FISHERIES STANDARD REVIEW

ENSURING HABITAT PERFORMANCE INDICATORS ARE CLEAR AND CONSISTENTLY APPLIED

IMPACT ASSESSMENT REPORT

October 2021

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The views and opinions expressed in this report do not necessarily reflect the official policy or position of the Marine Stewardship Council. This is a working paper, it represents work in progress and is part of ongoing policy development. The language used in draft scoring requirements is intended to be illustrative only, and may undergo considerable refinement in later stages.

How to reference this report:

Wootton, E (2021). Ensuring habitat performance indicators are clear and consistently applied. Fisheries Standard Review Impact Assessment Report. Published by the Marine Stewardship Council [www.msc.org]. Fisheries Standard Review habitat performance indicators | Marine Stewardship Council (msc.org). 26 pp

1 PURPOSE OF THIS REPORT

This report presents a summary of the impact assessment undertaken for alternative policy options developed for the Habitats work package. This is part of the Fisheries Standard Review project Ensuring Habitats performance indicators are clear and consistently applied. A brief introduction to the work package is provided in the background section below.

This report provides a description of the options under consideration and a summary of the likely impacts for each of the different options. A preferred option was then identified and taken forward for further impact testing, which subsequently contributed to a new version of the Fisheries Standard.

2 BACKGROUND

2.1 Impact Assessment Framework

The aim of impact assessment is to provide clear information on the impacts of the options developed to sort out the policy issues identified in the project inception. It serves as a basis for comparing options against one another and against the business-as-usual scenario, and identify a preferred option if possible. It does not replace decision-making but is used as a tool to support the decision-making process and underpin evidenced based decision-making; increasing transparency, making trade-offs visible and reducing bias.

Impact assessment should help to:

- Specify how proposed options will tackle the identified issues and meet objectives.
- Identify direct and indirect impacts, and how they occur.
- Assess impacts in both qualitative and quantitative terms.
- Help find perverse or unintended consequences before they occur.
- Where possible, make risks and uncertainties known.

This is achieved by following MSC's Impact Assessment Framework that outlines when and how to undertake Impact Assessment. This ensures an efficient, systematic and consistent approach to policy development to underpin a responsive, robust and credible program. In particular, the Impact Assessment Framework defines the different types of impact (see below) and a suite of methodologies best suited to assessing each type.

The impact types used in the Impact Assessment are defined as follows:

1. **Effectiveness:** The extent to which the change is deemed likely to be successful in producing the desired results and resolving the issue(s) originally identified.
2. **Acceptability:** The extent that the change is considered tolerable or allowable, such that the MSC program is perceived as credible and legitimate by stakeholders.
3. **Feasibility:** The practicality of a proposed change and the extent to which a change is likely to be successfully implemented by fisheries within a given setting and time period.
4. **Accessibility & Retention:** The extent to which the change affects the ability of fisheries (both currently certified and those potentially entering assessment in the future) to achieve and maintain certification (i.e. changes in scores, conditions and pass rates).
5. **Simplification:** The extent to which the change simplifies and does not further complicate the Standard such that it can be easily and consistently understood and applied.

6. **Auditability:** The extent to which the change can objectively be assessed by Conformity Assessment Bodies (CABs) and Accreditation Services International (ASI) to determine whether the specified requirements are fulfilled, and CABs can provide scores.

The Impact Assessment report presents the results of this process, whereby each of the options for proposed changes to the Fisheries Standard are tested to understand their potential effects across the six defined impact types.

2.2 Problem Statement

The previous Fisheries Standard Review (FSR), undertaken in 2012-2014, considerably strengthened our requirements on Habitats. However, numerous issues/concerns have since been raised by stakeholders regarding a lack of clarity and guidance. Several questions from stakeholders have required the MSC to publish additional guidance and interpretations for CABs. There was concern that there was misapplication of the Habitat PIs, resulting in inconsistent outcomes. In response, the MSC Board agreed that the Executive draft revision options for improved Requirement language and Guidance to support the application of the Habitat PIs.

In the first phase of the Fisheries Standard Review (FSR), all logged issues and interpretations, with respect to the Habitats scoring component, were reviewed. This work revealed that the issues focused on 2 principal topics:

- Defining 'vulnerable marine ecosystems (VMEs)' and potential VMEs (pVMEs).
- Defining how 'move-on rules (MoRs)' should be applied.

1. VMEs

The identification of VMEs, pVMEs, and their subsequent scoring, has proved to be challenging. Fundamentally, this issue may be associated with the challenges in applying the VME concept using the FAO identification criteria. The criteria were developed for managing the impact of deep-sea fisheries; hence, they may not be appropriate for shallower seas and inshore waters. Lack of clear intent within the fisheries standard on how VMEs (or pVMEs) should be identified for assessments (including which party is responsible for identifying VMEs during assessment) is also partly responsible. Furthermore, inconsistencies in wording between, and within, requirements, guidance and interpretations have exacerbated the problem. An objection on the Murmanseld II fishery exposed key inconsistencies within the normative and non-normative information. In addition, fisheries operating in jurisdictions which have designated VMEs, are subject to additional requirements (and are held to a higher level of expectation) relative to those operating in jurisdictions that have not designated VMEs. Therefore, it may be considered that well-managed fisheries are currently being penalised.

2. MoRs

The current Fisheries Standard requires MoRs at the SG60 level for fisheries that may interact with VMEs. In April 2017, however, the MSC issued an interpretation to exempt fisheries from requiring MoRs in situations where those fisheries had low catchability for VMEs species or features. Despite this, inconsistencies in the application of MoRs continued, and in several instances, resulted in ASI major non-conformities, and an objection on the Australia orange roughy fishery. This led to the MSC issuing a derogation in Nov 2020, stating that if a fishery has a partial management strategy in place that protects and avoids VMEs/pVMEs, then MoRs are not required at the SG60 level.

3. Research on VMEs & MoRs
The following work has been undertaken as part of the FSR Habitats project to support the development of options.

July 2020	Consultation events (webinars) and follow-up survey.
Aug 2020	FSR Habitats Scoring Component Review (Consultant).
Sept 2020	Exco paper on MoR derogation
July 2021	Best practice review, fisheries data analysis and stakeholder consultation on VMEs and MoRs (Consultant)
May 2021	Technical Advisory Board (TAB) Habitats Working Group set-up.

Major findings:

- The interpretation and application of VMEs and MoRs are inconsistent throughout fishery assessments, which has led to a non-level playing field between fisheries in different regions and national jurisdictions.; principally due to the lack of consensus over what should be considered as a VME for the MSC assessment (due to national jurisdictions not usually using the 'VME' terminology), and different levels of progress on identifying and protecting VMEs or sensitive habitats.
- FAO VME criteria may not be considered 'fit for purpose', and therefore not sufficient for assessment teams or fishery clients to identify VMEs. An alternative approach is required.
- MoRs have been adopted by most RFMOs but are not common in national jurisdictions; and number of limitations of MoRs have been observed, documented and researched.
- MoRs imply a tolerance to a level of impact and may encourage cumulative impacts in new fishing areas.
- Numerous alternative approaches to MoRs exist, which are potentially more effective precautionary management tools, and therefore should be included in the new FS.

2.3 Objectives

Following the problem statement and the associated research it was confirmed that the two objectives were:

1. To introduce a clear, consistent, and transparent approach to identifying and scoring VMEs/ pVMEs in fisheries assessments.
2. To clarify the MSC's intent on the application of MoRs.

3 OPTIONS FOR OBJECTIVE 1 (IDENTIFYING AND SCORING VMES/PVMES)

In this section the business-as-usual option (BaU, option 0) as well as 3 alternatives (options 1, 2, 3) are described.

3.1 Option 0 – business as usual

Option 0 is the BaU scenario and is how VMEs (and MoRs) are defined and assessed in the current Fisheries Standard (v 2.01). Option 0 uses the FAO VME identification criteria to identify VMEs and pVMEs. However, this has proved challenging for assessment teams. Many issues have been raised regarding inconsistencies in wording, including between (and within) requirements, guidance, and interpretations. In particular, how and when are habitats considered VMEs/pVMES? And who is responsible for identifying VMEs/pVMEs? Subsequently, assessment approaches and outcomes may greatly vary, and there is a risk of perverse outcomes.

3.2 Option 1 – New definition for VMEs & potential VMEs are scored using the risk-based framework (RBF)

The following is a summary of option 1:

- The term 'VME' to be replaced with a generic term and definition – such as 'Sensitive Benthic Habitat (SBH)', unless specifically referring to FAO-designated VMEs.
- Potential VMEs which must be scored using a Risk-based framework (i.e. Consequence Spatial Analysis).

Sensitive Benthic Habitats definition:

'Sensitive benthic habitats are those which have been accepted, and are managed, by a competent authority within the 'managed area'; and who's legislative/management framework affords the habitats a level of protection. Such protection will ultimately moderate fishing activity in these habitats/areas. The habitats may not have been explicitly designated to afford protection from fishing activity, nor always be incorporated into (or recognised in) fisheries management strategies.'

3.3 Option 2 – New definition for VMEs & a list of potential VME criteria are listed in the Standard.

The following is a summary of option 2:

- The term 'VME' to be replaced with a generic term and definition – such as 'Sensitive Benthic Habitat (SBH)', unless specifically referring to FAO-designated VMEs.
- The MSC provides a list of criteria (or even species) for habitats which assessors must consider as potential SBHs (and hence score accordingly). It is likely that the list will not solely be FAO VME criteria.

Sensitive Benthic Habitats definition:

'Sensitive benthic habitats are those which have been accepted, and are managed, by a competent authority within the 'managed area'; and who's legislative/management framework affords the habitats a level of protection. Such protection will ultimately moderate fishing activity in these habitats/areas. The habitats may not have been explicitly designated to afford protection

from fishing activity, nor always be incorporated into (or recognised in) fisheries management strategies.'

3.4 Option 3 – A new generic approach to identifying VMEs and potential VMEs, based on habitat recoverability

The following is a summary of option 3:

- The term 'VME' replaced with 'sensitive habitat', unless specifically referring to FAO-designated VMEs.
- FAO VME criteria no longer used to identify sensitive habitats in assessments.
- In PI 2.4.1 Habitat Outcome, 'Commonly-encountered' habitats and 'VME habitats' are renamed:
    - ***'Commonly-encountered' = 'Less sensitive habitats'***
    - ***'VME' = 'More sensitive habitats'***
- Habitat designation is now based recoverability, with 'more sensitive habitats' taking longer to recover than 'less sensitive habitats'.
- The 'less/more sensitive habitat' designation is irrespective of the habitat's protection status.
- The term 'potential VME' no longer exists.
- The 'Minor habitats' category (PI 2.4.1; SIc, SG100) is no longer required.

'Less sensitive habitat' definition:

The team shall define a 'less sensitive' habitat as a habitat that would be **able** to recover to at least 80% of its unimpacted structure and function within 5-20 years, if fishing were to cease entirely**.**

'More sensitive habitat' definition:

The team shall define a 'more sensitive' habitat as a habitat that would be **unable** to recover to at least 80% of its unimpacted structure and function within 5-20 years, if fishing were to cease entirely.

3.5 Impact Assessment Level 0 (IA0)

The 4 options for VMEs underwent IA0 against the 6 impact types: effectiveness, acceptability, feasibility, accessibility and retention, simplification and auditability. The results are summarised in the Table below; and are based on expert judgement of the project lead, and information provided by outreach leads, senior colleagues and stakeholders. Annex 1 contains supporting information.

Impact Types	Description	Option 0 BaU	Option 1 - new definition & pVMEs scored using RBF	Option 2 - New definition for VMEs & a list of potential VME criteria listed in the Standard	Option 3 - A new generic approach to identifying VMEs and potential VMEs, based on habitat recoverability
Effectiveness	***Is the change effective at meeting the MSC's intent?***	No, not always. Our current intent is ambiguous (and lacks clarity), and therefore VMEs/pVMEs are identified and scored inconsistently. Several interpretations relating to VMEs/pVMES have had to be published. ASI incidents and Objections have also occurred. There is potential for perverse outcomes, and unintended consequences.	Yes, it would be effective at meeting the MSCs intent. If a pVME is identified, it must be scored using the CSA. Using the CSA will improve consistency and reliability. It will also lower the risk of unintended consequences. The CSA has the advantage of involving stakeholders in the decision-making process. Will also need to check that the CSA is properly calibrated, and triggers are set accordingly.	Yes, because it includes a precautionary element, and the MSC determines the pVMEs. It is more precautionary than option 3, because the MSC would provide a list of pVME criteria. In this scenario, 'unknown unknowns' could be included in such a list. Potential detrimental impacts include: 1. which criteria to use- should they be species, habitats, ecosystems, characteristics of ecosystems? Qualitative and/or quantitative? 2. Will the list be exhaustive, and cover all pVMEs, including 'unknown unknowns'? Will the list be globally representative and cover all pVMEs in all waters? It could be consistent at resolving the issue because MSC provides a pVME list, which must be adhered to, however, the list must be true and not be biased towards particular geographical areas or water bodies. Again, if the list was comprehensive and true, it could reliably resolve the issue.	Yes, this option does meet MSC's intent. The new habitats classification is based on recoverability, with more sensitive habitats taking longer to recover than less sensitive habitats. The recoverability timeframe of 5-20 years is based on the MSCs definition of 'serious or irreversible harm'.
	The option seems effective at resolving the issue(s) consistently and reliably.	Completely disagree	Neither agree nor disagree	Disagree	Completely agree
Acceptability	*Is the change acceptable to stakeholders?*	No. Stakeholders have raised numerous concerns over the problems associated with identification, and scoring, of pVMEs. It is currently not considered to be particularly legitimate or credible.	This option may be acceptable to eNGOs because the CSA process allows for stakeholder engagements. CABs and assessors are highly likely to not find it acceptable. This option is a significant chnge to the current FS, and stakeholders may precise it to be too late in the day to make such a change (consultation on this option required at an earlier stage in the process?).	It may be acceptable. Acceptability will depend on the list itself. Different stakeholders are likely to have different opinions. E.g. fishery clients vs eNGOs. How precautionary is the list? What criteria are used? Who is responsible for identifying pVMEs? Is it a level playing field? Will fisheries with more data be held to a higher	Acceptability may vary between different types of stakeholders. TAB Habitats WG and STAC P2 WG find the changes acceptable. The changes clarify the application of Habitat PIs, and simplify the standard.

			The CSA can be time consuming and costly to undertake. CSA is rarely used in assessment of VMEs. Currently approx. only 7 fisheries have used the CSA to score VMEs, there must be reasons for this. Issues from assessors include the process being cumbersome and requiring a lot of pre-determined data in order to carry out the CSA, so in fact is easier to use the default tree under most circumstances. Assessors also require training in the RBF in order to undertake a CSA.	bar, than those without. Could it create a penalising system?	
	The option seems acceptable to stakeholders	Completely disagree	Neither agree nor disagree	Neither agree nor disagree	Agree
Feasibility	***Is the change feasible to fishery partners?***	No. Currently pVME identification is a technical challenge and an impractical process.	This option may be technically feasible for some fisheries, but not others. Applying the CSA, requires the assessors being trained in RBF/CSA (not all assessors are trained), it requires organising a workshop/group discussion with stakeholders. It can be time consuming and costly to undertake such a process. CSA is rarely used in assessment of VMEs. Currently approx. only 7 fisheries have used the CSA to score VMEs, there must be reasons for this. Issues from assessors include the process being cumbersome and requiring a lot of pre-determined data in order to carry out the CSA, so in fact is easier to use the default tree under most circumstances. The change is compliant with governance and policy. The changes could be implemented within an 8-year period.	This option is technically feasible. However, this option could be more precautionary than option 3- depending on the MSC list. The more precautionary the option, the more work and resources are required. Therefore, SSF, DLF, and developing fisheries may be at a disadvantage. The more precautionary the option, the higher the costs. There is a possibility that the change isn't compliant with governance and policy. The changes could be implemented within an 8-year period.	This option is technically feasible. Resources and information on the recoverability of habitats are already required for scoring fisheries under 'Serious or irreversible harm' in Habitats outcome PI2.4.1. Costs should not be detrimentally affected, and the change should be compliant with governance and policy. The aim of this option is to simplify scoring of Habitats PIs. Yes the change can be implemented in an 8-year period.
	The option seems technically feasible for fishery partners	Completely disagree	Neither agree nor disagree	Agree	Agree
	The option seems affordable for fishery partners	Neither agree nor disagree	Neither agree nor disagree	Neither agree nor disagree	Agree

	The option seems possible given the management contexts of fishery partners	Completely disagree	Neither agree nor disagree	Agree	Agree
	The option seems doable within 5 years for fishery partners	Completely disagree	Disagree	Agree	Agree
Accessibility and retention	***Does the change affect the accessibility and retention of fisheries in the MSC program?***	There is potential for BaU to detrimentally affect accessibility and retention. This is due to our current intent being ambiguous (and lacking in clarity), hence VMEs/pVMEs are scored inconsistently. Several interpretations relating to VMEs/pVMES have had to be published. ASI incidents and Objections have also occurred. There is potential for perverse outcomes, as well as for inconsistency in scoring between data-poor and data-rich fisheries, and between SSF and LSF.	it will depend upon the outcome of the CSA. Also, will fisheries have enough data in order to carry out a successful CSA? Would need to make sure the CSA is calibrated.	The list will dictate the accessibility and retention of fisheries. It depends on how the list defines pVMEs and what level of information is required It will also depend on how the relevant clauses and requirements are written in the revised standard. SSF, DLF and developing world fisheries may not have the resources to provide verifiable evidence of pVMEs and therefore their certification may be hindered.	The change should not detrimentally affect the accessibility and retention of fisheries in the program. Habitat recoverability, and serious or irreversible harm, are already considered in the existing standard under PI 2.4.1.
	The option seems accessible to fisheries seeking certification in the future	Disagree	Neither agree not disagree	Agree	Agree
	The option seems accessible to currently certified fisheries	Agree	Agree	Agree	Completely agree
Simplification	***Does the change simplify the Standard?***	The BaU is not simple to understand. Our current intent is ambiguous (and lacks clarity), and therefore VMEs/pVMEs are scored	This option is not considered as simplification	It has the potential to simplify the standard, however, it depends on the composition of the pVME list.	Yes, it does simplify the Standard. The habitats classification is now simplified, and only based on one criteria of habitat recoverability (with 2 outcomes). Potential VME/sensitive habitats no

		inconsistently. It is not easily understood and applied.			longer exist. Minor habitats category no longer exists. The chnages are consistent, and have reduced redundancy, ambiguity, and duplication. Guidance has also been simplified to reflect changes in SIs.
	The option seems to simplify the Standard	Completely disagree	Disagree	Agree	Completely agree
Auditability	***Is the change auditable by CABs?***	No. CABs have expressed problems with objectively assessing VMES/pVMEs. Guidance is currently ambiguous thus leading to technical challenges and inconsistent outcomes.	It will depend how much work is required by assessors and CABs to identify and score pVMEs. CABs may not consider it auditable, due to the time, cost and training involved in using the CSA (i.e. operational aspects) for scoring pVMEs.	It will depend on the composition of the pVME list, and what criteria are used. The list will dictate how much work is required by assessors and CABs to identify and score pVMEs.	The CABs should find this change auditable.
	The option seems to auditable by CABs	Completely disagree	Neither agree nor disagree	Neither agree nor disagree	Agree

4 OPTIONS FOR OBJECTIVE 2 (APPLICATION OF MORS)

In this section the business-as-usual option (BaU, option 0) as well as 2 alternatives (options 1 and 2) are described.

4.1 Option 0 – Business as usual

MoRs are a requirement at SG60 (as it was prior to the derogation). This is stated in the current version of the Fisheries Standard as:

SA3.14.2.3

In scoring issue (a) at the SG60 level, "measures" for a UoA that encounters VMEs shall include, at least, the following points: ◙

a. Requirements to comply with management measures to protect VMEs (e.g., designation of closed areas);

b. Implementation by the UoA of precautionary measures to avoid encounters with VMEs, based on commonly accepted move-on rules.

4.2 Option 1 – Incorporation of the MSC MoR derogation.

The MSC issued a derogation in Nov 2020, stating that if a fishery has a partial management strategy in place that protects and avoids VMEs/pVMEs, then MoRs are not required at the SG60 level. Details of the derogation are as follows, and can be found here

If a fishery has a partial management strategy in place that protects and avoids vulnerable marine ecosystems (VMES) and potential VMEs (pVMEs), then commonly accepted move-on rules are not required (at the SG60 level).

Option 2 would officially incorporate this derogation into the requirements of the new Fisheries Standard.

4.3 Option 2 – MoRs are not a requirement at any SG level.

This option completely removes MoRs as a requirement at any SG level. Precautionary management must still be in place to avoid encounters with VMEs. But as long as they are appropriate to the fishery, they do not need to be MoRs. MoRs can, of course, still be used as a precautionary management measure, if deemed appropriate.

4.4 Impact Assessment Level 0 (IA0)

The 3 options for MoRs underwent IA0 against the 6 impact types: effectiveness, acceptability, feasibility, accessibility and retention, simplification and auditability. The results are summarised in the Table below; and are based on expert judgement of the project lead, and information provided by outreach leads, senior colleagues and stakeholders. Annex 1 contains supporting information.

Impact Types	Description	Option 0 BaU	Option 1 – incorporation of MSC MoR derogation	Option 2 – MoRs no longer a requirement
Effectiveness	***Is the change effective at meeting the MSC's intent?***	No. It is not a level playing field. MoRs have been adopted by RFMOs, but not national jurisdictions. A number of limitations of move-on rules have been observed, documented and researched	This option is closer to meeting MSC's intent than option 1. This is because the derogation states that MoRs are not required at SG60, if a fishery has a partial management strategy in place that protects and avoids VMEs and pVMEs.	This option is effective at meeting the MSCs intent. The bar has not been lowered. MoRs are now considered just one example of a precautionary measure which can be used to protect/avoid VMEs. The measures may now be considered as those most appropriate to the fishery and can include MoRs (if appropriate or currently implemented). This option will reliably resolve the issue in a consistent manner. It will create a level playing field.
	The option seems effective at resolving the issue(s) consistently and reliably.	Completely disagree	Neither agree nor disagree	Completely agree
Acceptability	*Is the change acceptable to stakeholders?*	No. Stakeholders have raised numerous concerns over the problems associated with MoRs at SG60. Major non-conformities and objections have been raised against fisheries. This has resulted in a Derogation being issued.	Some stakeholders find this option acceptable. This is because the derogataion allows MoRs not to be a requirement at SG60, if a partial management strategy is in place. Furthermore, the derogation is a significant improvement on the BAU, which requires MoRs to be obligatory for all fisheries at SG60. This option moves towards creating a level playing field.	This option is likely to be deemed acceptable for the majority of stakeholders, in particular CABs and fishery clients. Due to the fact that MoRs are no longer obligatory, fisheries can implement the most appropriate and effective precautionary management measures to protect and avoid sensitive habitats. The measures may, or may not, include MoRs.
	The option seems acceptable to stakeholders	Completely disagree	Neither agree nor disagree	Completely agree
Feasibility	***Is the change feasible to fishery partners?***	No. Obligatory MoRs are a technical challenge and an impractical process. MoRs often do not align with relevant governance and policy (including legal and customary frameworks). Costs (both monetary and non-monetary economic resources) may increase as a result of developing and implementing MoRs (which would not normally be required), purely to achieve SG60 and become MSC certified.	Yes, this may be feasible for fishery partners. It far less of a technical challenge and an impractical process than option 1. Precautionary management measures can now align with relevant governance and policy (including legal and customary frameworks). Costs (both monetary and non-monetary economic resources) are likely to decrease because the development and implementation of MoRs is no longer required in order to achieve SG60 and become MSC certified. However, the caveat is that	This option is likely to be deemed feasible for the majority of stakeholders, in particular CABs and fishery clients. Due to the fact that MoRs are no longer obligatory, fisheries can implement the most appropriate and effective precautionary management measures to protect and avoid sensitive habitats. Precautionary management is now more likely to align with relevant governance and policy (including legal and customary frameworks). Costs (both monetary and non-monetary economic resources) are likely to decrease because the development and

			a partial management strategy, rather than just management measures, is required at SG60, in order for MoRs to not be obligatory. The changes could be implemented within an 8-year period.	implementation of MoRs is no longer required in order to achieve SG60 and become MSC certified. The changes could be implemented within an 8-year period.
	The option seems technically feasible for fishery partners	Completely disagree	Neither agree nor disagree	Completely agree
	The option seems affordable for fishery partners	Neither agree nor disagree	Neither agree nor disagree	Completely agree
	The option seems possible given the management contexts of fishery partners	Completely disagree	Agree	Completely agree
	The option seems doable within 5 years for fishery partners	Completely disagree	Agree	Completely agree
Accessibility and retention	***Does the change affect the accessibility and retention of fisheries in the MSC program?***	There is potential for BaU to detrimentally affect accessibility and retention of fisheries. This is because MoRs are not universally accepted and implemented as effective precautionary management measures. Obligatory MoRs at SG60, could detrimentally impact the number of MSC certified fisheries. Major non-conformities and Objections have also occurred as result of the MoRs. There is potential for perverse outcomes, as well as for discrimination against fisheries in regions where MoRs are not legally recognised or implemented. SSF may also be at a disadvantage because there are extra costs and resources involved in designing and implementing MoRs - purely to become MSC certified.	This option will improve the accessibility and retention of fisheries. There may still be some discrimination against fisheries in regions where MoRs are not legally recognised or implemented, and also in SFF, because if there isn't a partial management strategy in place (only measures), then MoRs will still be obligatory at SG60. There are extra costs and resources involved in designing and implementing MoRs - purely to become MSC certified.	This option will significantly improve the accessibility and retention of fisheries, because MoRs are no longer obligatory, and hence, precautionary management measures which are most appropriate to the fishery can be used (and recognised).
	The option seems accessible to fisheries seeking	Disagree	Neither agree nor disagree	Completely agree

	certification in the future			
	The option seems accessible to currently certified fisheries	Disagree	Agree	Completely agree
Simplification	***Does the change simplify the Standard?***	The BaU is simple to interpret within the FS, but always not simple to implement in fisheries.	Yes, because MORs are no longer obligatory at SG60, if a partial management strategy is in place. It does not simplify the standard if a partial management strategy (only measures) isn't in place, because the fishery will still have to implement MoRs in order to become MSC certified.	Yes, because MoRs are no longer obligatory, and hence, precautionary management measures which are most appropriate to the fishery can be used (and recognised), and MoRs are no longer a requirement under any scenario.
	The option seems to simplify the Standard	Disagree	Agree	Completely agree
Auditability	***Is the change auditable by CABs?***	The BaU is auditable by CABS if MoRs are already in place for the fishery. If MoRs are not in place then it becomes an operational (time and money) and technical challenge.	Yes, the change should be auditable by CABs. However, if the fishery does not have a partial management strategy in place, nor MoRs then this option becomes an operational (time and money) and technical challenge - because MoRs will be required at SG60 and hence required for fisheries to become MSC certified.	Yes, because MoRs are no longer obligatory, and hence, precautionary management measures which are most appropriate to the fishery can be used (and recognised) in assessing fisheries. There will be no operational (time and money) nor technical challenges associated with implementing MoRs in fisheries which would not normally use MoRs in their jurisdiction; as MoRs are no longer a requirement at any SG level.
	The option seems to auditable by CABs	Disagree	Neither agree nor disagree	Completely agree

5 SUMMARY OF IMPACTS FOR VME AND MOR OPTIONS

The major findings were:

- It is currently not a level playing field when scoring Habitat PIs in fisheries assessments.
- With respect to VMEs - auditability, feasibility, acceptability, and effectiveness are of most concern with the current 'Business as Usual' (BaU) scenario.
- Replacing the term 'VME' with 'sensitive habitat', unless specifically referring to FAO-designated VMEs, solves the confusion over what constitutes a VME in fishery assessments.
- There are no suitable alternative 'established' sensitive habitat identification criteria to replace the FAO VME criteria, and identification of potential VMEs is still a problem. Therefore a different approach is required, such as designating habitats based on their recoverability.
- MoRs are not universally applied within fisheries, and they have a number of limitations with regards to being effective precautionary management tools.
- The BaU scenario of having MoRs as a requirement has significant detrimental impacts on effectiveness, acceptability, feasibility, accessibility, and retention.
- The most effective solution for the application of MoRs is to remove them as a requirement at all SG levels.

6 PREFERRED OPTION FOR VMES AND MORS

6.1 VMEs

Following the results of the IA0, Option 3 was decided upon to be the preferred option, hence this option was taken forward for further development. A summary of Option 3 is as follows:

- The term 'VME' replaced with 'sensitive habitat', unless specifically referring to FAO-designated VMEs.
- FAO VME criteria no longer used to identify sensitive habitats in assessments.
- In PI 2.4.1 Habitat Outcome, 'Commonly-encountered' habitats and 'VME habitats' are renamed:
  - ***'Commonly-encountered' = 'Less sensitive habitats'***
  - ***'VME' = 'More sensitive habitats'***
- Designation is based on 'more sensitive habitats' taking longer to recover than 'less sensitive habitats'.
- The 'less/more sensitive habitat' designation is irrespective of the habitat's protection status.
- The term 'potential' VME' no longer exists.
- The 'Minor habitats' category (PI 2.4.1; SIc, SG100) is no longer required.

'Less sensitive habitat' definition:

The team shall define a ‘less sensitive’ habitat as a habitat that would be **able** to recover to at least 80% of its unimpacted structure and function within 5-20 years, if fishing were to cease entirely**.**

‘More sensitive habitat’ definition:

The team shall define a ‘more sensitive’ habitat as a habitat that would be **unable** to recover to at least 80% of its unimpacted structure and function within 5-20 years, if fishing were to cease entirely.

6.2 MoRs

Following the results of the IA0, Option 2 was decided upon to be the preferred option, hence this option was taken forward for further development. A summary of Option 2 is as follows:

MoRs are no longer a requirement at any SG level. Precautionary management must still be in place to avoid encounters with VMEs. But as long as they are appropriate to the fishery, they do not need to be MoRs. MoRs can, of course, still be used as a precautionary management measure, if deemed appropriate.

7 IMPACT ASSESSMENT LEVELS 1 AND 2 (IA1 AND IA2)

The preferred option for both VMEs and MORs, were used to draft Habitat-associated text (PIs, SGs, requirements, and guidance) for the new draft version of the Fisheries Standard. The drafted text then underwent more detailed impact assessments. This involved pilot testing the new draft version of the Fisheries Standard, an ASI auditability review, as well as further consulation with expert groups and stakeholders. A summary of each impact assessment is described below.

7.1 Pilot testing

Pilot testing against 5 existing certified fisheries (covering 10 UoAs in total) was carried out by CABs and assessors in Sept 2021. They were provided with a draft version of the new Fisheries Standard and requested to score the existing fisheries using the same available information, to enable a direct comparison.

Changes to the Fisheries Standard and Guidance were generally positively received. Concerns and comments were minimal, and in most cases were justifiable and could be easily rectified via clarification. The changes were perceived to simplify the Standard, as well as improve acceptability, effectiveness, and auditability.

There was a concern that the addition of a particular new requirement would raise the bar, further consideration concluded that this would be the case, hence the requirement was subsequently removed.

Only one assessor did not agree with removing species-specific criteria for identifying more sensitive habitats (previously known as VMEs) and found the new terms for sensitive habitats (prev. VMEs) more ambiguous than the previous ones.

The removal of MoRs as a requirement was very positively received and was considered to considerably improve accessibility and retention of fisheries into the programme.

No general themes were identified, instead it was generally ad hoc comments from individual assessors.

7.2 ASI auditability review

ASI undertook an auditability review of a draft version of the Standard in Sept 2021. General comments associated with auditability and consistency within the Habitat PIs and associated guidance were received, and these were relatively easy to resolve.

There were also comments associated with the definition of 'unimpacted state' and 'habitat recovery', as well as interpretation of the 'historical cut-off point'. Clarification was therefore provided by revising the requirements and associated guidance; in order to improve effectiveness, feasibility and auditability.

7.3 Consultation with expert groups and stakeholders

Once the preferred options had been decided upon, consultation and engagement with a variety of expert groups and stakeholders continued in order to further inform the impact assessments, and hence develop the Habitat PIs and associated guidance. The groups included MSC colleagues (including MSC Outreach staff), TAB Habitats Working Group, STAC P2 Working Group, and fisheries stakeholders.

8 DISCUSSION AND CONCLUSION

The proposed changes (i.e. the preferred options) were generally very well received by all stakeholders.

Changing the habitat classifications to 'more sensitive habitats' and 'less sensitive habitats' based on their ability to recover, was considered to simplify the Habitat PIs, which in turn significantly improved the following impact types: simplification, auditability, effectiveness, feasibility and acceptability. Some minor refinements were required, after the pilot testing and ASI auditability review, to ensure that the intent had not been changed, nor the bar raised. It is anticipated that the proposed changes will improve consistency across fishery assessments and help minimise perverse outcomes.

The removal of MoRs as a requirement was also well received, and there were no associated detrimental comments received on this matter. It is anticipated that the removal of MoRs as a requirement will create a level playing field across fisheries, and hence improve accessibility of fisheries to the MSC programme.

The proposed changes are continuing to undergo refinement, based on ongoing feedback and impact assessment. In particular, there is consideration of whether to refine the habitat definitions, by replacing 'within 5-20 years' with 'within 20 years'.

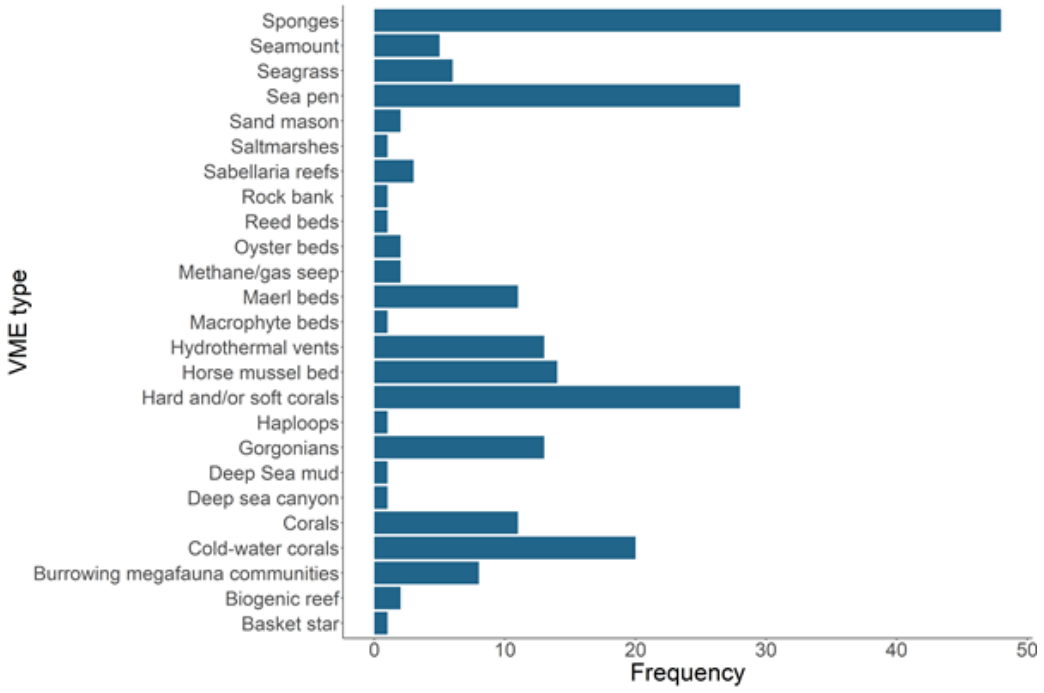
APPENDIX 1: SUPPORTING EVIDENCE FOR IMPACT ANALYSIS

Vulnerable Marine Ecosystems (VMEs)

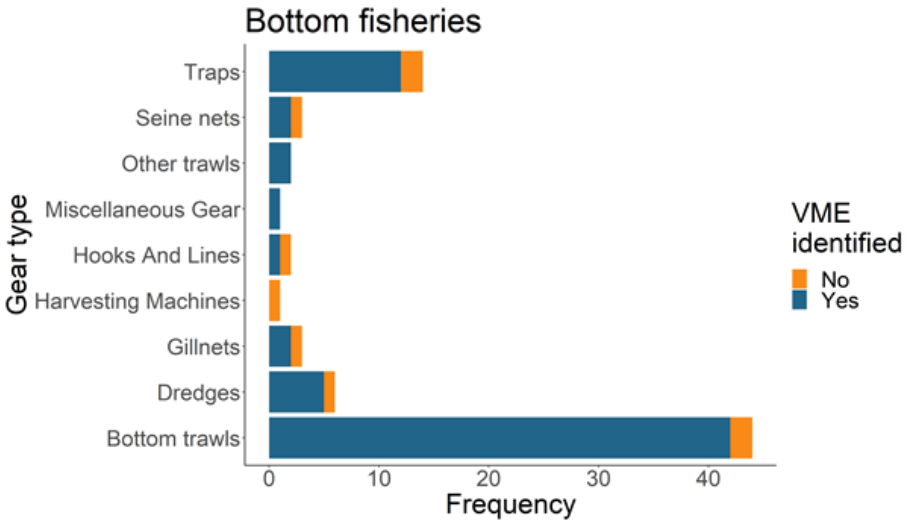
The following are excerpts from: ABPmer & Ichthys Marine, (2021). Vulnerable Marine Ecosystems and Fishery Move-on-Rules, Best Practice Review, ABPmer Report No. R.3660. A report produced by ABPmer for Marine Stewardship Council, June 2021.

Analysis of VME identification in MSC certified fisheries

Out of 93 fishery/gear combinations, 76 of them had VME indicator taxa and/or physical features listed. There were two where VMEs were stated as not identified in the certification reports, but VME indicators were listed, such as seagrass and gorgonians, sponges and sea pens. The most common VME indicator taxa/physical features listed were sponges and sea pens accounting for 21% and 13% of the VME indicators listed, respectively. However, when combined, corals (including corals, hard and/or soft corals, gorgonians and cold-water corals) were the most frequently identified VMEs across all fishery/gear combinations, accounting for 32% of all VMEs listed.



The relationship between gear type and the presence ofVME indicator taxa are shown in the bar chart below.



There was a general consensus that the main taxa/features identified as VME types in the database were types of corals, sponges and sea pens. Corals and sponges were the most consistently identified. This mirrors recommendations made in the FAO Guidelines on the vulnerable species and features most likely to require VME status. There was less consistency across fisheries in relation to the identification of other habitat types, including sea pens, horse mussel beds, maerl beds, hydrothermal vents and bryozoans as VMEs.

The majority of fisheries used national (e.g. DFO, MPA, NOAA) or regional (e.g. OSPAR, Natura 2000) approaches to define their VME types rather than RFMO approaches. It was also evident that inshore fisheries have identified VME taxa and physical features which are shallow-water species, such as seagrass, sand masons and biogenic reefs. Fisheries which used risk-based frameworks tended not to have VMEs identified. It was therefore unclear whether sensitive/VME habitats were being appropriately identified and managed by these fisheries, or assessed in the assessment process. Not all fisheries for benthic species, which typically deploy bottom contact gear such as bottom trawls, dredges and traps, had identified VMEs. However, it was generally unclear why this was the case. A higher proportion of fisheries for pelagic species had not identified VMEs, with most stating under PI 2.4.2 that VME habitats are not impacted by the fishing gear as it does not come into contact with the seabed.

Are the FAO VME criteria fit for purpose for application within MSC fishery assessments?

The FAO VME criteria are appropriate for application in high seas areas, but their application has been limited in national waters (with the exception of deep-water environments). Instead, national authorities have used a variable range of criteria to identify sensitive habitats requiring protection, that often incorporate concepts of ‘productivity’ and ‘naturalness’ (i.e. that may not be equivalent to the VME concept), and some approaches to MPA networks aim to protect 'representative' habitats as well as specifically vulnerable/sensitive habitats. Therefore, all designated habitats in national waters should not necessarily be considered VMEs.

The current approach in the MSC Standard to identifying VMEs and assessing fishery impacts has resulted in inconsistencies between fisheries in which habitat types are assessed as VMEs in MSC assessments. In some regions, VME taxa identified are fairly consistent (e.g. NE Atlantic, where NEAFC VMEs are identified and the OSPAR list of threatened and declining habitats provides some consistency for assessments on a

regional level). Even in this region, though, beyond corals and sponges, there are differences between fisheries in whether sea pens, maerl beds, horse mussel beds and bryozoans are considered as VMEs; this may in part be due to the specific areas in which the fisheries operate, but it was not possible to confirm this in this review. In other regions, there are large discrepancies in identification of VMEs between fisheries (e.g. SW Atlantic, where one fishery identified four VME types, and the other fishery identified none). Benthic fisheries in the MSC Database with no VME taxa identified tended to be those that used the Risk-Based Framework (i.e. those where there is limited information on identifying VMEs from management authorities). This leads to the distinct potential for a non-level playing field between fisheries in different regions and national jurisdictions, due to the lack of consensus over what should be considered as a VME, and different levels of progress on identifying and protecting VMEs in different jurisdictions.

Do alternative criteria to the FAO VME criteria exist for identification of benthic habitat types which are particularly sensitive or vulnerable to serious/irreversible impact from fishing activity?

The FAO VME criteria have been applied across most ABNJ by RFMOs, however they have not been widely applied within national jurisdictions where the term 'VME' is not commonly used. An analysis of the strengths and weaknesses of different criteria and approaches to identifying VMEs for MSC assessments is provided in Table 23 below.

Approach/ criteria	Strengths	Weaknesses
FAO Criteria	▪ International process and global set of criteria ▪ Wide uptake on the high seas – most RFMOs have identified VMEs and use VME terminology ▪ Easy to apply and assess in ABNJ	▪ Most national jurisdictions do not use VME terminology, so it is not clear which habitats to consider for the assessment ▪ Difficult to apply in national jurisdictions/inshore waters, resulting in inconsistency between assessments ▪ Inconsistency with national approach may lead to strong criticism and /or lack of management/ regulator engagement. ▪ Inconsistency with national approach may lead to strong criticism and /or lack of engagement from other (non-MSC) fishery operators.

Approach/ criteria	Strengths	Weaknesses
CBD EBSA	▪ International process and set of criteria ▪ Developed to be relevant to both inshore waters and open seas ▪ EBSA areas have been identified for many regions of the world	▪ EBSA areas do not appear to have been widely incorporated into national policy/protections ▪ No areas identified for NE Atlantic ▪ EBSA terminology not used in national waters, so the problem of identifying which habitats correspond to EBSAs remains ▪ EBSAs may be identified for more than just benthic habitat features, so still requires assessor interpretation of habitats to be scored.
National designations	▪ Relevant to specific fisheries and regions ▪ Takes into account those habitats/species considered important at national level. ▪ Will have management/ regulator engagement. ▪ Should have engagement from other (including non-MSC) fishery operators.	▪ National approaches do not always focus on *vulnerable/ sensitive* habitats (sometimes on representative habitats), therefore not in line with the intention of scoring issue 2.4.2(a) ▪ Different jurisdictions have made different progress in identifying and protecting habitats, meaning that fisheries in areas with few designations will score higher more easily than fisheries in areas with many designations (the converse of the intention of the scoring issue)
Bespoke list of habitats for MSC assessments to	▪ Assessment for all fisheries would consider the same list of sensitive/vulnerable	▪ Would require investment and stakeholder

Approach/ criteria	Strengths	Weaknesses
consider, by region	habitats – level playing field	consultation to develop such a list ▪ List could be considered inflexible and may not be appropriate to all jurisdictions ▪ Inconsistency with national approach may lead to strong criticism and /or lack of management/regulator engagement. ▪ Inconsistency with national approach may lead to strong criticism and /or lack of engagement from other (non-MSC) fishery operators.
Apply scoring issue 2.4.2(a) only to deep-water habitats/ ecosystems	▪ In line with the original intent of the UNGA Resolutions and FAO Guidelines ▪ Identification of relevant habitats more straightforward, in line with Guidelines	▪ Inshore/ shallow water habitats would not be assessed against the same bar as deep-water VMEs. ▪ Sensitive habitats that are vulnerable to damage from fishing may not be accounted for adequately within assessments. ▪ Likely to be considerable concern from stakeholders.

Move-on Rules (MoRs)

The following are excerpts from: ABPmer & Ichthys Marine, (2021). Vulnerable Marine Ecosystems and Fishery Move-on-Rules, Best Practice Review, ABPmer Report No. R.3660. A report produced by ABPmer for Marine Stewardship Council, June 2021.

Limitations of using of MoRs for VME protection

A number of limitations of move-on rules have been observed, documented and researched, and include:

- Tolerance of a level of impact, and cumulative impacts in new fishing areas
- Catchability of VME species in fishing gears
- Setting thresholds at appropriate levels
- Level of effort in thresholds
- Enforcement and observer coverage.

Alternative approaches to MoRs

This review has identified a number of alternative approaches to move-on rules that can or should be used to minimise or mitigate impacts on VMEs. Identifying the list of species that should be considered as VME indicator species is the first step. But then developing an understanding of the distribution of potential VMEs, either through modelling or survey, is the next key step in identifying appropriate measures. Where the distribution of VME habitats is well understood and appropriate protections are in place to avoid impacts, move-on rules gradually become redundant. We consider that move-on rules should be used as an interim measure or a back-up to other protection measures, rather than being a minimum acceptable level of protection for VMEs. This is further exemplified by the lack of move-on rules for fisheries in many waters under national jurisdiction, where protection of vulnerable and sensitive habitats has progressed on a different path from that on the high seas.

Alternative approaches to move-on rules include the following, all of which may be informed by impact assessments to identify potential risks:

- Closed areas
- Frozen footprints
- Impact assessments and prior authorisation for new fishing activities
- Technical measures

There is no one single approach that should be adopted, but rather a combination of approaches is likely to be appropriate, according to the specific circumstances, fisheries and habitats in question.

Are MoRs effective for protection of VMEs in national and international waters?

Move-on rules are an approach to account for the existence of unknown VMEs inside and outside of existing fishing areas. However, there are key limitations of encounter thresholds and move-on rules and they should not be considered as a minimum or only requirement for avoiding potential impacts on VMEs in national and international waters. Indeed, it is recognised that move-on rules cannot be considered in isolation, but are often one component of a package that includes spatial closures, impact assessments, and limits on catches or fishing effort (Hansen et al., 2013). Furthermore, move-on rules are generally not used in national waters, where spatial management and closures are more commonly used to protect sensitive habitats.

There was consensus amongst stakeholders that move-on rules are not appropriate in many circumstances, specifically where there is good spatial management, in heavily fished areas, where there are sensitive habitats present, for gears that are unlikely to retain indicator species/taxa, and where there are low levels of observer coverage). An additional concern raised by stakeholders relates to observer protocol that samples portions of the catch, rather than the whole catch. In these cases, where VME taxa appear rarely in a sampled portion of the catch, extrapolation of the sampled weight to the whole haul can result in unusually high weights being calculated, which may not represent the actual catch weight of indicator taxa in the haul.

Do alternative (and equivalent) precautionary management approaches exist?

A number of alternative approaches to move-on rules exist. The ideal situation is for benthic habitats to be well surveyed and understood, and sensitive areas protected from fishing (and other) impacts. Many shelf areas within national jurisdiction have a relatively good coverage of scientific surveys and extensive work has been undertaken to identify and protect relevant areas, as well as sensitive habitats outwith protected areas (e.g. Scotland). This is reinforced by Hansen et al. (2013) who highlight that it is 'necessary for RFMOs to initiate processes to develop reliable predictions and analyses of VME evidence and VME distribution, and to then design and implement permanent spatial closures applicable to all participants, to protect key VME areas'.

Any consideration of possible precautionary management approaches to VMEs should avoid a one-size-fits-all approach, but should promote a level playing field. This means there should be consistency in the habitats that are considered, and consistency in the requirement for a fishery to have an understanding of the VMEs in its area of operation. However, it should avoid prescriptive measures for addressing impacts (e.g. a requirement for move-on rules).

The range of alternative measures identified in this report are considered in relation to their applicability for demersal gear types, whether they are robust to issues of low catchability of VME species, appropriateness for drifting gear types, and to situations of low observer coverage, in Table 24 below.

Table 24. Assessment of precautionary measures for protecting VMEs

Measure	Applicable/ appropriate to all demersal gear types	Robust to issues of low catchability of VME spp by fishing gears	Appropriate for drifting gear (dFADs, pelagic driftnets and longlines)	Appropriate to situations of low observer coverage or little/no independent monitoring of catches
Move-on rule	No	No	No	No
Footprint approach (could be frozen, or remove marginal areas)	Yes (but need to take care over baseline)	Yes	No	Yes
Prior authorisations informed by impact assessments for fishing in new areas (combined with frozen footprint approach)	Yes	Yes/No: Yes (if benthic surveys are carried out to identify potential VMEs prior to fishing) No (if VMEs are expected to be identified through encounters during fishing)	No	No (activity in new fishing areas would be expected to require scientific observer to record encounters with indicator species)
Benthic surveys to identify VMEs, and implementation of spatial closures	Yes	Yes	Maybe (could identify areas where gear should not be deployed, to minimise risk of ocean currents taking them into sensitive areas. Would need additional controls e.g. GPS tagging, retrieval, biodegradable)	Yes
Technical measures (reduce	No (varies by gear type)	Yes	N/a	Depends on gear modification (i.e. if

benthic impact of fishing gears)	it requires observer coverage to ensure correct deployment)