated F_{MSY} (= 0.32), F_{pa} (= 0.58) and F_{lim} (= 0.88). The proposed long term management strategy (LTMS) included a harvest control rule (HCR) with two breakpoints (at B_{pa} and B_{lim}), a 10% inter-annual quota flexibility ("banking and borrowing"), and a 20% TAC change limits. This HCR was evaluated to ensure that the probability of SSB going below B_{lim} in any given year should be less than 5%. WKBWMS concluded that the proposed HCR was precautionary for the re-evaluated estimates of B_{lim} (1.5 million tonnes), B_{pa} (2.25 million tonnes) and F_{MSY} (= 0.32). Including a 10% inter-annual quota flexibility in the LTMS had an insignificant effect on the performance of the HCR. The HCR was precautionary both with and without the 20% TAC change limits above B_{pa} . However, not applying TAC change limits can lead to advised TAC being lowered considerably if the stock is estimated to have recovered above B_{pa} .

This work resulted in the signing of a new long term management strategy by the Coastal States (EU, Faroe Islands, Iceland and Norway) in October 2016 (Anon, 2016).

The agreed strategy is slightly modified from that presented by ICES, as follows:

- 1. The parties agree to implement a long-term management strategy for the fisheries on the blue whiting stock, which is consistent with the precautionary approach and the MSY approach, aiming at ensuring harvest rates within safe biological limits.
- 2. For the purpose of the long-term management strategy, in the following text 'TAC' means the sum of the agreed Coastal State quotas and the NEAFC allowable catches.
- 3. As a priority, the long-term strategy shall ensure with high probability that the size of the stock is maintained above B_{lim} .
- 4. In the case that the SSB is forecast to be above or equal to $B_{trigger}$ (= B_{pa}) on 1 January of the year for which the TAC is to be set, the TAC shall be fixed to a fishing mortality of FMSY.



- 5. Where the rules in paragraph 4 would lead to a TAC, which deviates by more than 20% below or 25% above the TAC for the Preceding year, the Parties shall fix a TAC that is respectively no more than 20% below or 25% above than the TAC of the preceding year.
- 6. The TAC constraint described in paragraph 5 shall not apply if:
 - a. The SSB at 1 January in the year preceding the year for which the TAC is to be set is less than $B_{trigger}$; or
 - b. The rules in paragraph 4 would lead to a TAC that deviates by more than 40% from the TAC of the preceding year.
- 7. In the case that the SSB is forecast to be less than the precautionary biomass (B_{trigger}) on 1 January of the year for which the TAC is to be set, the TAC shall be fixed at a level that is consistent with a fishing mortality given by:

Target F = $0.05 + [(SSB-B_{lim})*(F_{MSY}-0.05)/(B_{trigger}-B_{lim})]$

- 8. In the case that the SSB is forecast to be less than B_{lim} on 1 January of the year for which the TAC is to be set, the TAC will be fixed corresponding to a fishing mortality F = 0.05.
- 9. Each Party may transfer to the following year unutilised quantities of up to 10% of the quota allocated to it. The quantity transferred shall be in addition to the quota allocated to the Party concerned in the following year.
- 10. Each party may authorise fishing by its vessels of up to 10% beyond the quota allocated. All quantities fished beyond the allocated quota for one year shall be deducted from the Party's quota allocated for the following year.
- 11. The inner-annual quota flexibility scheme in paragraphs 9 and 10 should be suspended in the year following the TAC year, if the stock is forecast to be under B_{trigger} at the end of the TAC year.
- 12. The Parties, on the basis of ICES advice, shall review this long-term management strategy at intervals not exceeding five years. The first such review shall take place no later than by December 2021.

The principal departure from the ICES advice within the management strategy is paragraph 5, where the Coastal States delegates expressed concern that the 20% TAC change limits would be insufficient to allow response to changes in advice; therefore this was modified as stated in paragraphs 5 and 6 and ICES have been asked to provide advice based on this (Anon, 2016).

Delegates of the Coastal States agreed to limit catches to no more than ICES advice in 2017 1,342,330 tonnes, but establishing unilateral quotas for 2017 does not imply acceptance of the level of these quotas by any Party (Anon, 2016). There is still no agreed shared proportion of catch between Coastal States. This has resulted in the annual catch not following ICES advice and overall catch exceeding recommended TACs since 2014 (**Error! Reference source not found.**) and the corresponding F being above F_{MSY} (Figure 1).

As a result of the fishing mortality continuing to exceed F_{MSY} , the current harvest strategy and associated harvest control rules cannot be viewed as achieving the objectives met at the time of certification (desClers et al., 2015). The relevant performance indicators (PI 1.2.1 and PI 1.2.2) were therefore rescored against FCR 1.3 as part of this surveillance audit, which



included harmonisation with other fisheries targeting this stock (Harmonisation see section 0, Rescoring see 10 Appendix).

Sharing arrangements within the EU countries to which the client group belong remain unchanged from the time of certification (Table 5).

Table 5. EU quota share distribution between countries within the client group and the percentage of country quota for each UoC.*PFA represent five EU member counties with quota split across them which is variable annually.

Country	EU quota share	UoC Percentage
Netherlands	19%	NA (PFA)*
Denmark	15%	100% (DPPO)
Ireland	12%	≈ 65% (KFO)
UK	20.0%	95.8% (SPSG 2016)
France	10.625%	83.57% (CDPSM)

3.2.1 UoC 1 – PFA

The PFA fleet fish for blue whiting principally of the west coast of Ireland (ICES subarea 7) and the west coast of Scotland (ICES subarea 6). A small amount of catch is also taken in Faroe Island waters.

Table 6. PFA Initial quota, net quota after swaps, available quota (including flexibility), landings and landing as percentage of available quota for DPPO between 2014-2017 in tonnes.

Year	Client	Initial Quota	Net Quota after swaps	Available Quota	Landings	Landing %
2014	PFA	-	-	74,177.6	68,788.5	92.7
2015	PFA	-	-	85,042.5	83,651.2	98.4
2016	PFA	-	-	84,038.1	83,908.9	99.8
2017	PFA	-				

3.2.2 UoC 2 – DPPO

Blue whiting is targeted by the DPPO fleet principally of the west coast of Ireland (ICES subarea 7) and the west coast of Scotland (ICES subarea 6). A small amount of catch is also taken in Faroe Island waters. For DPPO vessels the fishery is relatively short encompassing a period of 6 weeks between February and the end of March. Denmark operates a full ITQ system and the DPPO UoC makes significant swaps with blue whiting quota per annum and makes use of the annual bank and borrow facility for 10% of quota per annum to assist in fishery management planning (Table 7, Table 1). In 2014 and 2015 catches by DPPO member vessels were 88.7% and 99.5% respectively of the available quota. Total landings for 2016 were not available at the time of the audit. DPPO are actively involved in the ICES working group for small pelagics (WGWIDE) and represented at the meetings by their chief biologist.

Table 7. Initial quota, net quota after swaps, available quota (including flexibility), landings and landing as percentage of available quota for DPPO between 2014-2017 in tonnes.

Year	U₀C	Initial Quota	Net Quota after swaps	Available Quota	Landings	Landing %
2014	DPPO	28,325		39,478	35,011.2	88.7
2015	DPPO	30,106		45,277	45,036.9	99.5
2016	DPPO	30,106		39,331	NA	NA
2017	DPPO					

3.2.3 UoC 3 – KFO

The Irish fishery for blue whiting typically takes place in February and March off the West coast of Ireland within the EEZ and within ICES Subareas 6 and 7. KFO landings between 2014 and 2016 ranged from 16,053-20,054 tonnes and were on average 76% of the available quota (Table 8, Table 1). KFO make use of the 10% flexibility in quota provided per annum to assist in quota management. Blue whiting from the Irish KFO fleet are landed for human consumption or for reduction to fishmeal depending on market prices. All landings were made into Killybeg port with three factories available for processing.

Table 8. Initial quota, net quota after swaps, available quota (including flexibility), landings and landing as percentage of available quota for KFO between 2014-2017. All data in tonnes.

Year	Client	Initial Quota	Net Quota after swaps	Available Quota	Landings	Landing %
2014	KFO	18,639	+1,018	19,657	16,053	81.7
2015	KFO	23,313	+1,689	25,002	17,051	68.2
2016	KFO	24,550	+1,367	25,917	20,054	77.4
2017	KFO	45,547	-2,437	43,110		

3.2.4 UoC 4 – SPSG

The UK receives an EU quota share of 20%, with the annual percentage allocated and taken by SPSG subject to significant inter-annual variation, depending on stock trading. In 2016 SPSG final allocation was 95.8% of the UK share (Table 5). SPSG represent all pelagic vessels in Scotland. SPSG did not bank any quota in years 2014-16. In each year between 2014 and 2016 annual landings by SFSG were >92% of the available quota (Table 9). In 2017 there is a large increase in UK quota available.



Table 9. Initial quota, net quota after swaps, available quota (including flexibility), landings and landings as percentage of available quota for SPSG between 2014-2016. All data in tonnes. *Overall UK quota, SPSG share subject to negotiation

Year	UoC	Initial Quota	Net Quota after swaps	Available Quota	Landings	Landing %
2014	SPSG	3,724	25,975	25,975	25,593	98.5
2015	SPSG	33,687	32,929	32,929	30,504	92.6
2016	SPSG	37,020	36,638	36,638	36,896	100.7
2017	SPSG	76,319*	-	-	-	-

3.2.5 UoC 5 CDPSM

France is allocated 10.625% of the EU quota share of blue whiting per annum with CDPSM holding an 83.57% share, therefore 8.88% of the EU quota share. CDPSM's share is also fished within the southern area of the fishery with typically up to 20% of it being fished within the Bay of Biscay region. In 2015 however, fishing within the Bay of Biscay was poor and less than 2 % of the annual catch was taken in this region. From 2014-2016 CDPSM did not land their entire quota with the percentage landed ranging from 64.2% – 86.3% (Table 10). The 2016 CDPSM spring campaign did not take place due to technical issues with the vessel. In 2017 CDPSM have an initial quota of 34,206 tonnes with swaps yet to be confirmed.

Table 10. Initial quota, net quota after swaps, available quota (including flexibility), landings and landing as percentage of available quota for CDPSM between 2014-2017. All data in tonnes.

Year	UoC	Initial Quota	Net Quota after swaps	Available Quota	Landings	Landing %
2014	CDPSM	16,473	16,256	16,256	10,429	64.2
2015	CDPSM	17,508	11,296	11,296	9,753	86.3
2016	CDPSM	18,437	12,375	12,375	10,407	84.1
2017	CDPSM	34,206	TBA	-	-	-

3.3 Principle 2

3.3.1 Retained

The blue whiting fishery is generally described as a clean, single-species fishery targeting spawning shoals of blue whiting (desClers et al., 2015). There have been no significant changes to the procedures of the client group in regard to the method of fishing and therefore no need to rescore this performance measure. There has, however, been the introduction of the EU-discard ban from 1 January 2015.

Small quantities of species such as mackerel and horse mackerel are caught. Declared landings data were used as the principal data source to determine retained species in the assessment of this fishery. For RSW vessels, the catch is only sorted and graded once it arrives in the factory at which stage the official weights per species are recorded. For PFA



freezer-trawler vessels, the catch is sorted and graded on board and the official weights by species are recorded at landing by the national authorities.

There have been no significant developments in this area since certification for any of the UoCs and their sustainability policies listed in the PCR (desClers et al., 2015) can be assumed to be current.

I. UoC1 – PFA

PFA policy states that measures must be taken to counter by-catches and discards, that highgrading of catch is not permitted and that use of technological advances seek to reduce bycatch below 3%. There is also advice on the avoidance of grounds harbouring undersized fish. PFA operate a self-sampling research program to determine catch composition for each fishery including length frequency data. Catch composition data from the blue whiting fishery in 2015 and 2016 show that <5% of the catch is the non-target species (Table 11). In either year Atlantic horse mackerel (*Trachurus trachurus*) was the only species with >1% catch, highlighting the clean single species ability of this fishery (Table 11).

Table 11. Catch composition for 2015 and 2016 from the PFA self-sampling program, for blue
whiting. n is number of vessel trips taking part in the program within the given year

Species	2015 n = 10	% Catch	2016 n = 25	% Catch
Blue whiting	10,994	95.7	36,705	97.5
Horse mackerel	201	1.7	284	0.8
Argentines / herring smelts	89	0.8	361	1.0
Smelt	102	0.9	183	0.5
Mackerel	55	0.5	54	0.1
Hake	41	0.4	26	0.1
Whiting	0	0.0	12	0.0
Squid	5	0.0	0	0.0
Pollock	0	0.0	4	0.0
Total	11,487		37,629	

In accordance with current regulations, undersize fish landed and retained cannot be sold for human consumption. For PFA undersize fish are bulk packaged, irrespective of species and sent for non-human consumption markets. Within the regulation for undersize fish there is provision for 10% of undersize catch to be available for human consumption and this is used by PFA for some species.

II. UoC2 – DPPO

DPPO vessels complete a special logsheet on which discards and interactions with ETP species must be recorded. The DPPO Code of Conduct further specifies that DPPO members are engaged in avoiding unwanted catches (undersized fish or unwanted species) and reducing discards.

III. UoC3 – KFO

The PO's member vessels complete an environmental management form as part of having signed up to the BIM Seafood Stewardship Programme, which includes recording of slipping, gear loss and seabed interaction, and interactions with ETP species. Each vessel is required to sign up to a code of conduct under which vessel operations take place. Catch composition



is regularly assessed (subsamples taken every minute during retrieval) for marketing purposes. This sampling includes catch composition and size and quality. Only the catch composition is recorded in logbooks, while the remaining data are for internal and commercial use. Records of catch composition are returned to the vessels via the receiving factory following processing (Table 12). Catch composition data from 2014-2016 continue to show this fishery as an almost exclusive single species fishery with minimal retained species (Table 12).

Species	2014	2015	2016	% total catch
Herring	0	0	0	0
Mackerel	0	19	1	0.04
Horse Mackerel	0	0	45	0.07
Blue whiting	16,053	17,051	20,054	99.9
Total	16,053	17,070	20,099	

Table 12. Record of discard and bycatch species from KFO between 2014-16 in tonnes.

IV. UoC4 – SPSG

SPSG vessels complete a special logsheet: "Occurrence of Exceptional / Unusual Events During Fishing Activity". Events to be reported include slippage events, interactions with endangered, threatened or protected species and gear contact with seabed or gear loss. There are no observer records: Marine Scotland ceased pelagic observer programme in 2011 for budgetary reasons. Catch composition data from the SPSG fleet provided by Marine Scotland for all vessels with blue whiting access and landings greater than 10t indicate that no other species comprises more than 2% of the catch in any year between 2014-2016 (Table 13). This maintains the description of the fishery as a clean single species fishery as originally described in the assessment (desClers et al., 2015).

Species	2014	2015	2016	% catch total
Boarfish	16.3			0.02
Haddock	0.9			0.00
Herring	1,302.2			1.29
Horse Mackerel	215.4			0.21
Blue whiting	27,175.5	32,396	39,907.9	98.48
Total	28,710.3	32,396	39,907.9	

V. UoC5 – CDPSM

The Joseph Roty operates under a *de minimis* exemption from the EU discard ban for small blue whiting on the basis of food safety. The processing of small individuals of blue whiting onboard the vessel can lead to small amount of gut being included in the final product, which may create bacterial issues. For 2017 the exemption covers the catches up to 7% in 2018 this will reduce to 6%. All discards and by-catch are recorded on electronic logbooks and transferred to the PO against quota obligations and to the French authorities. By-catch rates are very low, excepting small blue whiting representing <0.1% of the total catch in any year (Table 14).



CDPSM are working together with Ifremer to record length-frequency information daily (10kg of fish from each haul) throughout the fishing season in order to better understand population structure within the French catch. IFREMER will meet with the Joseph Roty when it next returns to port (expected mid-February 2017) to discuss the latest data. There have been no technological advances in regard to reducing capture of small blue whiting. CDPSM identified vessel captain's skill in avoiding the smaller fish, which tend to school separately.

Species	201	4	201	2015 2016		6
Species	Catch (kg)	% catch	Catch (kg)	% catch	Catch (kg)	% catch
Blue Whiting	455,500	4.19	597,696	6.13	435,152	4.18
Atlantic Mackerel			2,500	0.03		
Swordfish	1,610	0.01				
Shortfin squids	760	0.01	300	0.00		
Oarfish	1,370	0.01				
Saithe	100	0.00				
Porbeagle	50	0.00				
Longfin inshore squid					150	0.00
Hake					70	0.00
Total discards	459,390	4.22	600,496	6.16	435,372	4.18
Total landings	10,424,280		9,744,880		10,406,960	
Total catch	10,883,670		9,753,360		10,345,480	

3.3.2 ETP species

Pelagic trawl fisheries vessels >15 m in length are required to be monitored by on-board observers if the fishery is deemed to be 'at risk (in accordance with EC regulation 812/2004). This fishery is generally perceived as low-risk to ETP species (references within desClers et al. 2015) and, with the exception of the PFA fleet, no observer programs are currently operating.

I. UoC1 – PFA

In each year from 2014 – 2016 there has been a single observer trip per annum aboard a PFA fleet member vessel BX791. PFA actively enters into research programs with regard to increasing the effectiveness of broadband Eco-sounders. This research program is ongoing and will continue to assist in electronic species identification and ETP species avoidance (G. Gerard van Balsfoort pers. Comm.). All management policies with regard to reporting ETP interactions remain as described in the original certification report (desClers et al., 2015).

II. UoC2 – DPPO

DTU Aqua, the national institute for aquatic resources in Denmark, undertakes observer programs on behalf of the government. However, there has been no observer presence on the blue whiting fishery between 2014-2016, as a result of the perceived low risk of this fishery to ETP species interaction. All management policies with regard to reporting ETP interactions remains as that described in the original certification report (desClers et al., 2015).



III. UoC – KFO

All management policies with regard to reporting ETP interactions remain as described in the original certification report (desClers et al. 2015). Each of the 17 KFO vessels involved in the MSC Certification have a folder on board their vessel into which they keep different records for slipping and landing obligation requirements, manual watch, vessel cleaning reports and ETP interactions. Each vessel is responsible of their own folder and the KFO gathers up the folders once a year to inspect them, usually in the summer time when the vessel is not fishing. No ETP interactions were reported as occurring within the fleet between 2014 and2016 by KFO during surveillance. (S. O'Donoghue Pers. Comm.)

IV. UoC4 – SPSG

Exceptional incident forms were sent to each of the vessel skippers prior to commencement of the fishery in 2015. For the fishing year 2015-16 no exceptional incident forms (including ETP species interactions) were returned by fishers (Example sheet provided at 10.4). All management policies with regard to reporting ETP interactions remain as that described in the original certification report (desClers et al., 2015).

V. UoC5 – CDPSM

The Joseph Roty II operates a self-reporting mechanism for ETP interactions and there have been no interactions of note since certification. There are no observer reports for the Joseph Roty between 2014-16. All management policies with regard to reporting ETP interactions remains as that described in the original certification report (desClers et al., 2015).

3.3.3 Habitats

The fishing practices of mid-water trawls mean there is no interaction with the seabed, with the exception of exceptional / unusual events which would be recorded within logbooks and with UoC documents. There are no reported gear losses and seabed interactions recorded within the UoCs in 2015-2016.

3.3.4 Ecosystem

The WGWIDE report (ICES, 2016h) provides a broad summary of ecosystem relevant changes to the blue whiting stock in recent years:

- WGWIDE encourages further work to be carried out on ecosystem considerations linked to widely distributed fish stocks such as blue whiting. A close collaboration with the Working Group on Integrated Assessment of Norwegian Sea will help facilitate an ecosystem approach.
- Blue whiting may have taken advantage of warming oceans associated with Northern Hemisphere Temperature anomaly by extending their possible feeding opportunities further north, e.g. in Arctic waters. Whether such changes are directly or indirectly driven by the warming is not known.

Neither of the changes affects the scoring of this species in this assessment.

3.4 Principle 3.

The fishery's three-tier legal framework, with national, European and NEAFC/Coastal States systems, was reviewed in depth in the assessment report (desClers et al., 2015). Of these, the lack of agreement between Coastal States led to the conclusion that "international cooperation does not extend to an agreement and delivery of management actions consistent with sustainable management advice and therefore cannot be considered effective", and a condition was set. The content and wording of the condition were agreed after extensive harmonisation between CABs involved in the certification of all other small-pelagic fisheries within the same Coastal States system.

Some progress has been made since certification. The long-term management strategy for blue whiting was evaluated by ICES in 2016 at NEAFC's request (see section 3.2), and the Coastal States (EU, Faroe Islands, Iceland and Norway) agreed to a TAC of 1,342,330 tonnes for 2017, corresponding to F_{MSY} (Anon, 2016).

An important development is the strengthening of NEAFC's role following the recommendations of its 2014 external evaluation (Gascoigne et al., 2015). In 2015 NEAFC¹ set up a Working Group on a Framework for Coastal State Negotiations with the following Terms of Reference regarding quota allocation:

- 1. The criteria for quota allocations on stocks occurring in the North-East Atlantic, both discrete stocks in the Regulatory Area and straddling stocks occurring both in the waters of the Coastal States and the Regulatory Area
- 2. The appropriate reference period
- 3. The weighting to be given to each of those criteria
- 4. The minimum time period for which the allocation criteria should apply and the consequent timing of any review

The Working Group has met on four occasions in 2016 (NEAFC, 2016a) and was given a mandate to continue its work in 2017 if the outstanding items were not settled at the 2016 NEAFC Annual Meeting held in November (NEAFC, 2016b). Three additional WG meeting have now been scheduled to take place if necessary before the next Coastal States meeting (18 Oct 2017 to 20 Oct 2017).

As clearly stated during the Coastal States meeting with the EU, the "Delegations agreed that establishing unilateral quotas for 2017 does not in any way imply acceptance of the level of these quotas by any Party" (Anon, 2016) and in all likelihood, total catches will exceed the TAC recommended by ICES in 2017, as it did in 2016. Therefore, the condition on PI 3.1.1 a and b remains. In addition, fishing mortality remained above F_{MSY} in 2016 and, at the initiative of CABs auditing the certification of Norwegian, Icelandic and Faroese fisheries, two additional conditions have been set regarding PI 1.2.1b, and PI 1.2.2 (see rescoring of Principle 1 below) and harmonised for all fisheries on the blue whiting stock (Section 0).

There has been no notable change in the fisheries management objectives, decision-making processes or regarding consultation, roles and responsibilities. Activities aimed at improving

¹ <u>http://neafc.org/</u>

management and meeting SG80 for PI 3.1.1a and b are described against the Client Action Plan in section 0.

Compliance remains high for this fishery, with a highly effective risk-based compliance system. The European Fisheries Control Agency (EFCA) is carrying on with its risk-based Joint Deployment Plan (JDP) in the North Western Waters (and South WW – only relevant to CPSM)². The JDP includes inspections at sea and on land, and takes into account member states-specific inspections of factories for RSW vessels, to determine risk levels. Notably, EFCA has been collaborating with NEAFC to coordinate the EU contribution to its Joint Inspection and Surveillance Scheme, and supported the NWWAC Focus group on Control and Surveillance to help assess compliance with the landing obligation³. According to EFCA's annual reports, there are no specific concerns regarding the fishery. National authorities (France, Scotland, pers. comm.) party to the EFCA JDP have also confirmed.

4 Traceability

4.1 Overview

All vessels are pelagic trawlers, but traceability systems vary according to the type of products, which can be fresh fish (RSW vessels), frozen blocks, or surimi paste (only CDPSM vessel) as detailed by UoC in the next section. Common features are indicated in Table 15.

Traceability Factor	Description of risk factor if present. Where applicable, a description of relevant mitigation measures or traceability systems (this can include the role of existing regulatory or fishery management controls)
Potential for non-certified gear/s to be used within the fishery	In accordance with EU regulations, retained volumes by species are fed into electronic logbooks which are submitted to the authorities every 24 hours. All UoC vessels must be equipped with an operational vessel monitoring system (VMS) unit. Through the VMS, flag states can monitor the location of each of their vessels at any time.
Potential for vessels from the UoC to fish outside the UoC or in different geographical areas (on the same trips or different trips)	The UoC covers the entire area of distribution of the blue whiting stock and client vessels only operate the gear as described in the UoC. There is therefore no risk of mixing certified with non-certified stock aboard the client vessels.
Potential for vessels outside of the UoC or client group fishing the same stock	As above
Risks of mixing between certified and non-certified catch during storage, transport, or handling activities (including transport at sea and on land, points of landing, and sales at auction)	For RSW vessels, no processing takes place on board and the catch is landed as fresh. For PFA freezer-trawler vessels, all catch is however processed on board. After processing, the catch is graded and placed into vertical plate freezers where blocks of whole frozen fish are formed. These are placed into cartons which indicate the date of catch, species, batch date and fishing area. Fish from separate production batches are kept on separate pallets and are never mixed (Andrews et

Table 15. Traceability Factors within the Fishery

² <u>https://www.efca.europa.eu/en/content/western-waters</u>

³ December 2015, NWWWAC report, http://www.nwwac.org/



Traceability Factor	Description of risk factor if present. Where applicable, a
	description of relevant mitigation measures or traceability systems (this can include the role of existing regulatory or fishery
	management controls)
	al., 2010). All PFA catch is destined for human consumption and is
	therefore subject to EU traceability requirements.
Risks of mixing between certified and non-certified catch during processing activities (at-sea and/or before subsequent Chain of Custody)	Port-of-landing authorities must be notified at least 4 hours before a vessel arrives into port. Upon landing, the catch is sampled by the port-of-landing authorities who verify total volume, species and fish size and validate this against the electronic logbook data (a 10% discrepancy is however permitted). For PFA vessels, a fishery inspector checks each pallet against log-sheet records for total weight and a statutory subsample of pallets is set aside, allowed to thaw, and the actual carton contents weighed to verify the accuracy of the log-sheet and labelling records (Andrews et al., 2010). For RSW vessels, for which the landed catch is only sorted and weighed after pumping/transporting into the factory, the inspection occurs in the processing factories. The validated landings data are then counted towards the official landing statistics and quota uptake. The combination of electronic logbooks, atsea inspections, port controls and VMS data makes that this fishery is subject to a robust traceability system. For PFA vessels, further traceability is provided by the client's own internal systems that record the date and time of fishing activities, and the date and time of packaging on board vessels. All of the frozen fish landed from this fishery can be traced back to the date and location of the trawl haul in
	which the fish were caught (Andrews et al., 2010).
Risks of mixing between certified and non-certified catch during transhipment	All transhipment operations in EC waters are prohibited and may only take place in designated ports in EU Member States subject to authorisation from the relevant authorities. None of the vessels in the UoC carry out transhipment activities. It was noted, however, that in exceptional circumstances, if a vessel overhauls, the surplus catch is pumped onto another vessel. However, this would always be within the same UoC and count towards the quota of that other vessel.
Any other risks of substitution between fish from the UoC (certified catch) and fish from outside this unit (non-certified catch) before subsequent Chain of Custody is required	The blue whiting fishery is a geographically and seasonally restricted fishery, predominantly carried out in the second and third quarter of the year in Irish, UK and open seawaters. For RSW vessels, all catch is pumped directly into the hold after which it is pumped/transported directly to the processing factory, no processing takes place on board and the catch is landed as fresh. In addition, the fishery verifies its landings data, which are used for official monitoring of quota up-take and national statistics. A high level and sophisticated system of at sea monitoring, control and surveillance is in place for the EU and provides confidence in a limited ability to substitute certified with non-certified fish. Routine boarding and inspection, spotter planes, reporting to checkpoints when crossing international boundaries, VMS are all methods by which the separation systems are interrogated by the fishery. On PFA vessels, fish from separate production batches are kept on separate pallets and are never mixed. The catch is graded and the fish frozen whole as blocks on board. The frozen blocks are boxed up in cartons, which indicate the date of catch, species, batch date and fishing area. Fish from separate production batches are kept on separate pallets and are never mixed. All PFA catch is destined for human consumption and is therefore subject to EU traceability requirements. On landing, all catches are subject to thorough inspection regimes at designated landing sites. The traceability systems previously described further make that the risk of substitution of certified fish with non-certified fish is minimal.



MSC Fisheries Surveillance Report Template V 1.0 (16th March 2015)



4.2 Details by UoC

Traceability systems vary according to the type of vessels, landing fresh (RSW vessels), frozen blocks, or surimi paste (only CDPSM vessel) as detailed below.

I. UoC1 – PFA

All PFA blue whiting is landed in the Netherlands at registered ports. The first point of sale is vertically integrated from the fishing vessel (each vessel is a registered limited company) to the PO's registered holding company (a separate limited company). Each carton of frozen fish (weighing approximately 22 kg) and packaged on board has unique identification codes, which indicate the species, date of capture, area of capture, vessel number and allow full traceability.

Under Dutch national regulation and implementation EU legislation on fisheries there are 15 current designated ports for fishing vessels > 59 m. These are

Breskens (Gemeente Oostburg), Vlissingen, Breskens (Gemeente Oostburg), Vlissingen, Colijnsplaat, Stellendam, Scheveningen, IJmuiden:, Den Helder: Den Oever, Harlingen, Lauwersoog, Delfzijl: Termunterzijl, Eemshaven, Urk, Velsen, Colijnsplaat, Stellendam, Scheveningen, Ijmuiden, Den Helder: Den Oever Harlingen, Lauwersoog Delfzijl: Termunterzijl, Eemshaven, Urk, Velsen.

Vessels registered with PFA as part of the this UoC principally use Vlissingen, Scheveningen, Ijmuiden, Velsen. There are current plans for the designating of the port of Amsterdam as well because one of the companies has acquired a cold store over there.

II. UoC2 – DPPO

DPPO blue whiting are landed across a number of countries including the UK, Faroes Islands, Denmark and Norway. In Denmark landing of catch is overseen by an independent third party company separate from the vessel owners and the receiving land based operator. This certified body (which varies between ports) provides an auditable log of catch weight, temperature, condition and catch-composition of the catch, providing assurance to both parties and data for dispute resolution.

III. UoC – KFO

All KFO blue whiting product is sold via contract before arrival at Killybeg Ireland. The port utilises tankers to transport the product from vessel to factory. Each tanker is provided by the factory and therefore represents the first point of sale. There are five factories operating at Killybeg with Chain of Custody certification for blue whiting (Table 16).

Company	Location	CoC number
Sean Ward (Fish Exports) Ltd	Killybeg	MSC-C-51142
Artic Fish Processing Ltd	Killybeg	MSC-C-51144
Killybegs Seafoods Ltd	Killybeg	MSC-C-50884
Island Seafoods Ltd	Killybeg	MSC-C-50946
Premier Fish Ltd	Killybeg	MSC-C-51146

Table 16. First point of sale for Blue Whiting from KFO in Killybeg, Ireland



IV. UoC4 – SPSG

The majority of stock is in Scotland where they are landed at one of four principle factories and the first point of sale is at the dock (Table 1. Blue Whiting ICES advice and catch statistics for subareas 1-9,12 and 14 from 2012-2017 in tonnes (ICES, 2016a). * No agreed TAC by the Coastal States, sum of unilateral quotas.

Year	ICES Advice	Predicted Catch corresponding to ICES Advice	TAC	ICES Catch	Official Catches
2012	Follow the agr eed management plan	391 ,000	391 ,000	376 ,000	38 5,300
2013	Follow the agreed management plan	643 ,000	643 ,000	614 ,000	628.2 00
2014	Follow the agreed management plan	948, 950	1, 200,000	1,148 ,000	1 ,155,300
2015	Follow the agreed management plan	839, 890	1, 260,000 *	1 ,391,000	1,396, 200
2016	MSY approach	≤776, 400	1 ,147,000 *	1 ,147,000	-
2017	MSY approach	≤1,342,330		-	-

Table 17). Additionally, occasional catch is landed in Ireland at processors operated by KFO.

Company	Location	CoC number
Lunar Freezing and Cold Store	Fraserburgh and Peterhead	MSC-C_50671a-g and
Company Ltd	_	MSC-C-50671, C-FCI-0023
Northbay Pelagic Ltd	Peterhead	MSC-C-50510
Shetland Catch	Lerwick, Shetland	MSC-C-50669
Denholm Seafood Ltd	Peterhead	MSC-C-50666

V. UoC5 – CDPSM

All Surimi paste produced and frozen on board the Joseph Roty II is landed in St Malo and sold to the CDPSM subsidiary processing CDP-Production, which holds a separate CoC certificate (Table 18).

Table 18. First point of sale for Blue Whiting from CDPSM in France

Company	Location	CoC number
Compagnie des Pêches - Distribution	Saint-Malo	MSC-C-54514



5 Harmonisation

This fishery is harmonised against the fisheries listed in Table 19 within the MSC program for P1 and P3. Each of the CABs responsible for harmonised fisheries was contacted on 15/03/17 with regard to MEC decision on scoring and conditions. Responses from other CABs in relation to Principle 3 found no need to reassess the current condition and this remains as set when the fishery was certified.

For Principle 1 a harmonisation meeting was conducted between MEC and DNV on 28/04/17. The meeting was conducted remotely and attended by Hugh Jones (TL), Mike Pawson (P1) and Sophie des Clers (P3) on behalf of MEC. For DNV Lucia Revenga (TL), Stefan Midteide (Manager), John Nichols and Hans Lassen (P1) and Geir Honneland (P3) were in attendance. See Appendix 3 section 10.2.

Fishery	Principle	MSC status	CAB
Faroese Pelagic Organisation North East Atlantic blue whiting	1 & 3	Jun-16	DNV
Norway spring spawning herring - scope extension (Norway North East Atlantic blue whiting)	1&3	In assessment	DNV
Faroese Pelagic Organization (FPO) Atlanto- Scandian herring	3	In reassessment	DNV
ISF Norwegian & Icelandic herring trawl and seine	3	May-14	Acoura
Norway spring spawning herring	3	Jul-14	DNV
Faroese Pelagic Organisation North East Atlantic mackerel	3	Jun-16	DNV
Northern Ireland Pelagic Sustainability Group (NIPSG) Irish Sea-Atlantic mackerel, WOS herring & NS herring	3	Dec-16	Acoura
MINSA North East Atlantic mackerel	3	May-16	Acoura

Table 19. Harmonisation



6 Evaluation Results

6.1 Principle Level Scores

Table 20. Final Principle Scores, revised scores from this surveillance in red.

Final Principle Scores					
	UoC 1	UoC 2	UoC 3	UoC 4	UoC 5
Principle 1 – Target Species	86.3	86.3	86.3	86.3	86.3
Principle 2 – Ecosystem	86.0	89.3	89.3	89.3	87.7
Principle 3 – Management System 88.4		88.4	88.4	88.4	88.4

6.2 Summary of Scores

Table 21. Summary of Scores, revised scores from this surveillance in red.

Principle	Component	Weighting	₽	Performance Indicator	UoC1	UoC2	UoC3	UoC4	UoC5
			1.1.1	Stock status	90	90	90	90	90
	Outcome	0.5	1.1.2	Reference points	90	90	90	90	90
			1.1.3	Stock rebuilding	N/A	N/A	N/A	N/A	N/A
			1.2.1	Harvest Strategy	70	70	70	70	70
1			1.2.2	Harvest control rules and tools	75	75	75	75	75
	Management	0.5	1.2.3	Information and monitoring	90	90	90	90	90
			1.2.4	Assessment of stock status	95	95	95	95	95
	Retained		2.1.1	Outcome	95	95	95	95	100
	species 0.2	0.2	2.1.2	Management	85	85	85	85	100
			2.1.3	Information	95	95	95	95	100
	Bycatch		2.2.1	Outcome	80	100	100	100	80
	species	0.2	2.2.2	Management	90	100	100	100	90
	50000		2.2.3	Information	80	100	100	100	80
			2.3.1	Outcome	80	80	80	80	80
2	ETP species	0.2	2.3.2	Management	80	80	80	80	80
			2.3.3	Information	80	80	80	80	80
			2.4.1	Outcome	90	90	90	90	90
	Habitats	0.2	2.4.2	Management	90	90	90	90	90
			2.4.3	Information	95	95	95	95	95
	_		2.5.1	Outcome	80	80	80	80	80
	Ecosystem	0.2	2.5.2	Management	80	80	80	80	80
			2.5.3	Information	90	90	90	90	90
			3.1.1	Legal and customary framework	65	65	65	65	65
3	Governance and Policy	0.5	3.1.2	Consultation, roles and responsibilities	90	90	90	90	90
	and Folicy		3.1.3	Long term objectives	100	100	100	100	100
			3.1.4	Incentives for sustainability	100	100	100	100	100



Principle	Component	Weighting	PI	Performance Indicator	UoC1	UoC2	UoC3	UoC4	UoC5
			3.2.1	Fishery specific objectives	90	90	90	90	90
	Fishery-		3.2.2	Decision making processes	80	80	80	80	80
	specific management	0.5	3.2.3	Compliance and enforcement	100	100	100	100	100
	system		3.2.4	Research plan	90	90	90	90	90
			3.2.5	Management performance evaluation	80	80	80	80	80

7 Conditions

Table 22.	Condition	1:	All	UoCs
-----------	-----------	----	-----	------

Performance Indicator	PI 3.1.1 The management system exists within an appropriate legal and/or customary framework which ensures that it:
Score	65
Rationale	 SI 3.1.1a SG80: There is an effective national legal system and organised and effective cooperation with other parties, where necessary, to deliver management outcomes consistent with MSC Principles 1 and 2. Currently, international co-operation does not extend to an 'agreement and delivery of management actions consistent with sustainable management advice' and therefore SG80 is not met. 3.1.1b SG 80: The management system incorporates or is subject by law to a transparent mechanism for the resolution of legal disputes which is considered to be effective in dealing with most issues and that is appropriate to the context of the fishery. The on going disputes in relation to the Norwegian share of the blue whiting TAC clearly indicate that the management system does not have a mechanism to address disputes that is 'effective in dealing with most issues' and so SG80 not met.
Condition	The SG80 requirements for SI a) and b) above must be met. There should be evidence of organised and effective cooperation between all affected parties, which delivers outcomes consistent with meeting Principle 1. There should also be evidence of an effective and transparent mechanism for dispute resolution between the parties (UNFSA Article 10 paragraphs a), h) and j) are particularly relevant to the meeting of this condition).
Milestones	Year 1. Communication should have begun or continued with relevant parties to promote cooperation on delivery of outcomes consistent with meeting the requirements of Principle 1 and achieving a suitable means of dispute resolution. The Client Group shall provide documented evidence of correspondence, meetings, representations etc. Year 2 and Year 3. It is understood that the condition could be closed at any time. Year 2 and 3 should therefore provide information on all relevant correspondence, meetings, representations undertaken and the prevailing situation regarding cooperation between parties and dispute resolution.

	Year 4. The SG80 requirements should be met. At the time this is achieved, this PI will be rescored at 80 or more.
Client Action Plan	Milestone year 1: Make contact with other interested parties and lobby the European Commission to initiate negotiations for a mechanism for cooperation between the Coastal States, which is effective in agreeing an appropriate management mechanism consistent with the management plan. Action year 1: During negotiations for 2016 TACs and sharing arrangements, arrange meetings with other fleets in the fishery, European Commission and Member States' national administrations to encourage a management solution for 2016. Outcome year 1: By March 2016, all Coastal States should have formally agreed on management and sharing arrangements for 2016 and beyond.
Progress on Condition Year 1	Numerous actions have taken place, led by the Client Group of EU fishing industry representatives. During 2015 and 2016 the EU industry had numerous contacts with their member state administrations, with the EC, and liaised directly with the Norwegian, Faroese and Iceland fishing industry representatives on the margin of Coastal State and NEAFC meetings on the sharing and management of blue whiting. The scientific basis of the blue whiting stock management, which included ICES scientific advice, new benchmark and management strategy evaluation, was discussed in detail at meetings of the Pelagic Advisory Council - PELAC (where the relevant NGO's on pelagic fisheries in the Northeast Atlantic are also active). The Client Group has also contributed in kind (vessel time and dedicated fisheries scientist time) and financially to improve the Blue Whiting research cruises. A new agreement between coastal states pledging explicitly to abide by ICES scientific advice was signed in December 2016. There is still no overall agreement on TAC shares to reduce fishing mortality to FMSY. Sustainable management for the stock has not yet been achieved. The condition remains open.
Observations at Year 1 SA	There is still no formally agreed sharing arrangements for the blue whiting fishery with quotas still set unilaterally by Norway and Iceland in 2016 and 2017. There is a sign that an agreement could be reached for the 2018 TAC shares. Therefore the expected outcome is not yet entirely reached.
Status of Condition	On target

Table 22: Condition 2: For all UoCs.

Performance Indicator	PI 1.2.1: There is a robust and precautionary harvest strategy in place.
Score	70
Rationale	Rescore of PI 1.2.1 – Harvest Strategy
	<u>SG 80 SI b) requirement</u> : The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives Finding: The current situation, where the long-term management plan implemented in 2008 has been set aside and the ICES MSY approach advice on the fishery is not being followed could lead to a situation where the status of the stock is adversely affected. Currently, the problem is only manifested in increased fishing mortality to above F_{MSY} . As evidenced by the annual catches exceeding the ICES advice and current level of fishing mortality being above F_{MSY} , the harvest strategy, based on the MSY approach and lacking an effective long-term management plan, is not achieving all its objectives and the requirements at SG 80 are not met.



Condition	The SG80 requirements for scoring issue b) must be met. <u>SG 80 SI b):</u> 'Available evidence' may be any relevant evidence, provided through ICES or other verifiable means, that shows the implications of all available management actions (e.g. by coastal states and/or agreements with other relevant states in controlling fishing mortality) in achieving exploitation levels consistent with the long term management strategy and that F is reduced below F_{MSY} .
Milestones	Year 1: Communication should be progressed with the Coastal States and NEAFC to promote cooperation by all participants in the fishery to deliver outcomes consistent with meeting the requirements of Principle 1 and achieving satisfactory progress towards a reduction in fishing mortality consistent with the MSY approach and, once implemented, consistent with the agreed Long Term Management Strategy (2016).
	Year 2 and Year 3: It is understood that the condition could be closed if ICES advice is that fishing mortality has fallen to at or below FMSY, thus providing sufficient additional evidence that the harvest strategy is achieving its objectives. Years 2 and 3 should therefore provide information on all relevant actions by the Coastal States and NEAFC towards achieving the requirement for evidence that the harvest strategy is achieving its objectives in relation to both SSB and F.
	Year 4: The SG80 (b) requirements should be met. At the time this is achieved, this PI will be rescored at 80 or more.
Client action plan	See Appendix 10.2
Consultation on condition	None. The actions required for meeting this condition lie with the fisheries "lobbying power" with the EU authorities and their coastal states counterparts.

Table 23: Condition 3: For all UoCs.

Score 75 Rationale Rescore of PI 1.2.2 – Harvest control rules and tools SG 80 SI c) requirement: At the generic level, setting an annual TAC, based on a reliable annual estimation of stock status, backed by either a precautionary long-term Management plan an MSY strategy, does have a reliable track record for many stocks in the NE Atlantic. The management of the blue whiting stock is now based on the MSY approach and will adopt a new management plan in 2017. The management is supported by rigorous surveillance, monitoring and enforcement of the national dependence meters.
<u>SG 80 SI c) requirement</u> : At the generic level, setting an annual TAC, based on a reliable annual estimat of stock status, backed by either a precautionary long-term Management plan an MSY strategy, does have a reliable track record for many stocks in the NE Atlantic. The management of the blue whiting stock is now based on the MSY approach and will adopt a new management plan in 2017. The management is supported by rigorous surveillance, monitoring and enforcement of the national
declared quotas together with technical measures. Levels of discarding in the various national fisheries are considered by ICES to be very low and total landings are considered to be a reasonable estimate of the actual catch. The recent history of increasing SSB and F usually below FMSY provides some vidence that the tools used to implement the HCR are effective and are appropriate methods to control exploitation: SG60 is met. SG80 requires evidence that the tools in use are appropriate and effective in achieving the exploitation levels required under the HCRs. Despite there being periods since 2006 when the catch exceeded the ICES advice and the agreed TAC, exploitation levels (F) were below FMSY from 2008 through 2013 when the long term management plan was in operation. Since 2014, however, coast states have effectively set their own catch levels, above ICES advice, and exploitation levels have been above FMSY. The evidence indicates that the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels have been above FMSY. The evidence indicates that the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in use are not effective in achieving the exploitation levels required under the tools in



Condition	The SG80 requirements for SI c.					
	<u>SG 80 SI c):</u> Available evidence' may be any relevant evidence, provided through ICES or other verifiable means, that shows the implications of all available management actions (e.g. by coastal states and/or agreements with other relevant states in controlling fishing mortality) in achieving exploitation levels consistent with the long term management strategy to which the HCRs are set.					
Milestones	Year 1: A revised Long Term Management Strategy(LTMS) has been endorsed by ICES as consistent with the Precautionary approach and agreed by the Coastal States (with a minor amendment) This revised strategy should be used by ICES from 2017 for their advice on the fishery in 2018 and subsequent years. Year 2 and Year 3: It is understood that the condition could be closed at any time. The evidence required to close the condition will be that: The Long-Term Management Strategy is being used by ICES as the basis for their advice: The Coastal States allocation of shares does not exceed the ICES advice; The total annual catch does not exceed the ICES advised catch (subject to					
	clause 5 in the LTMS) <u>Year 4:</u> The SG80 requirements should be met. At the time this is achieved, this PI will be rescored at 80 or more.					
Client action plan	See Appendix 10.2					
Consultation on condition	None. The actions required for meeting this condition lie with the fisheries "lobbying power" with the EU authorities and their coastal states counterparts.					

8 Conclusions

MEC has reviewed the above information. In accordance with Certification Requirements v1.3, Condition 1 remains on target and the addition of two conditions in Principle 1 is directly related to condition 1. On this basis Principle 1 final score has been revised while Principle 2 and 3 remain the same as at certification and implies a normal surveillance level with annual on-site surveillance audits due in year 2. The certificate for this fishery will expire on the 02 February 2021.



9 References

- Andrews, J., Eltink, A., Lockwood, S.J., 2010. MSC Public Certification Report for the Pelagic Freezer-Trawler Association Atlanto-Scandian Herring Fishery. Moody International Certification Report. Marine Stewardship Council.
- Anon, 2016. Agreed Record of conclusions between The European Union, The Faroe Islands, Iceland, Norway and the Russian Federation the Management of the Blue Whiting in the North_East Atlantic in 2017. London, 27 October 2016.
- desClers, S., Pawson, M., Sieben, C., 2015. Marine Stewardship Council (MSC) Public Certification Report (PCR) The SPSG, DPPO, PFA, KFO & Compagnie des Pêches St Malo Northeast Atlantic Blue Whiting pelagic trawl fishery. ME Certification.
- Gascoigne, J., Cieri, M., Sieben, C., Honneland, G., 2015. MSC Public Certification Report (PCR) The SPSG, DPPO, PFA, SPFPO & KFO Atlanto-Scandian purse seine and pelagic trawl herring fishery. MSC.
- ICES, 2016a. ICES Advice on fishing opportunities, catch, and effort for blue whiting (Micromesistius poutassou) in subareas 1–9, 12, and 14 (Northeast Atlantic).
- ICES, 2016b. Report of the Inter-Benchmark Protocol for Blue Whiting (IBPBLW). ICES.
- ICES, 2016c. Report of the Working Group on Widely Distributed Stocks (WGWIDE). ICES.
- ICES, 2016d. ICES Advice on fishing opportunities, catch, and effort. Mackerel (Scomber scombrus) in subareas 1–7 and 14, and in divisions 8.a–e and 9.a (Northeast Atlantic).
- ICES, 2016e. Report of the Inter-Benchmark Protocol for Blue Whiting (IBPBLW), 10 March– 10 May 2016, by correspondence. ICES CM 2016/ACOM:36.
- ICES, 2016f. Report of the Workshop on Blue Whiting (Micromesistius poutassou) Long Term Management Strategy Evaluation (WKBWMS). ICES.
- ICES, 2016g. NEAFC request to ICES to evaluate a long-term management strategy for the fisheries on the blue whiting (Micromesistius poutassou) stock. ICES.
- ICES, 2016h. Report of the Working Group on Widely Distributed Stocks (WGWIDE) (No. ICES CM 2016/ACOM:16). ICES.
- Mortensen, E., Jacobsen, J.A., Smith, L., Kristiansen, R., Vestergaard, P., Scoulding, B., Bakker, K., Pasterkamp, T., Burggraaf, D., Armstrong, E., Thijssen, D., Muller, F., Higgins, L., Couperus, B., Johnston, G., O'Donnel, C., Mullins, E., Keogh, N., Meade, R., Høines, Å., Salthaug, A., Johnsen, E., Anthonypillai, V., 2016. International Blue Whiting Spawning Stock Survey (IBWSS) Spring 2016. Institute for Marine Resources & Ecosystem Studies, IJmuiden, The Netherlands and Institute of Marine Research, Bergen, Norway, PINRO, Murmansk, Russia and Faroe Marine Research Institute, Tórshavn, Faroe Islands, Marine Institute, Galway, Ireland, Marine Scotland Marine Laboratory, Aberdeen, Scotland, United Kingdom, Johann Heinrich von Thünen-Institut, Hamburg, Germany, Danish Institute for Fisheries Research, Denmark, BirdWatch, Ireland and Galway/Mayo Institute of technology.
- NEAFC, 2016a. Working Group on a Framework for Coastal State Negotiations meetings. North East Atlantic Fisheries Commission, Marylebone, London, UK.
- NEAFC, 2016b. 35th Annual Meeting of the North-East Atlantic Fisheries Commission. North East Atlantic Fisheries Commission, Marylebone, London, UK.



MSC Fisheries Surveillance Report Template V 1.0 (16th March 2015)

10 Appendices



10.1 Appendix 1 – Rescoring of Performance Measures

Rescore of PI 1.2.1 – Harvest Strategy

PI 1.	2.1	There is a robust and p	recautionary harvest stra	ategy in place									
Scori Issue	•	SG 60	SG 80	SG 100									
а	Harvest	vest strategy design											
	Guide post	The harvest strategy is expected to achieve stock management objectives reflected in PI 1.1.1 SG80.	The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.										
	Met?	(Y)	(Y)	(N)									
	Justifi cation												
	nanagement plan, it is reasonable to conclude that a harvest strategy achieve the stock management objectives reflected in PI 1.1.1 at SG uitment might be impaired with an 80% probability and ensuring that <i>I</i> /SY. The requirements at SG 60 are therefore met.												
		the stock fluctuates around a level consistent with MSY. The requirements at SG 60 are therefore met. The MSY approach, with F_{MSY} at 0.32 and an MSY biomass target (2.25 million t) is clearly responsive to the stock and those two elements of the strategy are able to work together to set an advised catch based on the cu of the stock. The requirements at SG 80 are met.											



PI	1.2.1	There is a robust and precautionary harvest strategy in place											
	In the current situation, however, where the aggregate catches of the participating countries in the fishery e annual scientific advice, this MSY strategy is effective only in the short term. If the stock in future were to fall point where recruitment might be impaired, it is possible that the Coastal States will not react quickly enough the required reduction in fishing mortality. The MSY approach as presently applied is therefore not designed stock management objectives reflected in PI 1.1.1 SG80. The requirements at SG 100 are not met.												
b	Harvest strategy evaluation												
	Guide post	The harvest strategy is likely to work based on prior experience or plausible argument.	The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives.	and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.									
	Met?	(Y)	(N)	(N)									
	Justifi cation The current strategy of basing the TAC advice on the ICES MSY approach has a good track record in the of some other fisheries. It can be an effective management method, which is likely to work in the abser management plan, provided that all participants in the fishery 'sign up' to the strategy. In this fishery the will continue to be based on the current assessment of the SSB and the MSY approach and will be reduce in line with falling SSB. The requirements at SG 60 are met.												
		the fishery is ignored, is of the problem is only manif due mainly to low levels of into the fishery. However recruitment could well re	The current situation, where the long-term management plan has been set aside and the ICES MSY approach advice on the fishery is ignored, is clearly leading to a situation where the status of the stock could be adversely affected. Currently the problem is only manifest in fishing mortality being above F_{MSY} since 2014. Since 2011, the SSB has been increasing the mainly to low levels of F whilst the 2008 management plan was adhered to and two recent good year classes coming into the fishery. However, the current high level of fishing mortality coupled with a return to more normal levels of eccruitment could well result in a rapid reduction in SSB. The harvest strategy is not achieving its objectives and the equirements at SG 80 are not met.										
С	Harvest	strategy monitoring											
	Guide post	Monitoring is in place that is expected to determine whether the											



PI 1	1.2.1	There is a robust and precautionary harvest strategy in place										
		harvest strategy is working.										
	Met?	(Y)										
	Justifi cation	SSB and fishing mortality ra The evaluation is based on	ates. This process provi good catch statistics, link	ssessment programme in place which estimates current and historic des the relevant data to evaluate the success of the harvest strategy. ked to rigorous monitoring and enforcement of the unilaterally declared ng of catches and landings. (SG 60)								
d		strategy review										
	Guide post			The harvest strategy is periodically reviewed and improved as necessary.								
	Met?			(Y)								
	Justifi cation	st necessary. t? (Y) stifi The long-term management plan agreed by the Coastal States in November 2008 contained a clause (8) which specified										
	Shark fi	nning										



PI 1.	2.1	There is a robust and precautionary harvest strategy in place												
e	Guide post	It is likely that shark finning is not taking place.	It is highly likely that shark finning is not taking place.		degree of certainty that shark finning is not taking									
	Met?	Not relevant	Not relevant	Not relevant										
	Justifi cation	Sharks are not a target s	pecies and this scoring iss	ue is not scored.										
f	Review	of alternative measures												
	Guide post	There has been a review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock.	There is a regular review of the potential effectiveness and practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock and they are implemented as appropriate.	practicality of alternative measures to minimise UoA-related mortality of unwanted catch of the target stock, and they are implemented, as appropriate.										
	Met?	Not relevant	Not relevant	Not relevant										
	Justifi cation			1										
Refer	ences	Anon, 2016; ICES, 2014	; ICES, 2016a; ICES, 2016	6c ; ICES, 2016e;	ICES, 2016f; ICES, 2016h.									
OVEF	RALL PEI	RFORMANCE INDICATO	R SCORE:		70									
CONE	DITION N	UMBER (if relevant):			2									



Rescore of PI 1.2.2 – Harvest control rules and tools

PI 1.2.2 There are well defined and effective harvest control rules (HCRs) in place													
Scori Issue	•	SG 60	erstood Well defined HCRs are The HCRs are expected to keep the stock fluctuating at or above lace or in place that ensure target level consistent with MSY, or another more appropriate level										
а	HCRs d	lesign and application											
	Guide post	Generally understood HCRs are in place or available that are expected to reduce the exploitation rate as the point of recruitment impairment (PRI) is approached.	in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with	The HCRs are expected to keep the stock fluctuating at or above target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, most of the time									
	Met?	Y	ecosystem needs. Y	N									
	Justifi cation	tifi The fishery is currently being managed following the ICES F _{MSY} approach, which includes a generally understood H											
				g-term strategy are that it shall ensure with high probability that the size forecast to be above or equal to $B_{trigger}$ (= B_{pa}) on 1 January of the year									



PI 1	.2.2	There are well defined a	and effective harvest con	trol rules (HCRs) in place							
		the precautionary biomas Target F = 0.05 + [(SSB corresponding to a fishir	ss (B _{trigger}), the TAC shall -B _{lim})*(F _{MSY} -0.05)/(B _{trigger} -B	ed to a fishing mortality of F_{MSY} ; when SSB is forecast to be less than be fixed at a level that is consistent with a fishing mortality given by: $I_{IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$							
		Although the Coastal States agreed to limit catches to no more than ICES advice in 2017 1,342,330 tonnes, there is still no agreed shared proportion of catch between Coastal States. This has resulted in the annual catch not following ICES advice and overall catch exceeding recommended TACs since 2014 and the corresponding F being above F _{MSY} .									
		The requirements at SG 80 specifically require HCRs that manage the exploitation rate appropriately to be well defined , which they are here, but also to be in place . The current situation is that the 2009 long-term management plan has been set aside and, although a revised management strategy has been agreed by the Coastal States, it has not yet been used as the basis for ICES advice on the management of the fishery. In this situation the requirements at SG 80 are met as the HCRs are well defined and in place, but SG 100 is not met has the HCRs are not yet been used as the basis for ICES advice on the fishery.									
b	HCRs r	obustness to uncertainty									
	Guide post		The HCRs are likely to be robust to the main uncertainties.	The HCRs take account of a wide range of uncertainties including the ecological role of the stock, and there is evidence that the HCRs are robust to the main uncertainties.							
	Met?		Y	N							
	Justifi cation	The main uncertainty affecting the harvest control rule is the reliability of the annual stock assessment in estimating current									



PI	1.2.2	There are well defined a	and effective harvest con	trol rules (HCRs) in place								
		Since issues of equitable sharing of the advised TAC arose between Coastal States in 2014, the long-term management plan was set aside. This has led to the declared, unilateral, catch intentions of all the participants exceeding the advised exploitation level since 2014, and for the foreseeable future. Whilst the requirements at SG 80 are met, there is no evidence that the design of the current HCRs take into account these management problems, or the ecological role of the stock, and the more rigorous requirements at SG 100 are therefore not met										
С	HCRse	valuation										
	Guide post	There is some evidence that tools used or available to implement HCRs are appropriate and effective in controlling exploitation.	indicates that the tools in use are appropriate and effective in achieving the	Evidence clearly shows that the tools in use are effective in achieving the exploitation levels required under the HCRs.								
	Met?	Y	Ν	Ν								
	Justifi cation	precautionary long-term NE Atlantic. The management plan in 20 ⁻⁷ national declared quotase considered by ICES to be The recent history of incr the HCR are effective an	Management plan or an M gement of the blue whitin 17. The management is su is together with technical e very low and total landing reasing SSB and F usually d are appropriate methods	ed on a reliable annual estimate of stock status, backed by either a ISY strategy, does have a reliable track record for many stocks in the g stock is now based on the MSY approach and will adopt a new upported by rigorous surveillance, monitoring and enforcement of the measures. Levels of discarding in the various national fisheries are gs are considered to be a reasonable estimate of the actual catch. T below F_{MSY} provides some evidence that the tools used to implement to control exploitation: SG60 is met.								
				2006 when the catch exceeded the ICES advice and the agreed TAC,								



-

PI 1.2	2.2	There are well defined and effective harvest control rules (HCRs) in place						
		exploitation levels (F) were below F_{MSY} from 2008 through 2013 when Since 2014, however, coastal states have effectively set their own cat have been above F_{MSY} . The evidence indicates that the tools in use required under the HCRs, and SG80 is not met.	tch levels, above ICES advice, and exploitation levels						
Refere	ences	Anon, 2016; ICES, 2014 ; ICES, 2016a; ICES, 2016c ; ICES, 2016e; ICES, 2016f; ICES, 2016h.							
OVER	ALL PE	ERFORMANCE INDICATOR SCORE:	75						
COND	ITION I	NUMBER (if relevant):	3						



10.2 Appendix 2 Client Action Plan for conditions 2 and 3.

PFA, CDPSM, DPPO, KFO & SPSG Blue Whiting pelagic trawl and purse seine fishery

August 2017

CLIENT ACTION PLAN FOR REACHING A COASTAL STATES AGREEMENT ON THE IMPLEMENTATION OF THE 2016 AGREED LONG TERM MANAGEMENT PLAN (LTMP) FOR BLUE WHITING.

A condition of acceptance for continuing MSC certification for the DPPO, SPSG, PFA, CDPSM & KFO blue whiting fishery is that the fishery should work with the EU, other UoCs in the fishery and/or other parties, including the Pelagic Advisory Council, as appropriate to support the implementation of the 2016 agreed Long Term Management Plan (LTMP) for blue whiting by the Coastal States.

The Client group has agreed to formulate an action plan to support the establishment of an effective international cooperation mechanism for the fishery. The parties within the client group strongly believe in the principle of well managed and sustainable fisheries and have demonstrated their commitment to that by entering their respective fisheries for assessment against MSC principles and criteria. All members of the client group have worked diligently to address conditions and recommendations placed on their respective fisheries.

The parties within the Client group are however committed to independent fisheries certification and between them have many additional fisheries accredited to MSC standard. Therefore, the parties believe that working jointly on the following plan is a real commitment to resolving the current blue whiting management challenge and return to an effective management framework. The client hopes that with the Norwegian, Faroese and Icelandic blue whiting fisheries becoming MSC certified there will be strong industry engagement and lobbying on the authorities of the coastal states to understand the importance of a LTMP consistent with the Precautionary Approach and the MSY framework and agreeing TACs in line with such LTMP.

This action plan is based on three elements; lobbying, industry liaison and science, as described in detail below.

The client group views the plan as an adaptive process aiming at facilitating sustainable and science based management of the blue whiting stock.

The plan will be reviewed and revised following the end of the Coastal States quota and sharing negotiations for the following year. For 2018 negotiations are expected to begin in October 2017 and be finalised by end of November 2017. Should Coastal States not have resolved management issues by the end of the negotiations, the client group will review and revise the action plan taking into account the condition milestones for the following year: 2, 3, and 4.

For year 1, the client group is committed to engaging in activities targeting lobbying, industry liaison and science, as described in detail below. The client group will document is



engagement in these activities and provide evidence of lobby activities targeting the European Commission and other interested parties.

LOBBYING

Members of the client group will lobby relevant bodies to promote a message based on the necessity of sustainable and well managed fisheries. Members will remind parties, especially governments, of the consequences of unsustainable fisheries and cite the case of mackerel. The group will lobby for a fair and equitable blue whiting sharing arrangement within the limits of stock sustainability and the LTMP. The client group will request all Coastal States to continue negotiating until a solution has been found. The client group members will engage with the following actors and will provide documented evidence of this engagement:

- Member States' governments & administrations
- EU Commissioner / EU Commission Services
- Environmental NGO's

INDUSTRY LIAISON

Members will meet industry representatives from other Coastal States in order to seek joint positions and generate pressure on national governments & administrations and intergovernmental organisations. The client group members will provide documented evidence of this engagement.

SCIENCE

Members undertake continued engagement with the scientific community to ensure that the best possible scientific data is produced to help fully understand the status of the blue whiting stock. In addition, members will respect the blue whiting advice emanating from ICES and its relevance to the LTMP. The client group will provide documented evidence of engagement with the following:

- Engage in the ICES process
- Engage in the long term management plan revision
- Members will fully cooperate with the blue whiting commercial stock surveys as required
- Undertake to provide any additional catch data identified by the scientific community

Lyl Is.



TIMELINE

Auditing: At the year 2 surveillance audit (year 1 of this condition) the client group will present i) the most recent advice for blue whiting and harmonization actions; ii) a log of actions and meetings during the timeframe to the next scheduled surveillance.

Milestone year 1

Make contact with representatives from other Coastal States, EU-Commission, NEAFC and ICES in order to secure information on management, fishing activities and scientific analysis in the respective states and transnational governing bodies. Encourage all parties to seek a joint solution to the sharing arrangements within the framework of a LTMP.

Action year 1

During negotiations for 2018 TACs and sharing arrangements, arrange meetings with other certified MSC UoCs in the fishery and European Commission to gather information and evidence.

Participate in ICES advice drafting group on widely distributed stocks. Lobby all parties in seeking a joint solution within the framework of a long term management plan.

Outcome year 1.

By March 2018, all Coastal States have formally agreed on management and sharing arrangements for 2018 and beyond within reference to the LTMP.

Milestone year 2 and year 3

In years 2 and 3 (surveillance years 3 and 4) the client group will continue to provide information on the progress of the acceptance and implementation of the LTMP.

Improvements expected

Continued talks and communication on harmonization expecting to have the LTMP effective and operational therefore closing the condition, but planning for continued work into year 4.

Auditing

At years 2 and 3 audit the client group will present the progress from Coastal States' meetings, resolutions or, preferably, a decided sharing agreement of quota which reflects the TAC set by the LTMP.

Milestone year 4

In year 4 (surveillance year 5 and recertification), in case the coastal states LTMP as not been fully implemented by this time, the client group will continue to ask for the resolution before the end of the certification period.



Improvements expected

It is expected that the harmonization conditions will be met during or before year 4 and the condition will be closed.

Auditing

Evidence will be a signed agreement among the coastal states, stating the TACs with reference to the LTMP which is in line with the PA and the MSY framework.

Yours sincerely

Bal

Gerard van Balsfoort On behalf of: The Netherlands, Germany, France, England, Lithuania: PFA, France: CDPSM, Ireland: KFO, Denmark: DPPO, Scotland: SPSG.



10.3 Appendix 3 Harmonisation meeting MEC and DNV

Harmonised Fisheries

MSC Fishery	CR Version	САВ	MSC Assessment Status
Icelandic ISF Blue whiting	v.2	DNV-GL	In assessment
Norway herring scope extension for blue whiting	v1.3	DNV-GL	In assessment
Faroese Pelagic Organization NEA blue whiting fishery	v1.3	DNV-GL	Certified
The SPSG, DPPO, PFA, KFO & Compagnie des Pêches St Malo Northeast Atlantic Blue Whiting pelagic trawl fishery. (5 different countries/clients)	v1.3	MEC	Certified

Participants

Hugh Jones (TL), Mike Pawson (P1) and Sophie des Clers (P3) on behalf of MEC. For DNV Lucia Revenga (TL), Stefan Midteide (Manager), John Nichols and Hans Lassen (P1) and Geir Honneland (P3) were in attendance.

Prior to the meeting, DNV and MEC had agreed that the existing condition on P3.1.1 on the PFA, DPPO, KFO, SPSG & Compagnie des Pêches St Malo Northeast Atlantic blue whiting Pelagic Trawl (MEC) should be applied to the two DNV fisheries in assessment. MEC and DNV also agreed that a condition on PI1.2.2c was also needed in that the tools in use by the fishery although appropriate are not effective in achieving the exploitation levels required under the HCRs. The CABs agreed 'There must also be evidence that all parties participating in the fishery accept the resultant ICES advised total TAC and agree the national allocation of shares in that TAC according to the Coastal States agreement on the national percentages. The total of the national allocation of shares must not exceed the ICES advised catch.' A condition on this PI also brings the WHB fisheries in-line with the ASH certifications.

The Harmonisation meeting discussed how to deal with CS disputes in general, but also in light of mackerel and AS herring and in reference to previous harmonisation meetings (desClers et al., 2015) which concluded : 'For P1, it was concluded that outcomes between stocks does not have to be harmonized, since the P1 scoring will be different, but MSC is still looking for a consistency of scoring approaches when the issues are largely the same, as it relates to CS disputes and TAC not being in line with scientific advice.'

The conditions on PI 1.2.1b and PI 1.2.2a were eventually accepted by the MEC team.

For PI1.2.1b it is understood that the conditions could be closed if ICES advice is that fishing mortality has fallen to or below F_{MSY} , thus providing sufficient additional evidence that the harvest strategy is achieving its objectives.

For 1.2.2a it was noted that MEC had reservations with regard to DNV's definition of 'in place' and that the long-term management plan signed by Coastal States in 2016 does have well defined HCRs that are expected to reduce exploitation rate as PRI is approached, but that with the current SSB so far above any biomass reference point that testing of this is not currently possible.

MEC also asked DNV GL to affirm that the Norwegian, Icelandic and Faroese Blue Whiting fisheries that seek MSC certification have in place PI 3.2.2 SI b): "Decision-making processes



that respond to serious and other important issues identified in relevant research, monitoring, evaluation and consultation, in a transparent, timely and adaptive manner and take account of the wider implications of decisions." These three countries have persistently weakened the management system for blue whiting by contesting the scientific advice (EU 2016) (even though they had good grounds for doing so) or refusing to agree to a share of the TAC (even when they could not catch it).

10.4 Appendix 3 - SPSG exceptional events sheet.

		PSG elagic Sustainability	5												Fishing Activity.	
	Vesse			Skipper/Master:												
	Gear			Trips	Trips from: To:											
		ogsheet shou ill include sl											and gear	contact w	ith seab	ed or gear loss. Types of event are o
			Event	1		Detail of	f Slip	page	Event				P Interacti			
Date	Time	Position	Code			on (tonne						Species	Number			Additional/Other Comments
Jale	TIME	Fosicion	(See Below)	Est'd Bulk	Est'd Betaine	Est'd Dscrded					(Discar d Code)	Encounter ed	of Animals	n: Dead∛Ali	s Fished	Additionalization comments
01/201	00.05			and the second s	TIONALTIO						<u>a coacj</u>					
	03:25	58'00'N. 8'50' k	ETP									Orca	2	Alive	Mackenel	Following bag when hauling
01/201	00:30	59'50'N, 9'50'h	SL.	750	500	250	250				807					
***	12:35	59°10'N. 9'00'W	HAB													Gear came fast on shooting and setting nets, significant damage incurred to net. Recovered and spare net shot away
		e requested to completed and							rmatio	n gatheri	ing in ac	cordance with	n the operat	ing conditi	ons of all	MSC certified pelagic fisheries.
nt Des	scriptio	n														
	To rec								Infor	mation r	equired				Discard	Code
		asion when fish	have been	released	slipped fr	rom the ne	ŧ					lippage even	t section		C	Composition
	An inte	raction with any	Endangere	d, Threa	tened or F	Protected (species							ŪS	Under sized
		dent where gear										e loss. Wheth			D	Damaged
В		dent where there					ict with	the se	Comm	nents and	addition	al details of ev	/ent		XQ	Exceeded Quota
		an ann am fianail a	want which	mau hav	e an imna	act on the f	isheru	lenviro	Becon	d details.	and provi	de comment -	as necessari		0	Other (Specify)