



HARVEST STRATEGIES

Impact Assessment Report
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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.

Problem Statement

The harvest strategy project has two components, both related to issues associated with Principle 1.

First Component

The first component is that there exist scoring anomalies and inconsistencies in the existing requirements. The second is that in cases where an MSC Unit of Assessment (UoA) represents only part of the fishing activity that takes place on a stock (primarily from shared and highly migratory species (HMS) stocks), these fisheries have challenges in maintaining certification and closing conditions for harvest strategies and HCRs.

The first component has been in place from the inception of the FSR, and the options developed are informed by a consultant report specific to the harvest strategy performance indicator and public consultation in July 2020. The second component was included into the FSR in 2020 but did not go to public consultation as the Stakeholder Advisory Council (STAC) and Technical Advisory Board (TAB) felt the problem statement and impact analysis was not defined or sufficient.

The key challenge with the first component is that the issues are highly nuanced and specific to the existing requirements. Stakeholders have not demonstrated significant interest in this topic but may become more engaged if simplification of P1 proceeds, though this is likely to occur outside the FSR.

Second Component

The MSC theory of change (ToC) is stalled for shared and highly migratory stocks. The design, development, adoption and implementation of harvest strategies and harvest control rules for shared and highly migratory stocks does not show the pace of change the MSC would like to happen. In most of these cases the decisions to adopt harvest strategies (HS) and harvest control rules (HCRs) are beyond the control and influence of the MSC fishery clients, which means (i) fishery clients fail to push for/foster change on the water, and (ii) become limited in their ability to close related conditions within the required timeframes facing likely certification suspensions. The latter limiting MSC's potential impact to drive change.

Objectives

First Component

The overall objectives for the first component of the project are to reduce redundancy and add clarity to the existing requirements. This will allow for more consistent scoring among teams and reduce double scoring between performance indicators. It is not anticipated that new requirements will be needed, but minor changes to existing requirements or developing guidance will be the outcome.

As part of this project, the following topics were included as part of the impact testing:

1. To address the issue of 'responsive' within the harvest strategy performance indicator (PI) 1.2.1.
2. Whether conditions associated with the harvest strategy PI can be extended beyond the five-year certificate duration if the target stock is healthy.

- a. Extending the condition would follow the allowance afforded in PI 1.2.2 if 'available' HCRs are scored and the stock remains healthy
3. Whether changes to the rebuilding strategy performance indicator are required
4. How to score the harvest strategy performance indicator PI 1.2.1 when 'available' HCRs are scored in PI 1.2.2?
5. How to score the information and monitoring PI 1.2.3 when 'available' HCRs are scored in PI 1.2.2?
6. How to score the stock assessment PI 1.2.4 being appropriate to the HCR when 'available' HCRs are scored in PI 1.2.2?

Second component

The second component focuses on how to move a UoAs toward the adoption of a stock wide-harvest strategy. This occurred by assessing a number of options that included a phased condition pathway approach for the UoA to meet key milestones within the condition pathway as well as adopting harvest strategies at the UoA level only. It's important to recognise that for multi-jurisdictional fisheries on shared and highly migratory stocks there are several factors at play, multiple actors, geo-politics, [...], etc, which leads to potential long drawn out decision-making processes. The MSC can't change these factors on its own. The MSC can provide an improved framework against which to monitor and measure progress, while allowing more time for the process to unfold. Aiming to have a more transparent and granular framework for conditions on HS and HCRs, which ensures certification is credible because it's based on demonstrable progress against this framework.

Options

The Principle 1 harvest strategy FSR project prior to the initial impact testing for the first component and rescoping for the second component is represented in Figure 1.

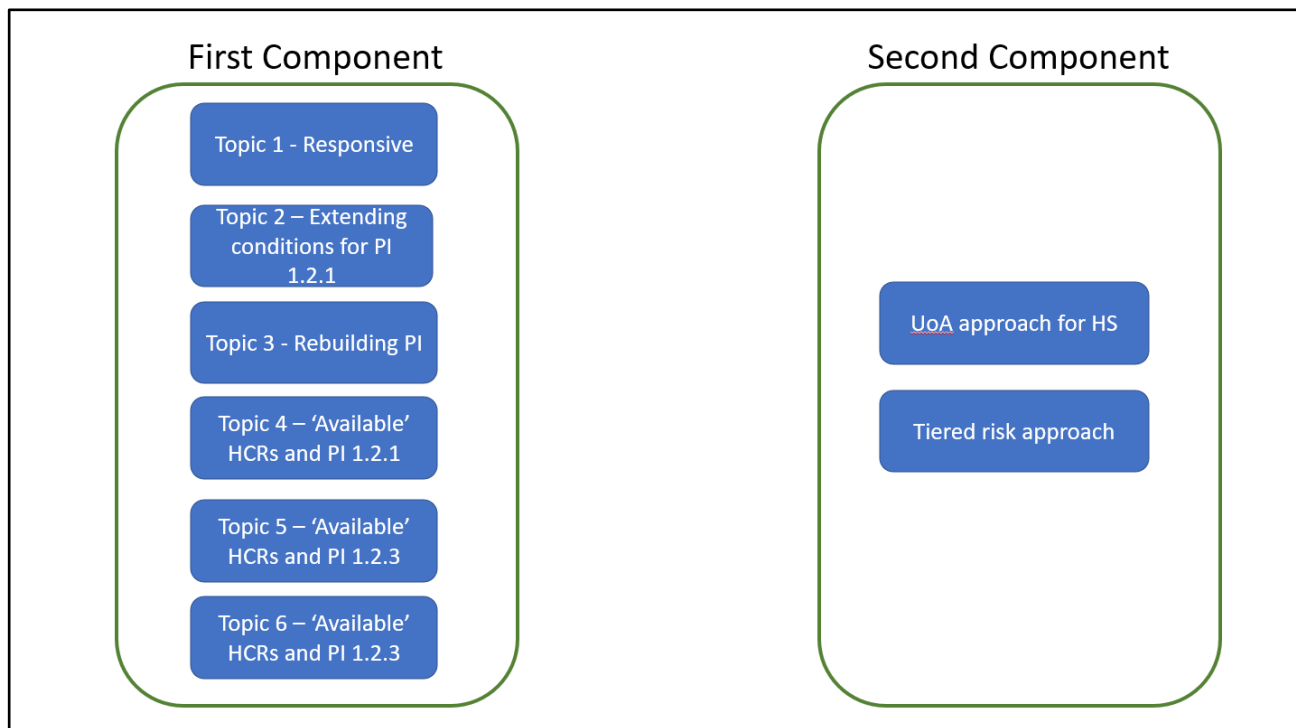


Figure 1 Schematic diagram of the Principle 1 harvest strategy FSR project prior to impact testing the first component and rescoping for the second component

Following the 2020 impact assessment conducted for the first component and the rescoping work conducted for the second component, the Principle 1 harvest strategy FSR project is now represented in Figure 2.

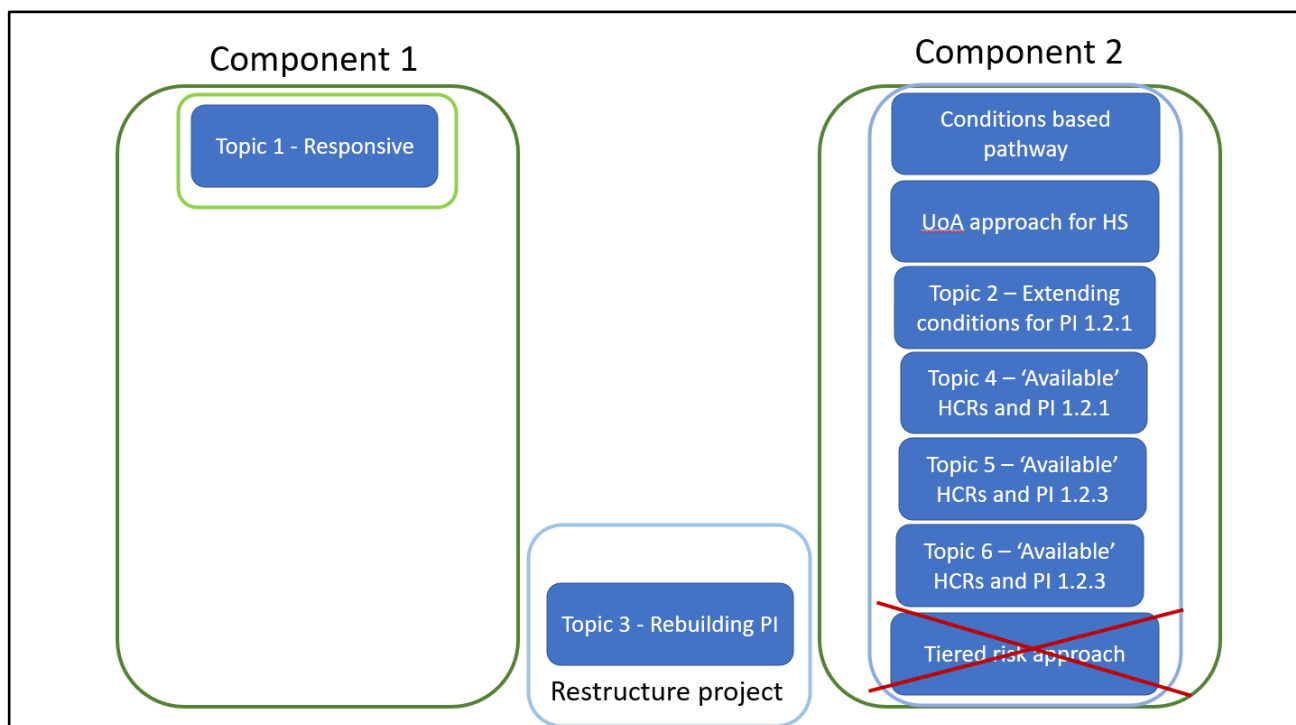


Figure 2: Schematic diagram of the Principle 1 harvest strategy FSR project following impact testing in 2020 for the first component and rescoping for the second component. Green boxes indicate a topic with a preferred option, red cross indicates a topic that was removed from the project.

First Component

The options assessed within the topics provided above that form the first component of the Principle 1 Harvest Strategy project fall into four categories:

0. Business as Usual
1. Modify the existing requirements and guidance
2. Develop new requirements and guidance
3. Restructure the requirements

Not all these broad options are considered within each of the six topics, with a summary of the preferred option provided in Table 1. Note, no preferred option changes the bar within P1.

Table 1: Each Topic considered in the P1 Harvest Strategy project and the preferred option.

Topic	Preferred Option
Topic 1 – ‘Responsive’ in scoring issue a PI 1.2.1	Modify the existing requirements and guidance
Topic 2 – Extending conditions to PI 1.2.1	Moved into second component (see Figure 2)
Topic 3 – Rebuilding PI 1.1.2	Move into new project, focussed on innovative changes to Standard structure (see Figure 2)
Topic 4 – ‘Available’ HCRs impacting scoring in PI 1.2.1	Moved into second component (see Figure 2)
Topic 5 – ‘Available’ HCRs impacting scoring in PI 1.2.3.	Moved into second component (see Figure 2)
Topic 6 – ‘Available’ HCRs impacting scoring in PI 1.2.4.	Moved into second component (see Figure 2)

Topic 1

Topic 1 is addressing issues related to terminology within PI 1.2.1. Originally, the focus was on ‘responsive’ within SG80 of scoring issue a. Additional aspects of PI 1.2.1 were added included defining ‘designed’ at SG100 as well as addressing the objectives that are needed in scoring issue b. The preferred option for this topic is to define all these terms and make the objectives refer to PI 1.1.1.

Topic 2

The rescoping and redefined problem statement of the second component led to the development of options to address issues related to the adoption of harvest strategies for shared and HMS stocks. Because of this, there exists an overlap between Topic 2 in the first component and the second component, as they are essentially trying to tackle the same problem. Further, if an option was developed for PI 1.2.1 within the second component that ran counter to or clashed with the outcome of this topic, it would lead to further ambiguity and inconsistent outcomes, which is a key driver for this FSR project. As such, the preferred option for Topic 2 for extending conditions to PI 1.2.1 is to move this into the second component.

Topic 3

Topic 3 is investigating whether changes to the condition setting mechanism are required as well as if the requirements are better placed in either PI 1.1.1 or PI 1.2.1. Initial impact testing showed that without changing the current weighting approach across Principle 1 for determine the overall Principle score, 20% and 29%, of certified fisheries that have scored rebuilding would fail if the rebuilding requirements were moved into either PI 1.1.1 or PI

1.2.1, respectively. Therefore, the Executive recommended addressing this topic through a new project under development to simplify the Standard structure and scoring system, as a more thorough restructure or simplification is required if PI 1.1.2 is removed as a stand-alone PI. Upon completion of the restructuring, the condition setting mechanism can also be resolved. This project was agreed by the Board in September 2020.

Topic 4

The MSC definition of a harvest strategy includes having a HCR. When 'available' HCRs are scored in PI 1.2.2, there is no direct HCR applied to the P1 stock. Therefore, in such situations the full definition of a harvest strategy cannot be applied. Due to the potential interactions with the second component, the preferred option was to move this into the second component.

Topic 5 and 6

Topic 5 and Topic 6 are identical although they apply to PI 1.2.3 (Information and Monitoring) and PI 1.2.4 (Assessment of stock status), respectively. Within both PI 1.2.3 and PI 1.2.4, there is a scoring guidepost that refers to the 'harvest control rule'. Similar to Topic 4, if 'available' HCRs are scored in PI 1.2.2, the link between PI 1.2.3 and PI 1.2.4 and a HCR that is applied to the target stock is unclear. Due to the potential interactions with the second component, the preferred option was to move these topics into the second component.

Second component

The second component of the project investigated five options. The preferred option was to develop a phased condition approach to be scored in a bespoke annex. Under this mechanisms, each UoA will need to demonstrate progress at certain stages in order to maintain certification and move into the next condition phase. For example, the condition could be structured so that the first phase is focused on the scientific process of building the knowledge base for decisions, whereby the UoA needs to demonstrate it has started and completed a management strategy evaluation (MSE) for the development of a harvest strategy. Once complete, the second phase of the condition would focus on the policy process of decision making allowing additional time for the agreement and adoption of management measures by fisheries managers to take place. Such an approach would aim to separate the science aspects from the political as much as possible whilst ensuring demonstrable progress is made at each phase prior to the next. However, it is worth noting that with the development of HS under an MSE framework, the early stages involve policy input from managers setting the parameters or desired outcomes. Further, there may be changes required to the harvest strategy in the second phase following management direction. Thus, each phase will not be entirely distinct. But the general structure of the condition phases would remain that the first phase focusses on developing the HS and the second phase focuses on the implementation.

Given that this pathway could extend the condition beyond the typical 5 year certification, the expectation is that the end harvest strategy would meet the 'designed' criteria at the SG100 level of scoring issue a of PI 1.2.1. The final implemented harvest strategy therefore has an overlap with Topic 1 from the first component of the project, as defining the term 'designed' is a preferred option. At present, the preferred option for the term 'designed' is the definition:

- A harvest strategy that includes a management procedure that has been developed through management strategy evaluation.

Overall, four options were assessed in 2021 for the second component, being:

0. Business as usual
1. Bespoke scoring tree for shared and highly migratory stocks
2. Phased condition pathway for shared and highly migratory stocks
3. Phased condition pathway that is optional to any stock

4. Unit of Assessment approach

Summary of Impacts

First component

Topic 1 – ‘Responsive’ harvest strategies in scoring issue a PI 1.2.1

Within the requirements of PI 1.2.1, teams need to demonstrate that the harvest strategy is ‘responsive’ to the state of the stock. However, there is currently no definition for the term ‘responsive’.

Summary of options

Option 0 – Business as Usual. This option will not be effective at reducing double scoring and ambiguity in the standard, which were the key reasons why the FSR project was established.

Option 1 – Modify the existing requirements and guidance (preferred option in 2020). This will clarify the terms ‘responsive’ at SG80 and ‘designed’ at SG100 in PI 1.2.1 scoring issue a, as well as consider whether the harvest strategy objectives for ‘tested’ and ‘fully evaluated’ in PI 1.2.1 Slb, should align with PI 1.1.1. This option will be effective, acceptable and feasible for fishery stakeholders as it resolves ambiguity that assessors face when applying the existing requirements. This option also retains the existing PI structure but provides clarity on existing terms and it received wide support during the consultation process.

Option 2 – Develop new requirements and guidance. This would remove the term ‘responsive’ from SG80 and include new text whereby the focus is on the ‘elements’ of the harvest strategy working together. Scoring individual elements was also proposed for SG60. This was the option put to public consultation but feedback suggested that by changing the focus from the full harvest strategy to ‘elements’ this would create further inconsistencies and require a restructuring of the other SG60 and SG80 scoring issues in PI 1.2.1.

Option 3 – Restructure the requirements. This option was to completely overhaul and restructure PI 1.2.1, and possibly the entirety of P1 under the banner of streamlining. However, there is a separate simplification project outside the FSR that will incorporate this approach for possible restructuring of requirements. This option is not being taken forward in the FSR but incorporated into the simplification workstream.

Topic 2 – extending conditions to PI 1.2.1

As described above, this topic was moved into the second component of the project.

Topic 3 – Rebuilding PI 1.1.2

As described above, this topic was moved into a new project to address innovative changes to Standard structure.

Topic 4, 5 and 6 – ‘Available’ HCRs impacting scoring in PI 1.2.1, 1.2.3 and 1.2.4.

As described above, this topic was moved into the second component of the project.

Second Component

Following STAC and TAB feedback, the second component of the project was rescoped and a problem definition developed. To understand the breadth of the issue across the program, every currently certified or suspended UoA

was assessed as either managed under a single jurisdiction or a shared/HMS jurisdiction. For the purposes of the scoping exercise, all salmon UoCs were excluded given their unique stock structure and management arrangements. Further, the most recent catch data from each UoC was investigated to compare the total catches from single or shared/HMS.

Based on the guidance from Principle 3, the following classifications were used:

- Single managed - The fishery management framework may exist at a local, regional or national scale within the jurisdiction of a single State.
- Shared/HMS – Fisheries are exploited by two or more States and international law becomes relevant. These multi-level management systems may have a variety of jurisdictional arrangements that apply to that UoA and are therefore required to be considered by the assessment team.

For the analysis, a stock was only considered shared/HMS when two or more countries were involved in the management of that stock. However, it is recognised there may be situations within some national management regimes where two states/provinces or national and state agencies co-manage a stock

The results demonstrated that:

- There are currently more UoAs with stocks managed under a single jurisdiction than from shared/HMS (55:45 across 742 UoAs). However, a higher proportion of total catch volume come from shared/HMS stocks (58%).
- The trend of MSC fisheries carrying over conditions on PI 1.2.1 and PI 1.2.2 occurs for roughly 1 of 3 assessments.
 - For PI 1.2.1 and PI 1.2.2, 27% and 37% of fishery assessments that have had a condition for each PI, respectively, have carried over open conditions into reassessment.
 - Given the high number of fisheries that have entered the program in the previous five years with open conditions on PI 1.2.1 and PI 1.2.2 (e.g. WCPFC tuna fisheries), these percentages are likely to increase
 - Within the certificate holders that have carried over conditions, two of eight UoAs with a condition on PI 1.2.1 targeted shared/HMS stocks, while 23 of 32 UoAs with a condition on PI 1.2.2 targeted shared/HMS stocks.

These results informed the framing of the problem statement of the second component to focus on a condition pathway toward the adoption of stock wide harvest strategies.

Impact assessment – First component

Prior to the options outlined above, impact testing occurred for a higher number of options. In total, 23 options were initially investigated across the six topics (Table 2). The analysis undertaken, including the methods, data sources and risk-benefit for all options is provided below. Note, this impact analysis was undertaken for both Topic 2 and 3 prior to these topics being removed from the first component.

Table 2: Options considered for each topic in the initial phase of impact assessment (initial options), the completion of the second phase of impact testing (combined options, which are used in the main sections of the paper) and the preferred option to be taken forward for further analysis in 2021.

Topic	Initial options	Combined Options	Preferred Option
1: “Responsive” harvest strategies	<ol style="list-style-type: none"> 1. Business as usual 2. Status quo with defining ‘responsive’ within guidance 3. Removing the term ‘responsive’ and adding in ‘elements’ 4. Defining the term ‘designed’ at SG100 5. Simplification of PI 1.2.1, possibly entire Principle 1 6. Redefine objectives to PI 1.1.1 in scoring issue b 	<ol style="list-style-type: none"> 0. Business as usual 1. Modify the existing requirements and guidance 2. Develop new requirements and guidance 3. Restructure the requirements 	1: Modify the existing requirements and guidance
2: Extending conditions to PI 1.2.1	<ol style="list-style-type: none"> 0. Business as usual 1. Extending conditions 	<ol style="list-style-type: none"> 0. Business as usual 1. Extending conditions 	Moved into second component
3: Rebuilding PI 1.1.2	<ol style="list-style-type: none"> 0. Business as usual 1. Adding clarity to requirements for condition setting 2. Moving requirements to PI 1.1.1 3. Moving requirements to PI 1.2.1 	<ol style="list-style-type: none"> 0. Business as usual 1. Modify the existing requirements and guidance 2. Restructure the requirements 	Moved into new project for structural changes.
4: ‘Available’ scored at PI 1.2.1	<ol style="list-style-type: none"> 0. Business as usual 1. Removing the term ‘available’ from requirements 2. Limiting the score of PI 1.2.1 to <80 if ‘available’ is scored 	<ol style="list-style-type: none"> 0. Business as usual 1. Modify the existing requirements and guidance 2. Develop new requirements and guidance 	Moved into second component
5 and 6: ‘Available’ scored in PI 1.2.3 and PI 1.2.4.	<ol style="list-style-type: none"> 0. Business as usual 1. Removing the term ‘available’ from requirement 2. Removing the term ‘harvest control rule’ 3. Replacing the term ‘harvest control rule’ with ‘harvest strategy’ 	<ol style="list-style-type: none"> 0. Business as usual 1. Modify the existing requirements and guidance 2. Develop new requirements and guidance 	Moved into second component

Topic 1 – ‘Responsive’ Harvest strategies

This topic aims to clarify the term ‘responsive’ used in the Harvest Strategy PI within Principle 1 (P1), to the point that fisheries are consistently scored such that different assessors would come to the same conclusion (when using the same information) as it relates to PI 1.2.1 and 1.2.2.

However, there is no definition or guidance on what ‘responsive’ means, with many assessments attributing responsiveness to relate to harvest control rules (HCRs). Given the perceived lack of clarity in the standard, there is some disagreement among teams and potential for ‘double scoring’ between PI 1.2.1. and PI 1.2.2 (HCRs). Out of 79 assessments, 35 has conditions on 1.2.1 and 1.2.2 and 23 had references to HCRs. As such, evidence suggests that approximately 50% of assessments are likely to continually encounter this problem. This is affecting all fisheries equally.

The scoring guidepost (SG) 80 language for PI 1.2.1. scoring issue (SI) (a) within the Fisheries Certification Requirements (FCR) v2.0 is:

- ‘The harvest strategy is responsive to the state of the stock and the elements of the harvest strategy work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.’

The analysis for each option focussed on ‘effectiveness’, ‘acceptability and ‘feasibility’.

Option 0 – Business as usual

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - The issue would not be solved and double scoring would continue - CAB expert judgement would remain in an area of confusion/ambiguity. So consistency issues among teams would remain 	<ul style="list-style-type: none"> - Assessment teams are used to the current requirements - If harmonisation occurs, the lowest score would prevail, limiting the consistency issues
Acceptability	<ul style="list-style-type: none"> - Issues remain with undefined term that is open to expert judgement - Issue will remain for double scoring or lack of update to SG80 if management shows response - May exacerbate ongoing harmonisation which is perceived as too expensive by clients 	<ul style="list-style-type: none"> - Stakeholders already familiar with the existing requirements - Many fisheries have had scoring set for this PI. So maintaining status quo perceived as low cost
Feasibility	<ul style="list-style-type: none"> - Issue would remain and the consistency and double scoring that is known would not be resolved - Main reason the FSR project was kicked off 	<ul style="list-style-type: none"> - Some assessment team members believe it is not an issue of double scoring. Though interpret ‘responsive’ differently - Requirements are currently known and so ongoing harmonisation, if applicable would remain valid
Accessibility and retention		
Simplification		
Auditability		

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Option 1 – Status quo with defining ‘responsive’ within guidance (preferred)

This option was not taken into the July 2020 public consultation as an explicit option. However, based on consultation feedback with respect to the ‘elements’ option and the work for dynamic species identifying a ‘responsive’ harvest strategy is key for these stocks, it is proposed that language in the requirements and guidance for defining ‘responsive’ is developed as the preferred option. Focus of the requirements and guidance will be removing the issue of the HCR from PI 1.2.1 and having the assessment team focus on the wider management actions that were enacted or able to be enacted under the harvest strategy.

Proposed changes to requirements (italics) are as follows:

SA2.4.1 Teams shall interpret:

SA2.4.1.1. “Responsive” at SG80 and SG100 is to mean that the harvest strategy allows management to be adaptive to the development and implementation of the differing elements of the harvest strategy.

Proposed changes to guidance (italics) are as follows:

The elements of the harvest strategy need to work together. CABs should therefore consider the overall performance of the harvest strategy, and how its elements contribute to allowing the management system to be responsive to the state of the stock.

In terms of being responsive to the state of the stock, CABs should provide evidence that the harvest strategy allows an adaptive management system. This could include demonstrating that the harvest strategy allows or has allowed the management authority to respond to issues in a clear, transparent and consistent manner. This may include prior evidence of action that management has taken when shortcomings in the elements of the harvest strategy have been identified. A responsive harvest strategy should also demonstrate that the management agency has taken action, when required.

A responsive harvest strategy does not need a ‘well-defined’ harvest control rule for it to be responsive.

For highly fluctuating or dynamic stocks that can have their stock status driven by environmental factors, a responsive harvest strategy should allow management to reduce exploitation to levels that are consistent with the natural environmental fluctuations. In such cases, the harvest strategy should allow management to alter exploitation in an adaptive manner, to levels that are appropriate for the stock to meet the objectives reflected in PI 1.1.1 SG80 under fluctuating environmental conditions.

Additionally, for dynamic fisheries such as small pelagic and annual species, there can be trade-offs between catch rates, fishery stability, and management and conservation objectives (Cochrane et al., 1998; Siple et al., 2017). Being that life history can affect such trade-offs (Siple et al., 2017), the design of the harvest strategy should be appropriate for the species, and scoring should be reflective of this. Examples of the management system being robust and responsive in this manner could include the use of in-season monitoring and adjustments, consideration and inclusion of long-term climatic changes such as regime shifts into the harvest strategy (King et al., 2005) and maintenance of buffers to account for uncertainty (Pikitch et al., 2012).

Key elements of harvest strategies include:

- the control rules and tools in place, including the ability of the management system to control effort, taking into account issues such as overcapacity and its causes;
- the information base and monitoring stock status and the responsiveness of the management system and fleet to stock status.

CABs should also consider whether there are issues that might compromise the effectiveness of the harvest strategy, such as fishing overcapacity caused by subsidies. If overcapacity exists as a result of subsidies, the management system should be robust enough to deal with this issue and still deliver a sustainable fishery in accordance with MSC Principle 1 & 2.

A 'light touch' auditability review of these draft requirements and guidance provided the feedback that the requirements add needed clarity and the guidance supports the requirements whereby ambiguity is reduced and double scoring with the HCR is not as likely.

One issue for further exploration in IA.2 is whether to remove the term "responsive to the state of the stock" or the link in the requirements to PI 1.1.1 in scoring issue a. A stakeholder suggestion was that SG80 is reworded to:

- *The harvest strategy is responsive to the past fishery performance and the elements of the harvest strategy work together towards achieving stock management objectives.*

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Providing guidance may not cover all aspects of a harvest strategy being 'responsive' - Some assessment team members believe that the HCR issue is not central to the problem 	<ul style="list-style-type: none"> - Resolves the issue of a key term in the requirements being undefined - Would remove the double scoring aspect and focus the issue on the wider harvest strategy - Will increase consistency for assessments - Can allow CABs a definition to apply
Acceptability	<ul style="list-style-type: none"> - May be perceived by some stakeholders as a shift in the bar - Will require harmonisation that has already been extensive under the existing requirements. Therefore an additional cost burden. 	<ul style="list-style-type: none"> - Requirement and associated guidance will help to parse out the issues between PI 1.2.1 and PI 1.2.2 - Will clarify a term that was previously undefined, adding to consistency and application of the requirements, making it clearer to stakeholders what is the MSC intent
Feasibility	<ul style="list-style-type: none"> - May add complexity to the standard that already is arduous in guidance - Guidance not normative so CABs would not have to adhere to it 	<ul style="list-style-type: none"> - Can focus ongoing harmonisation efforts reducing costs once they are complete - Would increase client's ability to understand how scoring harvest strategies occurs in their fisheries - May allow conditions to be focused on areas of cohesive improvement
Accessibility and retention		
Simplification		
Auditability		

Option 2 – Removing the term 'responsive' and adding in 'elements'

This option was put out for consultation in July 2020 as follows:

- SG60: The elements of the harvest strategy ~~is~~ are expected to achieve stock management objectives reflected in PI 1.1.1 SG80.
- SG80: The elements of the harvest strategy ~~is responsive to the state of the stock and the elements of the harvest strategy~~ work together towards achieving stock management objectives reflected in PI 1.1.1 SG80.

- SG100: The harvest strategy is responsive to the state of the stock and is designed to achieve stock management objectives reflected in PI 1.1.1 SG80.

The notion of removing 'responsive' was somewhat supported, though analysis of stakeholder feedback showed around 60% of respondents preferred an alternate approach. Adding in that at SG60 and SG80 that only 'elements' of the harvest strategy are considered was thought to add confusion to the requirements. This was not only at scoring issue a, but also for the remainder of PI 1.2.1. In other words, the same language would be needed at SG60 and SG80 throughout the harvest strategy performance indicator. Further, this option was presented before the topic of defining 'designed' was implemented. Together, the option would seem to further complicate PI 1.2.1, and thus it is not proposed that this option be taken forward for further consideration.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Further inconsistencies in PI 1.2.1 which may deviate from the MSC intent with how harvest strategies are applied - By focusing only on 'elements', assessment teams may be able to cherry pick which elements are used for scoring - Not having the full definition of the harvest strategy apply at SG80 would likely not reflect global best practice, reducing their effective uptake 	<ul style="list-style-type: none"> - Resolves the issue of a key term in the requirements being undefined - Would remove the double scoring aspect and focus the issue on the wider harvest strategy - Will increase consistency for assessments
Acceptability	<ul style="list-style-type: none"> - Stakeholders perceive this as adding complexity to an already complex situation - Would require stakeholders to understand the various elements that are needed through guidance at the differing SG levels. - Perceived as a lowering of the bar if 'responsive' was taken out. 	
Feasibility	<ul style="list-style-type: none"> - Would add complexity to PI 1.2.1 for why 'elements' are acceptable at SG60 and SG80 - May put fishery clients at odds with stakeholders in terms of expectations for what is needed under their overall harvest strategy 	<ul style="list-style-type: none"> - Makes the distinction clear between SG80 and SG100, in terms of only needing the full definition at SG100.
Accessibility and retention		
Simplification		
Auditability		

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Option 3 – Defining the term ‘designed’ at SG100

Option 3 was suggested by stakeholders during the July 2020 consultation as a similar issue to ‘responsive’. That being, it is not currently defined and is a key aspect of SG100 that needs to be met in order for the fishery to meet this scoring. As with ‘responsive’ the current situation is ‘expert judgement’ which some stakeholder believe should not be appropriate in the context of harvest strategies. Such a situation played out in the recent Usufuku bluefin objection. Given the similarities to the issue of ‘responsive’, this aspect of the project will be taken forward into further impact testing. The proposed approach is to develop guidance that speaks to the harvest strategy definition which ‘may include’ management procedures (MPs) that are tested via management strategy evaluation (MSE). Additionally, ‘acceptability’ has been assessed here instead of ‘accessibility and retention’.

Proposed changes to requirements (italics) are as follows (note revised requirement for SA2.4.1.1 proposed above):
SA2.4.1 Teams shall interpret:

SA2.4.1.2. “Designed” at SG100 si a to mean a harvest strategy that includes a management procedure that has been developed through management strategy evaluation.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Unlikely to have negative impacts to effectiveness 	<ul style="list-style-type: none"> - Resolves a key term that is undefined, as has been picked up in a recent objection - Would elucidate the difference between SG80 and SG100 for scoring issue a - Aligning the requirements to the MSC intent and definition of a harvest strategy - Will increase consistency for assessments - Can allow CABs a definition to apply
Acceptability	<ul style="list-style-type: none"> - May be perceived by some stakeholders as too high a bar - Might not be attainable for any developing country or small scale fishery 	<ul style="list-style-type: none"> - Allows stakeholders an area to challenge assessments on if SG100 deemed to be given when not justified - Fully outlines the expectations for fisheries to meet the requirement - Likely aligns with current state of the art fisheries management if ‘designed’ is an MP that is MSE tested.
Feasibility	<ul style="list-style-type: none"> - May add complexity to the standard - May be deemed impractical for fisheries to move from SG80 to SG100 if MSE is required 	<ul style="list-style-type: none"> - Can focus harmonisation efforts reducing costs to assessments - Would increase client’s ability to understand how scoring harvest strategies occurs in their fisheries - Most fisheries not striving for SG100 so unlikely to cause major angst
Accessibility and retention		
Simplification		
Auditability		

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Option 4 – Simplification of PI 1.2.1, possibly entire Principle 1

This aspect of the project has been moved into the efficiency workstream that is occurring outside the FSR.

Option 5 – Redefine objectives to PI 1.1.1 in scoring issue b

This option was added to the project from work the data limited methods (DLM) project. That project highlighted that it is currently unclear what ‘fully tested’ vs ‘evaluated’ means. Further, it is not clear if the harvest strategy should be tested against its own goals or in line with the MSC goals from PI 1.1.1. This topic will be taken into further impact testing to fully unpack the required changes.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Current requirements or guidance have not been a major issue of contention in terms of not portraying the MSC intent 	<ul style="list-style-type: none"> - Resolves an issue of conflicting language in the current guidance between ‘tested’ and ‘evaluated’ - Focusses the harvest strategy on the outcome PI 1.1.1 to ensure a healthy stock, likely making the MSC intent more clear - Will increase consistency for assessments
Acceptability		
Feasibility	<ul style="list-style-type: none"> - If SG80 was to be ‘evaluated’ instead of ‘tested’ there is a chance the bar would be raised. - 	<ul style="list-style-type: none"> - Can focus harmonisation efforts reducing costs - Would increase client’s ability to understand how scoring harvest strategies occurs in their fisheries - May allow conditions to be focused on areas of cohesive improvement
Accessibility and retention	<ul style="list-style-type: none"> - If the testing bar at SG80 becomes too high, this may limit the access of some fishery types (e.g. small-scale) than the status quo 	<ul style="list-style-type: none"> - Would make the current requirements and guidance more-clear for FIPs the areas of improvement are needed with respect to implementing - Also allows the Theory of Change for harvest strategy assessments to be realised as improvements to be made are more obvious - Aligns with DLM so access may be increased through the development and application of that tool.
Simplification		
Auditability		

Topic 2 – Extending conditions to Harvest Strategy PI

At present, there is no allowance for conditions associated with PI 1.2.1 to be extended beyond the normal five year time period for delivery. This topic is investigating whether, similar to the allowance for 'available' HCRs, the condition for PI 1.2.1 should be allowed to extend beyond 5 years.

Informing this topic was an analysis the MSC undertook to assess the prevalence of conditions associated with PI 1.2.1 and PI 1.2.2. All fisheries scored using the FAM v2.0 scoring requirements (≈ 2010) through to FCR v2.0 until March 2020 were investigated for their conditions associated with PI 1.2.1 and PI 1.2.2.

The analysis demonstrated that when a condition existed for PI 1.2.1 or PI 1.2.2 and that fishery went through recertification, the condition was carried over for 27% and 37% of assessments, respectively. In other words, approximately one in three assessments has needed to carry over a condition on PI 1.2.1 or PI 1.2.2 when entering reassessment. However, the majority of fisheries (75%) have not been through reassessment. So the issue may be underestimated for future reassessments.

The analysis for both options focussed on 'effectiveness', 'acceptability and 'feasibility'.

Option 0: Business as usual

Based on stakeholder feedback during consultation around 55% of respondents supported the status quo.

Supporting the status quo was mainly to do with the extension of this condition perceived as a weakening of the MSC Theory of Change and the MSC creating another loophole for fisheries clients.

Further, the initial scoping exercise showed that for both the HCR and harvest strategy conditions, the majority of fisheries that needed to carry over conditions were from shared or HMS stocks. Issues with these types of fisheries led to the development of the 2nd component of this FSR project. Under the second component of the harvest strategy project, the redefined problem statement with respect to fisheries that do not take the whole stock showed that the condition setting mechanism may be the central issue. Therefore, that aspect of the project has been moved into a conditions based pathway. There is a risk that if this option was to develop an extension to the 5-year timeline, it would contradict the outcome of the condition based pathway. That could lead to further inconsistencies and ambiguity in the standard. Taken together, status quo is the preferred option for this topic and extending the conditions for the harvest strategy PI beyond 5 years is proposed to be dropped from this component of the project.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - The Theory of Change with respect to harvest strategies does not apply equally among fishery types. Thus the status quo is seemed to limit the ToC from applying to shared and HMS stocks for the adoption of HS. - May lead to high amounts of variation requests to extend conditions for recently certified fisheries (i.e. 75% that have this condition for PI 1.2.1) 	<ul style="list-style-type: none"> - Keeping fisheries to the 5 year certification helps to drive change along the traditional pathways and timings - Will not work counter to the conditions project if the outcome of both projects differ - Will maintain the consistency for assessments as well as the Principles that a sustainable fishery should be based upon
Acceptability	<ul style="list-style-type: none"> - Status quo may be perceived by stakeholders as driving fisheries out of the program for what is perceived to be a technical issue 	<ul style="list-style-type: none"> - Reinforces that the MSC is not cherry picking or singling out certain fishery types to maintain certification (e.g. HMS tuna fisheries). - Helps to alleviate concerns from NGOs in particular that HMS fisheries need to be held to account at the RFMO level.
Feasibility	<ul style="list-style-type: none"> - Ongoing harmonisation issues of conditions will require additional time investments which cost clients 	<ul style="list-style-type: none"> - The requirements are currently clear and do not have ambiguity with respect to

	<ul style="list-style-type: none"> - Large investment from client fisheries in certification could be lost under the perception of a technical issue (i.e. stock remaining healthy). - MSC requirements seen as too much a one size fits all approach 	<ul style="list-style-type: none"> - condition setting, making them easy to understand - No additional schedule issues and adheres to legal and or customary frameworks. -
Accessibility and retention		
Simplification		
Auditability		

Option 1: Allowing extensions to conditions

As outlined above, this topic will not be taken forward into the FSR. Rather, the issue associated with HMS and shared stock conditions will be incorporated into a larger workstream under the conditions based pathway related to overall conditions.

Topic 3 – Rebuilding PI

The stock rebuilding performance indicator PI 1.1.2 is only scored when PI 1.1.1 scores less than 80. It is unique among all PIs within the default tree as the only PI that is not scored for every assessment.

Two issues have arisen for this performance indicator primarily to do with condition setting, particularly when the stock falls below 80 for PI 1.1.1 during the certification period. First, the requirements for condition setting state that, from Fisheries Certification Process (FCP v2.2):

7.18.1.1 The CAB shall ensure that every PI that receives a score of less than 80 has its own distinct condition associated with it.

However, because PI 1.1.2 is only scored when PI 1.1.1 is less than 80, the way the condition is set for PI 1.1.1 is inconsistently applied. Further, when PI 1.1.2 is scored during the certification period (i.e. stock health has fallen during the 5-year certification), the requirements allow one year for the CAB to score PI 1.1.2. A one year 'condition' therefore supersedes process requirements associated with condition setting for all other PIs (given above). Due to these irregularities, the MSC has needed to issue interpretations to CABs on how to set conditions when PI 1.1.2 is scored.

Second, because PI 1.1.2 is a stand-alone PI, when it is scored it alters the weighting for determining the overall Principle 1 score. This therefore changes the way a Principle aggregate score is determined in a way that is different to all other PIs.

The impact assessment for this project looked at four options. These included changing the condition setting mechanism and moving the rebuilding requirements to either PI 1.1.1 or PI 1.2.1.

With respect to moving the requirements, in order to assess if this change would be acceptable, feasible and not effect accessibility and retention, every v2.0 fishery that scored rebuilding was investigated. The overall Principle 1 score

using the status quo was compared to the score that would be achieved if the rebuilding requirements were in either PI 1.1.1 or PI 1.2.2.

Impact testing showed that 21% and 29% of certified fisheries assessments that have scored rebuilding, would have failed due to the aggregate score of P1 becoming <80 if the scoring of PI 1.1.2 were incorporated into either PI 1.1.1 or PI 1.2.1, respectively. The failure rate increased to around 60% if a fishery only met SG60 for PI 1.1.1.

Option 0 – Business as usual

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Undermines effectiveness relative to delivering conditions on the correct PI as intent unknown 	<ul style="list-style-type: none"> - Will maintain the existing structure of the requirements which drive the ToC for rebuilding stocks
Acceptability	<ul style="list-style-type: none"> - Status quo may be perceived by stakeholders as driving fisheries out of the program for what is perceived to be a technical issue 	<ul style="list-style-type: none"> - Stakeholders know the requirements and FIPs are working toward the existing bar
Feasibility		
Accessibility and retention	<ul style="list-style-type: none"> - Fisheries that cannot meet the current bar for rebuilding will remain outside the program - The condition setting mechanism may end up with client action plans too onerous on fisheries entering the program 	<ul style="list-style-type: none"> - Not perceived to be a big issue for accessibility generally as rebuilding PI is an accessibility tool
Simplification		
Auditability		

Option 1 – Status quo with condition issues addressed

This option maintains the current structure of P1 but will add clarity in the requirements and guidance for how to set conditions associated with rebuilding. Providing this clarity was the main reason this topic entered the FSR. As it does not impact accessibility or retention in the same way that option 3 and 4 do, this is the preferred option.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Nil 	<ul style="list-style-type: none"> - Will maintain the existing structure of the requirements which drive the ToC for rebuilding stocks - Will allow the condition setting mechanism to be specific and consistent allowing reducing loopholes
Acceptability	<ul style="list-style-type: none"> - Some stakeholders feel that the issues associated with rebuilding are best 	<ul style="list-style-type: none"> - Stakeholders know the requirements and FIPs are working toward the existing bar - Condition setting mechanism is resolved

	addressed in PI 1.2.1, rather than stand alone PI	
Feasibility		
Accessibility and retention	<ul style="list-style-type: none"> - Fisheries that cannot meet the current bar for rebuilding will remain outside the program 	<ul style="list-style-type: none"> - Does not change the bar for fisheries but reduces inconsistency in outcomes and condition setting
Simplification		
Auditability		

Option 2 and 3 – Move rebuilding to PI 1.1.1 or PI 1.2.1

As stated in the background section, these two options involve moving PI 1.1.2 requirements into either PI 1.1.1 (Option 3) or PI 1.2.1 (Option 4). The biggest impact identified in the initial impact assessment was likely to come from accessibility and retention.

As stated above, when the two scoring issues from PI 1.1.2 were moved into either PI 1.1.1 or PI 1.2.1, 20-25% of certified fisheries that have scored rebuilding using v2.0 would have failed. The failure was due to the overall P1 score < 80. Further, if the score of PI 1.1.1 was 60, the failure rate increased to 60%. For this reason, these options are not preferred.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness		-
Acceptability	<ul style="list-style-type: none"> - Some stakeholders felt that the existing requirement provide a good accessibility 	<ul style="list-style-type: none"> - Some stakeholders feel that the issues associated with rebuilding are best addressed in PI 1.2.1, rather than stand alone PI - Reduces inconsistency in outcomes and condition setting
Feasibility	<ul style="list-style-type: none"> - May not adhere to some policies or frameworks if the rebuilding PI needs to be incorporated into stock status for example 	<ul style="list-style-type: none"> - Similar to status quo in that the same requirements are scored they are just scored in a different place - No cost change
Accessibility and retention	<ul style="list-style-type: none"> - Significantly raises the bar for fisheries that need rebuilding plans or are in improvement projects - Certified fisheries that would rescore off the new requires would run a high risk of losing certification 	<ul style="list-style-type: none"> - Nil
Simplification		
Auditability		

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Topic 4 – ‘Available’ HCRs and the link to PI 1.2.1

The definition of a harvest strategy within the MSC requirements is the following:

- *The combination of monitoring, stock assessment, harvest control rules and management actions, which may include an MP or an MP (implicit) and be tested by MSE.*

Each element mentioned in the definition is scored within Principle 1 under separate PIs. However, the elements within the harvest strategy definition need to be considered in PI 1.2.1. When ‘available’ HCRs are scored, there is key element of the harvest strategy that is missing.

As part of this impact assessment, the number and type of v2.0 fisheries that score ‘available’ HCRs was investigated.

This topic is informed primarily from stakeholder consultation feedback that was received during July 2020. The focus of the impact types were ‘effectiveness’, ‘acceptability’ and ‘feasibility’.

Option 0 – Business as usual

Based on stakeholder feedback from the public consultation, around 60% of respondents felt the score should not be limited at SG80 for PI 1.2.1. This supports the status quo, with some stakeholders

Further analysis into the scoring of ‘available’ was undertaken to ascertain trends in fishery scoring and typologies to determine a preferred option. For version 2.0 fisheries, 223 UoAs have scored PI 1.2.2. Of these, 31 (14%) have scored ‘available’ criteria. 27 of these 31 have been tuna UoAs, with the remaining four all being shared stocks under ICES advice (e.g. Northern prawn.) All 31 were also conditional on PI 1.2.1 scoring issue a, indicating that double scoring or consideration of having an ‘available’ HCR was limiting the overall harvest strategy from meeting SG80. Stakeholders opposed to limiting the score of PI 1.2.1 if ‘available’ were scored suggested that double scoring would persist if such a system was allowed. Further, the HCR is one element of the harvest strategy and clearly placing the emphasis of ‘responsive’ on the overall harvest strategy would deal with this issue.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Does not fully articulate to stakeholders how ‘available’ HCRs interact with the harvest strategy performance indicator or fits within the HS definition - Double scoring may continue in an inconsistent manner leading to loopholes regarding how fisheries are scored 	<ul style="list-style-type: none"> - Will not force scoring rules on one PI when another does not SG80 i.e. independence of PIs - Maintains the separation of the two PIs, which will be helped with the addition of the ‘responsive’ guidance.
Acceptability	<ul style="list-style-type: none"> - Stakeholders that are strongly weighted toward the notion that a harvest strategy cannot exist without a HCR will oppose, this includes NGOs 	<ul style="list-style-type: none"> - Will demonstrate to stakeholders that certain deficiencies in one area of the requirements do not lead to down scoring in another

Feasibility	<ul style="list-style-type: none"> - Ongoing harmonisation issues may remain and require additional time investments which cost clients 	<ul style="list-style-type: none"> - Fisheries may see benefit of having the scoring separated if undertaken in conjunction with 'responsive' as teams will have the opportunity to independently assess the harvest strategy PI - May reduce assessment costs as investment in two conditions is not required
Accessibility and retention		
Simplification		
Auditability		

Option 1 – Remove 'available' from the requirements

Based on stakeholder feedback, the notion of removing 'available' was put forward as an option to overcome all issues with this term.

As stated above, 14% of fisheries under v2.0 have used the term 'available' suggesting that it does have use within the requirements and has allowed accessibility to the program that would otherwise be removed. The majority of these are tuna fisheries which under the MSC certification have continued to push for change and adoption of harvest strategies and HCRs within their RFMOs.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Stalls the MSC Theory of Change for fisheries, particularly HMS - 'Available' was brought in during the last FSR under that same notion - 'Available' can only be scored if the stock is healthy, so only applies to low risk fisheries in terms of maintaining healthy populations 	<ul style="list-style-type: none"> - Removes a key component of the issues with relation to how 'available' interacts with other PIs - Ensures every MSC certified fishery has at least a 'generally understood' HCR in place
Acceptability	<ul style="list-style-type: none"> - Stakeholders feel the HCR at times is a technical issue of certification, not an immediate need to address (e.g. stock health) - Does not afford fisheries in low risk stock health the chance of certification while HCRs for their stock are developed. 	<ul style="list-style-type: none"> - Stakeholders that are strongly weighted toward the notion that a harvest strategy cannot exist without a HCR will agree, this includes NGOs
Feasibility	<ul style="list-style-type: none"> - Undoes the work of the previous FSR and large amounts of harmonisation between assessment teams, therefore appearing as a time and money waste - Fisheries will be forced to immediately act to implement HCRs in situations 	<ul style="list-style-type: none"> - Makes the requirements simpler reducing costs for assessments - Follows more conventional fisheries management where direct HCRs are applied to the target stock

	where time or money investments are not secured - May force fisheries to leave certification prior to RFMO timelines for certain stocks to be met	
Accessibility and retention		
Simplification		
Auditability		

Option 2 – Additional guidance that if ‘available’ HCRs are scored, the score of PI 1.2.1 cannot meet 80

The overall aim of this FSR is to reduce double scoring. Implementing a scoring limit for PI 1.2.1 if ‘available’ is scored in PI 1.2.2 runs counter to that notion. Therefore, this option is not the preferred.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Unintended consequence of having fisheries fail because two PIs are scored less than 80 - Places highest emphasis on the HCR within the definition of the harvest strategy 	<ul style="list-style-type: none"> - Demonstrates that HCR is the most important part of the HS to stakeholders that are of this thinking - Ensures HCRs are delivered under the guise of updating the wider harvest strategy
Acceptability	<ul style="list-style-type: none"> - Stakeholders already frustrated with double scoring. - Will be the only scoring set up of this kind throughout the standard - May be seen as MSC adding another complication to an already complicated standard 	<ul style="list-style-type: none"> - Stakeholders that are strongly weighted toward the notion that a harvest strategy cannot exist without a HCR will agree, this includes NGOs
Feasibility	<ul style="list-style-type: none"> - Will increase costs to assessments as every fishery that scores ‘available’ will need to invest in conditions and client action plans - Would require the harvest strategy to be updated or developed every time an ‘available’ HCR is scored 	<ul style="list-style-type: none"> - Makes the requirements simpler reducing costs for assessments - Follows more conventional fisheries management where direct HCRs are applied to the target stock
Accessibility and retention		
Simplification		
Auditability		

Topic 5 – ‘Available’ in PI 1.2.3

This topic is similar to topic 4, in that the scoring of information and monitoring in PI 1.2.3 has an interaction with the HCR that is scored in PI 1.2.2. If ‘available’ HCRs are scored, that means the fishery is not directly scoring the information and monitoring that goes into the HCR.

During the consultation, the question that was asked of participants was:

“When “available” HCRs are scored in PI 1.2.2, is it sufficient that the monitoring scored in PI 1.2.3 scoring issue b only assesses the criteria for allowing ‘available’ HCRs given in SA 2.5.2 a?

Around 45% of respondents answered no. From the feedback received, an additional option was added into the FSR project, Option 4, with all options assessed below.

Topic 6 – ‘Available’ in PI 1.2.4

This topic is similar to Topic 5 however the application shifts to PI 1.2.4 for the stock assessment. However, given the similarities in their issue (i.e. ‘available’ HCRs impacting on the way each PI is scored), they are considered to have the same risk profile and are considered together below. Similar to PI 1.2.3 topic, an additional option was included, being Option 4.

Option 0 – Business as usual

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none">- Assessment teams score the harvest control rule of a fishery that does not apply to the P1 stock.- No information consideration back to the harvest strategy- Potential loophole to needing sufficient information	<ul style="list-style-type: none">- Requirements are known and the expert judgement aspect would mean that information is pertinent to understanding that ‘available’ criteria are met.
Acceptability	<ul style="list-style-type: none">- Stakeholders will see that ambiguity remains- Issue is not resolved so requirements remain inconsistent	<ul style="list-style-type: none">- Stakeholders had not known this problem and so essentially no harm no foul
Feasibility	<ul style="list-style-type: none">- Inconsistent application would remain resulting in differing costs among assessments	<ul style="list-style-type: none">- No change need thus fisheries do not need to adopt new requirements.
Accessibility and retention		
Simplification		
Auditability		

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Option 1 – Remove ‘available’ from the requirements

Based on stakeholder feedback, the notion of removing ‘available’ was put forward as an option to overcome all issues with this term.

As stated above, 14% of fisheries under v2.0 have used the term ‘available’ suggesting that it does have use within the requirements and has allowed accessibility to the program that would otherwise be removed. The majority of these are tuna fisheries which under the MSC certification have continued to push for change and adoption of harvest strategies and HCRs within their RFMOs.

Taken together, this option is not supported as it reduces the effectiveness of the MSC Theory of Change and limits accessibility and retention.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Stalls the MSC Theory of Change for fisheries, particularly HMS - ‘Available’ was brought in during the last FSR under that same notion - ‘Available’ can only be scored if the stock is healthy, so only applies to low risk fisheries in terms of maintaining healthy populations 	<ul style="list-style-type: none"> - Removes a key component of the issues with relation to how ‘available’ interacts with other PIs - Ensures every MSC certified fishery has at least a ‘generally understood’ HCR in place
Acceptability	<ul style="list-style-type: none"> - Stakeholders feel the HCR at times is a technical issue of certification, not an immediate need to address (e.g. stock health) - Does not afford fisheries in low risk stock health the chance of certification while HCRs for their stock are developed. 	<ul style="list-style-type: none"> - Stakeholders that are strongly weighted toward the notion that a harvest strategy cannot exist without a HCR will agree, this includes NGOs
Feasibility	<ul style="list-style-type: none"> - Undoes the work of the previous FSR and large amounts of harmonisation between assessment teams, therefore appearing as a time and money waste - Fisheries will be forced to immediately act to implement HCRs in situations where time or money investments are not secured - May force fisheries to leave certification prior to RFMO timelines for certain stocks to be met 	<ul style="list-style-type: none"> - Makes the requirements simpler reducing costs for assessments - Follows more conventional fisheries management where direct HCRs are applied to the target stock
Accessibility and retention		
Simplification		
Auditability		

Option 2: Remove the reference to 'harvest control rule'

There was some support from stakeholders with respect to the removal of the term 'harvest control rule'. However, there was sentiment that the PI still needs to interact with the wider harvest strategy. Thus, the proposal to change the term 'harvest control rule' to 'harvest strategy' was put forward. The change to harvest strategy is supported as the preferred option within this FSR project, with the removal of 'harvest control rule' outright not preferred.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Would only score the information collected without an understanding of what that information is used for 	<ul style="list-style-type: none"> - Reduces the link between two elements of the harvest strategy that is confused in the current requirements
Acceptability	<ul style="list-style-type: none"> - Stakeholders may see this as a lowering of the bar as the information collected does not go back to anything substantive 	<ul style="list-style-type: none"> - Stakeholders may see this as one less contradictory and complicated piece of the requirements. - Change would be acceptable to fishery partners that lack a HCR in place on their fishery
Feasibility	<ul style="list-style-type: none"> - Inconsistent application would remain resulting in potentially differing costs and outcomes among assessments 	<ul style="list-style-type: none"> - Fisheries can easily and cost effectively implement this change it is a removal of a scoring criteria in a sense - Removes inconsistency of scoring
Accessibility and retention		
Simplification		
Auditability		

Option 3: Change the reference from 'harvest control rule' to 'harvest strategy'

This option was added after consultation as a number of stakeholders raised this as an idea. As explain above in Option 2, this is the preferred option.

Impact type	Risk (expected negative impacts)	Benefit (Expected positive impacts)
Effectiveness	<ul style="list-style-type: none"> - Essentially asking for a feedback mechanism on itself i.e. this aspect of the harvest strategy is appropriate to itself. - Potential unintended consequence for double scoring if the information/stock assessment leads to PI 1.2.1 being deficient 	<ul style="list-style-type: none"> - Reduces the link between two elements of the harvest strategy that is confused in the current requirements - Adds clarity to the overall harvest strategy assessment in that a key element needs to be considered separately - Enforces the importance of each element within the harvest strategy definition
Acceptability	<ul style="list-style-type: none"> - Stakeholders may see this as a shifting of the bar from the HCR to the HS. Although both are important, many stakeholders e.g. NGOs feel HCRs are 	<ul style="list-style-type: none"> - Stakeholders may see this as one less contradictory and complicated piece of the requirements.

	the most important aspect of fisheries management	<ul style="list-style-type: none"> - Change would be acceptable to fishery partners that lack a HCR in place on their fishery - The change may be seen as strengthening the requirements with respect to the harvest strategy and its various considerations
Feasibility	<ul style="list-style-type: none"> - Fisheries with deficient elements may pick up additional conditions - RFMO managed fisheries may struggle to implement deficient aspects of their harvest strategy 	<ul style="list-style-type: none"> - Change should be affordable given the majority of conditions are in place on HCR with respect to P1 - Technical work to update stock assessment in particular is often a key piece of harvest strategy development - Changes should be able to be implemented within an 8 year period
Accessibility and retention		
Simplification		
Auditability		

Impact Assessment – Second Component

Option 0 – Business as usual

This option will not be effective, acceptable and would impact retention and accessibility.

The scope of the issue that led to the development of the second component of this project was determined in mid-2020. The main results were:

- There were more UoCs with stocks managed under a single jurisdiction than from shared/HMS (55:45 across 742 UoCs). However, a higher proportion of total catch volume come from shared/HMS stocks (58%).
- The trend of MSC fisheries carrying over conditions on PI 1.2.1 and PI 1.2.2 occurs for roughly 1 of 3 assessments.
- For PI 1.2.1 and PI 1.2.2, 27% and 37% of fishery assessments that have had a condition for each PI, respectively, have carried over open conditions into reassessment.
- Given the high number of fisheries that have entered the program in the previous five years (e.g. WCPFC tuna fisheries), these percentages are likely to increase

- Within the certificate holders that have carried over conditions, two of eight UoCs with a condition on PI 1.2.1 targeted shared/HMS stocks, while 23 of 32 UoCs with a condition on PI 1.2.2 targeted shared/HMS stocks.

This work highlighted that a conditions-based solution may be an effective way to overcome the issue with respect to the ToC.

If business as usual was to be maintained, there would continue to be issues to do with suspensions, CAB and MSC intervention would likely be required and stakeholder angst would persist. It would therefore not be effective, acceptable and would impact retention and accessibility.

Option 1 – Bespoke scoring tree for shared and highly migratory stocks

Option 1 is a scoring approach from the development of new and bespoke scoring tree. This scoring tree would only be scored by UoAs that come from shared and highly migratory stocks. However, it would likely also require that process requirements be developed in parallel, based on either Option 2 or 3. With respect to the impact assessment, this option would be effective at overcoming the issue relating to scoring these stocks against the default tree. It would also be able to overcome issues associated with 'available' remaining in the default tree. This is because all fisheries that have scored 'available' in FCR v2.0 have been from shared or HMS fisheries. If 'available' was removed from the default tree it would address an aspect of Component 1 of the FSR project to do with scoring harvest strategies when 'available' criteria are scored. Likely the biggest barrier to this option is the time remaining in the FSR to draft, impact test and pilot new scoring requirements. This would therefore impact simplification and auditability. Further, acceptability may be low from NGOs who believe that SHM stocks should not be given special treatment.

Further, decisions are required to determine i) how previously certified fisheries adopt this process ii) what is scored at certification and during the MSE process, and iii) should this pathway only be allowed if stock status remains healthy (i.e. PI 1.1.1 > 80). Last, because this option uses the default tree, the topics that were due for revisions in the FSR would need to be included to ensure the issues of consistency and double scoring were fully addressed.

Shared and HMS stocks have differing challenges compared to single managed stocks with respect to the adoption of harvest strategies and HCRs. These include the multi-national nature of their management that brings in geo-political issues and the complex nature of the multi-sector, multi-gear fisheries that target these stocks. Because of these factors, the decision-making processes are slow and complicated.

With this background, a bespoke scoring tree in Principle 1 for shared and HMS may present an opportunity to certify shared and HMS stocks in a different way to single stocks. Option 1 would be a scoring solution from the development of new and bespoke requirements. Access to these new requirements would likely be based on the stock definition. The stock definitions would follow Table GSA10 from FCR v2.0, whereby:

- **Single stock:** The fishery management framework may exist at a local, regional or national scale within the jurisdiction of a single State. Additionally, a purely domestic UoA may exist in multiple jurisdictions within a State, for example under a Federal system of government
- **Shared/HMS:** Are exploited by two or more States, international law becomes relevant. These multi-level management systems may have a variety of jurisdictional arrangements that might apply to that UoA and are therefore required to be considered by the assessment team.

Issues relating to the way harvest strategies and HCRs are designed and implemented would be a key focus. There would be overlaps with Principle 3 and thus considerations into the development of bespoke scoring beyond Principle 1 would be needed. Further, if bespoke scoring requirements were to be developed, process issues would also need to be included that relate to timelines needed for harvest strategy and HCR development. Therefore Options 2 or 3 would likely need to be developed in parallel and incorporated into any bespoke requirements.

One advantage of this option is the ability to triage the 'available' scoring (First component Topic Topic 4) into the bespoke tree and remove it from the default tree. For version 2.0 fisheries, 223 UoAs have scored PI 1.2.2. Of these, 31 (14%) have scored 'available' criteria. 27 of these 31 have been tuna UoAs, with the remaining four all being shared stocks under ICES advice (e.g. Northern cold water prawn). Given that an issue was identified in Component 1 about scoring the harvest strategy when 'available' HCRs are scored, if this was removed from the default tree it would remove the issue as it currently exists.

Likely the biggest barrier to this option would exist from NGO stakeholders who believe that MSC should not give shared or HMS special treatment. Further, with the FSR wrapping up in 2021, the time to develop and test an entirely new scoring tree may be unattainable. Lastly, from an effectiveness and auditability perspective, the definition of a shared or HMS stock would need to be water-tight as loopholes may exist in certain situations (e.g. national fisheries that overlap state boundaries).

Option 2 – Phased condition pathway for shared and highly migratory stocks

Option 2 is a process approach that would use the existing default scoring tree. It would be mandatory for shared and HMS stocks to follow. The approach would have these fishery types attain SG100 for PI 1.2.1 and PI 1.2.2., but over a longer timeframe than one certification. It is a phased approach that would see the fishery commit to the development and implementation of a harvest strategy and HCR using management strategy evaluation (MSE) (Figure 3). Based off the impact assessment, Option 2 would be acceptable, effective and would increase retention and accessibility. Issues would exist that relate to the auditability of the individual phases and feasibility for client groups to lead the MSE processes. As with Option 1, some NGOs may not favour this option as they feel that SHM stocks should not be given special treatment.

Further, decisions are required to determine i) how previously certified fisheries adopt this process ii) what is scored at certification and during the MSE process, and iii) should this pathway only be allowed if stock status remains healthy (i.e. PI 1.1.1 > 80). Last, because this option uses the default tree, the topics that were due for revisions in the FSR would need to be included to ensure the issues of consistency and double scoring were fully addressed.

Option 2 would score the existing requirements but involve a new process for the adoption of harvest strategies and harvest control rules to the SG100 level for all shared and HMS stocks. The initial concept was outlined to [STAC and TAB in Dec 2020](#) and outlined below in Figure 3. Note, this approach would also be applied to the scoring of harvest control rules.

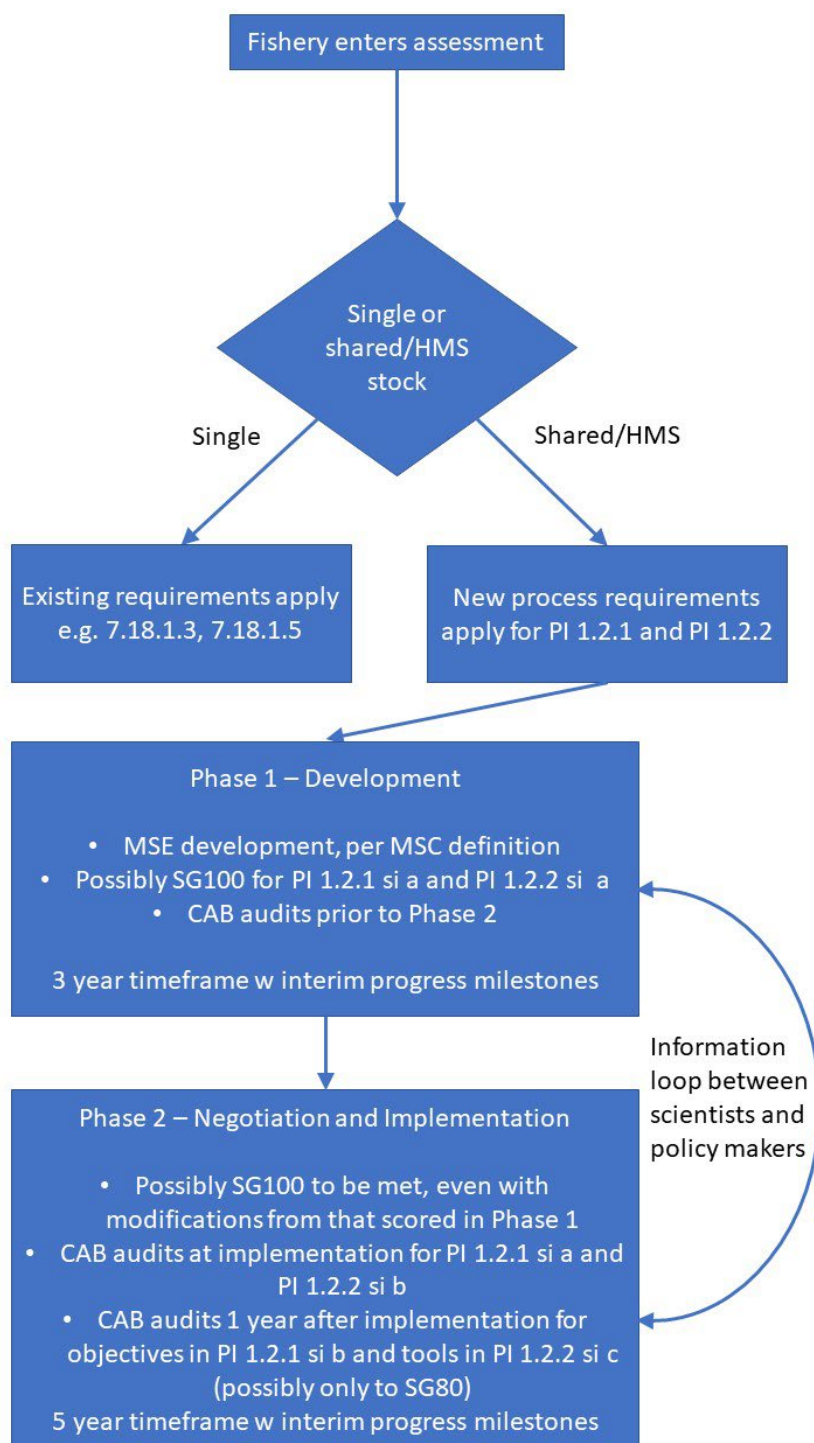


Figure 3 Schematic of Option 2 being a phased conditions approach by stock type

Option 2 would rely on the stock definition, as given in Option 1. Only UoAs that targeted shared or HMS stocks would be eligible for this approach and it would be mandatory. The key aspect is that the MSC would require that all shared and HMS stocks achieve SG100 for PI 1.2.1 or PI 1.2.2 within a set time frame, irrespective of their score when certified.

This approach would not impact simplification to the same degree as Option 1. Though problems relating to defining and applying the stock type would remain.

As with Option 1, issues would remain with respect to NGO stakeholders opposed to giving special treatment to shared and HMS stocks and stock definitions.

This option would be applied irrespective of whether or not a UoA triggers a condition for performance indicator (PI) 1.2.1 (harvest strategies) or PI 1.2.2 (HCRs). By applying options in this way, the issue related to conditions can be overcome as the pathway to enable the Theory of Change occurs equally across all fisheries that meet the definition provided in Option 1. In other words, this option would make every shared/HMS fishery reach the SG100 level within a set timeframe.

For this option, a decision regarding the requirements that are needed at certification is required. Possibly, a shared/HMS fishery would only need to meet the SG60 level for PI 1.2.1 and PI 1.2.2 scoring issue a and b until the SG100 level was met in full. This could mean that the overall P1 score could be less than 80 but the fishery remains certified while harvest strategies and HCRs are being developed. Further, consideration regarding the stock health would need to be given while the MSE pathway was enacted. For example, would the fishery still be able to maintain its certification along this pathway if the score for PI 1.1.1 dropped below SG80.

How previously certified fisheries adopt this pathway also needs to be considered. Given this approach is proposing two certifications to attain SG100, should previously certified fisheries be given this same timeframe? That could mean for example, fisheries that were certified prior to 2020 may be given until 2030 to attain SG100. This timeline assumes the FSR effective date enacting this pathway in 2022.

Option 2 would likely be the most effective, acceptable and feasible while not greatly impacting accessibility and retention. A weakness for this option would be the auditability as there will be numerous issues that include what a CAB scores prior to Phase 2 being undertaken, as well as the scoring needed at certification and surveillance while the harvest strategy and/or harvest control rule are developed.

Option 3 - Phased condition pathway that is optional to any stock

As with Option 2, Option 3 is a process approach that would use the existing default scoring tree. It would be optional for any fishery and only be triggered if a condition was generated for PI 1.2.1 or PI 1.2.2. All other aspects mirror that of Option 2. This is not preferred however as MSC governance bodies including the STAC and Board have advised that the project should only focus on shared and HMS. Further, harmonisation issues and loopholes would be highly probable for overlapping stocks as different UoAs could follow different condition pathways.

Option 3 is the same as Option 2, with the difference being the phased approach is optional for any fishery and be enacted if a condition is required for PI 1.2.1 or PI 1.2.2 (Figure 4). The phased approach would likely be under the exceptional circumstances requirements and can only be enacted at the time of the condition being drafted. It could not be applied retrospectively (e.g. at reassessment).

This option would overcome issues associated with stock definitions that exist for Option 1 and 2.

Although this option is comparable to Option 2 in the impact assessment, multiple governance bodies (e.g. STAC and MSC Board) recommended that the project only focus on shared and HMS stocks. Further, by making the phased

condition pathway optional, there may be perverse outcomes where overlapping UoAs (i.e. from the same stock) undertake different condition pathways. Such a situation would undermine harmonisation and have ramifications for MSC credibility, effectiveness, acceptability and auditability.

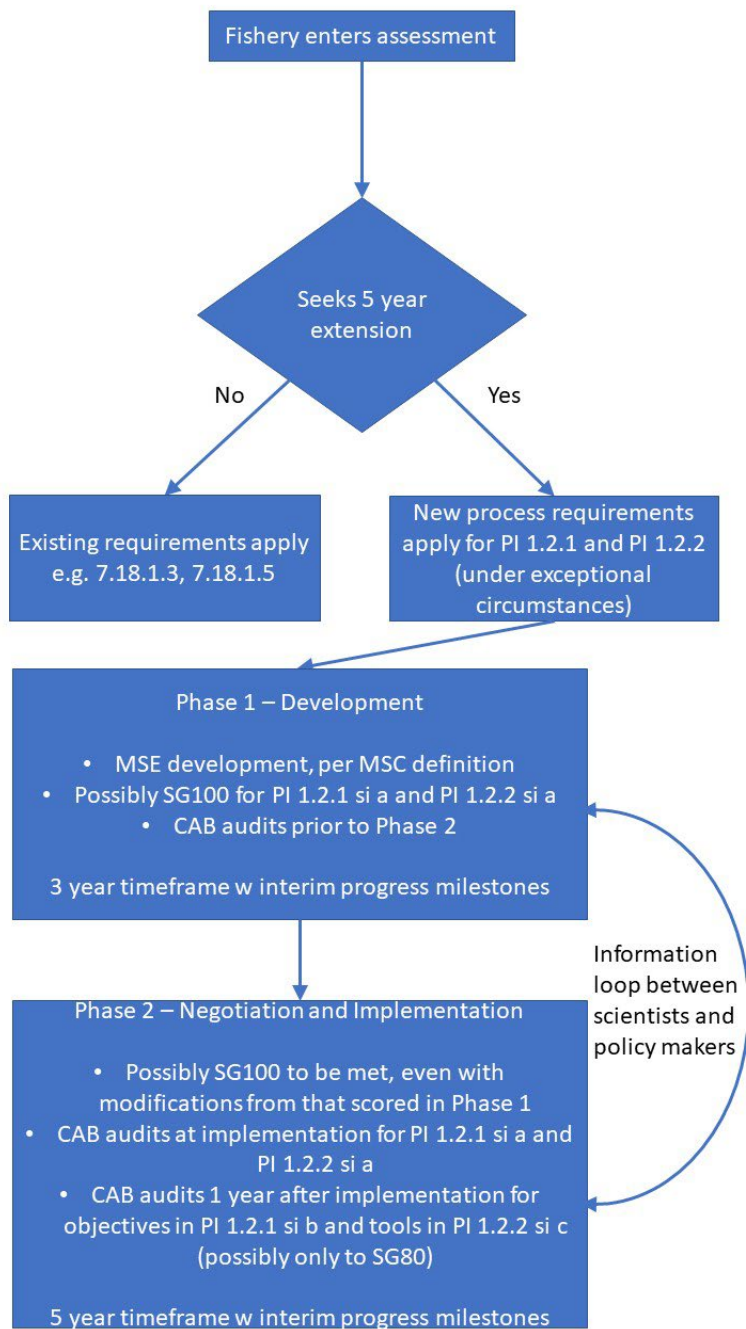


Figure 4 Schematic of Option 3, being a conditions-based approach that is optional

Option 4 - Unit of Assessment approach

Option 4 is an approach to change the intent to how Principle 1 is applied. This approach would have individual UoAs from SHM stocks develop and implement their own harvest strategies. This would occur for UoAs that were in a management setting that did not currently have a stock wide harvest strategy. In other words, it would occur for fisheries that have a condition for either PI 1.2.1 or PI 1.2.2. This approach would essentially create a step-wise pathway for the development of a stock wide harvest strategy by having MSC fisheries make stock level improvements incrementally. Based on the impact assessment, this approach would have issues relating to effectiveness, acceptability, feasibility and auditability. Further, it is unlikely that sufficient time remains to develop, test and draft requirements for this option within the FSR timeframe.

This option was first put to STAC and TAB in June 2020. The general feedback to this approach was that it was unfavoured as it would undermine the work needed to deliver a stock-wide approach.

However, the option was kept in the project for this impact assessment given that it is an alternate approach to gaining driving positive stock-wide outcomes, albeit from incremental gains.

Through MSC outreach staff, candidate fisheries have been identified and external experts in management strategy evaluation (MSE) have been approached. The work to undertake this UoA approach would require an understanding of the feasibility into individual UoAs having enough control over a stock (i.e. proportion of total catch).

Key barriers to this option however include credibility from NGO stakeholders, access to relevant data for the testing phase and the time frame needed to ascertain this approaches effectiveness and the subsequent development, testing and implementation of associated requirements. Based on the limited time remaining in the FSR and the amount of uncertainty in this approach, it is proposed to drop this option from the project.

Due to issues relating to acceptability, feasibility and effectiveness, this option is not preferred.

Component 2 – Impact assessment tables

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
Effectiveness	<p><i>Is the change effective at meeting the MSC's intent?</i></p> <p>Please explain your answer and rationale – following the guidelines in Step 4</p>	<p>-ve: Problem remains with conditions not being closed and ToC not occurring</p> <p>-ve: MSC intervention from VRs or derogations</p> <p>-ve: stock-wide harvest strategies unlikely to be met</p>	<p>+ve: will allow these fishery types to have their specific issues addressed</p> <p>+ve: will likely lead to application of requirements that lead to adoption of stock wide harvest strategies and interim scoring</p> <p>-ve: unintended consequences may be created for fisheries to define their stock in a manner that is not appropriate or doesn't</p>	<p>+ve: conditions based approach for stock type likely to allow these fisheries to enact the ToC over a more suitable timeframe</p> <p>+ve: will lead to a process that allows for stock wide adoption of harvest strategies</p> <p>+ve: outcome is a harvest strategy and HCR at a higher bar to typical condition</p> <p>-ve: possible loopholes for fisheries getting extensions where</p>	<p>+ve: optional entry into a condition based pathway allow fisheries to enact the ToC over a more suitable timeframe when needed</p> <p>+ve: will lead to a process that allows for stock wide adoption of harvest strategies</p> <p>+ve: outcome is a harvest strategy and HCR at a higher bar to typical condition</p> <p>+ve: not prescriptive to fishery type and would follow exceptional</p>	<p>+ve: allows the MSC fishery to take control of their own catch and develop action on the water</p> <p>-ve: would likely only apply or be effective for UoAs that have a high proportion of the target catch (e.g. >70%)</p> <p>-ve: if UoAs develop HS and HCR</p>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
			match the MSC definition	not needed based on stock type -ve: definition of stock type may be ambiguous in some cases	circumstances requirements -ve: if fishery chooses to not have extension but later needs it, may lead to issues with ToC continuing to be stalled -ve: harmonisation issues from overlapping stocks that chose two different pathways	independently, differing or perverse outcomes may exist (e.g. race to fish)

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems effective at resolving the issue(s) consistently and reliably.</i></p>	<i>1 = Completely disagree</i>	<i>3 = Neither agree nor disagree</i>	<i>3 = Neither agree nor disagree</i>	<i>4 = Agree</i>	<i>2 = Disagree</i>
Acceptability	<p><i>Is the change acceptable to stakeholders?</i></p> <p>Please explain your answer and rationale – following the guidelines in Step 4</p>	<p>-ve: Fisheries clients remain against deadlines they cannot meet, suspensions</p> <p>-ve: Stakeholders view certifications with no action as toothless</p>	<p>+ve: Fishery clients will be keen on bespoke requirements if certifications more robust/attainable</p> <p>+ve: likely drives the changes required for the ToR to be maintained for</p>	<p>+ve: Fisheries clients will want more time for conditions to be closed in shared and HMS fisheries</p> <p>+ve: provided interim milestones and phases are transparent, stakeholders likely to be in favour</p>	<p>+ve: Fisheries clients will want more time for conditions to be closed in shared and HMS fisheries</p> <p>+ve: provided interim milestones and phases are transparent, stakeholders likely to be in favour</p>	<p>+ve: Fishery clients may welcome the opportunity to enact change themselves and demonstrate sustainability</p>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
			<p>these fishery types</p> <p>-ve: Stakeholders don't see that these types of fisheries should be allowed special treatment</p>	<p>+ve: likely drives the changes required for the ToR to be maintained for these fishery types</p> <p>-ve: some stakeholders feel these fisheries should not be given special treatment</p>	<p>+ve: puts the onus on the fishery from the outset to go down the desired pathway</p> <p>-ve: some stakeholders feel these fisheries should not be given special treatment</p>	<p>-ve: stakeholders are viscerally opposed to the idea of interim HS not at the stock wide level</p> <p>-ve: may lead to disengagement from the program from NGOs who work on HS and HCR adoption as they view this as undermining the stock wide approach</p>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems acceptable to stakeholders</i></p>	<i>1 = Completely disagree</i>	<i>4 = Agree</i>	<i>4 = Agree</i>	<i>4 = Agree</i>	<i>2 = Disagree</i>
Feasibility	<i>Is the change feasible to fishery partners?</i>	<p>-ve: Clients remain relatively powerless to enact change</p> <p>-ve: costs for certification remain but suspensions will continue to occur outside their control</p>	<p>+ve: scoring of these fisheries would mirror the specific nature of the governance structure of the fishery types</p> <p>+ve: numerous CABs deal with shared and HMS fisheries so wider pool for technical skill for scoring</p> <p>-ve: may increase costs given that</p>	<p>+ve: fisheries clients may welcome the onus of HS development on themselves</p> <p>-ve: issues relating to adoption in the policy space will remain</p> <p>-ve: additional costs from the client in terms of MSE work</p>	<p>+ve: fisheries clients may welcome the onus of HS development on themselves</p> <p>-ve: issues relating to adoption in the policy space will remain</p> <p>-ve: additional costs from the client in terms of MSE work</p>	<p>+ve: provides a clear stepping stone target for fisheries to meet and attain</p> <p>-ve: adds cost to clients to develop and enact their own HS and HCR</p> <p>-ve: likely reduces the</p>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
			<p>bespoke requirements generally require specialty in assessments</p> <p>-ve restricted timeline of FSR for development and testing likely the biggest barrier</p>			<p>economic viability of MSC fisheries that have to take a catch reduction when the wider fleet does not</p> <p>-ve: UoA HS and HCR may not reflect the governance that deals with shared and HMS stocks</p> <p>-ve: technical development and implementation of UoA approach</p>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
						will be challenging
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems technically feasible for fishery partners</i></p>	<i>2 = Disagree</i>	<i>4 = Agree</i>	<i>4 = Agree</i>	<i>4 = Agree</i>	<i>3 = Neither agree nor disagree</i>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems affordable for fishery partners</i></p>	2 = Disagree	3 = Neither agree nor disagree	2 = Disagree	2 = Disagree	2 = Disagree
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems possible given the management contexts of fishery partners</i></p>	2 = Disagree	4 = Agree	4 = Agree	4 = Agree	2 = Disagree

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems doable within 5 years for fishery partners</i></p>	2 = Disagree	3 = Neither agree nor disagree	4 = Agree	4 = Agree	3 = Neither agree nor disagree
Accessibility and retention	Does the change affect the accessibility and retention of fisheries in the MSC program?	-ve: Fisheries clients will likely become suspended or drop out of the program with no solution to the issue, unless MSC intervention occurs	+ve: bespoke tree would result in specific issues that exist in the default tree being overcome	+ve: extra time for condition closing will limit suspensions and increase fishery willingness to enter the program -ve: cost and technical barrier to entry into the program -ve: if bar is set too high at	+ve: extra time for condition closing will limit suspensions and increase fishery willingness to enter the program -ve: cost and technical barrier to entry into the program -ve: if bar is set too high at completion, it may lead to	+ve: UoA approach is entirely up to the MSC fishery so if they do it, they can remain certified -ve: cost and technical barrier to entry into

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
				completion, it may lead to withdrawal of fisheries	withdrawal of fisheries	the program -ve: FIPs will not have a clear pathway for entry into the program during pre-certification
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems accessible to fisheries seeking certification in the future</i></p>	<i>1 = Completely disagree</i>	<i>4 = Agree</i>	<i>4 = Agree</i>	<i>4 = Agree</i>	<i>3 = Neither agree nor disagree</i>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems accessible to currently certified fisheries</i></p>	2 = Disagree	4 = Agree	4 = Agree	4 = Agree	3 = Neither agree nor disagree
Simplification	Does the change simplify the Standard?	+ve: no change means the fisheries/CABs apply the existing requirements which are well known	+ve: would remove redundancy from the default tree for these stocks and focus the scoring -ve: bespoke tree adds complexity to the existing standard	+ve: doesn't change the scoring requirements -ve: increases the complexity of conditions for harvest strategy and HCRs	+ve: doesn't change the scoring requirements -ve: increases the complexity of conditions for harvest strategy and HCRs	+ve: will create a clear outcome that is required -ve: increases the complexity of harvest strategy and HCR development by the UoA

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
	<p>Please state whether you agree/disagree with the following statement:</p> <p><i>The option seems to simplify the Standard</i></p>	<i>3 = Neither agree nor disagree</i>	<i>2 = Disagree</i>	<i>4 = Agree</i>	<i>4 = Agree</i>	<i>3 = Neither agree nor disagree</i>
Auditability	<i>Is the change auditable by CABs?</i>	<p>+ve: as above for simplification</p> <p>-ve: variation requests and other work arounds will be needed to keep fisheries in the program</p>	<p>+ve: may reduce some of the issues associated with these stocks in the default tree</p> <p>-ve: requires pilot process to be undertaken</p>	<p>+ve: doesn't change the scoring of the existing requirements</p> <p>+ve: provides CAB with better framework for conditions scope/development/milestones</p> <p>-ve: adds complexity and possible ambiguity to</p>	<p>+ve: doesn't change the scoring of the existing requirements</p> <p>+ve: provides CAB with better framework for conditions scope/development/milestones</p> <p>+ve: the condition option is up to the client and takes the decision away from the CAB</p>	<p>+ve: provides a mechanism that is clear for CABs to assess</p> <p>-ve: adds complexity and each harvest strategy/H CR development will be different</p>

Impact Types	Description	Option 0	Option 1	Option 2	Option 3	Option 4
				condition setting and surveillance -ve: requires the CAB to fit the stock type into a definition from the outset which could be problematic	-ve: adds complexity and possible ambiguity to condition setting and surveillance	-ve: levels of uncertainty will be large when it comes to scoring various fisheries based on gear/catch
	Please state whether you agree/disagree with the following statement: <i>The option seems to auditable by CABs</i>	<i>2 = Disagree</i>	<i>3 = Neither agree nor disagree</i>	<i>3 = Neither agree nor disagree</i>	<i>4 = Agree</i>	<i>3 = Neither agree nor disagree</i>

Consultations – 2021

Based on the revised problem statement for this component of the project and the results of IA0 and IA1, a public and targeted consultation was undertaken in May and June 2021 with a preferred option presented. The public and targeted consultations presented the preferred option that was a combination of Option 1 - 3 from IA0 and IA1 (Figure 5). The status quo and Option 4 were not taken forward.

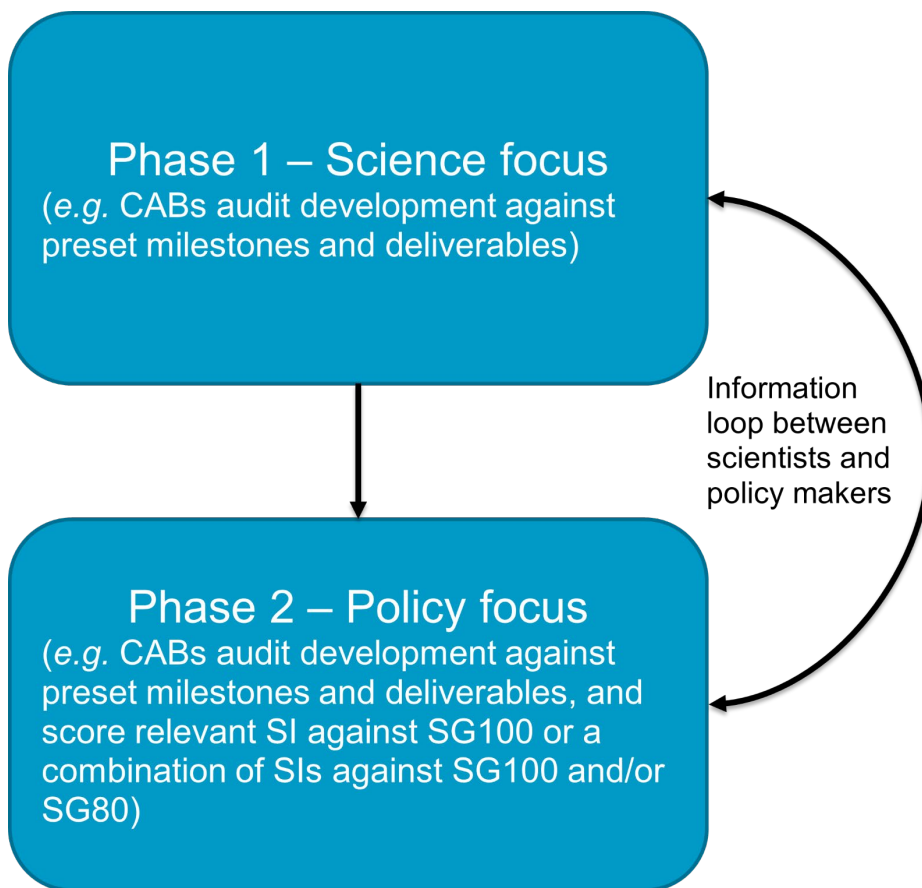


Figure 5 Schematic of the preferred option as presented in both the public and targeted consultations

Public Consultations

The background information was the same for the public and targeted consultations, with the difference being the questions asked in relation to the option. The timeline was proposed as 10 years and the voluntary or compulsory nature was captured in the public consultation only.

The stakeholder groups that responded to the public consultation are provided in Table 3 (refer to [summary report](#) for further information). The public consultation addressed the impacts of effectiveness, acceptability and feasibility for the phased condition pathway

Table 3 Stakeholder groups that responded to the public consultation

Category	Count
Academic fishery	5
CAB	3
Commercial fishery	4
Consultant	2
Governance/management	2
NGO	7
Seafood supply chain	8
Total	31

Effectiveness

Overall, stakeholders agreed that the phased condition pathway would be effective at leading to the adoption of stock wide-harvest strategies for shared and HMS stocks (

Figure 6).

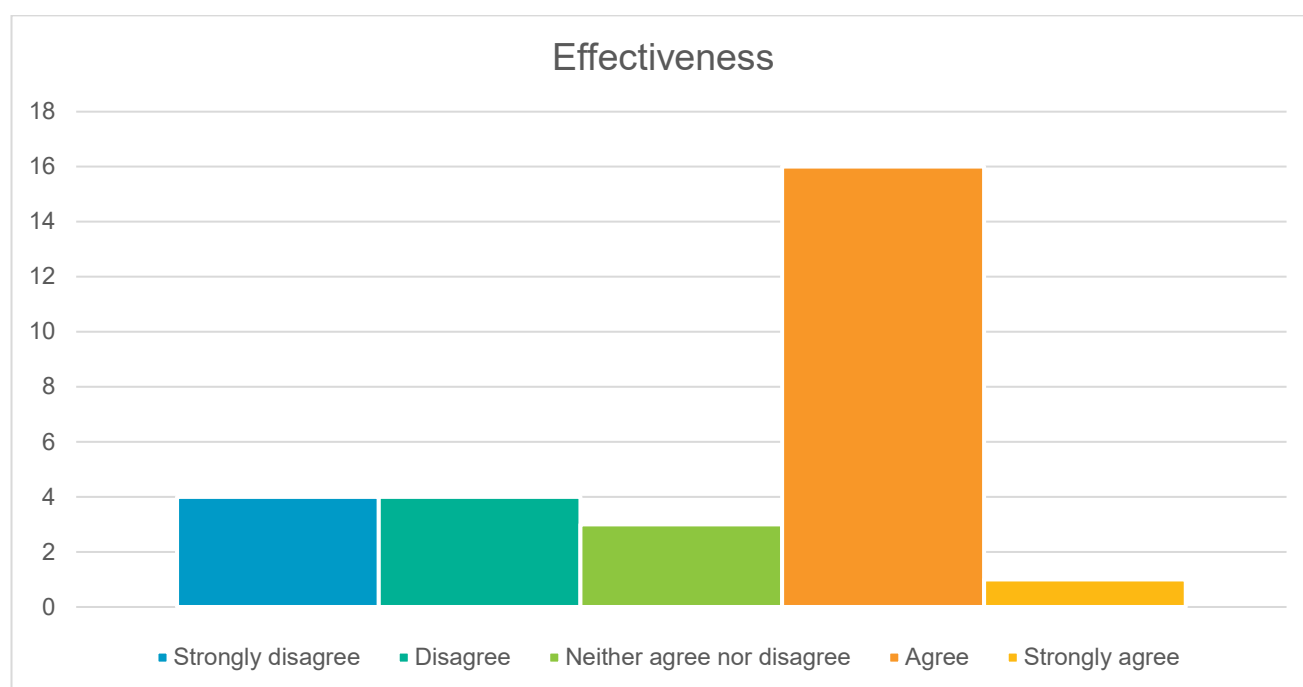


Figure 6 Effectiveness likert scores for the phased condition pathway approach

In terms of the two most prevalent stakeholder groups that responded, there was an even split between disagreeing and agreeing the proposal would be effective.

Table 4 Likert scoring for NGOs and seafood supply stakeholders for effectiveness of the proposal

Likert category	NGOs	Seafood supply
Strongly disagree	2	2
Disagree	1	1
Neither agree nor disagree	0	0
Agree	3	4
Strongly agree	0	1
	6	8

Acceptability

Acceptability was spread across four aspects. These were whether it was acceptable that:

1. 10 years was the allowed time
2. SG100 was attained for some aspects
3. The proposal could only occur if the target stock remained healthy
4. It was voluntary

For the 10 year allowance, attaining SG100 or whether the pathway was only allowed if the stock remained healthy, stakeholders were evenly split between disagreeing or agreeing this was acceptable (Figure 7 to Figure 9). This trend was also reflected for the two most prevalent stakeholder groups for the responses being NGOs and seafood supply.

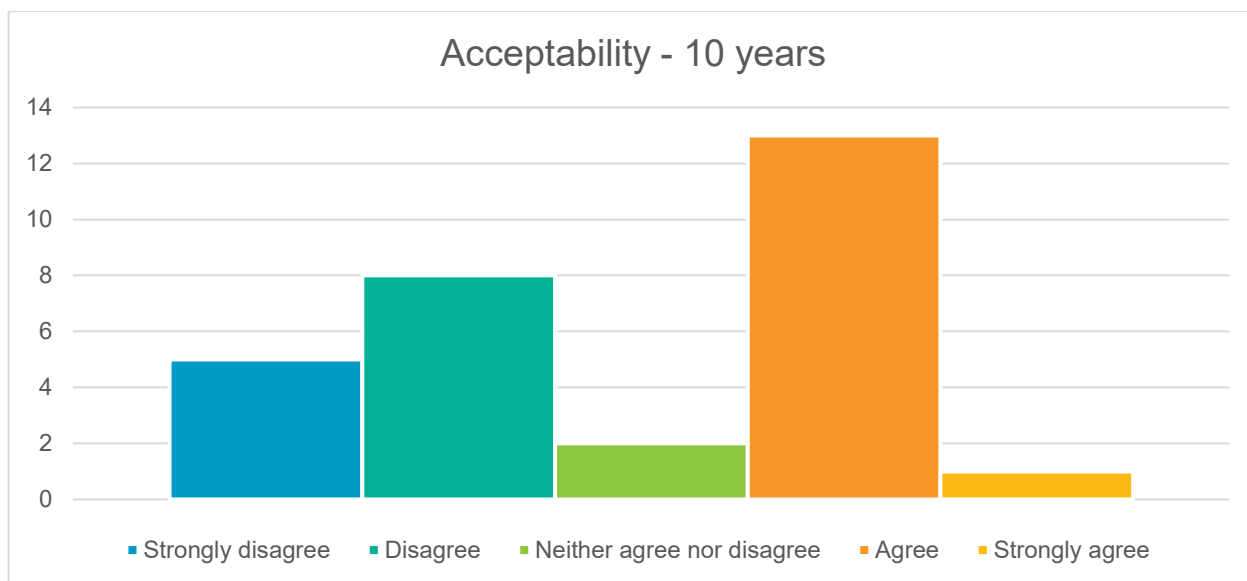


Figure 7 Acceptability likert scores for the phased condition pathway approach for the 10-year timeframe



Figure 8 Acceptability likert scores for the phased condition pathway approach for attaining SG100

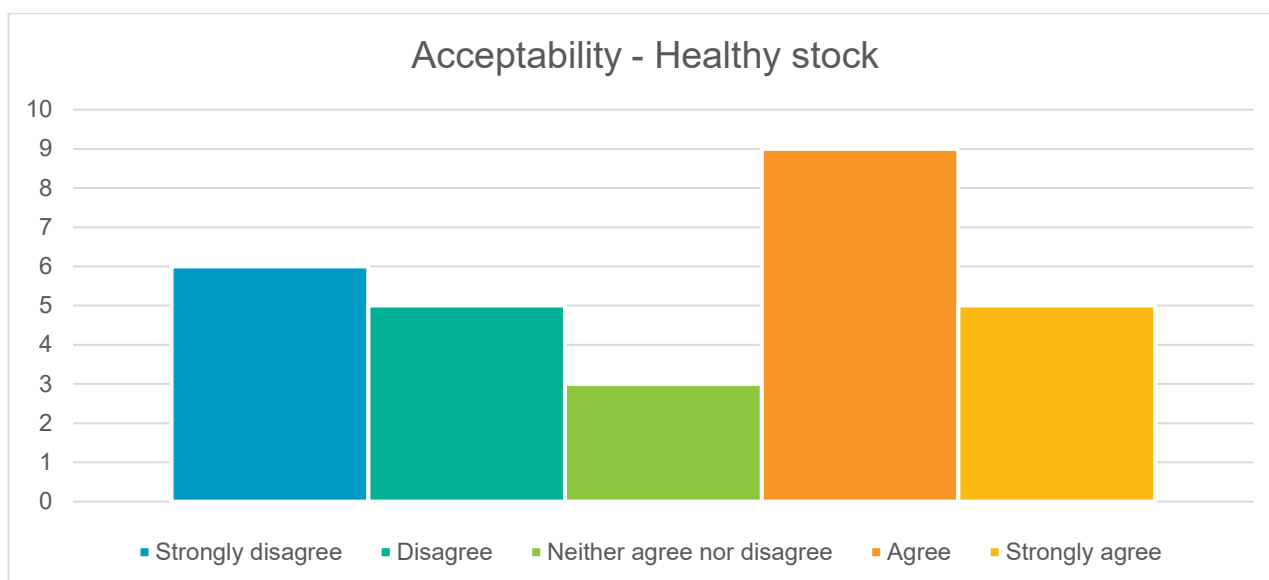


Figure 9 Acceptability likert scores for the phased condition pathway approach for having a healthy stock

In terms of whether the pathway should be voluntary, there was no clear trend with a relatively even representation of all likert scores (Figure 10).



Figure 10 Acceptability likert scores for the phased condition pathway approach for being voluntary.

Feasibility

Like acceptability, the feasibility of the proposal was assessed against three factors, being:

1. 10 years was the allowed time
2. SG100 was attained for some aspects
3. The proposal could only occur if the target stock remained healthy

For the feasibility of attaining SG100 or the target stock remaining healthy, there was a relatively even split between stakeholders disagreeing or agreeing (Figure 11 and Figure 12).

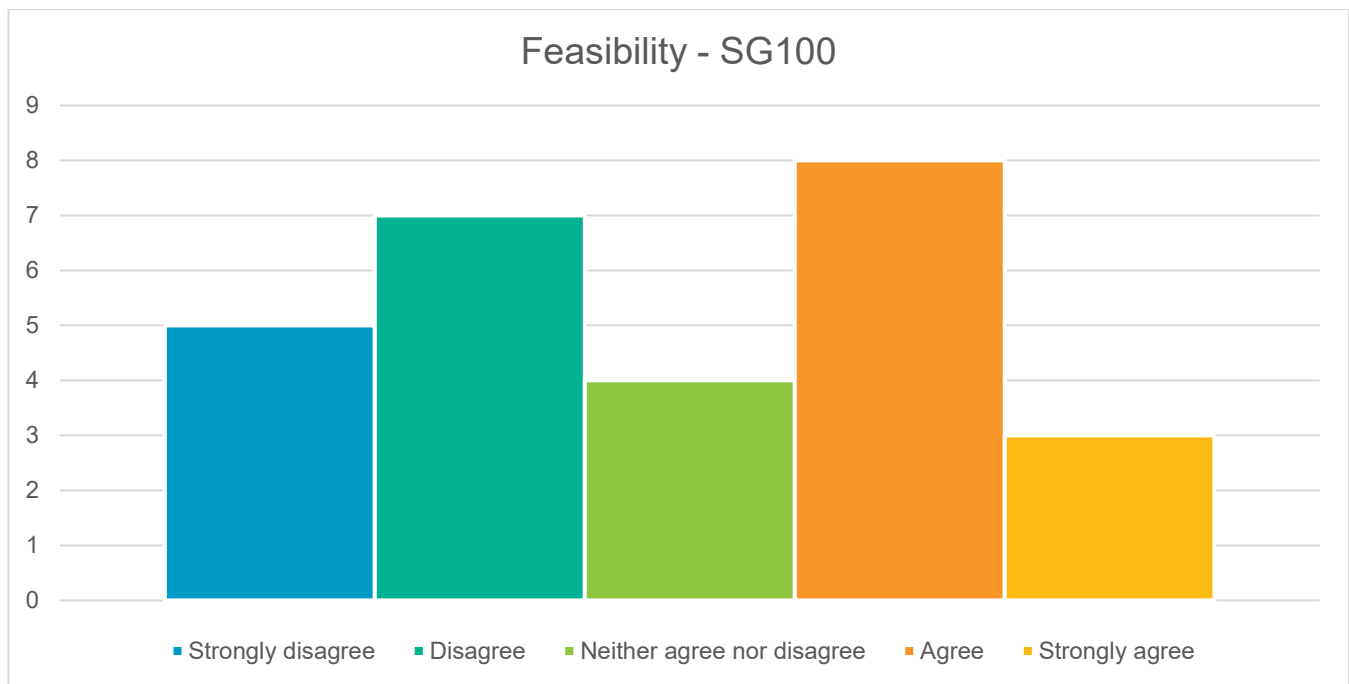


Figure 11 Feasibility likert scores for the phased condition pathway approach attaining SG100.

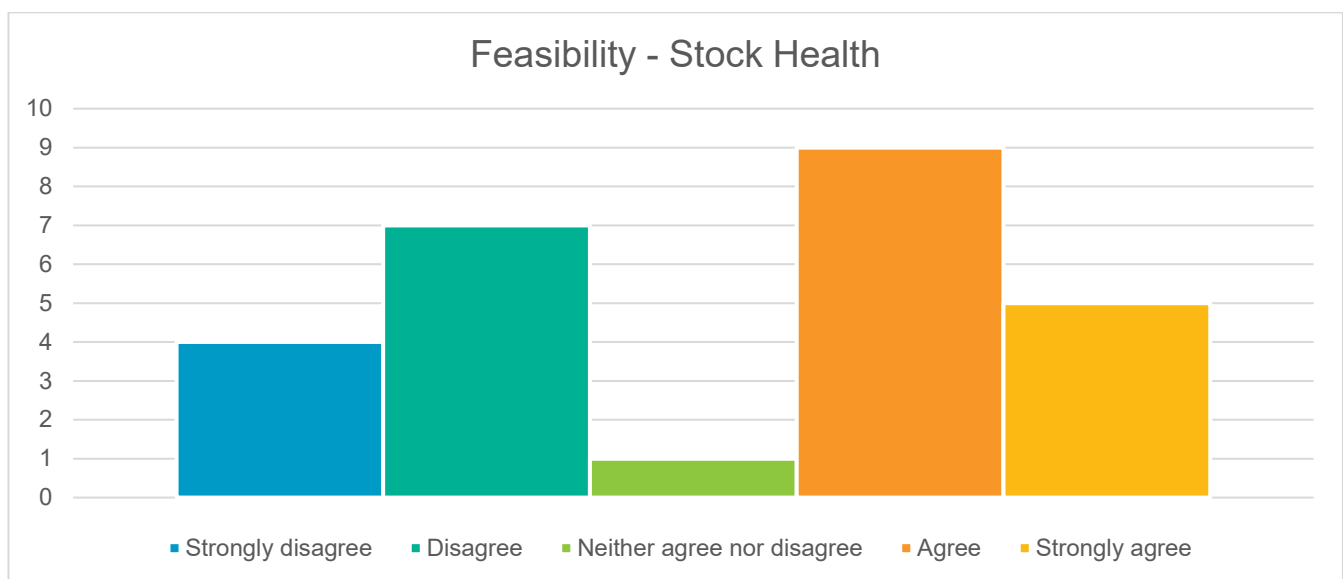


Figure 12 Feasibility likert scores for the phased condition pathway approach only when stock is healthy

The feasibility of the proposal being applicable across 10 years showed not clear trend, with the highest response being stakeholders neither agreeing nor disagreeing (Figure 13).

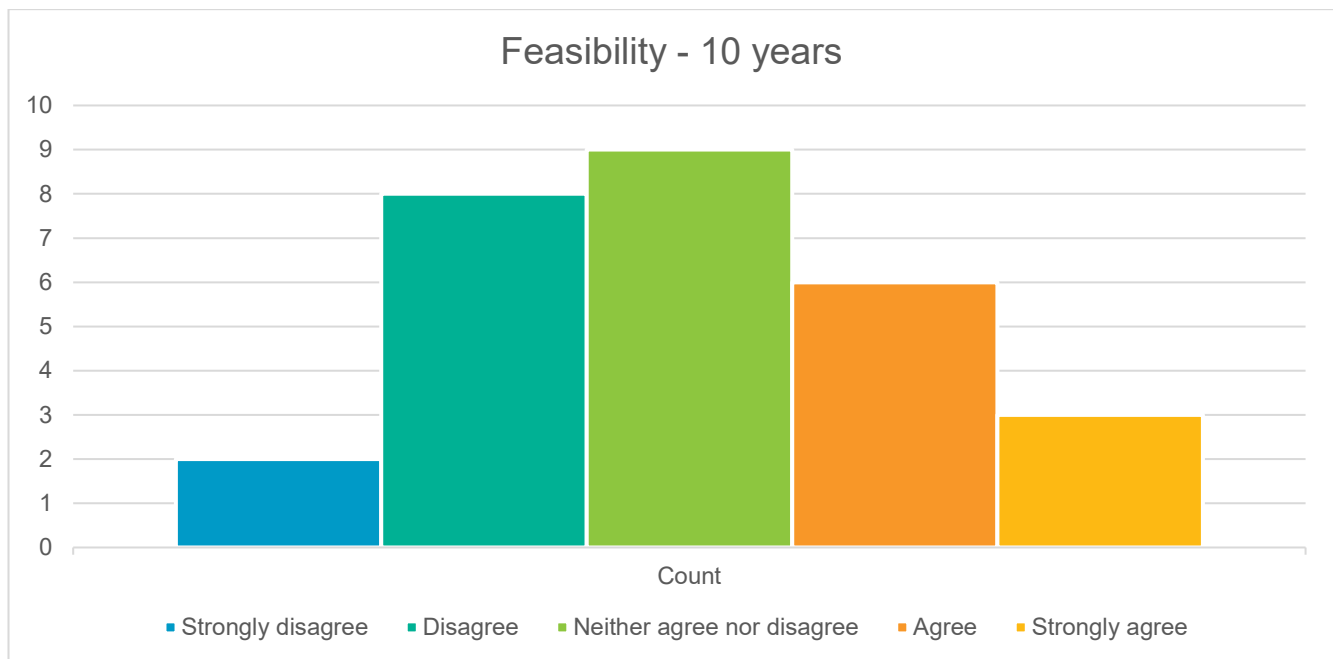


Figure 13 Feasibility likert scores for the phased condition pathway approach across 10 years

Thematic analysis

To understand the development of any themes for respondents, the submissions were reviewed by two MSC staff. Of all submissions, two had verbatim responses in favour of the proposal and two had verbatim responses in opposition to the proposal.

Under each impact type described above, the following themes were identified.

Effectiveness

Key themes:

- Proposal weakens Theory of Change including timeline being too long (between 9 to 10 respondents)
- Will help incentivise uptake as allows sufficient time and development of key attributes of a harvest strategy (e.g. MSE) – (around 9 to 10 respondents)
- Proposal may not provide enough time or leverage for adoption of HS (around 4 respondents)
- Unsure without further details (around 4 respondents)

Stakeholders also raised issues associated with the rigidity of the way the phases are split in the proposal as well as harmonisation and how this would apply to previously certified fisheries.

Acceptability and feasibility

The responses for acceptability and feasibility followed similar themes in terms of the responses and thus are combined to provide a summary.

Voluntary – acceptability only

- Issue arose due to shared and HMS so should be only for those fisheries (around 5 responses)

- Support for voluntary as some knowledge bases or management agencies are ahead of others (around 10 respondents)
- Issues of harmonisation if one fishery enters pathway but another does not, issue with first mover

Feasibility

Stock healthy

Key themes

- Other areas of the standard already deal with stock status so shouldn't be an issue and it adds complexity (around 15 respondents)
- Stock health should be considered but issues related to which type of reference points (e.g. B or F based), whether it is TRP or LRP and whether the entry is ok when healthy but dropping during the phases is ok (around 15 respondents)

SG100

Key themes

- Further clarification of what areas need to be scored higher (around 5 respondents)
- Will create an unequal standard among these and other fisheries (around 10 respondents)
- Additional time should result in fisheries achieving a higher performance (around 5 respondents)
- The presence or absence of a harvest strategy, particularly for RFMOs, should be a scope issue (around 4 respondents)
- Issues of harmonisation will undermine any efforts (around 10 responses)

10 years

Key themes:

- Will not drive change or increase the likelihood of HS adoption (around 20 responses)
- Will allow fisheries sufficient time (around 15 respondents)
- Political factors may still stall process (around 5 respondents)
- Consideration needs to be given for how this applies to previously certified fisheries (around 15 responses)

Targeted consultation

A total of 54 people were contacted to provide input to the targeted consultation, with 24 providing feedback.

In terms of factors to be assessed, the responses can be summarised as the following:

- Management objectives, performance indicators and data needs defined
 - This could include development of working group and cut off for data considerations
- Operating models and candidate MPs identified and tested through MSE simulations
- Demonstration of consultation and input from stakeholders, should be ongoing
- Refine HS to preferred

The milestones in terms of sequential steps can be summarised as:

- Early consultation and commitment from management/stakeholders/Commission
- Evaluation framework inc OMs, data collection
- Implementation and monitoring strategy
- Catch or resource allocation mechanism agreement
- Horse trading of preferred option and implemented HS
- Implement including tools for sharing the resource
 - As a resolution/CMM
- Review effectiveness including exceptional circumstances (min every 5 years)

There was a fair amount of overlap between responses in terms of the two questions that related to factors and milestones. There was also a common theme that the phases are not as separate as presented and feedback from policy makers into the development of the HS is required throughout.

Additional options and impacts

First component

Topic 1 – ‘Designed’ definition at SG100

Initially focussed on ‘responsive’ at SG80, Topic 1 expanded to include defining the term ‘designed’ at SG100 for scoring issue a, PI 1.2.1.

The impact of retention and accessibility was tested for the term ‘designed’ by investigating all FCR v2.0 fisheries that scored at SG100. The PCR of each fishery was investigated to determine if:

- MSE or MP was explicitly used in the scoring rationale of scoring issue a
- MSE or MP was explicitly used in other parts of the PCR to explain harvest strategy development

If a fishery did use MSE and MP in determining its score, the score attributed to that fishery remained the same. If a fishery did not use MSE or MP to determine the score or mention it within the PCR, scoring issue a was rescored to 80 and a new overall P1 score was determined. Retention and accessibility was therefore determined against how many fisheries fail based on the rescoring resulting in the overall P1 score to fall below the aggregate of 80.

The summary of results is as follows:

- 97 UoAs against v2.0 met SG100 for PI 1.2.1
- 3 mention MSE in the rationale for PI 1.2.1 si a
- 1 of these 3 mentions an MP in the rationale for PI 1.2.1 si a
- 16 mention MSE or MP (16%) as part of harvest strategy development somewhere in the report
- 9 UoAs fail overall on P1 (9%) if rescored based the proposed SG100 definition for 'designed'

Overall, although only three UoAs and one UoA mentions MSE and MP in the scoring rationales, respectively, rescoring to SG80 would only fail nine out of 97 UoAs (9.3%)

Because SG100 is 1) state of the art and 2) the MSC definition includes HS “*may include an MP or an MP (implicit) and be tested by MSE*” it is proposed to keep the definition as for ‘designed’ as:

- *a harvest strategy that includes a management procedure that has been developed through management strategy evaluation.*

Topic 1 – Objectives scored within PI 1.2.1 scoring issue b

As with the term ‘designed’, an additional aspect to topic one was included to change scoring issue b in PI 1.2.1. Following review from the TAB harvest strategy working group and DLM project, scoring issue b will be revised to read (bold emphasis):

- The harvest strategy may not have been fully tested but evidence exists that it is achieving the objectives **reflected in PI 1.1.1 SG80.**

It was felt that the harvest strategy should be aiming to achieve the objectives of being highly likely above the PRI and fluctuating around a level consistent with MSY. This would also reflect the same wording that is present in PI 1.2.1 scoring issue a. An issue would exist however if the rebuilding PI were scored. This is because the harvest strategy may be gear toward getting the stock to PI 1.1.1 SG80. Guidance will be added to the FCR to reflect this difference.

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Following review from the TAB harvest strategy working group and DLM project, scoring issue b will be revised to read (bold emphasis):

- The harvest strategy may not have been fully tested but evidence exists that it is achieving the objectives **reflected in PI 1.1.1 SG80.**

It was felt that the harvest strategy should be aiming to achieve the objectives of being highly likely above the PRI and fluctuating around a level consistent with MSY. This would also reflect the same wording that is present in PI 1.2.1 scoring issue a. An issue would exist however if the rebuilding PI were scored. This is because the harvest strategy may be gear toward getting the stock to PI 1.1.1 SG80. Guidance will be added to the FCR to reflect this difference.

Topic 1 – Edit wording in PI 1.2.1 scoring issue b SG80 and SG100

During pilot testing, an issue was raised by an assessor with respect to the wording with SG80 and SG100 of PI 1.2.1. scoring issue b. The issue relates to the use of the term ‘fully’ and that SG80 asks to assess two separate things.

The existing wording of the SGs is:

- SG80: The harvest strategy may not have been fully tested but evidence exists that it is achieving its objectives
- SG100: The performance of the harvest strategy has been fully evaluated and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.

The proposed change is to remove the term ‘fully’ from both SGs but also edit the SG80 language. The proposed change would be:

- SG80: The harvest strategy has been tested and is expected to meet the objectives reflected in PI 1.1.1 SG80 or there is evidence that the harvest strategy is achieving its objectives reflected in PI 1.1.1 SG80
- SG100: The performance of the harvest strategy has been evaluated and evidence exists to show that it is achieving its objectives including being clearly able to maintain stocks at target levels.

The removal of 'fully' does not require impact testing as the term 'fully' is not defined in the previous version so removing it will not change the application of the requirement. The altering of the wording to the SG80 language was impacted tested for accessibility and retention. 40 certified UoAs from v2.0 were haphazardly selected to reflect a spread of fishery types in the MSC program. These included large and small scale fisheries with different gear types and target species that included mid-water trawl, bottom trawl, long-line, line, trap and purse seine.

Each rationale was assessed to determine if:

- The rationale mentions that the HS is tested/fully tested
- If the objectives are being met, even if the HS has not been tested/fully tested

The results demonstrated that making this change would have little impact on previously certified fisheries. Only two of the 40 UoAs did not mention that the objectives were being met or that the harvest strategy was tested in some way. Neither of these fisheries would fail by changing the score of scoring issue b to SG60 based on the proposed change. Based on these results, the change to the wording of scoring issue b will be included.

Topic 4 – 'Available' HCRs and the link to PI 1.2.1

The preferred option for this topic relates to the preferred option of the second component to develop a bespoke scoring tree for shared and HMS species (see below). During the initial impact assessment for this topic, it was identified that only shared or HMS stocks have scored 'available'. It is therefore ideal to contain 'available' scoring within the bespoke tree only, as it will ultimately force the UoA to adopt a more robust HS. Further, scoring 'available' allows extensions to conditions for PI 1.2.2. By removing 'available' from the default tree and only allowing them to be scored in the bespoke tree the anomaly of having a HCR condition being able to be carried over within the default tree is removed. This anomaly is covered within the bespoke tree as the phased condition pathway is proposed to occur over 10 years.

The proposed bespoke tree will include a process/scoring requirement that if 'available' HCRs are scored, SG80 cannot be met in PI 1.2.1 scoring issue a. This will make it clear that 'responsive' harvest strategies have to include an in place HCR in some context. Note, 'available' HCRs are not 'in place' for the UoA. If 'available' HCRs are not scored in the default tree, this process issue can be contained within the bespoke tree.

The most important process function within the phased condition pathway is making every fishery attain SG100 for PI 1.2.1 si a. By doing this, even if the fishery initially scores an 'available' HCR, the process balances additional time to achieve the required outcome with attaining a more robust and 'designed' harvest strategy. Note, the proposed definition of 'designed' within the first component of the FSR project is:

- *a harvest strategy that includes a management procedure that has been developed through management strategy evaluation.*

Second component

It was identified from various sources (e.g. TAB WG) that the definitions related to relevant terms to the second component may need updating. The terms proposed to be updated include operating model (OM), management strategy evaluation (MSE), management procedure (MP) and MP approach (Table 5).

Table 5 Proposed definitions for updating within the MSC definitions

Term	Existing definition	Alternative definitions	Proposed definition for FSR
Operating model	-	A dynamic simulation of the evolution of stock biomass in response to changes in fishing mortality and other parameters ¹	As per the alternative definition
MP	The combination of pre-defined data, together with an algorithm to which such data are input to provide a value for a TAC or effort control measure; this combination has been demonstrated, through simulation trials, to show robust performance in the presence of uncertainties. Additional rules may be included, for example to spread a TAC spatially to cater for uncertainty about stock structure.	Has the same elements as a harvest strategy. The distinction is that each component of a Management Procedure is formally specified, and the combination of monitoring data, analysis method, harvest control rule and management measure has been simulation tested to demonstrate adequately robust performance in the face of plausible uncertainties about stock and fishery dynamics. ²	Maintain MSC definition
MP approach	Management of a resource using a fully specified set of rules incorporating feedback control; the approach is explicitly precautionary through its requirement for simulation trials to have demonstrated robust performance across a range of uncertainties about	-	Maintain the MSC definition

Term	Existing definition	Alternative definitions	Proposed definition for FSR
	resource status and dynamics.		
MSE	Usually synonymous with MP approach; often used to describe the process of testing generic MPs or harvest strategies.	A process whereby the performances of alternative harvest strategies are tested and compared using stochastic simulations of stock and fishery dynamics against a set of performance statistics developed to quantify the attainment of management objectives ²	The alternative definition.

1. Definition from Holland, D. S. (2010), "Management Strategy Evaluation and Management Procedures: Tools for Rebuilding and Sustaining Fisheries", OECD Food, Agriculture and Fisheries Working Papers, No. 25
2. Definition from Tuna RFMO WG on MSE: https://www.tuna-org.org/Documents/MSEGlossary_tRFMO_MSEWG2018.pdf

Preferred option

Based off the impact assessment, the preferred option is to implement a phased condition pathway. A summary of the proposed changes to implement this are:

1. The phased condition pathway will be compulsory for shared/HMS stocks and voluntary for all others
2. The phased condition pathway will be scored in a bespoke tree within a stand-alone annex for PI 1.2.1 and PI 1.2.2
 - a. PI 1.2.1 will have bespoke process requirements to make fisheries attain the SG100 level of PI 1.2.1 scoring issue a and b
 - b. PI 1.2.2 will retain 'available' but these requirements will be removed from the default tree
3. In terms of scoring, all previous requirements will still apply to enable certification. That being, all scoring issues need to score 60 and above the overall P1 score aggregate greater than 80
4. In terms of timelines;
 - a. For new assessments, the phased condition pathway will be permitted a maximum of 10 years (i.e. two certification cycles) and a fishery can only enter this pathway when they first enter assessment
 - b. For previously certified assessments, they will have a maximum of five additional years from their first surveillance/next reassessment (whichever comes first) after the release of the new requirements
 - i. They need to demonstrate that all aspects of the first phase are completed after one year
 - ii. They have to link the extension to tangible management developments/plans (i.e. they can't simply get an arbitrary five years)
 - iii. They need to demonstrate they are following scientific advice
 - c. The timeline for completing the phased pathway, whether for new assessments or previously certified, starts with the first UoA that enters and all subsequent fisheries harmonise their milestones accordingly
5. The first phase has four milestones;
 - a. Management objectives, performance indicators and data needs defined

- b. Operating models and candidate MPs that include mechanisms for catch constraints tested through MSE simulations
 - c. Demonstration of consultation and input from stakeholders
 - d. Preferred harvest strategy adhering to an MP approach with an agreed catch constraint identified
6. The second phase has three milestones;
 - a. Mechanism for catch constraints agreed
 - b. Harvest strategy adhering to an MP approach with catch reduction or resource sharing mechanism that follows scientific advice adopted and implemented
 - c. Effectiveness review of implemented harvest strategy determined
7. To move from the first to the second phase, PI 1.2.1 si a needs to be scored at SG100 at the completion of the first phase
 - a. The milestones outlined above will not be timebound explicitly though if no progress is demonstrated after 3 years in the first phase, the fishery will become suspended
8. To complete the phased pathway, SG100 shall be scored for PI 1.2.1 a and b and all SG80 for PI 1.2.2
9. Stock health will not be a consideration for the entry into the pathway or being able to stay in it
 - a. Exception to this is if the UoA is scoring 'available' HCRs

This approach balances the desire for more robust harvest strategies in many fishery types while allowing additional time for development and implementation. With increasing likelihoods of factors such as climate change altering how fisheries are managed, it is advantageous for MSC's mission and vision that more fisheries develop designed harvest strategies that are robust to uncertainty.

Key Considerations

Compulsory for HMS stocks

Making the pathway compulsory links the issue back to the problem statement, as it was identified that with respect to harvest strategy adoption, *"the MSC theory of change is stalled for shared and highly migratory stocks."*

The requirements would follow the stock types identified in SA4.1.1:

- c. Shared stocks;
- d. Straddling stocks;
- e. Stocks of highly migratory species (HMS).

The definition proposed for UoAs to use the bespoke annex is modified from Table GSA10 of FCR v2.0:

- Are exploited by two or more States where international law becomes relevant. These multi-level management systems may have a variety of jurisdictional arrangements that might apply to that UoA and are therefore required to be considered by the assessment team.

In terms of how this compulsory definition would impact the program, for v1.3 and v.20 fisheries certified up until August 2020, shared/HMS stocks represented 45% of current 742 UoCs but 58% of the total catch volume. However, if these are broken down further into the difference between a shared UoA (i.e. two states) or HMS (i.e. three or more states) the contributions vary (Table 6).

Table 6 Number and contributions of single managed, shared (i.e. two states) or HMS (i.e. three or more states)

Stock type	No. of UoAs	% of UoAs	Catch (t)	% volume
Single	340	46%	5,913,506	43%
Shared	200	27%	2,606,532	19%
HMS	202	27%	5,264,158	38%
Total	742		13,784,196	

Therefore, if the compulsory aspect of the bespoke tree was only applied to HMS UoAs, the number of UoAs and catch volumes relative to the program would be reduced. If this were broken down further to RFMO managed stocks only, it would represent around 16% by number of UoAs in the program.

Harmonisation

For harmonisation of the phased condition pathway, it is proposed that the timeline for the phased condition pathway is set for the first fishery to enter assessment. All subsequent fisheries shall align their milestones based on the first fishery. This is proposed as it is expected that the scientific provider for the management agency that the UoA is part of will lead the MSE development. Thus, work should commence upon the certification of the first fishery. This proposal also aligns with guidance for conditions where timelines should be aligned for harmonised conditions among assessments, based on the timeline of the first fishery to pick up that condition.

By making the pathway compulsory for certain stock types, this would also reduce the ambiguity for assessments if the process was voluntary.

Timelines

The public consultation indicated support for a ten-year timeframe for the first attempt at producing a HS that adheres to an MP approach that is developed through MSE testing. It is proposed that previously certified fisheries are given a maximum of five years to complete the phased condition pathway. This will balance retention issues against acceptability issues identified from the recent public consultation.

An additional five years acknowledges:

- 1) adoption of stock side harvest strategies is difficult for shared and HMS stocks
- 2) a robust HS is a more desirable end goal than one that fails in the short term (i.e. one that meets SG100 for PI 1.2.1 scoring issue a and b).
- 3) sufficient progress should have been made during certification and existing conditions to justify:
 - a. One year to complete the first phase
 - b. Four years at most to complete the second phase

Two fishery types highlight the five year timeline balances the above for certified fisheries. The first are the tuna fisheries in the WCPO. These fisheries have been undertaking an MSE process for harvest strategy adoption since 2015. Currently, the workplan for these fisheries has the harvest strategy and HCR adopted for skipjack and South Pacific albacore by 2022 with no adoption date set for yellowfin or bigeye. However, these milestones are likely to be moved given the current progress toward achieving these milestones. If the phased condition pathway was enacted in 2015, the ten year timeframe would largely mirror the timeline being undertaken by these fisheries (Table 7). Given there are already certified fisheries for these stocks, the five year timeframe puts these fisheries on a similar trajectory to the workplan.

The second are the NE Atlantic pelagic fisheries. Discussions with MSC staff indicate that the scientific work, which is the focus of Phase 1, is relatively progressed. However, the policy adoption process with respect to allocation remain

the biggest hurdle, which is the focus of Phase 2. In the phased condition pathway, both phases occur over five years. If the previously certified fisheries in the NE Atlantic were given the overall five year timeframe for the entire phased condition pathway, it is likely that a stock wide harvest strategy with an appropriate catch reduction mechanism can be developed and implemented.

Taken together, these two examples highlight that a five year timeframe for previously certified fisheries to complete the phased condition pathway is sufficient.

One of the focal points in the MSC allowing an additional five years for previously certified fisheries will be tuna fisheries certified in the WCPO. All MSC certified WCPO tuna fisheries have a condition on both PI 1.2.1 and PI 1.2.2. However, the legacy of having these conditions open is not even among stocks. With respect to the overall ten year timeframe for new UoAs that enter the phased condition pathway, only three of eight current conditions will exceed this time by a substantial margin, if an additional maximum of five years were granted to previously certified fisheries (Table 8

Table 7 Condition history for PI 1.2.1 and PI 1.2.2 for the Western and Central Pacific Ocean (WCPO) stocks of South Pacific albacore (SPA), skipjack (SKJ), yellowfin (YFT) and bigeye (BET). Yellow cells indicate open conditions and green cells indicate the proposed 5 year extension under the phased condition pathway. Note, the current WCPO workplan has HCRs and HS adopted for SKJ and SPA in 2022. Numbers in each cell represent the cumulative number of fishery assessments where the conditions apply for each stock.

). These three relate to the condition on PI 1.2.1 for South Pacific albacore and the condition on PI 1.2.2 for South Pacific albacore and skipjack. It is worth noting that with respect to the HCR condition, the current requirements for 'available' have permitted this to be carried over into recertification. Further, for all three situations, only a small number of assessments had the condition within the first certification cycle when the condition first applied.

Table 7 Condition history for PI 1.2.1 and PI 1.2.2 for the Western and Central Pacific Ocean (WCPO) stocks of South Pacific albacore (SPA), skipjack (SKJ), yellowfin (YFT) and bigeye (BET). Yellow cells indicate open conditions and green cells indicate the proposed 5 year extension under the phased condition pathway. Note, the current WCPO workplan has HCRs and HS adopted for SKJ and SPA in 2022. Numbers in each cell represent the cumulative number of fishery assessments where the conditions apply for each stock.

PI 1.2.1					PI 1.2.2				
Year	SPA	SKJ	YFT	BET	Year	SPA	SKJ	YFT	BET
2007					2007	1			
2008					2008	1			
2009					2009	1			
2010					2010	1			
2011					2011	2	1		
2012	1				2012	3	1		
2013	1				2013	3	1		
2014	1				2014	3	1		
2015	3		1		2015	5	1	1	
2016	3	3	4		2016	5	4	4	
2017	5	4	5		2017	6	5	5	
2018	7	7	9	1	2018	7	7	9	1
2019	8	8	12	2	2019	8	8	12	2
2020	9	9	15	3	2020	9	9	15	3
2021	10	11	18	5	2021	10	11	18	5

PI 1.2.1					PI 1.2.2				
2022					2022				
2023					2023				
2024					2024				
2025					2025				
2026					2026				
2027					2027				

The phased approach scored in the bespoke annex will need to address the following milestones:

a. Phase 1

- i. Management objectives, performance indicators and data needs defined.
- ii. Operating models and candidate Management Procedures (MPs) that include mechanisms for catch constraints tested through Management Strategy Evaluation (MSE) simulations.
- iii. Demonstration of consultation and input from stakeholders.
- iv. Preferred harvest strategy(s) adhering to an MP approach with an agreed catch constraint identified.

b. Phase 2

- i. Mechanism for catch constraints agreed.
- ii. Harvest strategy adhering to an MP approach with catch constraints or resource sharing mechanism that follows scientific advice, adopted and implemented.
- iii. Effectiveness review schedule of implemented harvest strategy determined.

The approach to be implemented for previously certified UoAs will be that the maximum of an additional five years can only occur if the first three milestones of Phase 1 are completed prior to scoring the bespoke annex. That would be determined at either reassessment or a surveillance audit immediately prior to the new version of the requirements being released.

Stock health

The proposal does not currently include the consideration of stock health. There was some support in the public consultation that this pathway could only be entered if the stock meets SG80 for PI 1.1.1. Although that may be appropriate, other stakeholders felt that even in a depleted stock, the rebuilding PI will deal with getting the stock back to PI 1.1.1 and the phased condition pathway aids the long term development of robust HS that maintain a level fluctuating around Bmsy. Further, 'available' HCRs are proposed to be scored in the bespoke tree. Such requirements have a stock health aspect built into them for putting in at least 'generally understood' HCRs. Last, all the previous scoring criteria in the default tree would apply, including ongoing certification being subject to all PIs scoring above 60 and the Principle 1 score being 80 or above. Taken together, it is proposed that a requirement to continue or enter the phased condition pathway is not developed with regard to stock health.

Scoring requirements

It is proposed that bespoke scoring requirements are developed for Principle. To implement the proposed change, process modifications would be needed to PI 1.2.1 in the bespoke tree and requirement changes would be needed in PI 1.2.2 in the default tree (Table 8). The change proposed are summarised as:

- Bespoke tree
 - Process requirement that if ‘available’ HCRs are scored, PI 1.2.1 scoring issue a cannot meet SG80.
 - Process requirements that SG100 for scoring issue a must be met to complete the phased condition pathway
- Default tree
 - Remove the scoring of ‘available’ HCRs from PI 1.2.2 scoring issue a
 - The requirement for effectiveness of the HCRs needs to be based on those implemented within the phased condition pathway

Table 8 Proposed scoring requirements changes within the bespoke phased condition pathway tree and default tree. Strikethrough shows the proposed changes from the existing default requirements.

Tree	Performance indicator	SG60	SG80	SG100
Default	PI 1.2.2	HCRs are generally understood and in place and are expected to reduce the exploitation rate as the point of recruitment impairment (PRI) or HCRs are available	Well defined HCRs are in place that ensure that the exploitation rate is reduced as the PRI is approached, are expected to keep the stock fluctuating around a target level consistent with (or above) MSY, or for key LTL species a level consistent with ecosystem needs.	The HCRs are expected to keep the stock fluctuating at or above a target level consistent with MSY, or another more appropriate level taking into account the ecological role of the stock, most of the time.

The proposed changes to scoring address a number of issues identified both in Component 1 of the FSR project and the recent public consultation for Component 2.

Pilot testing

Five previously certified fisheries underwent pilot testing for the draft requirements from the preferred options for the first and second component. The first component did not cause major changes to the assessments, with the exception of a tuna assessment. This assessment would not mee the ‘designed’ definition at SG100 and rescoring to SG80 would fail the fishery based on the overall P1 score falling below 80. This UoA however, was identified in the impact testing to be one of the nine UoAs to fail based on the rescoring to SG80.

For the second component, two of these five would have triggered the use of the bespoke scoring tree for shared and HMS stocks, both including tuna from the WCPO and Atlantic Ocean.

For the WCPO fishery, no concerns were raised with respect to the application of Annex SE for the previously certified UoAs entering the pathway using the proposed gap analysis. This is because the WCPFC, that manages these target stocks, has progressed their HS development and would meet the entry requirements of Phase 1 for a previously certified stock against FCR v2.0.

For the Atlantic fishery, the CAB identified that the fishery would not be able to enter the pathway using the proposed gap analysis. This is because ICCAT has not progressed their HS development sufficiently to meet the entry requirements of Phase 1 for a previously certified stock against FCR v2.0.

This CAB also identified that although most tuna RFMOs are moving toward the outcome required of Annex SE, other shared/HMS are not. This includes the Northwest Atlantic Fisheries Organisation (NAFO) managed stocks.

Discussion and conclusions

The comparison of options presented below is with regard to the options from the first component that were consolidated following the initial impact assessment.

First component

Topic 1 – ‘Responsive’ harvest strategies

This topic has:

- Developed a new definition for ‘responsive’ within scoring issue a PI 1.2.1 at SG80
- Developed a new definition for ‘designed’ within SG100 scoring issue a PI 1.2.1 at SG100
- Modified the language within scoring issue b PI 1.2.1 at SG80 and SG100
- Ensured the objectives in scoring issue b PI 1.2.1 refer to the SG80 level of PI 1.1.1 (stock status)

Topic 2 – Extending conditions to PI 1.2.1

This topic was moved into the second component of the project.

Topic 3 – Rebuilding PI 1.1.2

This topic was moved into a project to address innovative changes to Standard structure.

Topic 4 – ‘Available’ HCRs and scoring PI 1.2.1

This topic was moved into the second component of the project. ‘Available’ HCRs will no longer be scored in the default tree and only allowed to be scored using the bespoke annex for stock targeting shared/HMS. The requirements within this annex state that if ‘available’ HCRs are scored, the score of PI 1.2.1 scoring issue a can only meet SG60.

Topic 5 and 6 – ‘Available’ HCRs and scoring PI 1.2.3 and PI 1.2.4

This topic was resolved by having PI 1.2.3 and PI 1.2.4 refer to the harvest strategy instead of the HCRs in the relevant PISGs.

Second component

A bespoke annex to score shared/HMS stocks has been developed to address the problem statement relating to these stocks. New UoAs will have a maximum of 10 years to implement a harvest strategy that includes a management procedure that is developed using management strategy evaluation. The development will occur in a phased approach, with the first phase needing to be completed (first certification) prior to entering the second phase at reassessment. Existing UoAs will have a maximum of five years to develop their harvest strategy but the first phase must be completed within one year and the first milestones must be demonstrated to be complete before they can score using the bespoke annex.

This approach will balance the desire for more robust harvest strategies that attain an SG100 level, while acknowledging that more than one certification cycle for new fisheries is likely needed to achieve this goal.