

Ireland rope grown mussel

Surveillance Report

Conformity Assessment Body (CAB)	SAI Global
Assessment team	Lead Assessor, Conor Donnelly Assessor, Sam Dignan
Fishery client	Bord lascaigh Mhara
Assessment Type	First Surveillance
Report Code	MSC034/1.1
Report Date	13 October 2020



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2 Glossary

AA Appropriate Assessment

AFMD Aquaculture and Foreshore Management Division, DAFM

ALAB Aquaculture Licences Appeals Board

AtoN Aids to Navigation
BIM An Bord Iascaigh Mhara

CAB Conformity Assessment Body – Certifier

CFP Common Fisheries Policy
CIL Commissioners of Irish Lights

CLAMS Coordinated Local Aquaculture Management Systems

CoC Chain of Custody

CR Certification Requirements

DAFM Department of Agriculture Food and the Marine

EC European Commission

eNGOs Environmental Non-Government Organisations ETP Endangered, Threatened and Protected species

EU European Union

FAO United Nations Food and Agriculture Organisation

FCR Fishery Certification Requirements

IFA Irish Farmers Association LLA Local Lighthouse Authority

MED Marine Engineering Division, DAFM

MI Marine Institute

MSC Marine Stewardship Council

MSO Marine Survey Office

NPWS National Parks and Wildlife Service

P1 MSC Principle 1 P2 MSC Principle 2 P3 MSC Principle 3

PCR Public Certification Report

PISG Performance Indicator Scoring Guideposts / Scoring Guideposts

PI Performance Indicator

RBF Risk Based Framework

SAC Special Area of Conservation

SFPA Sea-Fisheries Protection Authority

SG Scoring Guidepost SI Scoring Issue

SPA Special Protection Area

SUMS Special Unified Marking Schemes

TAC Total Allowable Catch
UoA Unit of Assessment
UoC Unit of Certification

VME Vulnerable Marine Ecosystems



3 Executive summary

This report contains the findings of the 1st surveillance audit in relation to the Ireland rope grown mussel certificate.

This audit was carried out by an audit team commissioned by SAI Global (the CAB) and consisting of Conor Donnelly and Sam Dignan. The audit team's expertise skills and experience are summarized in section 7.5.

The surveillance audit process began in June 2020 and was conducted according to relevant requirements as outlined in MSC Fisheries Certification Process (FCP) v.2.1. The MSC Scheme Documents and Templates outlined in the table below were used during this surveillance audit.

Table 1. Fisheries program documents versions.		
Document	Version number	
MSC Fisheries Certification Process	Version 2.1	
MSC Fisheries Standard	Version 2.0	
MSC General Certification Requirements	Version 2.4.1	
MSC Reporting Template	Version 2.0	

The audit included a remote desktop review by the audit team of documentation relating to changes in management and science in the fishery and a remote 'site visit' which involved engagement with the client and relevant stakeholders through remote interviews. This surveillance audit was originally intended to involve an on-site site visit but as a result of the COVID-19 pandemic it was announced as an off-site audit using the MSC Covid-19 pandemic derogation (see interpretation 1 in section 6.1). Meetings were held remotely with stakeholders over two weeks from the week commencing 6th July 2020.

The 1st surveillance audit focused on any changes to the fishery and its management since the full assessment (completed July 2019) and evaluated whether there is continued compliance with the MSC Principles and Criteria.

There were no conditions set during the initial assessment. One was identified during this surveillance following the receipt of new monitoring information on the impact of rope grown mussel production on protected maerl (a habitat ETP species) in Roaringwater Bay SAC. This resulted in the re-scoring of PI 2.3.1 from 100 to 75 and the identification of the condition. Note that the revised scoring of PI 2.3.1 leads to a revised overall score for Principle 2 of 86.1 (from 88.9), so the fishery still passes Principle 2. Two recommendations were identified during the initial assessment, these remain open with progress being made. No new recommendations were identified during this surveillance.

SAI Global determines that:

• Ireland rope grown mussel continues to operate as a well-managed and sustainable fishery and therefore, continued certification to the MSC Principles and Criteria for Sustainable Fishing is awarded.

On behalf of the MSC client, Bord Iascaigh Mhara (BIM) and SAI Global would like to extend thanks to the management organizations and stakeholders of the Ireland rope grown mussel fishery who took part in this surveillance audit.



4 Report details

4.1 Surveillance information

Information on the surveillance is provided in the table below.

Table 2	 Surveillance announcement. 	

Table 2	ie 2. Sur vernance announcement.				
1	Fisheryname				
	Ireland rope grown mussel				
2	Surveillance level and type				
	Surveillance level 4, off-s	ite surveillance audit.			
		n for this fishery has changed from that previously indicated in the PCDR or a previous pdated surveillance program has been provided in section 7.3.			
3	Surveillance number				
	1 st Surveillance	X			
	2 nd Surveillance				
	3 rd Surveillance	^d Surveillance			
	4 th Surveillance Other (expedited etc)				
4	Proposed team leader				

Conor Donnelly – Lead Assessor with responsibility for Principle 3 and traceability

It is proposed that Conor Donnelly, a member of SAI Global's internal staff will lead the Assessment Team. Conor meets the Fishery Team Leader Qualification and Competency Criteria outlined in FCP Annex PC; he has:

- A degree in a relevant subject
- 3+years' fisheries experience
- Reviewed any updates to the MSC Fisheries Program Documents at least annually
- Passed MSC's fishery team leader training course within the last 5 years.
- Passed new versions of the compulsory online training modules where relevant.
- Has undertaken 2 MSC fishery assessment or surveillance site visits as a team member in the last 5 years.
- Experience in applying different types of interviewing and facilitation techniques
- Knowledge of a common language spoken by clients and stakeholders
- Two years fishery work experience in the country or in a relevant fishery in the last 15 years.

Conor will be responsible for coordinating the Assessment Team, participating in the assessment and be responsible for the completion of the assessment in accordance with Certification procedures.

In addition to leading the Assessment Team Conor will be the team's expert on Principle 3. To that end, he has:

3 years or more experience as a practicing fishery manager and/or fishery/policy analyst.

He will be responsible for traceability assessment and accordingly has passed:

- The MSC's Traceability training module within the last 5 years.
- New versions of the training when new traceability requirements are published prior to undertaking assessments against the new requirements.
- Reviewed any updates to the traceability requirements at least annually.

Conor does not have any conflicts of interest in relation to the fishery under assessment. Conor will be off-site during the audit.

5 Proposed team members

Sam Dignan – Assessor with responsibility for Principle 2 and Risk Based Framework (RBF)

Sam meets the Fishery Team Member Qualification and Competency Criteria outlined in FCP Annex PC; he has:

- A degree in a relevant subject
- 3 years' fisheries experience
- Reviewed any updates to the MSC Fisheries Program Documents at least annually



Table 2. Surveillance announcement.

- Passed MSC's fishery team member training within the last 5 years
- Passed new versions of the compulsory online training modules where relevant

With respect to his additional duties under Principle 2, Sam has:

• 3 years' or more experience in research into, policy analysis for, or management of, fisheries impacts on a quatic ecosystems including the following topics: i) by catch and ii) habitats.

Sam has also passed:

- The MSC's RBF training course in the last 5 years
- New versions of the training when new RBF requirements are published prior to undertaking assessments against the new requirements
- Reviewed any updates to the RBF requirements at least annually.

And he has:

- Knowledge of a common language spoken by clients and stakeholders
- Two years fishery work experience in the country or in a relevant fishery in the last 15 years

Sam does not have any conflicts of interest in relation to the fishery under assessment. Sam will be off-site during the audit

6 Audit/review time and location

The 'site visit' portion of this audit will take place remotely between Monday 6th and Friday 10th July 2020. As this is a remote site visit, Conor and Sam will participate from their offices at home

7 Assessment and review activities

The following will be assessed/reviewed during this audit (Note this may not be an exhaustive list):

- 1. Changes to the fishery and its management.
- 2. Any developments or changes within the fishery that impact traceability and the ability to segregate MSC from non-MSC products.
- 3. Any other significant changes in the fishery.



4.2 Background

The UoAs and UoCs have not changed from those published in the Public Certification Report in 2019 which are presented in the tables below:

Table 3. Unit of	Assessment (UoA) 1.
Target species	Mussel stock complex: blue mussel (<i>Mytilus edulis</i>), Mediterranean mussel (<i>M. galloprovincialis</i>), foolish/Baltic mussel (<i>M. trossulus</i>) and hybrids.
Geographic area	All fishing activity takes place within FAO Major Fishing Area 27 Northeast Atlantic (ICES Areas 6.a, 7.a, 7.b, 7.g, and 7.j) and may be split between licensed seed collection and on-growing locations.
	Seed location — Coastal waters within the Republic of Ireland's Territorial Seas (i.e. within the 12 nautical mile limit).
	Harvest locations – Permitted harvest areas in identified bays within the Republic of Ireland's coastal waters potentially including (note this represents a list of all the bays/estuaries where rope mussel culture is currently practiced or where an application for rope mussel culture has been made): Poul naclough Bay; Adrigole Harbour; Ardgroom Harbour; Ballycotton Bay; Ballymacoda Bay; Bantry Bay; Cleanderry Harbour; Clonakilty Bay; Coulagh Bay; Dunbeacon Bay; Dunbeacon Harbour; Dunmanus Bay; Gouleenacoush Harbour; Kenmare Bay; Kenmare River; Kilmakilloge Harbour; Kinsale Harbour; Oysterhaven; River Ilen; Roaringwater Bay; Arranmore Island; Donegal Bay; Illancrone Island; Lough Swilly; McSwynes Bay; Mulroy Bay; Ardbear Bay; Ballinakill Harbour; Bertraghboy Bay; Casheen Bay; Cleggan Bay; Friar Island; Galway Bay; Killary Harbour; Kinvara Bay; Mannin Bay; Castlemaine Harbour; Coongar Harbour; Dingle Bay; Shannon Estuary; Smerwick Harbour; Bellacragher Bay; Clew Bay; Waterford Harbour; Ballinekker; North Bay; Rosslare; South Bay Wexford; Wexford Harbour.
Stock Mussel wild stock complex around the island of Ireland.	
Fishinggear	 Seed mussel collection by suspended ropes and nets. On-growing of mussel using suspended ropes (including floating long-line cultivation).
Management system	Department of Agriculture, Food and the Marine (DAFM), in particular its Aquaculture and Foreshore Management Division and Marine Engineering Division; and DAFM's associated agency the Marine Institute. Also, the National Parks and Wildlife Service (NPWS), the Sea Fisheries Protection Authority (SFPA), Commissioners of Irish Lights (CIL) and the Marine Survey Office (MSO).
Client group and other	Bord I ascaigh Mhara (BIM).
eligible fishers	All members of the rope-grown mussel industry, operating in the licensed harvest locations, will be eligible to access the certificate. However, only those entities that have agreed BIM's terms of membership of the client group, including to contribute financially to the MSC assessment process and to comply fully with the MSC Standard and Fisheries Certification Requirements, will be considered to be part of the client group for the purpose of Certification. The most up to date client group will be available on the MSC website for this fishery (updated when any changes occur).
	There are other eligible fishers. In this case these are any producers, operating in the licensed harvest locations, who are not on the most up to date client group list. The Client has prepared and published a statement of their understanding and willingness for reasonable certificates haring arrangements in accordance with FCR 7.8.3.3 and FCR 7.4.12.2 (see Appendix 3. Client certificates haring statement and also the MSC website for this fishery).



Table 4. Unit o	f Certification (UoC) 1	
Targetspecies	Mussel stock complex: Blue mussel (<i>Mytilus edulis</i>), Mediterranean mussel (<i>M. galloprovincialis</i>), foolish/Baltic mussel (<i>M. trossulus</i>) and hybrids.	
Geographic All fishing activity takes place within FAO Major Fishing Area 27 Northeast Atlantic (ICES Areas		
area	7.b, 7.g, and 7.j) and may be split between seed and harvest locations.	
	Seed location – Coastal waters within the Republic of Ireland's Territorial Seas (i.e. within the 12 nautical mile limit).	
	Harvest locations – Permitted harvest areas in identified bays within the Republic of Ireland's coastal waters potentially including (note this represents a list of all the bays/estuaries where rope mussel culture is currently practiced or where an application for rope mussel culture has been made): Poulnaclough Bay; Adrigole Harbour; Ardgroom Harbour; Ballycotton Bay; Ballymacoda Bay; Bantry Bay; Cleanderry Harbour; Clonakilty Bay; Coulagh Bay; Dunbeacon Bay; Dunbeacon Harbour; Dunmanus Bay; Gouleenacoush Harbour; Kenmare Bay; Kenmare River; Kilmakilloge Harbour; Kinsale Harbour; Oysterhaven; River Ilen; Roaringwater Bay; Arranmore Island; Donegal Bay; Illancrone Island; Lough Swilly; McSwynes Bay; Mulroy Bay; Ardbear Bay; Ballinakill Harbour; Bertraghboy Bay; Casheen Bay; Cleggan Bay; Friar Island; Galway Bay; Killary Harbour; Kinvara Bay; Mannin Bay; Castlemaine Harbour; Coongar Harbour; Dingle Bay; Shannon Estuary; Smerwick Harbour; Bellacragher Bay; Clew Bay; Waterford Harbour; Ballinekker; North Bay; Rosslare; South Bay Wexford; Wexford Harbour.	
Stock	Mussel wild stock complex a round the island of I reland	
Fishinggear	Seed mussel collection by suspended ropes and nets.	
risiiiiggeai	 On-growing of mussel using suspended ropes (including floating long-line cultivation). 	
Management system	Department of Agriculture, Food and the Marine (DAFM) in particular its Aquaculture and Foreshore Management Division and Marine Engineering Division; and DAFM's associated agency the Marine Institute. Also, the National Parks and Wildlife Service (NPWS), the Sea Fisheries Protection Authority (SFPA), Commissioners of Irish Lights (CIL) and the Marine Survey Office (MSO).	
Clientgroup	Bord lascaigh Mhara (BIM).	
	Members of the rope-grown mussel industry that have agreed BIM's terms of members hip of the client group, including to contribute financially to the MSC assessment process and to comply fully with the MSC Standard and Fisheries Certification Requirements, will be considered to be part of the client group for the purpose of Certification. The most up to date client group will be available on the MSC website (updated when any changes occur).	

4.2.1 Fishery observations

There have no significant changes to the fishery or its management system in the past year except in relation to the major disruption caused by the COVID-19 pandemic from spring of this year. This has presented considerable difficulties to the sector in terms of disruption to markets meaning large quantities of stock on the ropes when normally at this time it would be being moved and sold. This has created significant uncertainties for businesses who have lots of product, reduced demand and downward pressure on price. It has also affected other areas of the fishery including, for example, causing disruption to DAFM's Marine Engineering Division's surveys of the bays.

4.2.2 Relevant changes to ecosystem components assessed under Principle 2

BIM drew the attention of the Assessment Team to the results of monitoring of Habitats Directive Annex 1 marine habitats and species in Ireland by the National Parks and Wildlife Service (NPWS) published in Scally *et al*, 2020. This report included monitoring of the habitat ETP species maerl, a species protected under Annex V of the Habitats Directive¹. The monitoring found evidence of direct impacts of rope mussel aquaculture on maerl in Roaringwater Bay Special Area of Conservation. The impact arose from mussel lines occurring outside of the licensed areas (in which the rope grown mussel equipment should be confined) and NPWS confirmed

¹ https://mscportal.force.com/interpret/s/article/habitat-species-as-ETP-SA3-1-5-1527262008263. Reproduced in section 6.1



that their survey found evidence of the lines extending across the buffer zones and into the maerl habitat. Impacts from rope grown mussel lines were not found in any other SAC.

NPWS alerted DAFM's Aquaculture and Foreshore Management Division (AFMD) to the issue who reported that the Marine Engineering Division (MED) are undertaking surveys of the SAC this summer to better understand the extent of the problem and will report back to AFMD to decide on further action as appropriate.

This new information has resulted in the re-scoring of PI 2.3.1 and the identification of a condition. Further detail on this is provided in sections 5.4 and 5.2 respectively of this report.

4.2.3 Relevant changes to legislation and regulations No changes.

4.2.4 Relevant changes to the management regime No changes.

4.2.5 Monitoring, control and enforcement

MED has been progressing the development of a more structured approach to monitoring the rope grown industry in a similar vein to that which applies to the finfish industry. Consultations have been undertaken with AFMD, BIM, SFPA and IFA. The programme will involve site survey (including checks on structures, flotation colour, marine litter). A checklist, based on that developed for fin-fish, has been developed for use as part of the monitoring. Information gathered is fed into a standard report (a draft reporting template and spreadsheet have been developed) and the intention is that this report will be made available on-line. The expectation is that the first reports will be ready to be published on-line by the end of 2020. The monitoring programme involves an initial bay-wide pre-inspection which is repeated at 5 yearly intervals with a mid-point survey and risk-based surveillance inspections occurring within this period. At time of the remote 'site visit' surveys on rope grown mussel had been undertaken in Inner Bantry Bay and were about to be undertaken for Roaringwater Bay (and will include checks on position of lines relative to licensed areas and maerl habitat and buffer zones). There have been delays in the planned programme of works caused by COVID.

As noted in the initial assessment, a monitoring, control and enforcement system exists outside of the aquaculture licensing system and is implemented in the fishery through the management of navigation in the bays where rope grown mussel production occurs. The boundaries of licensed areas must be marked by Aids to Navigation (AtoN) for navigational safety purposes. AtoN can be established for individual licensed areas, or where a number of licensed areas occur in proximity to each other, through a Special Unified Marking Scheme (SUMS). The Local Lighthouse Authority (LLA) is responsible for this marking and it must receive statutory sanction from the Commissioners for Irish Lights (CIL). BIM acts as a LLA in several locations for the management of SUMS. The SUMS unify multiple sites under one marking scheme with the dual advantage of improving navigation in aquaculture areas and providing efficiencies for the shellfish producer. SUMS of relevance to rope mussel production are located in the main rope grown mussel production areas of Mulroy Bay, Clew Bay, Killary Harbour, Bantry Bay and Roaringwater Bay, with another planned for Kilmackillogue.

CIL is the General Lighthouse Authority for the whole of Ireland and AtoN cannot be established, altered or removed without their prior consent. CIL require quarterly returns on AtoN performance from LLAs and undertake periodic inspections of AtoN (by the AtoN officer). As part of this monitoring and inspection activity by the LLA / CIL, compliance with aquaculture license conditions on the spatial extent of production activity in relation to the licensed area is necessarily checked i.e. to ensure lines and anchors are within site. Where deviations from license conditions are detected, support is provided to the producers to bring themselves back into compliance. The primary driver for this is to address risks to navigation but it also ensures aquaculture license conditions relating to the spatial extent of licensed activity are being complied with. For this



surveillance BIM have provided updated information, collated from area officers, of their AoN monitoring, control and surveillance activity since the initial assessment:

Table 5. Aids to Navigation surveillance activity (source: BIM)

Production area	Report	Source	Action Proposed for 2019/2020	Action 2019/2020
Killary	Oct 2018 - 3 longlines out of area	SUMS Inspection – BIM and CIL	1 removed, remainder to be removed by end of April 2019	We have not inspected any of the longlines which were outside licenced areas this year – due to Covid travel restrictions.
Roaringwater	Q3 – 6 lines out of area	SUMSinstallation	Contractor appointed to move lines, realignment due for completion Q2 2019	Completed
Bantry	July 2018 - Marker Buoys/Barrels extend from this site up to 0.10NM west of this licenced site.	Bantry Bay Port contacted local officer	BIM oversaw remedial measures, realignment completed Q4 2018	No action required
Mulroy	2017 - Lines outside licenced area.	SUMSInstallation	Licence not issued to date	Licences issued in 2018
Killary	2010-2015	CLAMS/ Navigational surveys	20-25 lines brought back into area; mappingservices supplied by BIM	No action required
Killary	Mooring inspection for all SUMS buoys	BIM		Survey completed by BIM
Killary	Barrell recycling	вім		May and November 2019 – over 300 mussel barrels were shredded by BIM and sent for recycling.

As noted in the initial assessment, the Ireland Operational Programme for the European Maritime and Fisheries Fund 2014-2020 requires that producers must be compliant with their license conditions and "in good standing with the Department" in order to access grants available to the industry. As can be seen in the updated information below, there is no evidence of those producers applying to the grant scheme being noncompliant:

Table 6	Custainableagu	uaculture scheme	(course DINA)
Table 6.	. Sustainable a di	uaculture s cheme.	(SOURCE: BLIVI)

Year	No. of Projects Registered	No. of Projects Approved	No. of Projects Referred /Deferred	No. of Projects Not Drawn Down due to Non- Compliance
2019	36	36	0	0
Year	No. of Rope Mussel projects Registered	No. of Rope Mussel projects Approved	No. of Rope Mussel Projects Referred / Deferred	No. of Rope Mussel Projects Not Drawn Down due to Non-Compliance
2019	8	9*	0	0

^{*}One of these projects was registered latter end of 2019

4.2.6 Changes to personnel

There has been a change in the Minister for the Department of Agriculture, Food and the Marine with the new government (and a couple of further changes since the remote 'site visit'). The current Minister is Charlie



McConalogue TD. No changes have occurred within the Aquaculture and Foreshore Management Division (AFMD).

In 2019, Teresa Morrissey was appointed as Executive Secretary for the Irish Farmers' Association (IFA) Aquaculture. The role looks after the interests of the aquaculture sector and involves communications with DAFM and licensing authorities.

Additional staff have been recruited into ALAB to help process the license appeals including an Aquaculture Technical Appeals Advisor.

DAFM's Marine Engineering Division (MED) have also recruited technicians to support the rope grown mussel post-compliance monitoring process.

There have been no other changes reported in key personnel in science, management or industry.

4.2.7 Changes to traceability

There have been no developments or changes within the fishery (including the Unit of Certification, UoC) which impact traceability or the ability to segregate between mussel from the UoC and mussel from outside the UoC (non-certified mussel).

4.3 Version details

The table below sets out the versions of the fisheries program documents used for this assessment.

Table 7. Fisheries program documents versions.		
Document	Version number	
MSC Fisheries Certification Process	Version 2.1	
MSC Fisheries Standard	Version 2.0	
MSC General Certification Requirements	Version 2.4.1	
MSC Reporting Template	Version 2.0	



5 Results

5.1 Surveillance results overview

5.1.1 Summary of conditions

No conditions were identified in the initial assessment. One condition has been identified during this surveillance. Further detail on the condition are provided in section 5.2.

Table 8. Summary of conditions.							
Condition	Condition	Performance	Ctatus	PI original	PI revised		
number	Condition	Indicator (PI)	Status	score	score		
1.	The client group must provide evidence that: 1. Known direct effects of the UoA are highly likely to not	2.3.1	New	100	75		
	hinder recovery of ETP species, and;						
	2. Indirect effects have been considered and are thought						
	to be highly likely to not create unacceptable impacts.						

5.1.2 Total Allowable Catch (TAC) and catch data

The fishery is not managed with quotas or Total Allowable Catches (TACs). However, the Assessment Team are required to include a completed TAC and catch data table using Table 9 below and where relevant a separate table for each species or gear, if possible.

In this instance Table 9 presents the rope mussel production from the Client Group which is intended to include the entire rope grown mussel industry in the Republic of Ireland. As such UoC "green weight catch" is analogous to rope mussel production in the Republic of Ireland which in 2018 was 9,192 tonnes, an increase of 7.5% in volume from 2017 when it was 8,549 tonnes (BIM, 2019; BIM, 2018).

Table 9. Total Allowable Catch (TAC) and catch data (sources: BIM, 2019 and BIM, 2018).				
TAC	Year	n/a	Amount	n/a
UoA share of TAC	Year	n/a	Amount	n/a
UoA share of total TAC	Year	n/a	Amount	n/a
Total green weight catch by UoC	2018	Amount	9,192 tonnes	
Total green weight catch by UoC	Year (second most recent)	2017	Amount	8,549 tonnes

5.1.3 Recommendations

Two recommendations were made during the initial assessment (Table 10). They remain open and progress is being made against them (Table 11 and Table 12). No new recommendations were made during this surveillance.

Recommendations are not obligatory and while they do not require action on the part of the fishery the client is encouraged to act upon them within the spirit of the MSC certification.

Table 10. Recommendations made during the initial assessment.				
Recommendation number	Recommendation	PI		
1	The Assessment Team recommends a comprehensive monitoring, control and surveillance (MCS) mechanism is implemented in the fishery which can demonstrate a consistent ability to enforce relevant management measures, strategies and/orrules.	3.2.3		
2	The Assessment Team recommends the publication of the implementation plan for the Independent Aquaculture Licensing Review. The publication of this implementation plan could provide evidence to support achievement of SG100 for a number of the Scoring Issues under Principle 3.	3.1.2, 3.2.2		



Table 11. Recommendation 1 – evaluation of progress.					
Performance Indicator(s) &	Insert relevant PI number(s)	Insert relevant scoring issue/scoring guidepost text	Score		
Score(s)	3.2.3 Compliance and Enforcement	Sla, Slc	80		
Recommendation	The Assessment Team recommends a comprehensi	ive monitoring, control and su	rveillance (MCS)		
1	mechanism is implemented in the fishery which can demonstrate a consistent ability to enforce relevant management measures, strategies and/or rules.				
Progress on	MED has been progressing the development of a mo	restructured approach to mor	nitoring the rope		
Recommendation	grown industry in a similar vein to that which applies	to the finfish industry. Consult	ations have been		
[Year 1]	undertaken with AFMD, BIM, SFPA and IFA. The prog	gramme will involve site surve	y and a checklist,		
	based on that developed for fin-fish, has been de		~ I		
	Information gathered is fed into a standard report ar	•			
	a vailable on-line. The expectation is that the first reports will be ready to be published on-line by the				
	end of 2020. The monitoring programme involves an initial bay-wide pre-inspection which is				
	repeated at 5 yearly intervals with a mid-point survey and risk-based surveillance inspections				
	occurring within this period. At time of the remote 'site visit' surveys on rope grown mussel had been				
	undertaken in Inner Bantry Bay and were about to be undertaken for Roaringwater Bay (and will				
	include checks on position of lines relative to licensed areas and maerl habitat and buffer zones).				
	There have been delays in the planned programme of works caused by COVID.				
Evidence for Year	Information presented by MED and the client during the remote 'site visit'.				
1					
Conclusionand	Progress is being made in developing a programme of post-license monitoring for the rope grown				
Outcome on	mussel industry, including consultations by MED with AFMD, SFPA, BIM, IFA and the development of				
Recommendation	the checklist and reporting tools required to implement it. Initial bay-wide inspections have been				
1 from 1st	piloted on a number of bays including Inner Bantry and Roaringwater Bay.				
surveillance audit					
Status of	On track.				
recommendation					

Performance Indicator(s) &	Insert relevant PI number(s)	Insert relevant scoring issue/scoring guidepost text	Score		
Score(s)	3.1.2 Consultation, roles and responsibilities and 3.2.2 Decision-making processes	3.1.2 SIb 3.2.2 SIb	PI 3.1.2:85 PI 3.2.2:80		
Recommendation 2	The Assessment Team recommends the publication of Aqua culture Licensing Review. The publication of this	ssessment Team recommends the publication of the implementation plan for the Independent culture Licensing Review. The publication of this implementation plan could provide evidence to			
Progress on Recommendation [Year 1]	support a chievement of SG100 for a number of the Scoring Issues under Principle 3 Implementation of the findings of the Aquaculture Licensing Review Group have been included as an action in the Programme for Government of the new government. An interim implementation plan has been produced but not yet signed off by the Minister.				
Evidence for Year 1	Information presented by the client and AFMD during the remote site-visit. Programme for Government. Final, June 2020 pg. 71. (https://drive.google.com/file/d/1wX0AXNK697FbGVzihMGulH6HdmQk0_pU/view)				
Conclusion and Outcome on Recommendation 2 from 1 st surveillance audit					
Status of recommendation	On track.				



5.2 Conditions

Following information received on the remote 'site-visit' relating to the impact of rope grown mussel activity in Roaringwater Bay on maerl, Performance Indicator (PI) 2.3.1 ETP outcome has been re-scored. The assessment team has downgraded PI 2.3.1's score from 100 to 75. As a consequence, one new condition has been identified for the fishery and is set out in the table below. The revised scoring table for PI 2.3.1 is set out in section 5.4.

On the 27 March 2020, the MSC issued an updated Covid-19 derogation allowing a six-month certificate extension for all fisheries. Accordingly, the MSC has required CABs to extend the deadlines for all associated processes, including assessments, conditions, action plans and milestones by six months. The updated derogation has been released as an Interpretation, and can be seen at the link below (and copied in full in section 6.1 of this report):

https://mscportal.force.com/interpret/s/article/Covid-19-pandemic-derogation-March-2020

As stated in the Guidance for MSC Fisheries CABs relating to the Covid-19 Derogation, issued on 17 April 2020, the derogation applies to recently drafted conditions and milestones, i.e. for fisheries currently in an assessment at the time the derogation was published. Accordingly, this has been taken into account in the condition below.

A new MSC derogation comes into effect on the 28th September 2020 (see link below and copied in full in section 6.1 of this report). The new derogation replaces the previous derogation of 27th March 2020 but extensions that have already been applied, as in this fishery, will remain in place.

https://mscportal.force.com/interpret/s/article/New-global-pandemic-derogation-September-2020

Table 13. Condition 1 NEW.				
Performance Indicator	2.3.1			
Score	75			
Justification	This condition is relevant to scoring issues b and c and scoring element 5 Plants. Between the initial assessment of this fishery and this surveillance audit, new information has become available related to the direct (SIb) and indirect (SIc) impacts of rope mussel a quaculture on one of the ETP species identified as being relevant to this fishery (maerl) (Scally et al., 2020). This new information results from monitoring of Habitats Directive Annex 1 marine habitats and species in Ireland by the National Parks and Wildlife Service (NPWS). Relevant to SIb (direct effects), Scally et al., 2020 found negative direct impacts on the maerl community in Roaringwater Bay resulting from rope mussel activity occurring outside of licenced areas, where those licenced areas were delineated to avoid direct impacts on known maerl habitats.			
	Relevant to SIc (indirect effects), Scally et al., 2020 found negative indirect impacts on the maerl community in Roaringwater Bay resulting from rope mussel activity occurring outside of licenced areas. These indirect impacts included pseudofaeces deposition and extensive algal cover of and/or the presence of the opportunistic ascidian Ascidiella aspersa on abundance on maerl beds in the immediate vicinity of mussel lines. In each case, the report does not describe the precise extent of maerl directly or indirectly impacted in the context of the extent of maerl within Roaringwater Bay or nationally. At a national level maerl, as an EU Habitats Directive-listed species, has been assessed recently as in			
	In each case, the report does not describe the precise extent of maerl directimpacted in the context of the extent of maerl within Roaringwater Bayor national			



1 NEW.
Given that there are now known direct and indirect effects of the fishery on maerl, the assessment team is no longer satisfied that the known direct (SIb) or indirect (SIc) effects of the fishery are highly likely to not hinder recovery of maerl such that SG80 is no longer met for SIb (direct effects) or SIc (indirect effects).
 The client group must provide evidence that; Known direct effects of the UoA are highly likely to not hinder recovery of ETP species, and; Indirect effects have been considered and are thought to be highly likely to not create unacceptable impacts.
According to MSC FCP v2.1 §7.18.1.3, CABs shall draft conditions to result in improved performance to at least the 80 level within a period set by the CAB but no longer than the term of the certification unless there are exceptional circumstances such that and the CAB determines that achieving a performance level of 80 may take longer than the period of certification (MSC FCP v2.1; §7.18.1.5). In this case the assessment team has determined that the exceptional circumstances provision does not apply such that the client is required to close this condition within the term of the certification.
The condition milestones are subject to a 6-month extension in accordance with Covid-19 Derogation 27 March 2020.
Year 1 (progress to be examined at Surveillance 2): The Client group shall provide evidence of a plan to ensure that: 1. Known direct effects of the UoA are highly likely to not hinder recovery of ETP species, and; 2. Indirect effects have been considered and are thought to be highly likely to not create unacceptable impacts. Expected score: 75.
xpcstcuscore.rs
 Year 2 (progress to be examined at Surveillance 3): The Client group shall provide evidence of the implementation of the planto ensure that: 1. Known direct effects of the UoA are highly likely to not hinder recovery of ETP species, and; 2. Indirect effects have been considered and are thought to be highly likely to not create unacceptable impacts.
Expected score: 75.
Year 3 (progress to be examined at Surveillance 4): The Client group shall provide evidence that: 1. Known direct effects of the UoA are highly likely to not hinder recovery of ETP species, and; 2. Indirect effects have been considered and are thought to be highly likely to not create unacceptable impacts. Expected score: 80 (Condition closed).
Details of verification required to meet requirements in FCP v2.1 7.19.8 are set out in below.
Not applicable as this is a new condition.
New at surveillance 1 (2020).
None.



5.3 Client Action Plan

The client has produced a Client Action Plan (CAP) to address the condition identified which has been accepted by the CAB, SAI Global.

Table 14. Cirent Actio	Table 14. Citent Action Plan New.				
Client Action plan	Year 1 (progress to be examined at Surveillance 2): BIM to complete a site survey of alleged overlap of mussellines and the ETP species of concern. Results will be assessed and where overlap is identified realignment to be factored into the 2021/2022 work programme.				
	Year 2 (progress to be examined at Surveillance 3): Any required realignment completed in consultation with relevant industry members. BIM will provide a report on this activity to NPWS and the SFPA. Further consultation with NPWS regarding any outstanding concerns. Addition measures may be required under the 2022/2023 BIM work programme.				
	Year 3 (progress to be examined at Surveillance 4): Any additional measures agreed with NPWS completed.				
Consultation on condition	Delivery of the Client Action Plan mainly involves action by the client, BIM, with some consultation with NPWS. The Client met with NPWS to discuss the CAP, and NPWS subsequently confirmed in writing that they support the action being taken (shared with the CAB). This satisfies the verification requirements set out in FCP v2.1 §7.19.8 and SAI Global are satisfied that the closure of the condition is both a chievable by the client and realistic in the period specified.				
Progress on Condition (Year 1)	Not applicable as this is a new condition.				
Status	New at surveillance 1 (2020).				
Additional information	None.				

5.4 Re-scoring Performance Indicators

As noted in the previous section, following information received on the remote 'site-visit' relating to the impact of rope grown mussel activity in Roaringwater Bay on maerl, Performance Indicator (PI) 2.3.1 ETP outcome has been re-scored. The revised scoring table for PI 2.3.1 is set out below.

Note that the revised scoring of PI 2.3.1 leads to a revised overall score for Principle 2 of 86.1 (from 88.9), so the fishery still passes Principle 2. Updated performance indicator and Principle level scores are respectively shown in Sections 5.4.2 and 5.4.3 below.



5.4.1 Revised scoring table for PI 2.3.1 ETP outcome

The scoring tables used are those from the version of the Reporting Template current at the time of the Full Assessment of this fishery. Changes made to the original rationales are identified as follows:

- Updated/amended rationale is outlined in blue.
- Superseded rationale has been struckthrough and greyed out.
- Unchanged rationale is in black.

Table 15. Revised scoring table for PI 2.3.1 ETP outcome.

PI 2.3.1		The UoA meets national and international requirements for the protection of ETP species The UoA does not hinder recovery of ETP species			
ScoringIssue		SG 60	SG 80	SG 100	
Effects of the UoA on population/stock within national or international limits, we will be supplied to the UoA on population of the UoA on the UoA on population of the UoA on the UoA o				, where applicable	
а	Guide post	international requirements set limits for ETP species, the effects	set limits for ETP species, the combined effects of the MSC UoAs on the population/stock are known and highly likely to	international requirements set limits for ETP species, there is a high degree of certainty that the combined effects of the	
	Met?	Not relevant	Not relevant	Not relevant	

Rationale

National and/or international requirements do not set limits *per se* for ETP species; therefore, this SI is not relevant and has not been scored for any of the applicable scoring elements.

	Direct effect	Direct effects				
b	Guide post	Known direct effects of the UoA are likely to not hinder recovery of ETP species.	UoA are highly likely to not	0 0		
	Met?	 Marine mammals – Yes Birds – Yes Reptiles/molluscs – Yes Fishes – Yes Plants – Yes 	 Marine mammals – Yes Birds – Yes Reptiles/molluscs – Yes Fishes – Yes Plants – Yes – No 	 Marine mammals – Yes Birds – Yes Reptiles/molluscs – Yes Fishes – Yes Plants – Yes Not scored 		

Rationale

There is a high degree of confidence that there are no significant detrimental direct effects of the UoA on ETP species.

Under this PI, only those effects of rope mussel cultivation that may reasonably be expected to affect ETP species are considered; therefore, the Assessment Team considered the possible direct effects of the UoA on ETP species to be entanglement in structures associated with mussel culture activities and, in the case of 'habitat species' (i.e. species that may also be considered to provide habitat, namely maerl and Zostera), the physical impacts of mussel lines.

The Assessment Team could not find any recorded evidence of the entanglement of any of the ETP species considered in this assessment, nor indeed of any other species, in ropes associated with rope mussel culture activities. While entanglement in mussel ropes is not unknown, cases are extremely rare and there have been no recorded cases in Ireland to date. Where cases have occurred, they have generally involved baleen whales and spat collectors or buoy lines connected to them. These ropes are thought to pose more of an entanglement risk when compared to other ropes used in the mussel-growing process, such as grow-out ropes, which are thicker, particularly near harvest, and more tightly anchored and tensioned (Lindell & Bailey, 2015). In Ireland given the fact that spat collection ropes do not differ



PI 2.3.1 The UoA meets national and international requirements for the protection of ETP species
The UoA does not hinder recovery of ETP species

from grow-out ropes and the lack of occurrences of baleen whales in close inshore waters where rope mussel operations are situated, entanglement would seem highly unlikely.

Given the available information, there is a high degree of confidence that there are no significant detrimental direct effects of the UoA on ETP species of marine mammals, birds, reptiles, molluscs or fish such that **SG60**, **SG80** and **SG100** are met for scoring elements 1 – 4.

In relation to the physical impact of this fishery on habitat species (maerl and Zostera), the mussel lines used in this fishery are kept in place by an anchor at either end of the line ends of the ropes. While these anchors could affect potentially impact habitat species on which they are placed, the negative impacts as a result of smothering are likely to be extremely localised, being limited to the immediate area of the benthos on which they are placed. Moreover, the majority of rope grown mussel cultivation occurs within Natura 2000 sites (SACs and SPAs) which may be designated for these habitat species (or they may be a component of a designated feature). If the granting of the cultivation license or renewal is likely to have a significant effect on the conservation objectives of the SAC or SPA, it is subject to Appropriate Assessment (AA). Only those licenses which can be ascertained not to have an adverse effect on the integrity of the Natura 2000 site may be granted. AA are undertaken by the Marine Institute with advice from NPWS. NPWS advise on a number of 'thresholds' against which disturbance to protected features can be measured (see section 3.4.2.2 for further detail) but they do not advise these apply to particularly sensitive habitats and/or species, including Zostera and maerl, which should be afforded a high degree of protection. In these cases, thresholds for impact should be low and any spatial overlap with activities should generally be avoided so that a quaculture activity overlapping with these sensitive habitat species would not be granted. Based on the available evidence the known direct effects of the UoA are highly likely to not hinder recovery of protected habitat species.

Therefore, overall the known direct effects of the UoA are highly likely to not hinder recovery of ETP species; SG60 and SG80 are met.

Regulations require the protection of ETP species and as already described this includes the designation of areas known to be of importance to ETP species. The exact spatial locations and extent of the mussel culture activities covered by the UoA are known as well as the extent to which they overlap with/impact on a reas designated for the protection of ETP species. Given that 1) the level of spatial overlap between ETP species and the UoA is known and 2) that there are no recorded instances of any of the ETP species in this assessment being significantly detrimentally impacted by the UoA, there is a high degree of confidence that there are no significant detrimental direct effects of the UoA on ETP species; SG100 is met.

Between the initial assessment of this fishery and this surveillance audit, new information related to the direct impacts of rope mussel aquaculture on habitat ETP species (maerl) has become available (Scally *et al.*, 2020); this information is the result of monitoring of Habitats Directive Annex 1 marine habitats and species (of which maerl one) in Ireland by the National Parks and Wildlife Service (NPWS).

Relevant to this fishery and scoring issue, Scally *et al.*, 2020 found negative direct impacts on the maerl community in Roaringwater Bay as a result of rope mussel activity by virtue of the fact that a number of mussel lines were found to be outside of their licenced area, where those licenced areas have been allocated to be outside of known maerl habitats with a 30 m buffer.

Scally et al., 2020 does not describe the extent of maerl habitat within Roaringwater Bay impacted nor as a proportion of the total known national habitat resource. At a national level maerl, as an EU Habitats Directive-listed species, has been assessed recently as in 'unfavourable-bad' status with a declining trend (NPWS, 2019a), a downgrading from its last assessment published in the 2013 Article 17 report but Roaringwater Bay is only area where impacts of rope mussel on maerl are noted.

Given that the area of maerl impacted by the fishery under assessment is undoubtably small when considered in the national context, the assessment team are satisfied that known direct effects of the UoA are likely to not hinder recovery of maerl such that **SG60** is **met for scoring element 5**.



PI 2.3.1 The UoA meets national and international requirements for the protection of ETP species
The UoA does not hinder recovery of ETP species

With that being said, the fact that there are known direct effects of the UoA on maerI precludes the assessment team from concluding that those known direct effects are highly likely to not hinder recovery of maerI such that **SG80** is not met for scoring element **5** and, as SG80 has not been met, **SG100** has not been scored.

	Indirect effec	ts		
С	Guidepost		considered and are thought to be highly likely to not create	There is a high degree of confidence that there are no significant detrimental indirect effects of the fishery on ETP species.
	Met?		1. Marine mammals – Yes 2. Birds – Yes 3. Reptiles/molluscs – Yes 4. Fishes – Yes 5. Plants – Yes No	1. Marine mammals – Yes 2. Birds – Yes 3. Reptiles/molluscs – Yes 4. Fishes – Yes 5. Plants – Yes Not scored

Rationale

There is a high degree of confidence that there are no significant detrimental indirect effects of the fishery on ETP species.

Under this PI, only those effects of rope mussel cultivation that may reasonably be expected to affect ETP species are considered; therefore, the Assessment Team considered the possible indirect effects to be exclusion by farm structures, reduced or increased prey availability, disturbance (noise or boat activity) and the creation of additional resting places on floats within farms (Lloyd, 2003) and, in the case of 'habitat species' (i.e. species that may also be considered to provide habitat, namely maerl and Zostera), the potential indirect impacts of bio-deposition and benthic organic enrichment.

Roycroft et al., (2004), in a study conducted to examine the interactions, and assess the impacts, if any, of mussel suspension culture on the seabird and seal community in Bantry Bay (which is part of the UoA) found that rope mussel culture did not appear to have an adverse effect on the abundance of seabirds or common seals in the study area. In addition, the safe perching platforms provided by suspension culture floats, combined with a number of other factors, contribute to an increased abundance of a number of seabird species, particularly *Laridae* (a family of seabirds that includes gulls, terns and skimmers).

In other rope mussel assessments in Northern Europe, significant levels of interactions between eider ducks and rope mussel operations have been identified. While eider (*Somateria mollissima*) have been identified as an ETP species in this assessment due to their being listed in Annexes II and III of the Birds Directive as well as in AEWA (Agreement on the Conservation of African-Eurasian Migratory Waterbirds), Ireland is at the southernmost edge of their range. As a result the breeding distribution of eider in Ireland is almost wholly restricted to northern counties and this has remained largely unchanged since the 1970s. The levels of interactions between eiders and mussel farms in Ireland are therefore much less than in other areas with many areas likely having no interactions at all. Predator nets are not used in the Irish rope mussel industry.

Given the available information, there is a high degree of confidence that there are no significant detrimental indirect effects of the fishery on ETP species of marine mammals, birds, reptiles, molluscs or fish such that **SG60**, **SG80** and **SG100** are met for scoring elements 1–4.

The main indirect impacts that suspended mussel culture systems are likely to have on habitat species (maerl and Zostera) is as a result of the fall of live mussels, broken shells and faeces and pseudofaeces from the mussel lines, potentially leading to bio-deposition and benthic organic enrichment. Pseudofaeces (false faeces) is made up of particles which cannot be used as food (e.g. grit) and which are wrapped in mucus and expelled without passing through the digestive tract. As noted in the previous scoring issue, the majority of rope grown mussel cultivation occurs within Natura 2000 sites (SACs and SPAs) which may be designated for these habitat species (or they may be a component of



PI 2.3.1 The UoA meets national and international requirements for the protection of ETP species
The UoA does not hinder recovery of ETP species

a designated feature). If the granting of the cultivation license or renewal is likely to have a significant effect on the conservation objectives of the SAC or SPA, it is subject to Appropriate Assessment (AA). Only those licenses which can be as certained not to have an adverse effect on the integrity of the Natura 2000 site may be granted. AA are undertaken by the Marine Institute with advice from NPWS. NPWS advise on a number of 'thresholds' against which disturbance to protected features can be measured (see section 3.4.2.2 for further detail) but they do not advise these apply to particularly sensitive habitats and/or species, including Zostera and maerl, which should be afforded a high degree of protection. In these cases, thresholds for impact should be low and any spatial overlap with activities should generally be avoided so that aquaculture activity overlapping with these sensitive habitat species would not be granted. Based on the available evidence the indirect effects of the UoA on protected habitat species have been considered and are thought to be highly likely to not create unacceptable impacts.

Based on the available information, there is a high degree of confidence that there are no significant detrimental indirect effects of the fishery on ETP species; SG80 and SG100 are met.

As discussed previously, between the initial assessment of this fishery and this surveillance audit, new information related to the indirect impacts of rope mussel aquaculture on habitat ETP species (maerl) has become available (Scally et al., 2020) resulting from NPWS monitoring of Habitats Directive Annex 1 marine habitats and species in Ireland.

Relevant to this fishery and scoring issue, that monitoring found negative indirect impacts on the maerI community in Roaringwater Bay as a result of rope mussel activity including pseudofaeces deposition and/or extensive algal cover over the maerI beds in the vicinity of mussel longlines and the presence of the opportunistic ascidian *Ascidiella aspersa* in abundance within the maerI beds in the immediate vicinity of the mussel longlines. Again, the report does not describe the extent of maerI indirectly impacted in the context of the extent of maerI within Roaringwater Bay or nationally.

Given that the negative impacts of smothering, benthic enrichment are likely to be localised and largely limited to the area of the benthos on which mussel lines are placed and immediate surroundings, addressing the direct impacts (i.e. ensuring that mussels lines are moved out of areas delineated as maerl + a 30m buffer) should also serve to address the indirect impacts.

While the area of maerl impacted by the fishery under assessment is undoubtably small when considered in the national context, the fact that there are known indirect effects of the UoA on maerl precludes the assessment team from concluding that those known indirect effects are highly likely to not hinder recovery of maerl such that **SG80** is not met for scoring element 5.

As SG80 has not been met, **SG100 has not been scored for scoring element 5**.

References

Lindell, S. & Bailey, D., 2015. What Can We Learn from Entanglement Cases of Whales and Turtles in Mussel Farming Gear? Presentation at the Northeast Aquaculture Conference and Exposition in Portland ME, January 16th, 2015.

Lloyd, B.D., 2003. Potential effects of mussel farming on New Zealand's marine mammals and seabirds. Discussion Paper, Published by New Zealand Department of Conservation, Wellington, New Zealand.

Roycroft, D.; Kelly, T. C.; Lewis, L. J., 2004. Birds, seals and the suspension culture of mussels in Bantry Bay, a non-seaduckarea in Southwest Ireland. Estuarine, Coastal and Shelf Science, Volume 61, Issue 4, p. 703-712.

Scally, L., Pfeiffer, N. and Hewitt, E., 2020. The monitoring and assessment of six EU Habitats Directive Annex I Marine Habitats. Irish Wildlife Manuals, No. 118. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

https://www.npws.ie/sites/default/files/publications/pdf/IWM118.pdf

NPWS, 2019a. The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report: https://www.npws.ie/sites/default/files/publications/pdf/NPWS 2019 Vol1 Summary Article17.pdf



PI 2.3.1 The UoA meets national and international requirements for the protection of ETP species
The UoA does not hinder recovery of ETP species

Marine Institute, 2013. Article 6 Assessment of Aquaculture and Fisheries in Roaringwater Bay. Marine Institute, Rinville, Oranmore, Co. Galway. June 27th, 2013:

https://www.agriculture.gov.ie/media/migration/seafood/aquacultureforeshoremanagement/aquaculturelicensing/appropriateassessments/RoaringWaterBavAssessment011013.pdf

DAFM, 2013. Appropriate Assessment Conclusion Statement by Licensing Authority (i.e. Minister for Agriculture, Food and the Marine) for aquaculture activities in Roaringwater Bay and Islands Special Area of Conservation (SAC) (Natura site).

 $\frac{https://www.agriculture.gov.ie/media/migration/seafood/aquacultureforeshoremanagement/aquaculturelicensing/appropriateassessmentconclusionstatement/AppropriateAssessmentConclusionStatement161213.pdf$

Overall Performance Indicator scores

Individual scoring elements		Applicable	Applicable SGs met per individual scoring element				
	Ü		SG80	SG100	scores		
1	Scoring element 1. Marine mammals	1 of 1	2 of 2	2 of 2	100		
2	Scoring element 2. Marine/waterbirds	1 of 1	2 of 2	2 of 2	100		
3	Scoring element 3. Marine reptiles/molluscs	1 of 1	2 of 2	2 of 2	100		
4	Scoring element 4. Marine/anadromous fishes	1 of 1	2 of 2	2 of 2	100		
5	Scoring element 5. Marine plants	1 of 1	2 of 2 0 of 2	2 of 2 Not scored	100 60		
Overall Performance Indicators core		Appli	Overallscore				
		SG60	SG80	SG100	Overaliscore		
		5 of 5	5 of 5 4 of 5	5 of 5 4 of 5	100 75		
Con	Condition number (if relevant)						



5.4.2 Updated Performance Indicator level scores

Revised scores for each Performance Indicator (PI) following this surveillance audit are shown in Table 16.

Table 16. Updated PI-level scores. Scores in bold have been revised during this surveillance assessment.

Principle	Component		Performance Indicator (PI)	Score
		1.1.1	Stock status	n/a
	Outcome	1.1.2	Stock rebuilding	n/a
		1.1.3	Genetic outcome	n/a
One		1.2.1	Harvest strategy	n/a
	Managamant	1.2.2	Harvest control rules & tools	n/a
	Management	1.2.3	Information & monitoring	n/a
		1.2.4	As s es sment of s tock status	n/a
		2.1.1	Outcome	n/a
	Primary species	2.1.2	Management strategy	n/a
		2.1.3	Information/Monitoring	n/a
		2.2.1	Outcome	n/a
	Secondary species	2.2.2	Management strategy	n/a
		2.2.3	Information/Monitoring	n/a
		2.3.1	Outcome	75
	ETP s pecies	2.3.2	Management strategy	85
		2.3.3	Information strategy	80
wo		2.4.1	Outcome	100
	Habitats	2.4.2	Management strategy	90
		2.4.3	Information	85
		2.5.1	Outcome	80
	Ecosystem	2.5.2	Management	85
		2.5.3	Information	95
		2.6.1	Outcome	n/a
	Translocation	2.6.2	Management	n/a
		2.6.3	Information	n/a
		3.1.1	Legal &/or customary framework	100
	Governance and policy	3.1.2	Consultation, roles & responsibilities	85
		3.1.3	Long term objectives	100
hree		3.2.1	Fisherys pecific objectives	100
iii ee	Fisheryspecific	3.2.2	Decision making processes	80
	management system	3.2.3	Compliance & enforcement	80
	managementsystem	3.2.4	Monitoring & management performance evaluation	90

5.4.3 Updated Principle level scores

Updated overall weighted Principle-level scores for each Principle are shown in Table 17 below.

Table 17. Updated Principle scores					
Principle	Score				
Principle 1 – Target Species	n/a				
Principle 2 – Ecosystem	86.1				
Principle 3 – Management	91.3				



6 References

BIM, 2019. National Seafood Survey Aquaculture Report 2019. BIM, 17 December 2019. http://www.bim.ie/media/bim/content/publications/aquaculture/BIM-National-Seafood-Survey-Aquaculture-Report-2019.pdf

BIM, 2018. BIM Annual Aquaculture Survey 2018. BIM, 14 May 2018. http://www.bim.ie/media/bim/content/publications/aquaculture/BIM-Annual-Aquaculture-Survey-2018.pdf

Programme for Government. Final, June 2020. https://drive.google.com/file/d/1wX0AXNK697FbGVzihMGulH6HdmQk0_pU/view

SAI Global, 2019. MSC Public Certification Report for Ireland rope grown mussel facilitated by the Bord Iascaigh Mhara (BIM). July, 2019.

https://fisheries.msc.org/en/fisheries/ireland-rope-grown-mussel/@@assessments

Scally, L., Pfeiffer, N. and Hewitt, E., 2020. The monitoring and assessment of six EU Habitats Directive Annex I Marine Habitats. Irish Wildlife Manuals, No. 118. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

https://www.npws.ie/sites/default/files/publications/pdf/IWM118.pdf

6.1 Relevant MSC Interpretations

The MSC requires that the use in an assessment report of an interpretation from the interpretation log must be properly referenced in a separate Appendix of the report with the date, title and web link of the interpretation being provided.

Relevant Int	erpretation 1
Title:	UPDATE 20/05/2020 - Covid-19 pandemic derogation, March 2020 — updated to include additional
	guidance for CoC CABs/Clients
Date:	15/06/2020
Weblink:	https://mscportal.force.com/interpret/s/article/Covid-19-pandemic-derogation-March-2020
Question:	
Answer:	Chain of Custody Certification Requirements and Fishery Certification Process allowing remote audit
	and extensions to certificates and associated timelines
	Date 27 March 2020
	To: MSC Accredited Conformity Assessment Bodies
	CC: Assurance Services International, Aqua culture Stewardship Council
	In response to the Covid-19 pandemic and consideration of the welfare of all individuals participating in the MSC certification system, the MSC issued a derogation to allow for scheduling and conducting remote site visits and audits for Fisheries and Chain of Custody certificate holders (Coronavirus Announcement, Derogation issued on 28th February 2020). We have received requests from certificate holders to allow for further flexibility given the unprecedented circumstances we now find ourselves in. This derogation supersedes the derogation issued on 28th February 2020.
	This derogation allows a six-month certificate extension for all Fishery and Chain of Custody certificate holders, according to the specifications below. In addition, requirements for in-person site visits do not apply during the period of this derogation. Fisheries and supply chain certificate holders could proceed with remote auditing with agreement from CABs, where feasible.



Relevant Interpretation 1

Fisheries: Automatic six-month extension shall be applied to all fishery certificates and associated timelines, including deadlines for client action plans, milestones and conditions. This ensures a consistent approach is taken with all fisheries in light of MSC's requirements for harmonisation. The extension shall also apply to audit and assessment activities and timelines specified in the MSC Fisheries Certification Process, with the exception of objections (to be decided by the Independent Adjudicator) and in certain cases, expedited audits. Guidance on expedited audits will be further defined by the MSC.

Fishery clients can opt to proceed with remote audit or assessment activities during this extension period, i.e. to work to existing or revised timelines, with their CABs, should they so choose. MSC expects a sensible and pragmatic approach will be taken to scheduling surveillance audits at the end of this derogation period where existing FCP requirements permitting flexibility in scheduling audits should allow audits to be staggered (i.e. FCP 2.1 clause 7.28.8.1 applies from the new certificate anniversary date).

Supply chain companies: Audits may be conducted remotely, however CABs may issue a six-month extension if this is not feasible due to the impact of Covid-19 to audit due dates and certificate expiry. This approach differs from that applied to fisheries and does not provide an automatic extension.

CABs will not need to submit a variation request to delay audit or assessment activities, to apply certificate extensions or to conduct remote audits or assessments. Certificate holders are expected to continue to conform to the requirements in the MSC Standards during the derogation and this will be subject to review at subsequent audits and assessments once the derogation is lifted. CABs may conduct initial chain of custody audits and fishery assessments remotely.

CABs shall maintain a list of certificate holders where this derogation has been applied and shall make this list available for MSC or ASI on request. The MSC will provide further guidance to support the implementation of this derogation. The MSC will review this derogation on a monthly basis, and may be extended if the Covid-19 disruption continues or intensifies.

For any other questions please contact the MSC Supply Chain Standards (<u>supplychain@msc.org</u>) and Fisheries Standard (<u>fisheries@msc.org</u>) teams. The MSC will continue to monitor the situation and provide any updates.

Date of issue: 27 March 2020 End of validity: 27 September 2020

Sincerely,

Dr. Rohan Currey Chief Science and Standards Officer

UPDATE 02/04/2020

For more information about how CABs should implement the derogation please refer to the following guidance documents. These (version 2) have been updated on 21/04/2020 to reflect further questions raised by CABs and include clarifications on auditability.

- Guidance to CABs Fisheries v2
- Guidance to CABs CoC v2

UPDATE 20/05/2020

For more detailed information about how CABs and clients should implement the derogation please refer to the following guidance documents:

- Additional Guidance for CoCCABs
- Remote Auditing Clause-by-Clause Guide
- Guidance for CoCHolders



Relevant Int	erpretation 2
Title:	UPDATE 02/09/2020 Covid-19 Pandemic Derogation – Effective 28 September 2020
Date:	02/09/2020
Weblink:	https://mscportal.force.com/interpret/s/article/New-global-pandemic-derogation-September-2020
Question:	
Answer:	The MSC has closely monitored the impact of Covid-19 on the seafood supply chain and its certification program. The MSC recognises that the impact of Covid-19 will continue to persist. Mindful of the welfare of those participating in the MSC program, the MSC issues the following derogation. This derogation allows for audit and assessment activities for Fisheries and Chain of Custody certificate holders to be undertaken remotely, rather than in person, according to the specifications below. The intent of this derogation is to ensure the welfare of those participating in the MSC program as they carry out audits and assessments to ensure that the requirements are met.
	This derogation is effective from 28 September until 27 March 2021. The derogation put in place on 27 March 2020 expires on 27 September 2020, therefore the six-month extension to a udit and assessment activities and timelines allowed under the previous derogation is no longer available. The derogation published on 6 May 2020 regarding labour audits remains effective.
	Fisheries and Supply Chain Programs: This derogation applies in situations where national or local restrictions put in place to prevent the spread of Covid-19 prevent CABs, auditors or assessors or certificate holders from carrying out on-site audits. This derogation also applies in situations where CABs assess there is a health risk involved in conducting an on-site audit.
	The CABs shall conduct on-site audits or assessments, subject to existing requirements, in situations where there are no Covid-19-related restrictions or health risks, affecting either the CAB, auditors/assessors, or certificate holder. CABs shall enable remote attendance for any other stakeholders who may be subject to Covid-19-related restrictions or health risks. If there are Covid-19-related restrictions or health risks affecting either the CAB, auditors/assessors or certificate holder, the CABs should conduct specified audit types remotely. These audits include the following: fisheries surveillance audits, expedited audits, scope extensions assessments and re-assessments, as well as all supply chain audits subsequent to initial audits.
	CABs shall document in the assessment announcement and the assessment/audit report the information on the restrictions or health risks which have prevented the on-site audit. CABs shall maintain a list of certificate holders where this derogation has been applied and shall make this list available for MSC or ASI on request.
	Certificate holders are still required to meet the requirements of the standards during the period this derogation applies.
	Fisheries Program: CABs shall submit a variation request and complete a risk assessment in situations where Covid-19-related restrictions or health risks prevent them from carrying out an on-site visit as part of an initial assessment. The MSC will consider variation requests on a case-by-case basis. The MSC will require that the Client and Peer Review Draft Reports and Public Comment Draft Reports for initial assessments carried out remotely are subject to review by an additional member of the Peer Review College.
	The requirements not referenced in this document or accompanying guidance shall remain applicable. CABs will not need to request a variation in cases where remote audits or assessments are conducted in accordance with this derogation. If extensions to audit and assessment activities and timelines are needed due to the impact of Covid-19 CABs shall request these by submitting a variation request.
	UPDATE 02/09/2020



Relevant Interpretation 2

To implement the derogation, the MSC has provided requirements and guidance. This document is normative, and compliance with the requirements is auditable by ASI. Please contact MSC with any questions.

• Guidance to CABs (Fisheries and CoC)

Relevant Int	erpretation 3
Title:	What are the MSC requirements on harmonisation? (multiple questions) (FCR v2.0 - Annex PB)
Date:	30/08/2018
Weblink:	https://mscportal.force.com/interpret/s/article/What-are-the-MSC-requirements-on-harmonisation-
	multiple-questions-1527586957701
Question:	8. Harmonisation of assessment trees . The requirements and guidance on tree use are contradictory. When should trees be harmonised?
Answer:	 MSC notes the lack of clarity in FCR Section PB2 and the related guidance GPB2. CABs are advised that: PB2.1 applies to all fisheries using default trees, including the vast majority of fisheries in the MSC programme. Fisheries are expected to transition to new trees (e.g. move from v1.3 to v2.0) as normal following the FCR implementation timelines. Any differences between such default trees may lead to non-harmonised outcomes and scoring (as stated in the guidance GPB3). Harmonisation should, however, still be applied where trees are materially unchanged. CABs should make reference to MSC's analysis of which changes are material and which not, as provided on the release of FCR v2.0. Sections PB2.2 – 2.4 applies to those fisheries that are not using the standardised default trees (such as the special trees used for enhanced bivalves and salmon prior to the release of the default versions for these species groups). Where a special tree is used in a previous overlapping fishery, it may also be appropriate for such tree to be adopted in the new fishery. However, developments such as the release of FCR v2.0 should also be considered at these times to ensure that such fisheries do not get 'stuck' with very old trees. When a new default tree is released for the species group, these should also be adopted instead of any old pre-default version. Special consideration will be needed by CABs in these rare cases, and variation requests should be submitted as per PB2.3.

Relevant Int	erpretation 4
Title:	Habitats pecies as ETP (FCR v2.0 - Annex SA PI 2.3.1, SA 3.1.5)
Date:	29/08/2018
Weblink:	https://mscportal.force.com/interpret/s/article/habitat-species-as-ETP-SA3-1-5-1527262008263
Question:	Should a habitat species (e.g., coral) ever be assessed under the ETP component instead of the habitats component? If so, when?
Answer:	If the habitat (e.g., lophelia) or habitat component species (e.g., sea pens) is recognised as ETP by national ETP legislation or a binding international agreement (as per SA3.1.5), that habitat or component species should be assessed within the ETP component. If not, it should be assessed under the habitats component.



7 Appendices

7.1 Evaluation processes and techniques

7.1.1 Site visits

This surveillance audit was originally intended to involve an on-site site visit but as a result of the COVID-19 pandemic it was announced as an off-site audit using the MSC Covid-19 pandemic derogation (see interpretation 1 in section 6.1). Meetings were held remotely with stakeholders over two weeks from the week commencing 6th July 2020.

The objectives of the consultation meetings were:

- to collect information of any change in the fishery management system or regulations.
- to collect information on any changes to personnel in science, management or industry and evaluate their impact on the management of the fishery.
- to collect information on any changes to the scientific base of information.
- to evaluate any progress against the recommendations identified during the initial assessment.
- to evaluate any change in the client group or Chain of Custody

The consultation meetings were designed to be inclusive of all organizations and representatives of the fishery. A description of the meetings held and stakeholders involved are recorded in section 7.1.2.

7.1.2 Stakeholder participation

The announcement for this first surveillance was made on 5th June 2020. The announcement included details of the dates and times of the off-site audit, what will be assessed/reviewed during the audit and details of the auditors. Stakeholders were also contacted directly by email.

The table below details the meetings held remotely with stakeholders during the surveillance audit. Some meetings were arranged after the closing meeting to accommodate meeting requests made during the audit and stakeholders who were not able to attend earlier meetings.



Name of Organisation	Present at Meetings	Position	Location	Venue	Date/Time	Purpose
J	Vicky Lyons	BIM, Aquaculture Shellfish Quality & Food Safety Specialist				Client opening meeting. Changes to fishery and its management Performance in relation to recommendations
	Joanne Gaffney	BIM, Aquaculture Technical Manager				Any developments / changes in fishery that affect tracea bility.
	Gary McCoy	BIM, Shell fish Productivity Optimisation Officer				 Any other significant changes. Updated catch statistics.
	Conor Donnelly	SAIG lead and P3 assessor				
Bord Iascaigh Mhara (BIM)	Sam Dignan	SAIG P2 assessor	Off-site	Off-site	6 th July 2020; 10:00-11:00 UTC	 Key points: Impact of MSC derogation Maerl Update on Recommendations: 1. Post-license monitoring. BIM meeting with MED and update on developing inspection programme 2. Implementation of the findings of the Aquaculture Licensing Review. Included in programme for new government (pg.70) Challenges to industry presented by COVID BIM to provide updated figures on AtoN and SUMs and grants. Changes in personnel - new Minister Barry Cowan (as at that time). Traceability and CoC Changes in Client Group.
	Yvonne Leahy	NPWS, Marine Biologist				Introduction.
	Conor Donnelly	SAIG lead and P3 assessor				Maerl – Roaringwater Bay
National Parks and	Sam Dignan	SAIG P2 assessor				• 2015 survey
Wildlife Service (NPWS)	Vicky Lyons	BIM, Aquaculture Shellfish Quality & Food Safety Specialist	Off-site	Off-site	6 th July 2020; 11:30-12:30 UTC	 Muss el license a reas outside ma erl a reas but lines outside licensed a reas. 15% overlap threshold for N2K habitats doesn't
	Joanne Gaffney	BIM, Aquaculture Technical Manager				apply to maerl. No activity over maerl and buffer



Table 10. Stakeholder	The carried out	t during the off-site audit u	laci takeni	11 July 202	J.	analiad This was included in Anaronsists
						applied. This was included in Appropriate Assessment (AA) & subsequently in licenses. • Enforcement issue
	Gary McCoy	BIM, Shell fish Productivity Optimisation Officer				 Issue flagged in Article 17 reporting. Details of encroachment of ropes onto ma erl habitat (not just in buffer zone, directly onto ma erl). Surveyors revisited in 2016 and found some lines moved but not all. Issue focussed on Roaringwater Bay. Not an issue with RGM lines elsewhere. Changes to personnel Changes in management. Most sites now assessed in terms of AA. NPWS involvement in AA process NPWS activities Illegal gathering of shellfish in N2K sites
	Sean Minihane	Co-owner, Atlantic Sea Farms Ltd	Off-site	Off-site		 Introduction. Overview of Atlantic Sea Farms operation and
	Conor Donnelly	SAIG lead and P3 assessor				activities.
	Sam Dignan	SAIG P2 as sessor				Impact of COVID
Producers – Sean Minihane	Vicky Lyons	BIM, Aquaculture Shell fish Quality & Food Safety Specialist			6 th July 2020; 14:00 -15:00 UTC	 Traceability Production practices No changes to management system, legislation or
	Gary McCoy	BIM, Shell fish Productivity Optimisation Officer				 regulations Monitoring control and enforcement. Not aware of CLAMs group in Roaringwater Bay. Maerl. Awareness of maerl, use of GPS to ensure within licensed area, MED visits & surveys.
DAFM Aquaculture and	Geral dine Farrell	AFMD, HEO				Introduction.
	Helena Horan	AFMD, Assistant Principal]		15 th July 2020; 10:00 -11:00 UTC	No changes to management systems or
Foreshore Management Division	Therese O'Keeffe	AFMD, Aquaculture Licensing(except Roaringwater Bay)	Off-site	Off-site		legislation/regulations New Minister. AFMD remains as is.



	Conor Donnelly	SAIG lead and P3 assessor				Recommendations:
	Sam Dignan	SAIG P2 as sessor				1. Discussed work MED are undertaking to introduce
		BIM, Aquaculture				periodic inspections of RGM sites.
	Vicky Lyons	Shellfish Quality & Food				2. Aqua culture Licensing Review Implementation
		Safety Specialist				Plan – not yet signed off by Minister but in
	Joanne Gaffney	BIM, Aquaculture				Programme for Government.
	Journe Guiney	Technical Manager				• Traceability – no changes from their perspective.
	Gary McCoy	BIM, Shell fish Productivity Optimisation Officer				 Maerl. Meeting with NPWS in February, AFMD requested review from MED. Once report receive from MED will consider and decide how to respon MED monitoring reports for RGM not currently published but intention is to publish in future.
	Vicky Lyons	BIM, Aquaculture Shellfish Quality & Food Safety Specialist	Off-site	Off-site		Closing meeting.
	Joanne Gaffney	BIM, Aqua culture Technical Manager			15 th July 2020; 15:00 - 16:00 UTC	
Bord Iascaigh Mhara (BIM)	Gary McCoy	BIM, Shellfish Productivity Optimisation Officer				
	Conor Donnelly	SAIG lead and P3 assessor				
	Sam Dignan	SAIG P2 as sessor				
Producers – Tim Green	Tim Green	Seal Harbour Enterprises Ltd.	Off-site	Off-site	16 th July 2020; 9:00 – 9:10 UTC	Introduction.Short call as Tim very busy moving mussel.
	Conor Donnelly	SAIG lead and P3 assessor			9.00-9.10 010	 Overview of activities. No changes.
Producers – Michael Mulloy	Michael Mulloy	Blackshell Farm Ltd and		Off-site	16 th July 2020; 10:00 - 10:30 UTC	Introduction.
	ciaciivianoy	Chair of IFA Aquaculture				No changes to management systems
	Conor Donnelly	SAIG lead and P3 assessor	Off-site			 Monitoring and enforcement. Biggap around addressing non-compliance. Changes in personnel. Discussed IFA and role of Teresa Morrissey, Executive Secretary. Referred to



						 vacancies in ALAB which are now being filled. ALAB given funding to recruit full-time technical a dviser. Traceability. Information presented on AFMD website and ALAB not conducive to helping public understand what is going on in each Bay (e.g. in terms of species cultivated, active or non-active licenses). An interactive map (as used for example, in Scotland) would be better. Discussed Gatherer's Document – don't include your own license reference number, but reference number of local sampling site. Particular issue a round finding out what sites are active or not.
	Raphael Crowley	MED				Introduction.
DAFM Marine Engineering Division	Conor Donnelly Sam Dignan	SAIG lead and P3 assessor SAIG P2 assessor	Off-site	Off-site	27 th July 2020; 16:00 - 16:30 UTC	 Current MED activities – surveys in Inner Bantry Bay tomorrow Roaringwater Bay. Work has been impacted by COVID causing delays. Developed draft reporting template, consulted with BIM, IFA etc. Expect to be ready for reporting online by end 2020. Also developed checklist. Use of drone technology to survey Expect 5 yearly survey with mid-point survey too. Lines in Roaringwater Bay. Compliance and enforcement. Ultimately, if lines not moved licenses revoked. As seen in addressing non-compliance in other fisheries (e.g. salmon) Recruitment of staff



7.2 Stakeholder input

No written submissions were made by stakeholders during the first surveillance audit. A summary of verbal stakeholder input received during the site visit has been provided in the previous section.



7.3 Revised surveillance program

Section 7.28 of the MSC FCP v2.1 sets out that during each full assessment, surveillance and re-certification assessment, the team with input from the client, shall determine the level at which subsequent surveillance of the fishery shall be undertaken. Surveillance audits shall take place according to the default surveillance level (Level 6, requiring 4 on-site surveillance audits), unless the team decides on a reduced surveillance programme.

In the initial assessment, the assessment team determined that the fishery was eligible for a reduced surveillance programme of level 4 taking into account that no conditions had been identified and the ability to remotely verify information (see Table 29 of SAIG, 2019). Although one condition has been identified during this surveillance, the assessment team has reviewed the verification of information criteria presented in the initial assessment and consider that it still holds true — the team is able to access the required information remotely and can confirm veracity of the information, including in relation to measuring progress against the condition.

However, there have been some changes to the surveillance activity identified in the initial assessment. An on-site surveillance visit was originally planned for the first surveillance audit but as a result of the pandemic, this was changed to a remote 'site-visit' using the MSC Covid-19 derogation 27th March 2020 (the derogation has been released as an Interpretation, and can be seen in full in section 6.1 of this report). Despite this change, the surveillance level of the fishery is unchanged at level 4 so that there are still two on-site and two off-site audits - the off-site visit surveillance originally planned for surveillance 2 is now changed to an on-site audit (see Table 19).

The surveillance timeline together with rationale for any deviations from carrying out the surveillance audit before or after the anniversary date of certification are presented in Table 20 below. The MSC Covid-19 derogation issued on 27th March 2020 allowed a six-month certificate extension for all fisheries. Accordingly, the MSC has required CABs to extend the deadlines for all associated processes, including assessments, conditions, action plans and milestones by six months.

Table 19. Revised fishery surveillance program.				
Surveillance level	Year 1	Year 2	Year 3	Year 4
Level 4	Off-site surveillance	On-site surveillance	Off-site surveillance	On-site surveillance
	audit (originally on-site)	audit (originally off-site)	audit	audit & re-certification
				s i te vi s i t

Table 20. Timing of surveillance audit.			
Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
1	4 January*	July 2020	Complete
2	4 January*	June/July 2021	For the sake of efficiencies, the intention is to
3	4 January*	June/July 2022	align the surveillances of the rope grown and bottom grown mussel certificates around a common date in June/July. As the rope grown mussel certificate has been extended by 6 months this means the audit will take place 6 months before the new certificate anniversary.
4	4 January*	TBD	Allow sufficient time for re-assessment to be completed before certificate expiry date.

^{*}The original anniversary date was based on the certification date of 4 July 2019. The date shown here is the anniversary date extended by 6 months as a result of the MSC Covid-19 pandemic derogation.



Table 21. Surveillance level rationale.			
Year	Surveillance activity	Number of auditors	Rationale
1	Off-site audit	2 remote auditors	As a result of the pandemic this was changed to an off-site audit using MSC Covid-19 derogation 27th March 2020.
2	On-site audit	2 auditors on site	There is one condition. This was changed from an off-site to an on-site audit after surveillance 1 was changed to an off-site audit using the MSC Covid-19 derogation.
3	Off-site audit	2 remote auditors	There is one condition and required information is likely to be able to be provided remotely; therefore, SAI Global proposes to conduct a remote audit.
4	On-site audit	2 auditors on site	There is one condition. As this will potentially be both a 4 th surveillance and a re-assessment audit, SAI Global proposes to conduct an on-site audit with 2 auditors on-site.



7.4 Harmonised fishery assessments

Where fisheries have areas of overlap CABs are required to ensure consistency of outcomes so as not to undermine the integrity of MSC fishery assessments. Under PB1.3.5 of the MSC FCP v2.1, where a UoA under surveillance overlaps with a certified UoA, the CAB shall coordinate assessments to make sure that key assessment products and outcomes remain harmonised.

There has been no change in overlapping fisheries since the initial assessment which identified two overlapping fisheries, Ireland bottom grown mussel and Northern Ireland bottom grown mussel. The initial assessment (SAI Global, 2020) concluded no harmonisation was required with these fisheries however, since it's publication in July 2019, a scope extension has been announced for Ireland bottom grown mussel to enable seed from Ireland rope grown mussel to be used in the fishery (14 January 2020). As shown in Table 22, this scope extension requires harmonisation with the Ireland rope grown mussel fishery since, although the fisheries are assessed under different versions of the Standard, MSC have issued an interpretation that harmonisation between trees of different versions should still be applied where trees are materially unchanged - see Relevant Interpretation 3 in section 6.1.

The scope extension is being undertaken by SAI Global using the same assessment team who are undertaking the Ireland rope grown mussel surveillance and who undertook the initial assessment. Consequently, where PIs overlap the scoring and rationales have been copied from the Ireland rope grown mussel assessment to the scope extension (currently still under assessment at Client and Peer Review Draft Report stage). The findings of this surveillance, in particular the new information on the impact of rope mussel activity in Roaringwater Bay on the maerl habitat ETP species which has resulted in the re-scoring of PI 2.3.1 to 75 and the identification of a condition are being incorporated into the next scope extension report.

Table 22. Overlapping fisheries.			
Fisheryname	Certification status and date	Standard	Performance Indicators to harmonise
Ireland rope grown mussel	Certified, 4 July 2019	2.0	
Ireland bottom grown mussel	Scope Extension in assessment	1.3	P2 and P3

Table 23. Overlapping fisheries.

Supporting information

The assessment team for the rope grown mussel surveillance (and initial assessment) are the same assessment team from the CAB (SAI Global) that are undertaking the assessment for the Ireland bottom grown mussel scope extension. Consequently, where PIs overlap the scoring and rationales are copied from the Ireland rope grown mussel assessment to the scope extension which is currently still under assessment.

Was either FCP v2.1 Annex PB1.3.3.4 or PB1.3.4.5 applied when harmonising?	No
Date of harmonisation meeting	Not applicable
If applicable, describe the meeting outcome	
Not applicable	

Currently there are scoring differences between the published ACDR for the Ireland bottom grown mussel scope extension and the Ireland rope grown mussel as re-scored at this first surveillance see Table 24 below. As noted above the revised scoring for PI 2.3.1 will be incorporated into the next reporting stage of the scope extension.

Table 24. Scoring differences.			
Performance Indicators (PIs)	Ireland bottom grown mussel scope extension*	Ireland rope grown mussel	
1.1.1	≥80	Notscarod	
1 1 2	NΔ	Not scored	



Table 24. Scoring differences.			
1.1.3	N/A		
1.1.4	**		
1.2.1	≥80		
1.2.2	≥80		
1.2.3	≥80		
1.2.4	≥80		
2.3.1	≥80	75	
2.3.2	≥80	85	
2.3.3	≥80	80	
2.4.1	≥80	100	
2.4.2	≥80	90	
2.4.3	≥80	85	
2.5.1	≥80	80	
2.5.2	≥80	85	
2.5.3	≥80	95	
2.6.1	≥80		
2.6.2	≥80	Not scored in this assessment	
2.6.3	≥80		
3.1.1	≥80	100	
3.1.2	≥80	85	
3.1.3	≥80	100	
3.1.4	≥80	Not scored in v2.0	
3.2.1	≥80	100	
3.2.2	≥80	80	
3.2.3	≥80	80	
3.2.4 Research Plan	≥80	Not scored in v2.0	
3.2.5 Monitoring and Management performance evaluation	≥80	90	

^{*}As this is an ACDR only scoring ranges are provided

Table 25. Rationale for scoring differences.

If applicable, explain and justify any difference in scoring and rationale for the relevant Performance Indicators (FCP v2.1 Annex PB1.3.6)

The Ireland rope grown mussel fishery and the scope extension to the Ireland bottom grown mussel fishery represent the same fishery so where PIs overlap the rationale and scoring have been copied across into the scope extension. Ireland rope grown mussel was assessed under v2.0 which does not include two of the v1.3 PIs, PI3.1.4 Incentives for sustainable fishing and PI3.2.4 Research Plan which is why they were not scored in that assessment. Ireland rope grown mussel does not involve translocation and so these PIs were not scored in that assessment (spat is normally caught and on-grown in the same bay/estuary whereas the fishery assessed in the scope extension can involve movement on wider scales). Since the Ireland rope grown mussel does not involve translocation and does not negatively impact the parent stock Principle 1 was not scored in that assessment (in line with MSC FCR v2.0, SB2.1.4), whereas it has been assessed in the scope extension as it involves translocation and is adding two species to the existing certificate (*M. galloprovincialis* and *M. trossulus* in addition to the *M. edulis* originally assessed).

The findings of the first surveillance for Ireland rope grown mussel, in particular the new information on the impact of rope mussel activity in Roaringwater Bay on the maerl habitat ETP species which has resulted in the re-scoring of PI 2.3.1 to 75 and the identification of a condition, are being incorporated into the next report stage of the scope extension.

If exceptional circumstances apply, outline the situation and whether there is agreement between or among teams on this determination

Not applicable

^{**}An information gap has been identified for this PI and more information is required before it can be scored



7.5 Summary of Audit Team's CVs

A brief bio for each team member is presented below.

Conor Donnelly, lead assessor and responsible for P3 and traceability

Conor is an experienced marine ecologist and environmental manager with a background of over 17 years at the UK statutory nature conservation body, Natural England, where he was Senior Marine Adviser responsible for marine delivery across the East Midlands, Norfolk and Suffolk. He has a BSc. in Environmental Science from King's College, University of London and an MRes. in Marine and Coastal Ecology and Environmental Management from the University of York.

Conor has experience of shellfisheries and their management, in particular the mussel, cockle and shrimp fisheries of The Wash, UK, where he has extensive experience of working with fisheries managers, the fishing sector, local communities and eNGOs to assess the environmental impacts of these fisheries and provide advice on their management. He was Natural England's representative on the Eastern Inshore Fisheries and Conservation Authority and its predecessor. He also advised and supported the UK's Department for Environment, Food and Rural Affairs (Defra) on fisheries casework in the southern North Sea under the Common Fisheries Policy (CFP) including in meetings with other member states. Other experience includes Marine Protected Area designation, conservation advice and condition assessment; conservation legislation and policy; and working with partners and stakeholders to deliver positive environmental outcomes. Conor is certified as a Fisheries Team Leader under MSC FCR versions 1.3, 2.0 and 2.1 and is an ISO lead auditor.

Sam Dignan, assessor responsible for P2

Sam Dignan is a fisheries scientist who has previously worked with the Department of Environment, Food and Agriculture (DEFA), Isle of Man and Bangor University Fisheries and Conservation Science Group (Wales). He has a BSc in Biological and Chemical Sciences with Zoology from University College Cork and an MSc in Marine Environmental Protection from Bangor University. He has experience conducting stock assessments, from the survey design and implementation phases through to final analysis and report presentation; from 2013 to 2015 he was a member of the ICES working group on scallop stock assessment. He has been involved in providing scientific data to ensure fishery compliance with the Marine Stewardship Council's (MSC) certification framework and has participated in MSC surveillance audits from a client's perspective. Sam is now SAI Global's Fisheries Scheme Manager as well as acting as an Assessor/Lead Assessor on various fishery assessments.

Sam has extensive experience interacting directly with fishers and their representative organisations as well as members of scientific and government institutions. He was previously an advisor to the Isle of Man Queen Scallop Management Board that manages the MSC certified Isle of Man queen scallop fishery. He has also worked on the spatial analysis of fishing activity, using Vessel Monitoring System (VMS) and logbook data, to spatially quantify fishing activity and fisheries-ecosystem interactions. Sam is an ISO approved lead auditor.



8 Template information and copyright

This document was drafted using the 'MSC Surveillance Reporting Template v2.01'. Note amendments have been made to formatting in order to comply with SAI Global's corporate identity; however, content and structure follow that of the original template.

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Template version control		
Version	Date of publication	Description of amendment
1.0	08 October 2014	Date of issue
2.0	17 December 2018	Release alongside Fisheries Certification Process v2.1
2.01	28 March 2019	Minor document change for usability

A controlled document list of MSC program documents is available on the MSC website (msc.org)

Senior Policy Manager Marine Stewardship Council Marine House 1 Snow Hill London EC1A 2DH United Kingdom

Phone: + 44 (0) 20 7246 8900 Fax: + 44 (0) 20 7246 8901 Email: standards@msc.org