Preliminary Investigation of Internationally Recognised Responsible Fisheries Management Certification

Sevaly Sen

Project No. 2012/746

AUSTRALIAN SEAFOOD COOPERATIVE RESEARCH CENTRE

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SYDNEY FISH MARKET

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FRDC FISHERIES RESEARCH & DEVELOPMENT CORPORATION

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2012/746 Preliminary Investigation of Internationally Recognised Responsible Fisheries Management Certification

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PROJECT OBJECTIVES:

1. To evaluate the applicability and benefits of the Global Trust FAO based RFM Performance Criteria in an Australian fisheries management context.
2. To explore options for the development of a certification mark and make recommendations for its appropriate ownership structure, so that this can be used to demonstrate to the public (and other stakeholders) the status of fisheries against this Certification Program.
3. A coordinated communications strategy for the RFM and Professionalising industry projects to ensure objectives and outcomes are clearly communicated and synergies highlighted to demonstrate that the seafood industry is professional and committed to verifying its sustainability credentials.

NON-TECHNICAL SUMMARY

- The FAO Code of Conduct for Responsible Fisheries and FAO Guidelines for the Eco-labelling of Fish and Fishery Products from Marine Capture Fisheries represent internationally negotiated documents that represent consensus on the criteria for responsibly managed fisheries. These 'tools' form the basis of a number of private standards that are used for the certification of fisheries; including Marine Stewardship Council, Alaska FAO Based Responsible Fisheries Management (RFM) Certification and Iceland Responsible Fisheries Management Certification.
- This project investigated the feasibility of an FAO Based RFM Certification for Australia by testing on two NSW fisheries using the Conformance Criteria Version 1.2 which has been used in Alaska RFM fisheries certification.
- The first phase of the project was a general desk top review of the consistency of Australian and Commonwealth fisheries management systems against the Conformance Criteria. As anticipated, the review demonstrated that there were no fundamental reasons why Australian fisheries management could not utilise FAO criteria as a basis for fisheries certification. The next step was to assess whether the Conformance Criteria were applicable at the fishery-level.
- Compatibility assessment studies were carried out on two NSW fisheries which displayed varying degrees of complexity (species, gears, locations) in order to test the extremities of the FAO Based Conformance Criteria. The studies centred on testing how suitable both the FAO Based Conformance Criteria and the current accredited assessment procedures were for use for the assessment of Australian State fisheries.

- The outcome of the studies demonstrated that the Conformance Criteria and procedures were not ideally configured for the assessment of multi-species fisheries and would result in very lengthy (and potentially costly) assessments consisting of a review of species in the fishery.
- It was concluded that some revision to the FAO Based Conformance Criteria would be necessary. This would require more clearly defined clauses for assessing the general fishery management framework and a sub-set of more clearly defined criteria for assessing a sample of species in the fishery to assess the consistency of the management system.
- The project developed a method to select a subset of representative species using a sampling approach similar to that used in aquaculture certification.
- It is proposed that this sampling approach could also be used at the fisheries management agency level to assess the management system as a whole.
- It was concluded that a *'back to origins'* approach using the FAO normative documents to create an Australian version of RFM may be a more suitable option than creating interpretation clauses to the current RFM Conformance Criteria. This would be less constraining and result in a more appropriate '*product*' for Australian use than layers of guidance to the existing Conformance Criteria created for use in other regions.
- Three alternative options for assessing the responsible fisheries management for Australia are presented for further discussion at the end of project workshop:

    1. Criteria developed for first/second party assessments based on existing FAO and national normative documents (non-certification).
    2. An Australian publically available/ technical fisheries management specification which can be assessed by a second party or certified by an independent third party.
    3. A formal Australian Fishery Management Standard which can be certified by an independent third party.

- Both the choice of option and the method by which fisheries management systems are assessed will be determined by what stakeholders regard as the need. Whatever the choice, it is recommended that the processes to develop the scheme conform to ISO guidelines and include methods that enable multispecies data limited fisheries to be included.

KEYWORDS: Responsible fisheries management, third party certification

OUTCOMES ACHIEVED

1. Feasibility of the RFM Scheme for Australia evaluated at both the jurisdictional and fishery level using case study of two NSW fisheries.

2. Methods developed to assess multispecies and data limited fisheries against the FAO Code of Conduct for Responsible Fisheries criteria.

3. Pathways identified for third party assessment of responsible fisheries management in Australia.

4. Coordinated communications strategy developed and implemented when required.

LIST OF OUTPUTS PRODUCED

1. Desk Top Benchmark of Australian Fisheries Management Frameworks: Review Outcome Document (Commercial-in-Confidence)

2. FAO-Based Responsible Fishery Management Compatibility Assessment Final Report: Fishery A (Commercial-in-Confidence)

3. FAO-Based Responsible Fishery Management Compatibility Assessment Final Report: Fishery B (Commercial-in-Confidence)

4. Responsible Fisheries Management Certification for Australia: Feasibility and Options

Acknowledgements

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1. Introduction and Background

For a number of years there has been discussion about how to best bridge the gap between community expectation and the current industry status on seafood sustainability reporting. There has become increasing interest in the role of third party audited processes that can independently assess fisheries against predetermined criteria.

In December 2012, Sydney Fish Market (SFM) initiated this project to investigate the feasibility of an FAO based certification scheme for responsible fisheries management for use by Australia's State fisheries. The project was co-funded by SFM, the Fisheries Research and Development Corporation (FRDC) and the Seafood Cooperative Research Centre (Seafood CRC).

2. Need

Sydney Fish Market, along with the many wholesalers and cooperatives that trade in Australian seafood, are constantly faced with the risk of product supply being reduced due to spatial closures in fisheries, including marine parks and recreational fishing havens. Coastal fisheries are therefore struggling to maintain their social licence to operate. Research also indicated that the community is increasingly sceptical about the sustainability of Australian seafood. Seafood wholesalers, retailers and consumers were searching for assurance that Australian seafood is responsibly managed.

This project sought to address these needs by assessing the feasibility of an independently audited Responsible Fisheries Management (RFM) Certification Program to assess wild caught Australian fisheries. This program had been developed by Global Trust and, like other third party seafood certification schemes, was based on the FAO Code of Conduct for Responsible Fisheries. At the time of project inception, the Scheme (Conformance Criteria, Certification System) was managed in accordance with accredited certification requirements under the Global Trust governance structure; using an appointed expert fishery committee and existing governing board.

Just prior to the start of the project, Global Trust was bought by SAI Global. In 2014, ownership of the RFM Program was then transferred to the Alaska Seafood Marketing Institute. However, Global Trust as part of SAI Global retained accreditation to certify fisheries against the Scheme.

3. Objectives

The project had the following objectives:

1. To evaluate the applicability and benefits of the Global Trust FAO based RFM Performance Criteria in an Australian fisheries management context.
2. To explore options for the development of a certification mark and make recommendations for its appropriate ownership structure, so that this can be used to demonstrate to the public (and other stakeholders) the status of fisheries against this Certification Program.
3. A coordinated communications strategy for the RFM project and Professionalising industry pilot project (FRDC 2013/024) to ensure objectives and outcomes are clearly communicated and synergies highlighted to demonstrate that the seafood industry is professional and committed to verifying its sustainability credentials.

4. Methods

Project management
A project manager, based at Sydney Fish Market was appointed to manage the project. Global Trust (part of SAI Global) as an accredited Conformity Assessment Body for the RFM Scheme was subcontracted to undertake three feasibility assessments in Australia against RFM Conformance Criteria v.1.2. The project was guided by a Steering Committee chaired by Sydney Fish Market and comprising representatives from NSW DPI, Seafood CRC, FRDC, Oceanwatch and Sydney Fish Market.

Benchmarking of Australian fisheries management jurisdictions
The first conformity assessment was a high level desk top review of the Federal and State fishery management systems in Australia. Each management system was assessed by the SAI Global Assessment team against the RFM Conformance Criteria, based on evidence from publicly available documents (policies, legislation, reports). This was also a project go/no point to be decided by the project steering committee.

Compatibility Assessments
Two assessments against the RFM Conformance Criteria, known as compatibility assessments, were undertaken on two NSW fisheries. The aim of these assessments was to challenge the Conformance Criteria and assess the effectiveness of the NSW Department of Primary Industry (DPI) fisheries management system. A selection procedure was developed to select the two fisheries based on weighted rankings of fishery characteristics for the nine managed fisheries of NSW. The methodology used to select the fisheries is described in the Feasibility and Options report attached as Appendix 6. The characteristics of the two selected fisheries were:

- A cross jurisdictional fishery with few main target species: known as Fishery A for confidentiality purposes.

- A multispecies and multi-gear fishery with many target species: known as Fishery B for confidentiality purposes.

Each fishery was assessed in line with the current accredited certification system of the FAO Based RFM Programme. The compatibility assessment approach evolved during the work and comprised of three main components:

(i) A review of the overall fishery management system with focus on the institutional framework and management processes, data collection, monitoring and stock assessment activities;

(ii) A general consideration of all the species, gear types and jurisdictions, and;

(iii) A review of a sub-set of species within the fishery selected using a risk assessment method and assessed against chosen Conformance Criteria. This approach was developed because the FAO Based RFM certification scheme had previously not been tested on data poor multispecies fisheries. There was therefore a need to develop alternative methods to assessing these fisheries.

Two independent assessment teams of three assessors with relevant expertise were appointed following normal certification procedures. For each fishery, a site visit was conducted, consisting of a week of meetings with fishery managers, scientists, fishery participants and other stakeholders. The fisheries were evaluated by the assessment teams and scored according to the definitions of high, medium and low confidence ratings. However, due to the feasibility nature of the work and necessity to progress the project objectives there were reasons to step outside of procedure. In particular:

- Consultation was more explorative as these were not formal assessments and there was no certification outcome.

- Certain steps in the a third party certification assessment procedure were not undertaken including; Validation Report (Pre-assessment), Peer Review (post full assessment) and Certification Committee Review. Following the completion of the assessment, a summary report of the project findings as prepared and proposals made for next steps.

End of project workshop

The findings of the project were presented to a workshop of 50 participants from management agencies, industry associations, retailers, wholesalers and environmental NGOs. Three options for the development of an Australian RFM Scheme were proposed and discussed.

Communications strategy

The Pop Agency was subcontracted to develop a communications strategy and plan for the RFM Project and the Oceanwatch Professionalising Industry project. The communications plan for the project focused on the development of consistent messaging about the aim of the RFM project and the Professionalising Industry project implemented by Oceanwatch. A communications strategy was considered an important component of project activities, because, at the start of the project, internal scheme governance of the RFM Scheme was under scrutiny, affecting its international credibility. Whilst these issues were being resolved, it was thought that perceptions about the RFM scheme could impact negatively on project implementation. Furthermore it was important that there was clear messaging around the compatibility assessments to ensure that they were not interpreted as full scale assessments.

5. Results

Benchmarking of Australian fisheries management jurisdictions

The outcomes of the desktop review are described in a confidential report. The outcomes showed that whilst there were some differences in the overall institutional framework arrangements and responsibilities between Australian jurisdictions, there was general compatibility and conformance with the FAO Code as assessed using the FAO Based Conformance Criteria. This assessment provided a broad indication of the consistency of fishery management frameworks across all jurisdictions, measured by intended commitments as prescribed in legislation (Acts and Regulations), identified policies and associated information available through desktop reviews and publicly available information.

Conformity Assessments of two NSW Fisheries

The outcomes of the assessments of Fisheries A and B are documented in two confidential assessment reports. These findings are synthesised and summarised in the Feasibility and Options report attached as Appendix 3. Overall, the assessments found that for both fisheries there was a range in the compatibility of FAO Conformance Criteria clauses. A good number of Conformance Criteria were readily transferable with no need for further guidance to their interpretation whilst other clauses required relatively simple guidance to place them in context of a state, rather than, national jurisdiction. There was some duplication within the Conformance Criteria which, if used in the future, could be resolved through amalgamation and in some cases, substantial interpretation of the current FAO language.

As the assessment progressed, it also became apparent that certain clauses of the Conformance Criteria required greater interpretation. In particular, clauses concerning:

- Target and Limit Reference Points –Whilst FAO Guidelines support the use of MSY based target reference points, clause 30.4 of these Guidelines relate to

data limited fisheries management and the possibility of using generic evidence from similar stocks if biological based reference points are not available. However, the clause also stipulates that the greater the risk the more specific evidence is necessary to ascertain the sustainability of intensive fisheries.

- Fishing Effort and Fishing Capacity – The compatibility assessments identified the need for definitions of fishing effort and capacity to be developed which would help in the interpretation of clauses that focus on latent capacity.
- Economic/social/cultural factors and evidence requirements. There were some clauses where most likely, a formal assessment would reveal non-conformance and/or lack of evidence. However, as the Conformance Criteria does not set explicit outcomes for these clauses but requires the management system take consideration of the economic, social and cultural circumstances of the fishery, through data capture, analysis and review. The assessments found that there was a need for clearer definition of the requirements for the extent of these considerations for certification purposes. Collaboration among State fishery management systems using the recent Guide To Incorporating Social Objectives In Fisheries Management may be an appropriate route to establish common 'standards' of approach which could form the basis of certification criteria.

The current RFM assessment methodology was also not easily adapted to fisheries which comprised many target species and gear. In order to resolve this challenge, the project team explored an alternative approach. The chosen method was to develop and apply a sampling protocol that could select a subset of species for assessment that would be sufficiently representative of the fishery to act as test cases of the consistency of the management system in the fishery across all species. The proposition was that, this would allow all species to be included in the certification, even though some would not form part of the test case species evaluation. When developing the methodology, an additional consideration was the suitability of such an approach under the current norms of accredited certification systems as applied to fisheries certification. The approach used is detailed in the Feasibility and Options report (Appendix 3).

By the end of Stage 2, it became apparent that a re-drafted set of Conformance Criteria, configured from the outset with Australian fisheries in mind, could prove to be a more effective solution. Three possible options were proposed, described and evaluated against each other. These are described in detail in the Feasibility and Options report.

End of Project Workshop

Fifty participants from management agencies, industry associations, conformity assessment bodies, retailers, wholesalers and environmental NGOs were invited to discuss the project findings and give their opinions on options proposed. International participants from New Zealand and the United States also presented their perspectives. The outcomes of the workshop were incorporated into the Feasibility and Options report.

Communications strategy

The Pop Agency, contracted to implement the communications strategy, drafted questions and answers and briefing material for use by the RFM project, SAI Global and project steering committee members to ensure everyone "sang from the same songsheet." As the project progressed, other elements of the communication plan for the RFM project became obsolete for the following reasons:

(a) The transfer of ownership of the RFM Scheme to Alaska Seafood Marketing Institute had removed most of the criticism around ownership of the Scheme.

(b) The project team reached out to detractors of the Scheme to clearly explain the purpose of the research.

(c) The PI presented and/or discussed project objectives and generic results at a number of national and international fora including Seafood Directions 2013, the NSW Fisheries Research and Advisory Body, the FRDC Key Strategic Projects Meetings, the International Institute for Fisheries Economics and Trade Conference 2013 in Brisbane, the Australian Fisheries Managers Forum, the 2013 European Seafood Show in Brussels and the 2014 North American Seafood Show in Boston.

(d) NSW fisheries stakeholders were heavily involved and preoccupied by the structural adjustment being implemented in the State.

There was no need for a media launch of RFM project findings as the project findings had become a stage, rather than an end point, in the development of an Australian fisheries management standard. Components in the Communications Plan for the Oceanwatch Professionalising Industry were undertaken including a media launch in early 2015.

6. Discussion

When the project was conceived it was anticipated that one of the main outputs would be a guidance document which would become the foundation document to a formal standards setting committee, convened by Seafood Services Australia as the standards setting body for Standards Australia.

As the project progressed, it became apparent that that the RFM Scheme could not easily be adapted to Australian fisheries management at the fisheries level, particularly for multispecies data limited fisheries, common to all State jurisdictions.

It became clear that it would be more effective to undertake a 'back to origins' approach for Australia, by developing new clauses directly from the FAO normative documents and incorporating existing Australian guidelines (e.g. Harvest Strategy) for fisheries management.

The objective would be to create clauses which are applicable to:

1. the general management system

2. the fishery management unit
3. species

Three possible pathways to this "back to origins" approach are discussed in detail in the Feasibility and Options report and are summarised in Table 1. Option 4 was not further evaluated by the project on the basis that these schemes already existed.

Table 1 Options for assessing responsible fisheries management

	Option 1	Option 2	Option 3	Option 4
Scheme	Adapting Existing normative documents: FAO CRRF, Ecolabelling Guidelines; Caddy checklist, Australia adapted RFM Conformance Criteria	Australian Technical Specification; Publicly available Specification	Australian Fisheries Management Standard	Existing certification schemes e.g. MSC/RFM/Friends of the Sea
What can be assessed?	Performance of fisheries management system.	Performance of management system	Performance of management system	
		Performance of a fishery		Performance of a fishery
Who audits? (Conformance assessment)	First or second party or third party	Third party	Third party	Third party
Consumer facing label	No	Possible with additional chain of custody certification	Possible with additional chain of custody certification.	Additional chain of custody certification required

At the end of project workshop, there was more appetite for Option 2 (ATS/PAS) as it's adaptability, co-branding attributes and the development timeframes were considered attractive. The possibility of developing a joint Australia/New Zealand overarching ATS/PAS was also considered. A PAS would be based on the FAO Code of Conduct for Responsible Fisheries Management with the potential for addendum PAS's for specific fisheries (e.g. inshore, small scale) as well as by jurisdiction (State, Commonwealth, Australia, and New Zealand). Option 3 (Australian fisheries

management standard) was considered less attractive given the time required to develop such a standard and the existence of private third party schemes which were already being used in Australia to assess performance of some fisheries. (Option 4). The concept of an Australian fisheries management standard which assessed management performance (rather than specific fisheries performance) whilst attractive, was considered to be unworkable in practice given the variety of fisheries under one jurisdiction e.g. Could all fisheries managed under one agency claim that they were responsibly managed to seafood buyers? What consumer claim could be made? What would happen if there was non-conformance – how would that affect the fisheries?

7. Benefits and Adoption

The project has demonstrated that, overall, the current RFM Scheme Conformance Criteria is not a good fit for the majority of Australian multispecies and data limited fisheries. Whilst there are many clauses which could be readily adapted for inclusion in a future Australian responsible fisheries management standard or PAS or Australian technical specification, there are some clauses which would require to be "Australianised." Scope also exists to include specific requirements, not part of the CRRF, to enable streamlining of approval processes such as strategic assessments under the *Environmental and Biodiversity Protection Act*. For multispecies, data limited species, the project also developed an innovative approach based on sampling methodologies currently used in aquaculture certification which could be further developed and utilised.

The compatibility assessments undertaken on two NSW fisheries have provided NSW DPI with information as to where there are actual gaps or lack of evidence to demonstrate conformance with the FAO Code of Conduct on Responsible Fisheries. This will assist them in decisions as to where to focus efforts or request additional resources and will ultimately benefit the participants in the fishery.

The project workshop has increased awareness amongst the catching sector, fisheries managers and industry associations on the options and pathways available for third party assessment of responsible fisheries management.

8. Further Development

As mentioned in the previous section, the project has developed an innovative approach to assessing multi-species data limited fisheries, explained in detail in the Feasibility and Options report attached as Appendix 3. This approach was trialled in one fishery and there is scope for further development and application of this approach for other multispecies fisheries. This could potentially overcome the difficulty faced by multi-species, data limited fisheries whose management practices do not fit well under the assessment crtieria of existing certification schemes. Importantly, the development of a standard or specification could then be used to assess all Australian fisheries.

The project, through the PI, has also collaborated with US and Mexican fisheries managers on a project to identify Best Management Practices (BMPs) for Small-Scale Inshore fisheries. Identification of BMPs will help inform the development of relevant auditable assessment criteria. There is considerable interest for a similar working group to identify BMPs for Australian and New Zealand small scale/inshore fisheries. Ultimately the goal is to have these BMPs recognised by FAO through the development of international technical guidelines for small scale fisheries under the FAO Code of Conduct. These guidelines and BMPs could also inform the benchmarking of third party certification schemes under the Global Sustainable Seafood Initiative.

An alternative development area, which is also discussed in the Feasibility and Options report, is to widen the scope of assessment to assess an entire fishery management system. This would require applying a sampling approach for selected fisheries and then a further sub-selection of species within these fisheries. Further work would include the development of a methodology to ensure robustness but also assessment of the feasibility, buyer acceptance and application of such an approach – issues which were raised at the end of project workshop.

9. Planned Outcomes

FRDC is now the accredited standards development organisation for the seafood industry. There is interest within the seafood sector to develop an auditable Australian Standard or Technical Specification for RFM. It is anticipated that the flow on benefits from this project would heavily inform this process.

Third party assessment of responsible fisheries management using a standard or specification which incorporates the management of multispecies, data limited and often small scale fisheries will enable fisheries that conform to that standard to demonstrate their responsible fisheries management credentials. This could assist these fisheries in maintaining their social licence to operate and maintain or gain customers whom require such assurance. Independent audits will also identify areas

that industry and management agencies needs to address to ensure that community expectations on responsible fisheries management are met.

Ultimately, auditable standards lead to improvements, better managed and sustainable fisheries in Australia.

10. Conclusion

The FAO Code of Conduct on Responsible Fisheries is the cornerstone of all third party certification schemes in wild capture fisheries. At project inception, it was hoped that the RFM Scheme could be a scheme best suited to the Australian fisheries management context, particularly for multispecies and data limited fisheries.

However, the feasibility study has shown that the RFM Conformance Criteria, are not a good fit for the fisheries which were the focus of this research. Through this process, the project has established what is required for such a scheme and opened up the possibility of developing, less costly alternatives, which may be able provide sufficient assurance that a particular fishery is responsibly managed. In addition, the project has initiated the debate as to whether it is feasible to undertake third party assessments of the fisheries management system as a whole.

Appendix 1: Intellectual Property

Three commercial- in -confidence reports.

1. Desk Top Benchmark of Australian Fisheries Management Frameworks: Review Outcome Document (Commercial-in-Confidence)

2. FAO-Based Responsible Fishery Management Compatibility Assessment Final Report: Fishery A (Commercial-in-Confidence)

3. FAO-Based Responsible Fishery Management Compatibility Assessment Final Report: Fishery B (Commercial-in-Confidence)

Appendix 2: List of Staff

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Appendix 3: Feasibility and Options Report

Responsible Fisheries Management Certification for Australia: Feasibility and Options

CRC Project 2012/746

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APRIL 2015

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Abbreviations

Acronym	Full text
Act (the)	Fisheries Management Act 1994 [NSW]
CA	Conformity Assessment
CAB	Conformity Assessment Body
CC	Conformance Criteria
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EIS	Environmental Impact Statement
ERA	Ecological Risk Assessment
ESD	Ecologically Sustainable Development
FAO	The Food and Agriculture Organization of the United Nations
FMS	Fishery Management Strategy
FRDC	Fisheries Research and Development Corporation
MCS	Monitoring, control and surveillance
MOU	Memorandum Of Understanding
MPAs	Marine Protected Areas
Nm	Nautical Mile
NSW	New South Wales
NSW DPI	New South Wales Department of Primary Industries
NSW I & I	Industry & Investment New South Wales (now NSW DPI)
PAS	Publicly Available Specification
RAW	Resource Assessment Workshop
SEWPaC	Department of Sustainability, Environment, Water, Population and Communities (as of September 2013 is the Department of the Environment)
SFM	Sydney Fish Market
TAC	Total Allowable Catch
TACC	Total Allowable Commercial Catch
UoC	Unit of Certification

Executive Summary

- The FAO Code of Conduct for Responsible Fisheries and FAO Guidelines for the Eco-labelling of Fish and Fishery Products from Marine Capture Fisheries represent internationally negotiated documents that represent consensus on the criteria for responsibly managed fisheries. These 'tools' form the basis of a number of private standards that are used for the certification of fisheries; including Marine Stewardship Council, Alaska FAO Based Responsible Fisheries Management (RFM) Certification and Iceland Responsible Fisheries Management Certification.
- This project investigated the feasibility of an FAO Based RFM Certification for Australia by testing on two NSW fisheries using the Conformance Criteria Version 1.2 which has been used in Alaska RFM fisheries certification.
- The first phase of the project was a general desk top review of the consistency of Australian and Commonwealth fisheries management systems against the Conformance Criteria. As anticipated, the review demonstrated that there were no fundamental reasons why Australian fisheries management could not utilise FAO criteria as a basis for fisheries certification.
- Compatibility assessment studies were carried out on two NSW fisheries which displayed varying degrees of complexity (species, gears, locations) in order to test the extremities of the FAO Based Conformance Criteria. The studies centred on testing how suitable both the FAO Based Conformance Criteria and the current accredited assessment procedures were for use for the assessment of Australian State fisheries.
- The outcome of the studies demonstrated that the Conformance Criteria and procedures were not ideally configured for the assessment of multi-species fisheries and would result in very lengthy (and potentially costly) assessments consisting of a review of species in the fishery.
- It was concluded that some revision to the FAO Based Conformance Criteria would be necessary. This would require more clearly defined clauses for assessing the general fishery management framework and a sub-set of more clearly defined criteria for assessing a sample of species in the fishery to assess the consistency of the management system.
- The project developed a method to select a subset of representative species using a sampling approach similar to that used in aquaculture certification.
- It is proposed that this sampling approach could also be used at the fisheries management agency level to assess the management system as a whole.
- It was concluded that a *'back to origins'* approach using the FAO normative documents to create an Australian version of RFM may be a more suitable option than creating interpretation clauses to the current RFM Conformance Criteria. This would be less constraining and result in a more appropriate '*product*' for Australian use than layers of guidance to the existing Conformance Criteria created for use in other regions.
- Three alternative options for assessing the responsible fisheries management for Australia are presented for further discussion at the end of project workshop:

    4. Criteria developed for first/second party assessments based on existing FAO and national normative documents (non-certification).
    5. An Australian publically available/ technical fisheries management specification which can be assessed by a second party or certified by an independent third party.

6. A formal Australian Fishery Management Standard which can be certified by an independent third party.

- Both the choice of option and the method by which fisheries management systems are assessed will be determined by what stakeholders regard as the need. It is hoped that the end of project workshop will help inform that decision. Whatever the choice, it is recommended that the processes to develop the scheme conform to ISO guidelines.
- A 'Short Primer on Standards' has been produced to provide a jargon buster for readers who are less familiar with the terminology of accreditation, certification and standards found in this report.

1. Introduction

For a number of years there has been discussion about how to best bridge the gap between community expectation and the current industry status on seafood sustainability reporting. There has become increasing interest in the role of third party audited processes that can independently assess fisheries against predetermined criteria. One particular scheme, the FAO- based Responsible Fisheries Management Certification, has been closely watched by the Australian Seafood Industry.

In December 2012 Sydney Fish Market (SFM) initiated a project, known as the Responsible Fisheries Management (RFM) project, to investigate the feasibility of the FAO based certification scheme for use by Australia's State fisheries. The project was co-funded by SFM, the Fisheries Research and Development Corporation (FRDC) and the Seafood Cooperative Research Centre (Seafood CRC). At the time of project inception, the Scheme (Conformance Criteria, Certification System) was managed in accordance with accredited certification requirements under the Global Trust governance structure; using an appointed expert fishery committee and existing governing board.

The interest in FAO based certification programming can be seen elsewhere. Certification programmes based on this approach have been successfully rolled out in Alaska and Iceland and are in development in Louisiana. To date, RFM certification has been used on large single species stocks or for information rich, multiple species stocks. However, there is a general desire among interested parties for fishery certification systems to be adapted to better suit multi-species/multi-gear fisheries and data limited fisheries. The main objective of the RFM project was therefore to assess the compatibility of this FAO Based RFM type certification for use in Australia's more complex fisheries. More specifically, the project was trying to address one of the major challenges facing seafood certification, that of enabling certification for information poor, multi-species, multi-gear fisheries.

In NSW and many other Australian States, inshore fisheries are categorized as consisting of multiple species and gears and operating with varying and lesser degrees of data availability (when compared to large single-stock fisheries). The key challenge for the project when assessing it's feasibility was maintaining a balance between a thorough and robust assessment and an efficient and cost effective process. This document provides background to the FAO-based RFM scheme, synthesises the findings of the RFM project and discusses the possible pathways and next steps available to Australian fisheries in verifying responsible fisheries management.

Background of FAO Based RFM Certification Development

The RFM scheme is based on Articles and clauses specified in the United Nations Food and Agriculture Organization's (FAO) Code of Conduct for Responsible Fisheries (1995) and the minimum substantive criteria set out for marine fisheries in the FAO Guidelines for the Eco-Labeling of Fish and Fishery Products from Marine Capture Fisheries (2005 and revised in 2009 and 2011) - collectively referred to in this document as the FAO Code and Guidelines.

FAO Based Responsible Fisheries Management was founded in Iceland and Alaska through projects undertaken by Global Trust in support of the development of third party certification schemes in these respective regions. These schemes evolved from regional preferences and Global Trust's fishery management and certification system knowledge.

Fisheries are assessed for conformance against the criteria and if successful, the outcome of certification is an accredited third party certificate that demonstrates the 'Responsible Fisheries Management' of the applicant fishery in accordance with the FAO Code and Guidelines.

Since that time, Responsible Fisheries Management Certification has developed into fully accredited certification schemes in both Iceland and Alaska with a third scheme in Louisiana, now in development. A short overview of each programme is described.

Seafood from Iceland
for the benefit of future generations
www.ResponsibleFisheries.is

CERTIFIED

Icelandic Responsible Fisheries (IRF) Foundation (www.responsiblefisheries.is)

The Iceland Responsible Fisheries Foundation owns and operates the brand of Iceland Responsible Fisheries. The Foundation was established in February 2011 and took over the operation and management of the IRF certification programme from the Fisheries Association of Iceland that had initiated the project in 2007. The foundation operates on a cost basis, as a non-profit organisation.

The Foundation's objective is to serve as the owner of the IRF on behalf of the Icelandic fishing community, form contracts for the certification programme, control the certification symbol and promote the benefits of Iceland seafood and responsible fisheries management to markets and stakeholders. The Foundation has formed a technical committee responsible for the technical work, specifications and certification system, as well as communication with certification bodies and public bodies accordingly.

Icelandic Responsible Fisheries Management translates to a Specification (Icelandic Responsible Fisheries Management Specification v1.1) derived directly from the FAO Guidelines and Code. The scheme is accredited under ISO17065 by an International Accreditation Board (IAB) member, the Irish National Accreditation Board (INAB) and third party certification is provided by Global Trust Certification. Certification commenced in 2010 and to date; Icelandic cod, haddock, saithe and golden redfish have been certified to the IRF Scheme.

Alaska Seafood Marketing Institute (ASMI) RFM Scheme (http://www.alaskaseafood.org)

The Alaska Seafood Marketing Institute (ASMI) is a non-profit, trade body, formed by State statute to promote the benefits of Alaska seafood. ASMI took the initiative to develop an Alaska State certification programme for Responsible Fisheries Management in order to underpin the credibility of market communications of the sustainable use of Alaska's fisheries. The Alaska RFM Scheme operates in an identical manner to that of Iceland. A set of Conformance Criteria were derived directly from the FAO Code of

Conduct, Guidelines and FAO Circular 917 (referred to as the 'Caddy Checklist') and form the basis of the assessment. The task was managed through an expert fishery technical committee appointed by Global Trust and tasked with ensuring that the Alaska FAO Based Conformance Criteria were consistent with the FAO documents. The objective of Alaska RFM was to provide a straight-forward, independent and detailed verification that the various fishery management systems were consistent with the FAO Code and Guidelines. In this context, the fishery technical committee was not tasked with creating a standard but with confirming that the Conformance Criteria were directly translated from FAO documents and did not re-interpret or set additional requirements for certification. The Program achieved ISO 65 accreditation in 2012 (now up-dated to ISO17065) and can be described as conforming to the most recognized accreditation schemes for product/process certification as recognized by markets to-date.

However, in response to criticism from stakeholders and a desire to define the scheme structures of Alaska RFM further; ASMI has recently introduced a series of reforms and additions to the Program that define ownership and governance; the certification system requirements for certifying bodies, public and stakeholder input and facilitating the entry of new Certification Bodies. Both an Oversight RFM Committee and a Conformance Criteria technical Committee have been appointed as part of this development.

Currently, there are 7 certificates covering Alaska' major fisheries including; Alaska salmon, Pacific Halibut, Sablefish, Alaska Pollock, flatfish complex (12 species), Alaska Red King Crab (2 species) and Snow Crab and Pacific cod; across fisheries from the Gulf of Alaska, Bering Sea and Aleutian Islands.

Audubon Nature Institute Gulf United for Lasting Fisheries (G.U.L.F) Standard (in development) (http://audubongulf.org/)

Audubon Nature Institute Foundation is a non-profit support organization based in Louisiana operating a family of museums and parks dedicated to nature with a mission of preserving the native terrestrial and marine habitat, educating a diverse audience about the natural world and enhancing the care and survival of wildlife through research and conservation. The Audubon Gulf United for Lasting Fisheries Programme was founded in 2012 to advocate on behalf of Gulf fisheries and industry as well as promote and conserve seafood resources in the Gulf of Mexico.

Audubon has implemented a Gulf region expert technical committee to oversee the development of a G.U.L.F Standard applicable for use in Louisiana and the wider US Gulf fisheries. The Standard will be based on the FAO Guidelines for the eco-labeling of fish and fishery products from marine capture fisheries and the FAO Code of Conduct for Responsible Fisheries. The approach translates the FAO documents into region specific criteria whilst maintaining the intent of the FAO articles and clauses. Extensive feasibility trials were carried out on Louisiana fisheries beforehand using FAO Based Conformance Criteria for RFM certification.

Benchmarking

New developments that benchmark market based 'seafood sustainability' certification schemes are evolving such as the Sustainability Consortium (TSC)[1] and the Global Seafood Sustainability Initiative (GSSI)[2]. These aim to provide recognition of certification schemes that are based on sustainability

[1] http://www.sustainabilityconsortium.org/seafood-principles/

[2] http://www.ourgssi.org/

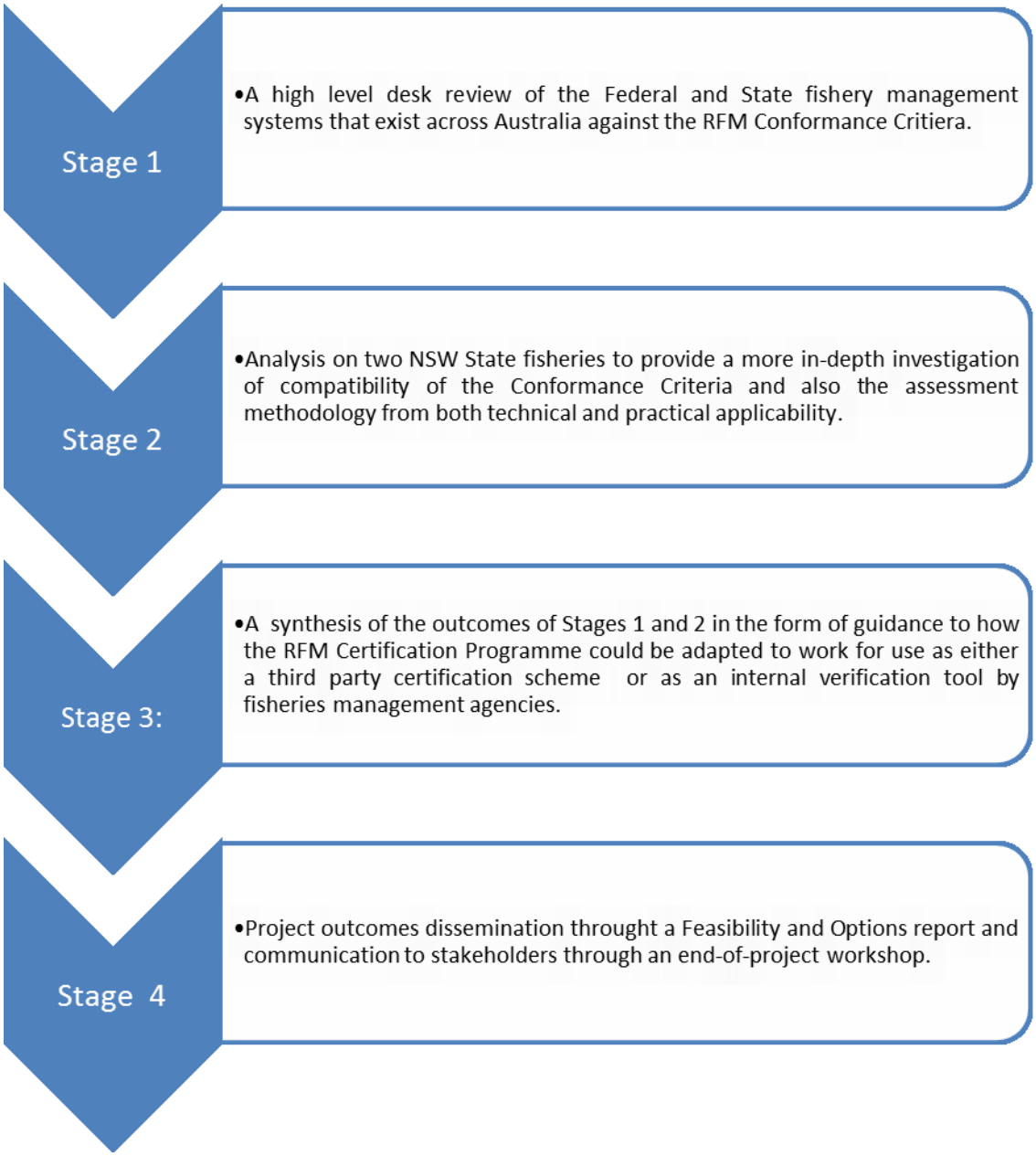
principles and are consistent with the FAO Code and Guidelines. Benchmarking tools are likely to become important mechanisms for the market acceptance of newly developed programmes and could serve as internal benchmarks for developing programmes.

2. Australia's RFM Project

The main objective of the project was to assess the compatibility of this FAO Based RFM type certification for use in Australia's State fisheries using Conformance Criteria developed for the FAO-based RFM scheme and used in Alaska.

The project was divided into a number of stages as illustrated in Figure 1.

Figure 1 Stages of the RFM Project



Stage 1 Desktop Review

The objective of this stage was to assess how compatible the existing RFM Programme is within an Australian fisheries management context. If there was little compatibility, the project would have been terminated at the end of this stage.

This confidential assessment provided a broad indication of the consistency of fishery management frameworks across all jurisdictions, measured by intended commitments as prescribed in legislation (Acts and Regulations), identified policies and associated information available through desktop reviews.

The outcomes of Stage 1 showed that whilst there were some differences in the overall institutional framework arrangements and responsibilities between Australian jurisdictions, there was general compatibility and conformance with the FAO Code as assessed using the FAO Based Conformance Criteria.

Stage 2 Compatibility Assessments

Stage 2 was undertaken to evaluate and test the RFM Conformance Criteria and the assessment methodology for two NSW fisheries. Overall deliverables for Stage 2 were:

- A technical evaluation of the applicability of the FAO Based RFM Conformance Criteria for multispecies and cross jurisdictional fisheries in NSW (and potentially other jurisdictions in Australia).

- Acquired knowledge for consideration of an Australian Programme for responsible fisheries management certification.

In order to select the two fisheries for assessment, the project developed a selection procedure based on weighted rankings of fishery characteristics that would both challenge the Conformance Criteria and assess the effectiveness of the NSW DPI management system. The selection procedure is described in more detail in Appendix 1. **Since these feasibility trials were not full assessments and were not at the request of stakeholders in the fishery, the assessment reports have been kept confidential for reporting purposes.**

The characteristics of the two fisheries chosen were:

- A cross jurisdictional fishery with few main target species (3 from 12): Fishery A
- A multispecies and multi-gear fishery with many target species (>12): Fishery B

Each fishery was assessed in line with the current accredited certification system of the FAO Based RFM Programme. The compatibility assessment approach evolved during the work and comprised of three main components:

(i) A review of the overall fishery management system with focus on the institutional framework and management processes, data collection, monitoring and stock assessment activities;

(ii) A general consideration of all the species, gear types and jurisdictions, and;

(iii) A review of a sub-set species within the fishery selected using a risk assessment method and assessed against chosen Conformance Criteria. This approach had not been tested within an FAO Based RFM certification but was considered of value to this project for the development of alternative

methods to assessing multi-species fisheries.

Two independent (from the fishery and it's management) assessment teams of three assessors each, were appointed following normal certification procedures. For each fishery, a site visit was conducted, consisting of a week of meetings with fishery managers, scientists, fishery participants and stakeholders. The fisheries was evaluated by the assessment teams and scored according to the definitions of high, medium and low confidence ratings. However, due to the feasibility nature of the work and necessity to progress the project objectives there were reasons to step outside of procedure. In particular:

- Consultation was more explorative- as these were not formal assessments and there was no certification outcome.
- Certain steps in the assessment procedure were not undertaken including; Validation Report (Pre-assessment), Peer Review (post full assessment) and Certification Committee Review.

Compatibility of the Conformance Criteria

When assessing the management systems of Fishery A and B, there was a range in the compatibility of FAO Conformance Criteria clauses. A good number of Conformance Criteria were readily transferable with no need for further guidance to their interpretation whilst other clauses required relatively simple guidance to place them in context of a state, rather than, national jurisdiction. There was some duplication within the Conformance Criteria which, if used in the future, could be resolved through amalgamation and in some cases, substantial interpretation of the current FAO language.

As the assessment progressed, it also became apparent that certain clauses of the Conformance Criteria required much greater interpretation such that a re-configuration rather than guidance could be considered a more appropriate path. Individual fishery reports provide the detail on which clauses were particularly challenging and presented here in summary. In particular, clauses concerning

- **Target and Limit Reference Points** –Whilst FAO Guidelines support the use of MSY based target reference points, clause 30.4 of these Guidelines relate to data limited fisheries management and the possibility of using generic evidence from similar stocks if biological based reference points are not available. However, the clause also stipulates that the greater the risk the more specific evidence is necessary to ascertain the sustainability of intensive fisheries. Risk assessment and use of qualitative information is a common feature of NSW/Australian State fishery stock assessment methods. These methods together with the application of the recently completed National Harvest Strategy Guidelines[3] could form the basis for clause reconfiguration for use in any future Australian RFM scheme.
- **Fishing Effort and Fishing Capacity** – The compatibility assessments identified the need for definitions of fishing effort and capacity to be developed which would help in the interpretation of clauses that focus on latent capacity.
- **Economic/social/cultural factors and evidence requirements**. There were some clauses where most likely, a formal assessment would reveal non-conformance and/or lack of evidence. However, the Conformance Criteria does not set explicit outcomes for these clauses but instead requires that the management system takes consideration of the economic, social and cultural circumstances of the fishery, through data capture, analysis and review. There is a need for clearer definition of the requirements for the extent of these

[3] Sloan, S. R., Smith, A.D.M., Gardner, C., Crosthwaite, K., Triantafillos, L., Jeffries, B. and Kimber, N (2014) National Guidelines to Develop Fishery Harvest Strategies. FRDC Report – Project 2010/061. Primary Industries and Regions, South Australia, Adelaide, March. CC BY 3.0

considerations for certification purposes. Again, collaboration among State fishery management systems using the recent Guide To Incorporating Social Objectives In Fisheries Management[4] may be an appropriate route to establish common 'standards' of approach which could form the basis of certification criteria.

By the end of Stage 2, it became apparent that a re-drafted set of Conformance Criteria configured from the outset with Australian State fisheries in mind, may prove to be a more effective solution, particularly for these sections of the Conformance Criteria.

[4] Triantafillos,Lianos, Kate Brooks, Jacki Schirmer, Sean Pascoe, Toni Cannard, Cathy Dichmont, Oliver Thebaud and Eddie Jebreen (2014) Developing and Testing Social Objectives for Fisheries Management. FRDC. http://frdc.com.au/RESEARCH/FINAL-REPORTS/FULL_REPORT-2010-040/Pages/default.aspx: Begg, G.A., Brooks, K.J., Stephenson, R.L. and Sloan, S.R. South Australian Research and Development Institute (Aquatic Sciences) 2014, SARDI Publication No. F2014/000315-1,SARDI Research Report Series no.765, *Practical Implementation of social and economic elements of ecosystem based fisheries management and integrated fisheries management frameworks*, Adelaide, June, 85pp.

Developing an Assessment Methodology

One of the areas the project team wanted to review was the current accepted definition of the Unit of Certification. Most fishery certification schemes have incorporated the FAO Eco-labelling guidelines guidance[5] on the definition:

The Unit of Certification consists of: *A species (and stock), a gear type and a management system for a defined jurisdiction that will form the scope of the certificate*.

The definition works adequately well for a single species stock where the fishery uses one gear type and is managed by a well-defined management system in the jurisdiction where the fishery operates. For more complex, multi-species fisheries, employing a number of gear types, a multiple number of UoC's for each species x gear type are often applied. Where there are a number of stocks (and jurisdictions) of the same species further iterations (UoC's) are applied.

When this approach is applied to a single gear fishery within one management jurisdiction, with, for example, 4 target species that feature mostly in landings, there would be 4 UoC's since the fishery employs only one gear type and the management system is the same. However, if there are 8 other species landed using 5 different gear types and all species are to be included to enable the whole fishery to be certified, this would result in 40 UoCs. If that fishery is in fact a sub-component of a larger fishery complex of species and gears, there would be further UoC's. Where multi-species, gears or multi-jurisdictions have been encountered in RFM to date, individual Assessment Units have been introduced for different species to ensure all components of the fishery have been addressed, although to date, these have been less complex than encountered here, notably in the case of fishery B (i.e. fewer gears, species).

Although having multiple UoC's in itself is not the main challenge, it is the issue of time and cost it takes to undertake the detailed assessment of multiple UoCs required by current certification procedures before fish can be identified as coming from a responsibly managed fishery. This may make such a certification system unattainable for many fisheries in Australia exhibiting multiple species, gears, regions and which may also be of relatively smaller scale. Currently, any species that are not included in the detailed evaluation would not be eligible for identification as certified under current certification system rules.

Taking New South Wales as an example, there are nine fisheries which are extremely diverse ranging from single species and single gear fisheries such as Eastern Rock Lobster to far more complex fisheries such as Estuary General Fishery (17 gear types, > 10 species, and 76 estuarine systems).

At the broadest level, the NSW Department of Primary Industries operates one management system for all fisheries. There is consistency across all fisheries with respect to the agency/institutional arrangements, the legislative framework and supporting legislation, and there is consistency in the approach to managing a defined fishery through a Fishery Management Strategy and in most cases an Environmental Impact Statement. It would seem appropriate therefore, that the scope of certification or scope of the assessment could follow a similar structure.

Developing a consistent and robust approach that fits the range of species and generally, lesser amounts of data availability in many Australian fisheries is challenging. A re-think of how to define scope of certification/assessment would be beneficial before any scheme to address these

[5] *The "unit of certification" is the fishery for which ecolabelling certification is sought, as specified by the stakeholders who are seeking certification. The certification could encompass: the whole fishery, where a fishery refers to the activity of one particular gear-type or method leading to the harvest of one or more species; a sub-component of a fishery, for example a national fleet fishing a shared stock; or several fisheries operating on the same resources.*

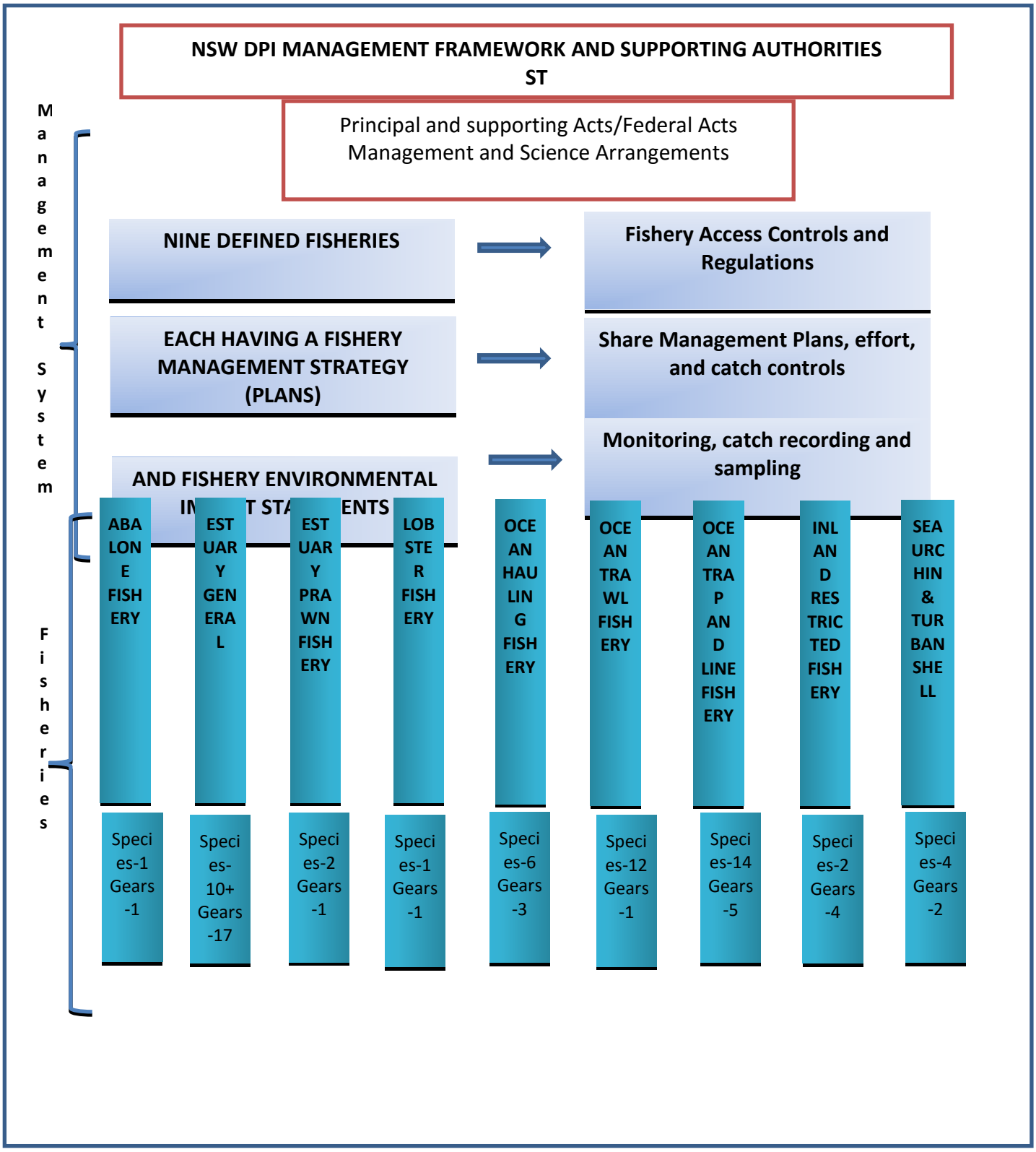
challenges is implemented as there must be initial agreement on the scope of certificates and the Unit of Certification (UoC).

As noted in the previous section, the current RFM assessment methodology was not easily adapted to fisheries which comprised many target species and gear. In order to resolve this challenge, the project team explored an alternative approach. The chosen method was to develop and apply a sampling protocol that could select a subset of species for assessment that would be sufficiently representative of the fishery to act as test cases of the consistency of the management system in the fishery across all species.

The proposition was that, this would allow all species to be included in the certification, even though some would not form part of the test case species evaluation. When developing the methodology, an additional consideration was the suitability of such an approach under the current norms of accredited certification systems as applied to fisheries certification.

Sampling is commonly used in third party audit, inspection and certification systems and is an accepted practice within ISO standards for third party conformity assessment such as product/process (ISO17065) and management systems (ISO 17021) certification. Whilst sampling of this type has not been used in fisheries certification to date, it does however, feature in aquaculture and chain of custody certification systems. In these applications, the term 'group entity' is used to assess a larger number of fish farms or supply chain users that perform the same tasks and operate under a common management structure. Under current norms of accredited certification systems, sample size is often based on a square root of the total group with a multiplier (e.g. 1 to 2) used to manage the risk of inconsistency occurring within the group (i.e. increase in sample size with increase in risk).

Figure 2 General Framework of NSW Fishery Management



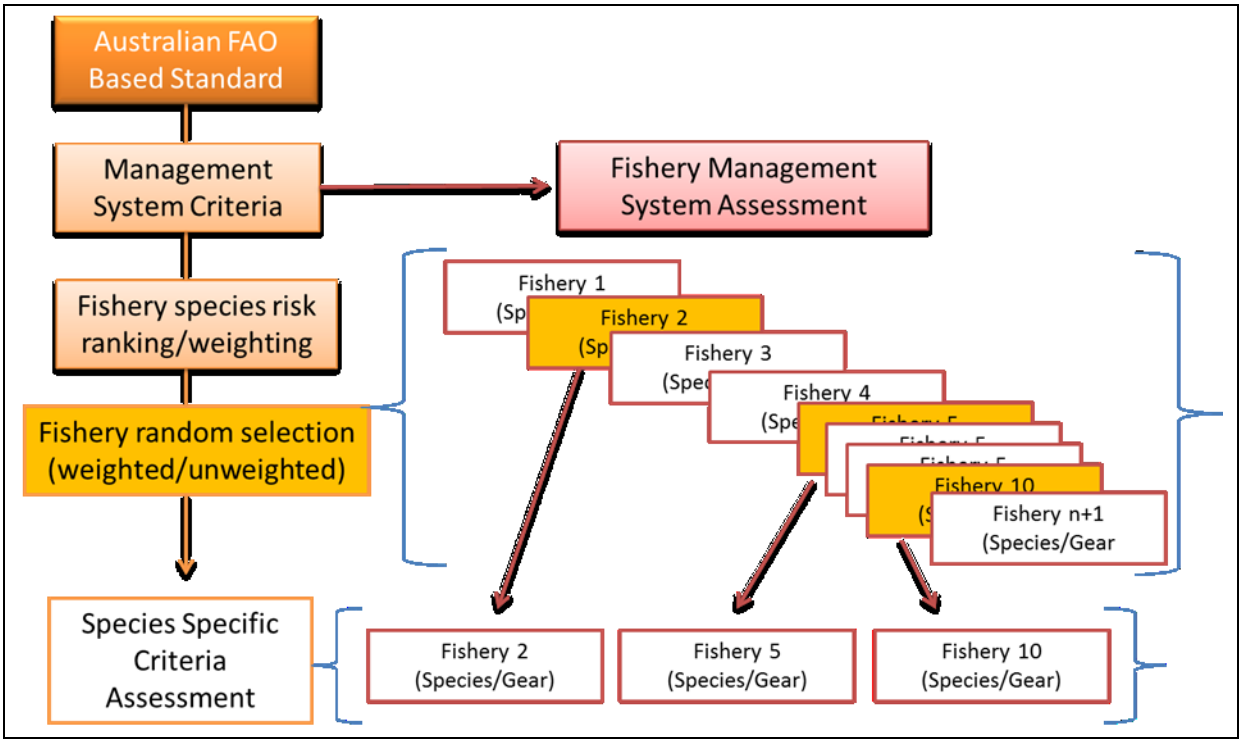
Applied to a fisheries management system (the entity being the fishery), the assumption underpinning this approach is that the outcome of the sample set of species within a fishery would be representative of the performance of the fishery overall, regardless of the fact that only a selection of species were included in the assessment.

The main premise of sampling is that it should be consistently applied across all entities being assessed. Such "group certifications" often require a degree of self-auditing and reporting and correcting of non-conformances. This activity is in turn, subjected to external assessment during a third party audit of the group's headquarters.

Although the project team were not aware of any fishery management systems yet certified to an ISO17021 compliant system, for certification purposes, this approach would appear to fit both the ISO17021 and ISO17065 (Certification of Management Systems and Certification of Product/Process/Services).

The project tried this approach in Fishery B. It considered all species that featured in the landings of the fishery and undertook a risk profiling method that screened out species not deemed significant in priority for determining whether the fishery was responsibly managed. The criteria for determining priority included species identified as target species, stock status and environmental impact assessment (EIS) score. The project team was aware that depending on the fishery, additional parameters could be included. The process used is summarised in Figure 3. More detail about the methodology used can be found in Appendix 2.

Figure 3 Overview of Assessment Approach for Multi-Species Fisheries



This process resulted in the ranking by priority which identified certain risk factors and other features that may give cause for prioritization (e.g. market interest). Principally, the higher priority species would require a more detailed assessment and lower priority species that would not require the same detail of review. The high priority species were then assessed against a sub-set of clauses in the Conformance Criteria.

The selection of the sub-set of clauses from the range of Conformance Criteria of v1.2 proved to be a challenging exercise. Since the Conformance Criteria were not conceived with this particular application in mind, they are not readily split into fisheries management and species specific criteria. The Conformance Criteria are an accurate translation of the FAO documents but they do not describe the process of assessing fisheries. As a result, the assessment team varied in their views about which clauses could be isolated as more species relevant but ultimately came to an agreement on the final sub-set of Conformance Criteria chosen.

Should this approach be used in the future, further work would be required to determine the Conformance Criteria which are more applicable at the species level. As noted earlier, the emerging conclusion was that a re-configuration of the Conformance Criteria with this specific purpose in mind should be strongly considered.

As described in the previous section, the project tested an approach for a methodology which samples a sub-set of species from the total number of species caught in a fishery to base a certification decision for all of the species in that fishery. Such an approach could also be applied to test the effectiveness of the management system on chosen species/fisheries.

This approach would require the development of a representative and robust sample selection process for the fisheries and for the species within those fisheries to ensure there is sufficient confidence in the consistency of outcomes across all fisheries and species based on the outcomes of the selected few. If this was the case, it would allow certification to include all fisheries and species within the scope of certification, even though they were not included in the sample audit.

Sample selection could incorporate risk as a weighting factor by choosing more higher risk species than lower with the assumption that management of the higher risk species would be of greater significance for demonstration of performance of the management system, whilst not forgetting that lower risk does not necessarily mean, a ‘lesser’ need for management.

Summary of Stage 2 Compatibility Assessments

In the project, a higher level management review of NSW fisheries management was carried out by selecting and assessing two of the nine managed fisheries in NSW, followed by a series of species-specific assessments within each of these fisheries using a sampling protocol developed during the course of the project. The assumption was that the outcome of the more detailed assessments of a sample set of species within each fishery would be representative of the performance of the fishery overall. For certification purposes, this would appear consistent with ISO17065 and ISO17021 (certification of product/process and management systems) used in other sectors such as aquaculture.

The compatibility assessments also found that some revision to the FAO Based Conformance Criteria would be necessary so that there are more clearly defined clauses for assessing the general fishery management framework and for fishery species specific purposes. It may be more effective to undertake a *‘back to origins’* approach for Australia, by developing new clauses directly from the FAO normative documents and incorporating existing Australian guidelines (e.g. Harvest Strategy) for fisheries management.

The objective would be to create clauses which are applicable to:

1. the general management system
2. the fishery management unit

3. species

Assessments would be undertaken in two stages. An assessment of the overall management system common to the fisheries under review (e.g. Estuary General) and then followed by the assessment of the selected fishery species to test the consistency of the management approach. Based on the findings of this project, the further review and possible testing of the sampling protocol developed here would be advised in order to ensure that the fishery/species selection process was sufficiently robust and consistent with objectives.

An alternative consideration also discussed during the project was of widening the scope of application of the assessment approach and assessing the entire state fishery management system as a whole and then applying a sampling approach for selected State fisheries (referring to Figure 2) and then a further sub-selection of species within these fisheries.

Whilst this project did not test this alternative approach, most likely it would be challenged if used for a certification claim in the marketplace since may be considered of insufficient scrutiny. However, if such an assessment was not used for a market eco-label claim, it may be an acceptable form of internal verification of the consistency of a State management system with FAO criteria.

4. Pathways for an Australian Responsible Fisheries Management Scheme

The outcome of Seafood CRC Project 2012/ 746 provides a good basis for the progression of an RFM Scheme, in some form, in Australia.

4.1 Defining need and objectives

There are a number of alternative approaches available in adapting RFM for Australian use depending on the objectives of a proposed scheme. These would have to be first identified and it is the intention of the final stage in the Project, the end of project workshop, to provide a forum for discussing these.

The project has identified four possible, not necessarily, mutually exclusive objectives for a certification or verification scheme:

1. **Business to Consumer (B2C)**. Assurance that the product is from a responsibly managed fishery demonstrated by a consumer facing eco-label e.g. "Australian RFM certified" requiring full chain of custody certification in addition to the fishery certification. Should this be required, it is unlikely that verifying overall management performance alone would be acceptable in the marketplace, and further measures of traceability (chain of custody) would need to be introduced as well.

2. **Business to Business (B2B):** Assurance that product is from a responsibly managed fishery. Where a product claim is not required, certification of the management performance without the need for chain of custody certification may be sufficient.

3. **Reputational risk of industry:** Assurance to the public/competing stakeholders that the fishery is responsibly fished and managed. A verification process rather than certification may be sufficient.

4. **Reputational risk of management agency:** Assurance to the public/competing stakeholders that the fishery is responsibly fished and managed. A verification process rather than certification may be sufficient.

4.2 Options

Whilst there are a number of alternatives, four options are put forward in this document on the basis that two preconditions have to be met:

- **Universality**: the scheme should be accessible to, and accommodate the variety found in all Australian fisheries.

- **Internationally and nationally compliant:** FAO Code and Guidelines, national guidelines and EPBC Act requirements should be incorporated.

The next decision to be made is how these objectives or needs are to be met. This requires decisions about:

- the scheme (fishery level or management agency level)
- The nature of the verification assessment process (first, second or third party) and whether a public certification statement is required.

Table 1 presents four possible options, the first three of which have not been developed. These three options are evaluated in more detail in this report. Option 4 includes schemes which already exist, such as the Marine Stewardship Council, ASMI Responsible Fisheries Management and Friends of the Sea, and are therefore not described or discussed further in this report. Readers not familiar with some of the terminology used in this section are encouraged to read Appendix 3, "A Short Primer on Standards" to assist in their understanding of the way standards are developed and conformance assessed.

Table 1 Scheme Options for assessing responsible fisheries management

	Option 1	Option 2	Option 3	Option 4
Scheme	Adapting Existing normative documents: FAO CCRF, Ecolabelling Guidelines; Caddy checklist, Australia adapted RFM Conformance Criteria	Australian Technical Specification; Publicly available Specification	Australian Fisheries Management Standard	Existing certification schemes e.g. MSC/RFM/Friends of the Sea
What can be assessed?	Performance of fisheries management system.	Performance of management system	Performance of management system	
		Performance of a fishery		Performance of a fishery
Who audits? (Conformance assessment)	First or second party or third party	Third party	Third party	Third party
Consumer facing label	No	Possible with additional chain of custody certification	Possible with additional chain of custody certification.	Additional chain of custody certification required

Option 1: Adapting Existing documents

Verification occurs by using existing normative documents included including the FAO CCRF, the Caddy checklist, the FAO eco-labelling guidelines translated as interpreted into an Australian version of the RFM Conformance criteria with specific guidance for Australia. In its basic sense, this could exist as a simple checklist for assessment purposes. This could serve as a useful tool for fishery managers to assess consistency of their management systems against FAO criteria. The approach to assessment could adopt the methods developed in this project combining management system assessment and selected fishery species assessments. Sample selection is likely to be driven by

specific management interests. Assessments could be performed periodically, either independently or part of other review mechanisms such as EPBC strategic assessments. The outcome would be a comprehensive evaluation report that could provide valuable feedback to managers, industry, scientists and other interested stakeholders for verifying improvements over time. This may be of assistance to both management and industry stakeholders when reviewing management effectiveness against cost and deliverables where cost recovery is a strong requirement of the management system.

The conformance assessment could be carried out internally (first party), another government department (e.g. Department of Environment) or by other States fishery personnel or consultants if further independence is required (2nd Party) or by a fully independent third party. Choosing a third party assessment would allow for objective review and verification of the performance of a fishery management system to be made. The third party entity need not be an accredited Conformance Assessment Body (CAB), although a certification body with ISO accreditation would be able to support the delivery of consistency, by readily adopting controlled procedures.

Reviews could be undertaken periodically, such as once every 2 or 3 years to monitor progress and assess effectiveness over time, particularly post substantial changes to the management system. The outcome of such reviews could also be used as feedback in decision-making in support of reforms and improvements to the management system.

As the outcome would not lead to certification, formal standard development procedures would not be required. However, as a matter of good practice, the scheme could adopt some of the principles set out by ISO guides and FAO eco-label guidelines. For example, the evaluation could adopt a formal, repeatable process to add robustness and consistency to the assessment and provide confidence in the outcomes of the conformance assessment. In effect, the RFM scheme could become a set of minimum performance requirements for State management systems to adopt and used to assess and demonstrate conformity.

Option 2: Australian Technical Standard or Publicly Available Specification

Under this option, FRDC as the accredited Standards Australia Standards Development Organisation for seafood would develop an Australian Technical Standard (ATS) for Fisheries Management according to the procedures prescribed by Standards Australia and based on the FAO Code and Guidelines. Alternatively, British Standards International (BSI) or SAIGlobal could be contracted to facilitate the development of a Publicly Available Specification (PAS). The process would take around a year to eighteen months to complete. An ATS/PAS process would also enable the progression into a formal Australian fisheries management standard, if required.

Whilst first or second party assessment could be undertaken, conformance would be best assessed by a third party to ensure that the legitimacy and credibility of the scheme is maintained given the investment cost into the scheme. Third party assessment could result in B2B certification of the fishery providing customer assurance. If a consumer facing label was required there would need to be additional chain of custody certification.

Option 3: An Australian Responsible Fisheries Management Standard

The development of an Australian Responsible Fisheries Management Standard would require a higher level of formality in its development than Option 2. Consequently, this would take more time and money to develop – up to two years to develop and a further 1 year to test and develop the certification systems for the scheme.

The objective of this standard would be to enable seafood to be certified and identified as being

sourced from a responsibly managed fisheries management jurisdiction. It could apply at the fishery level as well, but there are existing standards which could be used, such as the Marine Stewardship Council and ASMI RFM[6] which may not justify the additional expense of developing an Australian standard.

Conformance assessments would be carried out by third party accredited Conformance Assessment Bodies (CABs). This would ensure robustness, impartiality and credibility of the certification claims made. CABs would have to apply for accreditation to the scheme, noting that there is always a period where the scheme would operate in a non-accredited form during the application for accreditation stage as the systems, procedures and standard must be proven before accreditation is awarded. Depending on the type of accreditation, it may take a number of years to achieve accredited status.

Certification would provide an independent statement of the conformance of a fishery to the defined Standard and would be used by fisheries as a B2B claim of Responsible Fisheries Management (or other similar description). A consumer facing label would require additional chain of custody certification. Formal accreditation of certification is normally undertaken by an International Accreditation Forum (IAF) member against recognized standards such as the ISO 17065 and 17021 Conformity Assessment requirements. There are also alternative processes, such as ISEAL Alliance registration requiring compliance of standards setting mechanisms according to their Code of Good Practice for Environmental and Social Standards.

4.3 Assessment of the three options

Selection of any option requires tradeoffs to be made. Five attributes have been identified as important to consider when assessing each of the three options. These have been selected based on experience of developing and undertaking conformity assessments in the seafood and food industries. Attributes are inextricably linked and are not presented as a definite ordered list but serve for illustration purposes. These attributes apply to the development and management of both the conformity standard as well as the assessment process:

3. **Robustness**: Consistency and accuracy of content, procedure and outcomes.
4. **Transparency:** information on current work programmes and proposals is available to all interested parties. Greatest transparency occurs when all members of the public also have an opportunity to have an input into the process, comment on draft publications and view the history of development of a publication if required.
5. **Governance**: Committees established for the development of the scheme and decision making have all relevant interests represented and there is general agreement on the content of the publication with no sustained opposition by any important interests on the committee. As public interest is very apparent in common property resource management (as compared to privately owned resources) the requirements for demonstrating the formality and transparency of the processes, particularly the governance associated with developing the scheme is highly desirable.
6. **Time**: Time taken to develop and accredit the scheme
7. **Cost**: Cost to develop the scheme.

Table 2 analyses each option against these attributes and Figure 4 is a summary of how the three options perform against them.

[6] If this was available to be used.

Figure 4 Performance of the three options (scheme development and conformity assessment) against five key attributes

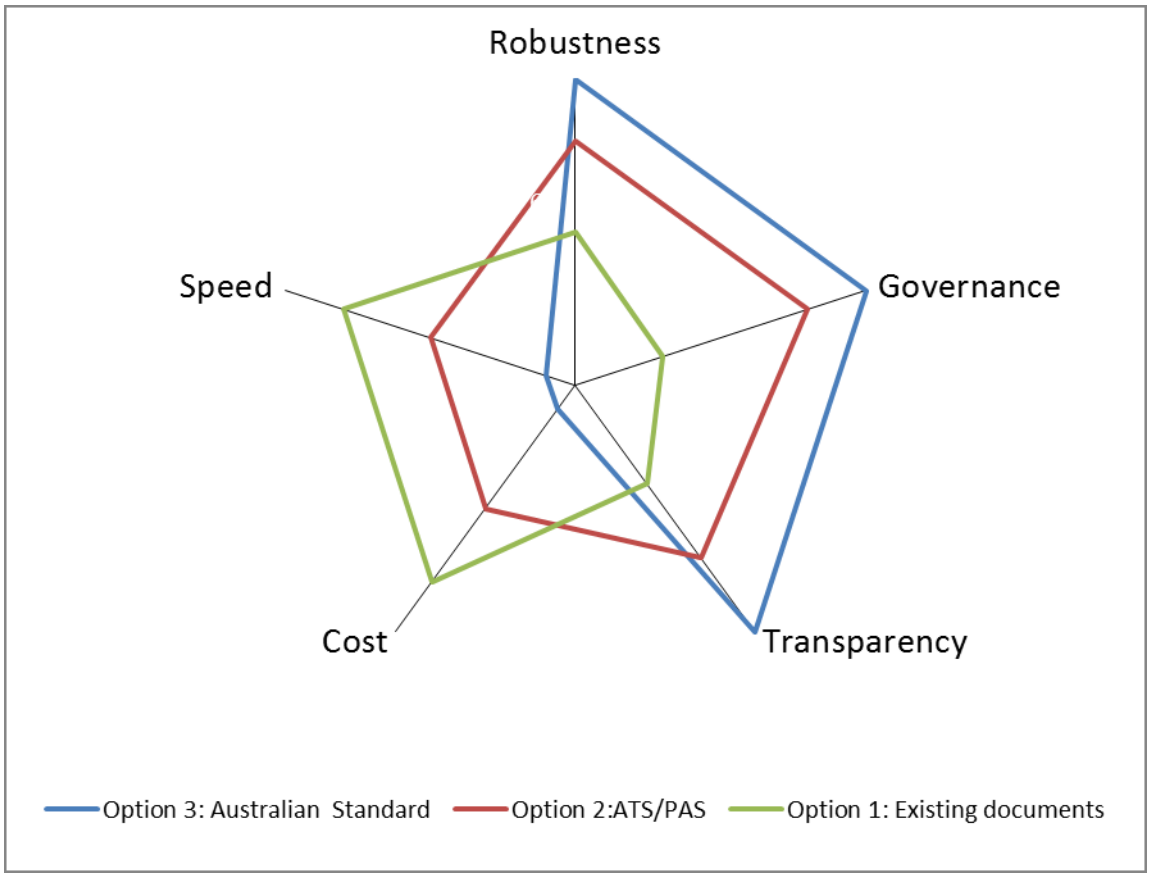


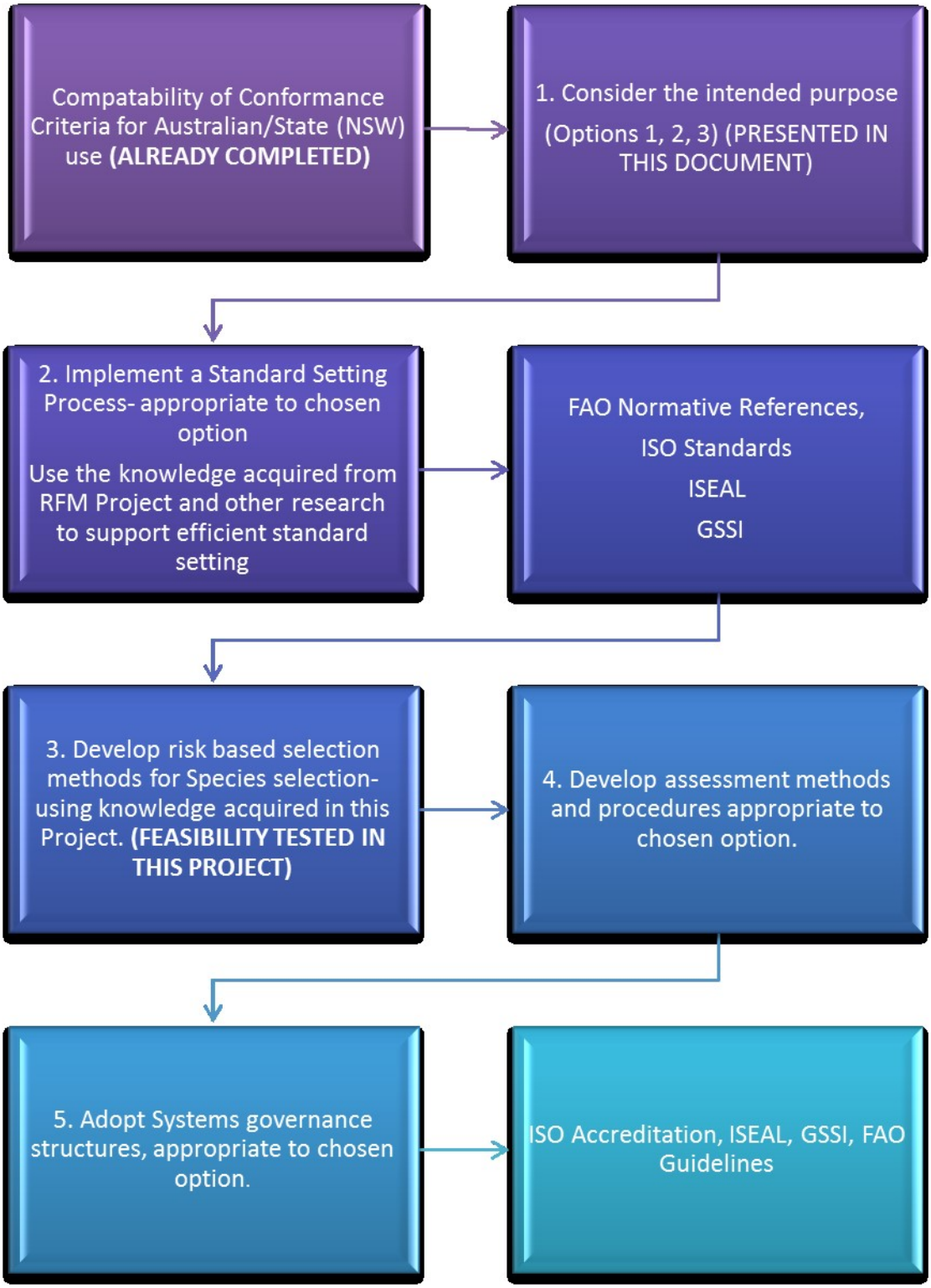
Table 2 Attributes of Three Scheme Options

Criteria	Option 1 Existing documents	Option 2 ATS/PAS	Option 3 Australian Fisheries Management Standard
Robustness	Adapting Existing normative documents: FAO CCRF, Ecolabelling Guidelines; Caddy checklist, Australia adapted RFM Conformance Criteria using internal experts.	Working Group comprised of selected experts and/or interested parties, under the direction of a constituted Technical Committee. A sponsor for the development would have to be identified.	Standard setting Technical Committee with balanced representation from management, science, industry, environmental stakeholders and consumer groups. An Australian Fishery Management Standard for ISO Accredited certification.
Transparency: Standard Setting	Based on internationally adopted FAO normative documents.	At the minimum draft specification is subject to limited peer review with the option of going to full public comment if it is deemed to be warranted.	Normally including greater stakeholder participation and public comment.
Transparency: Conformity assessments	Can be first, second or third party – but no requirement to make public	Parties directly affected by assessment outcomes would require transparency of decision making but not necessarily require transparency to external stakeholders.	Transparency to external stakeholders generally increasing such as communication of stages in assessment, peer review, public comment input, objection phase to certification decisions.
Governance: Standard/Scheme development	Internal governance to those affected by decisions.	A well-defined governance structure for decision making is considered good practice. Use ISO and Standards Australia best practice guides.	Well developed and stakeholder balanced governance available for external scrutiny. Use ISO and Standards Australia best practice guides.
Governance: Conformity Assessment	Internal process available to those affected by decisions.	Use only ISO accredited Certification Bodies. Conflict of interest, impartiality and competence externally verified by Accreditation Body.	Use only ISO accredited Certification Bodies. Conflict of interest, impartiality and competence externally verified by Accreditation Body.
Time: Scheme Development	Within a year	Within one year to 18 months	Standard setting – up to two years Scheme testing- 1 year
Time: Conformance Assessments	1-3 months	4-6 months (agency) 2-4 months (fishery)	6-10 months
Cost: To develop	Lower	Medium	Higher
Cost: Assessment	Lower	Medium	Higher

4.4 Implementation

Figure 5 provides a possible stepwise process for developing and implementing Options 1 – 3.

Figure 5 Process flow for developing an Australian Standard and Assessment System



8. End of Project Workshop

A one-day end of project workshop was held on 26 February 2015 to present and discuss project findings. The agenda, list of participants and presentations can be found in Appendix 4.

Following presentations, participants discussed the relative merits of the three options put forward in this report. A number of themes emerged from the workshop:

- General acknowledgement that data limited, domestic, smaller scale fisheries had limited means to demonstrate that they were responsibly managed. This was either a question of the assessment costs of existing third party schemes or their suitability.
- Agreement that the ability to demonstrate sustainable practices is good for business and it is important to take a lead on the issues rather than be responsive/defensive. There is also a growing interest in the wider definition ofsustainability and consider other environmental and social/economic criteria such asorigin, nutrients, greenhouse gas emissions, food miles, animal welfare, ethics, social accountability etc.
- Any future scheme should minimise duplication of assessment processes and recognise equivalence where appropriate i.e. EPBC strategic assessments.
- Responsible fisheries management certification will only be beneficial for fishing businesses if there are increases in financial returns or decreases in operational risk.
- Seafood fraud is a global problem and of increasing concern. Demand for full chain traceability systems for seafood is increasing. The growth in e-commerce may expedite the need for improved traceability systems.
- Option 1 (Assessment against existing documents) was seen as little more than the status quo and was not independent enough of government. Surveys have shown that the Australian public does not trust government or industry sufficiently regarding verification of sustainability credentials.
- Option 2 (ATS/PAS) had the most interest because it took less time (and cost) to develop, seemed more adaptable to include other parameters and was a step towards an Australian or ISO standard if this was considered necessary. The possibility of co-branding was seen as a positive benefit.
- Option 3 (Australian fisheries management standard) at a fishery level was unnecessary given that there were existing private schemes already available (Option 4) but it could be a viable approach for a whole of agency assessment approach. Participants from Western Australia observed that the decision to undertake Marine Stewardship Council pre-assessments of all their fisheries had compelled Fisheries WA to ensure more robust, evidence based fisheries management processes were implemented and had also led to proposed changes in legislation.
- The project raised the potential of developing a sampling process to select fisheries that were representative of the effectiveness of the management system which could then enable assessment of the management agency as a whole in the form of a process standard. Whilst participants did not have time to discuss the potential of developing Options 2 and 3 into such a process standard a critical question raised concerned the actual consequences if the management system is in non-compliance.

The presentation by Deepwater Group on the stages of towards third party certification suggests a staged approach: a gap analysis undertaken prior to assessment, remedial action taken, assessment and certification and then maintenance of performance. The presentation from SAI Global observed that there would need be further work on how this system would work in practice and whether potential benefits would be realised A critical question raised concerned the actual consequences if the management system is in non-compliance. The presentation by Deepwater Group on the stages of towards third party certification suggested a staged approach: a gap analysis undertaken prior to assessment, remedial action taken, assessment and certification and then maintenance of performance. The presentation from SAI Global observed that there would need to be further work on how this system would work in practice and whether potential benefits would be realised.

- Some participants expressed the view that the costs of fisheries management certification may outweigh the benefits gained from social licence, attaining premium prices or access to markets. Other methods, such as partnering with an environmental NGO or launching a public relations campaign may be more cost effective. Participants from New Zealand emphasised the need for "future proofing" in a world of growing consumer demand for transparency, seafood fraud and an increase in e-commerce.
- Whilst the comments were diverse and varied quite considerably, in synthesis, there was an overriding theme that 'social license' is seen as important for the long-term future of commercial fishing. Whilst difficult to define, it is driven by the balance of interested stakeholders (internal, external, local community, corporate, government, non-government, market, consumers, etc.) that have influence at any given time. Regardless of the development; either a national standard, an internal verification system, a third party certification scheme etc., the promoters of these should ensure that the specific set of expectations that define 'social license' for the target audience they wish to address are clearly understood and incorporated into the development so that outcomes can be better communicated and accepted.

9. Conclusions

The FAO Code of Conduct on Responsible Fisheries is the cornerstone of all third party certification schemes in wild capture fisheries. At project inception, it was hoped that the RFM Scheme could be a scheme best suited to the Australian fisheries management context, particularly for multispecies and data limited fisheries.

However, this project has found that the Conformance Criteria, which are based on the FAO CCRF and Eco-labelling guidelines, are not an ideal fit for the Australian fisheries management context. This is a positive result as through this process, the project has established what is required for a more appropriate scheme.

The project developed an innovative approach to assessing multi-species data limited fisheries. This was trialled in one fishery and there is scope for further development and application of this sampling protocol for all multispecies fisheries. This could potentially overcome one of the hurdles facing existing third party certification schemes (inclusion of multi-species, data limited fisheries) and more importantly contribute to the development

of a standard or specification that could be used to assess all Australian fisheries.

In addition, the project has opened up the possibility of developing, a less costly alternative to an Australian fisheries management standard: a Publicly Available Specification/Australian Technical Specification This may provide sufficient assurance that a particular fishery is responsibly managed without having to undergo a full standards development process and has the potential to be more cost effective than third party certification against an existing private or Australian standard.

The project has also initiated the debate as to the feasibility of undertaking third party assessments of the fisheries management system as a whole by suggesting further exploration of using sampling protocols currently used in aquaculture certification. Further research and development would be required to ensure robustness but also assessment of the feasibility, acceptance and application of such an approach. In the longer term, such an approach may not only be required from an assurance perspective but may also be a useful tool for industry to audit the performance of the fisheries management agency for services which they pay for under cost recovery.

Appendix 1

Methodology to Selection of fisheries

A review process was undertaken by the Project Executive and Steering Committee for the purposes of choosing the fisheries to be used in the study. The aim was to choose fisheries which test the compatibility and identify the limitations (technical suitability) of the Conformance Criteria for use on Australian State fisheries and the RFM assessment process from a practical application perspective. Where possible, the Project aimed to use the experience to identify, evolve and propose more suitable assessment methods and test these. Additionally, the assessments would also be useful to NSW DPI to identify criteria which were not in conformance with the FAO Code and Guidelines, noting that the assessments were for research purposes rather than a formal assessment.

Selection of the two fisheries occurred in three steps.

Step 1: Summary of key characteristics of all NSW fisheries using available data and reviewed by all fisheries managers for accuracy. The key characteristics were as follows:

- Methods
- Target species
- Resource competition
- Conflicts/Social Licence to Operate
- Total Catch (mt)
- Est. Value $m
- No. of authorised fishing businesses
- Byproduct
- By catch
- TEP issues
- Other factors e.g. other research/activities that may affect the compatibility assessment

Step 2: Complexity ranking. The fisheries were then ranked according to complexity as shown in Table 3.

Step 3: Weighting of Characteristics. A weighting was then applied to each of the characteristics based on what was considered more important for testing the RFM Conformance Criteria (Table 3, weighting column). This was multiplied by the rank.

Table 3: Fisheries Complexity Ranking

CHARACTERISTICS	EXPLANATION	RANKING	WEIGHTING
Multi-gear	The number of gear types in the fishery	0=1 gear; 1=2 gear, 2=3-5 gears; 3=> 5 gear	**0.3**
Multi-species (target)	Number of target species	0=1 species; 1=2 species, 2=3-5 species; 3=> 5 species	1
Resource competition	Stocks shared or straddling with other jurisdictions/sectors	0=none; 1 = limited; 2= some; 3= significant	0.4
Spatial and access conflicts	Conflicts with rec/indigenous and/ or poor public perception about fishery	0=1 species; 1 - 3 = the severity of conflicts or public perception	0.6
Number of operators	No. of authorised fishing businesses	0= < 20 ; 1=21-100, 2=100-200; 3=> 200	0.4
Byproduct (retained)	No. of species	0=1 species; 1=2 species, 2=3-5 species; 3=> 5 species	1
Bycatch (discard)	No. of species	0=0 species; 1=1-10 species, 2=10-20 species; 3=>20 species	1
TEP interactions	No. of species groups	0=0 species; 1=1 species group, 2= 2 species groups; 3=>3 species groups	1

Using the approach two fisheries were selected considered complex enough to challenge the FAO Conformance Criteria and assess the effectiveness of the NSW DPI management system. As these were not full assessments the fisheries are kept confidential for reporting purposes, however the characteristics of the two fisheries chosen were;

- Fishery A - cross jurisdictional fishery with few main target species (3 from 12)
- Fishery B – multispecies and multi-gear fishery with many target species (>12)

Appendix 2

Methodology used to approach multi-species fishery assessment

The evaluation methods used in Stage 2 combined an overall assessment of the fishery management system against all applicable Conformance criteria with an assessment of selected fishery species chosen using a risk based prioritization matrix against a narrow set of Conformance Criteria. These species 'case study' assessments were aimed at testing the consistency of application of the fisheries management system by analysing the effectiveness of management arrangements and measures at the species level. It was apparent that the selection method used provided a consistent and repeatable process for it to be used as part of an assessment/certification system.

Species Relevant Conformance Criteria

A set of species specific Conformance Criteria were chosen from the total and the resultant species list was then assessed against a sub-set of selected clauses from the overall Conformance Criteria which were on balance, felt relevant at the species level. The activity was undertaken using a number of categories (species specific, gear specific, both species and gear specific and fishery wide) with the premise that clauses that were 'more' applicable at a species level would be prioritized for selection.

As determined through this project, the current set of Conformance Criteria are not easily split into fishery management and species specific criteria, with a considerable level of cross over apparent between clauses. When carrying out the Compatibility Assessments there was considerable variability between reviewers regarding which clauses were the most applicable for species case studies.

Species Selection Process- Risk Basis

In order to provide species test case studies that could be used in the assessment, a robust species selection process was developed to provide a clearly defined classification system for all species in a fishery and that can be used by different fisheries. The species selection process should be a defined, repeatable process that results in a selection of fishery species that provide a representative sub-set of the entire fishery with respect to management performance.

For the compatibility assessments, a risk based approach was deemed appropriate when considering negative impacts of the fishery on species. It was considered that such an approach could utilise existing documentation and risk assessments developed by the fishery management processes which was both cost effective and provides transparent information that feeds into the selection process.

A range of parameters were considered as risk factors of potential environmental impact on the species exerted by the fishery. The activity considered mainly the potential for negative biological consequences, although additional parameters which may not necessarily be risk factors could also be considered. For example, Fishery A Compatibility also considered economic (commercial importance) and social factors:

- Species biology and vulnerability of the species to fishing
- Relative catch history in the fishery by gear
- Relative catch history of the species in the fishery compared to other fisheries
- Current scientific knowledge on exploitation status

- Trophic level of the species in the ecosystem
- Catch volumes and value, level of commercial importance of the species
- Other socio-economic parameters that might be identified

Fishery A compatibility assessment attempted to develop a numeric ranking system for species based on the above but did not take the concept forward for assessment testing. The exercise required considerable data for each species which was considered of variable quality. However, in the Fishery B compatibility assessment, the risk profiling was further refined and taken forward into the species reviews. (Readers should refer to individual reports for greater detail on the Fishery A and B Compatibility Trials).

Fishery B risk assessment was performed using the following:

- **Target Species:** Identified within the Fishery Management Strategy. This identified if the species in question was a primary or secondary targeted species (a parameter describing economic importance and hence more desirable for targeting).
- **Stock status:** Based on the stock status information provided by NSW DPI from the latest available information from Resource Assessment Workshop activities.
- **EIS Risk Score:** Environmental Impact Study (EIS) is used to conduct comprehensive multi-stage risk assessment processes of which one component is ecological. The species selection process utilised the information from the ecological part of the EIS to provide detailed information on species risk levels. In NSW the EIS process comprised developing a qualitative risk matrix to determine the risk from fishing for each component of the ecosystem. The matrix combined two independent factors that determined the likelihood (i.e. the risk) of an undesirable event. The first factor characterised each species' resilience and was based on its biological attributes including fecundity, life history strategy, distribution, habitat specificity, population size, growth rate, longevity, age at maturity, and diet specificity. The second factor was termed the fishery impact profile and was based on the characteristics of the fishery including what was caught, where it was caught, how it was fished, how much was caught and the number of fishers. These factors were scored in 5 categories from Low to High and then combined in a risk matrix (Figure 6). An EIS risk score was assigned to all the main species based on a combination of the inherent vulnerability of species within a fishery and the impact of the fishery on each of these species.

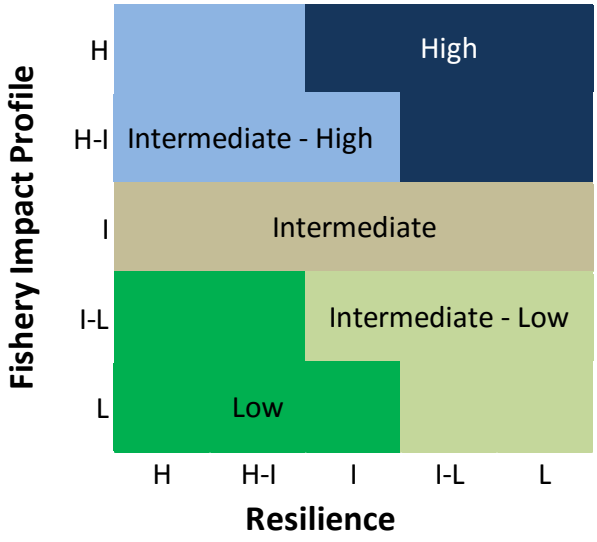


Figure 6: Risk matrix used to determine levels of risk for components of a fishery in NSW

To enable a non-biased repeatable methodology to select test case species, numeric scoring was applied to each of the parameters and scores attributed and summed for each species to provide an overall risk score as shown in Table 4.

Table 4 Attribute numeric scoring guideline

Attribute	Category	Category Number	Score
Target species	Primary	1	1
	Secondary	2	2
EIS Risk	EIS High	1	1
	EIS Inter (H)	2	2
	EIS Inter (L)	3	
	EIS Low	4	3
Status	Recruitment overfished	1	1
	Overfished	2	
	Growth overfished	3	
	Fully fished	4	2
	Moderately fished	5	
	Lightly fished	6	
	Uncertain	7	3*
	Undefined	8	

* Uncertain and undefined were scored as 3, a lower risk score than fully – lightly fished, on the basis that these species contribute relatively minor amounts to catch.

Species were classified as being of higher risk if they were within the top 25 % of the species list, whilst lower risk species were identified as in the bottom 25 % of the species list. A weighted random number generator was applied to the categories which was used to select 6 out of a list of 29 species with 3 high risk, 2 medium risk and 1 low risk species selected. The decision to select across risk categories was undertaken to provide for an expansive evaluation of the fishery management system. In this way, both higher risk was taken into consideration but recognizing that regardless of risk, all species require effective management. Six out of 29 species were chosen based on the square root, commonly applied in certification systems for selecting entities within a group certificate.

The resultant species list was then assessed against a sub-set of selected clauses as shown in Table 5). For the purposes of expedience of fishery B assessment, the work was divided among reviewers and then outcomes discussed among the team for agreement.

Note on Weighting

The Fishery A compatibility assessment did not apply weightings to attributes. However, additional attributes could be added and the species selection process could be developed so that key attributes are weighted according to their importance of the objective of the certification scheme. For example, if the scope of the Australian standard is to address environmental concerns then the stock status and EIS risk score could be more heavily weighted. Alternatively if the standard is designed primarily to assess economic/social factors within a fishery then attributes related to these

could be weighted more heavily in the risk score. Alternatively, if all attributes are deemed of equal importance, there would be no weighting.

Appendix 3:

A short primer on standards

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Prepared for: 2012/746 Preliminary Investigation of internationally recognised Responsible Fisheries Management Certification

1. Introduction

Globally there are well over half a million published Standards. These figures do not take into account the innumerable internal standards, which underpin any successful organisation.

Standards are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they were intended to. They establish a common language, are practical; outline achievable goals and are based on sound industrial, scientific and consumer experience and are regularly reviewed to ensure they keep pace with the advances in technologies.

Standards all have the same basic purpose of setting out agreed principles or criteria so that their users can make reliable assumptions about a particular product, service or practice. Standards are “living documents", which may initially be published and iteratively modified, corrected, adjusted and/or updated based on market conditions and other factors.

In some standards, the type of agreement essentially amounts to advice and guidance; others are much more prescriptive and set out absolute requirements that have to be met if a user wishes to make a claim of compliance with the standard.

2. Are standards different from codes and guidelines?

There is overlap, as illustrated in Figure 1. As you can see, standards and codes can be part of the same policy solution so it does get confusing. Also, different countries, organisations and individuals can use the terminology interchangeably.

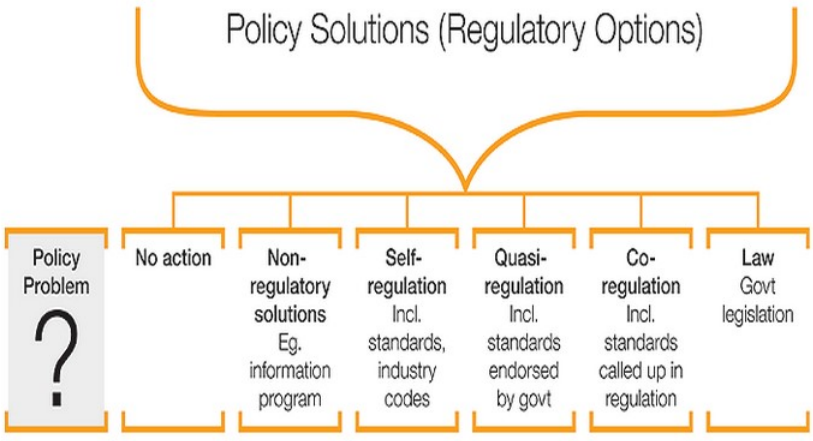

Figure 1 Policy solutions and regulatory options for a policy problem (Source: Standards Australia)

However in general, the following applies to standards:

- Compliance can be mandatory (regulated by government) or voluntary
- Does not have to lead to certification
- They can be international, regional, national or private
- There is a formal and technically robust process to developing the standard

3. The definition of a standard in Australia

The definition of a standard used by Standards Australia originates from the International Standards Organisation (ISO):

[published] "document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.

Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits."

A particular process to develop a standard has to be followed as described by Standards Australia in their publication, Rules for the Structure and Drafting of Australian Standards (www.standards.org.au) and illustrated in Figure 2. This follows ISO Guide 59, Code of good practice for standardization.

The development process has to be clear and rigorously defined and based on three internationally recognised principles:

- Openness and transparency of process
- Consensus
- Balance of representation

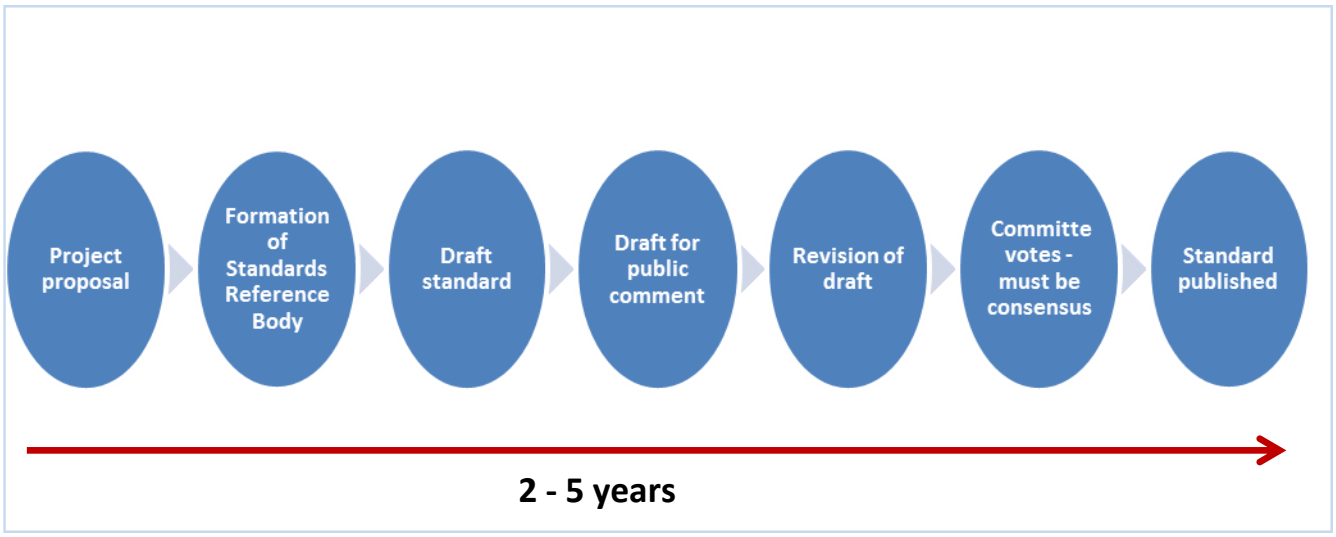

Figure 2 Formal Standard Development Process (Source: Standards Australia)

4. Who can develop Australian Standards?

Australian standards can be developed by Standard Development Organisations (SDOs) which have been accredited by the Accreditation Board for Standards Development Organisations (ABSDO). ABSDO is the coordination body for SDOs in Australia. FRDC is the accredited SDO "to develop Australian Standards in the fields of terminology, sustainability, and operational practices in the fishing industry" and now owns the Australian Fish Names Standard.

Standards can also be developed by Standards Setting Organisations (SSOs). SSOs can be differentiated from SDOs only in the sense that they develop private standards and are not accredited by the ABSDO. They can be guided by normative documents such as the ISO/IEC 17007-2009 which sets out principles and guidance for developing standards or the ISEAL Code of Good Practice for Setting Social and Environmental Standards.

SSOs can be:

- Professional Societies
- Industry Associations e.g. the Clean Green standard owned by Southern Rocklobster Ltd.
- Private companies e.g. SAIGlobal or BSI
- Non-profit organizations e.g. Marine Stewardship Council
- Consortiums of governments, industry and other organizations e.g. consumer organisations

5. What are product or process standards?

A **product standard** is a set of criteria with which a product or a family of products must comply. The Australian Fish Names standard is a product standard.

Process standards are either management system standards or performance standards. Management system standards set criteria for management procedures, for example for documentation for monitoring and evaluation procedures. They do not set criteria for the performance of the management system in terms of outcomes. ISO-14001 is an example of a management system standard.

Performance standards set verifiable requirements for the performance of a management system, such as the use of limit reference points in a fishery.

6. Is the FAO Code of Conduct on Responsible Fisheries (CCRF), a standard?

FAO has publicly stated that the CCRF is not a standard despite the introduction to the Code which says that (author emphasis), “This Code sets out principles and **international standards** of behaviour for responsible practices.”

Some have argued the CCRF is a standard having been through the robust and rigorous drafting process which was agreed by consensus by the Committee on Fisheries (194 countries). Others argue, including FAO, that it is not a standard but a code because FAO is not a standards-setting body.

There is general agreement, however that the CCRF, together with the Guidelines for the Ecolabelling of fish and fishery products from marine capture fisheries are normative reference documents for the development of sustainable/responsible fisheries standards. They have been used by the Marine Stewardship Council, the Iceland Responsible Fisheries Foundation, Friends of the Sea and the Alaska Seafood Marketing Institute in developing their private standards.

7. What are private standards?

Private standards are voluntary and are developed by entities other than government (companies, NGOs, stakeholder associations). They may differ in content, focus, certification and verification methods and also in how they are developed. In the food (including seafood) sectors, there are many private standards. These have usually been developed in response to a perception that public standards or regulatory frameworks are failing to achieve given outcomes (sustainability and responsible fisheries management, food safety assurance, animal ethics, child labour) and/or where there is a desire to differentiate certain products or operators in the market. They may or may not be publically available.

The Marine Stewardship Council, ASMI RFM and the G.U.L.F schemes are all private standards.

Whilst private standards do not have to go through the processes specified by Standards Australia, it is regarded as accepted best practice to develop standards based on internationally accepted norms of standard development such as ISO 59. This ensures credibility.

8. A Fast Track Alternative: Publicly Available Specification/Australian Technical Specification

A Publicly Available Specification (PAS) or Australian Technical Specification (ATS) is an alternative to formal standards described above. These were initially developed to respond to an urgent need in fast changing sectors like Information Technology where the development of a standard would simply take too long. In addition there is potential to use the ATS/PAS as a seed document to develop a national or international standards.

ATS/PAS's take less time to develop because:

- The sponsor can have more control of the content (this also allows for co-branding)
- does not have to be agreed by consensus

A PAS/ATS must also not conflict, or contradict, existing or draft work within the formal standards arena and must complement, not conflict with, any legislation in the subject area.

The process to develop an ATS/PAS is set out by Standards Australia and is based on ISO rules:

1. Working Group (WG) comprised of selected experts and/or interested parties, under the direction of a constituted Technical Committee (TC) which has sufficient understanding of the subject matter to oversee the process.
2. At the minimum, the draft specification is subject to limited peer review with the option of going to full public comment if it is deemed to be warranted. Comments are considered

by the WG.

3. At the end of the process, the supervising TC is asked to sign off on the final document to confirm that the appropriate process has been followed and that the required consultations and peer review have occurred.

ISO recommends that ATS/PASs should be reviewed at least every three years to decide either to confirm the ATS/PAS for a further three years, revise the PAS, process the PAS further to become either a technical specification or an International Standard, or to withdraw the PAS. After six years, a PAS should either be converted into an International Standard or be withdrawn.

9. Is a standard the same as a benchmark?

No. Benchmarks are not standards. They are a method to recognise that existing standards, codes and guidelines are equivalent (or not) by establishing a set of criteria and indicators to measure and compare the performance of standards, codes and guidelines. The aim is to avoid duplication and encourage harmonization and ultimately, reduce cost.

In seafood, there is a current initiative known as the Global Seafood Sustainability Initiative (GSSI) which is developing a benchmark for seafood schemes so that a seafood supplier can (a) know which schemes meet the benchmark and (b) select one that best fits their requirements and therefore avoid the need for dual or multiple certifications. This has been used in food safety with great success.

Currently, GSSI has been discussing benchmarking private voluntary schemes only. However, it is conceivable that codes, guidelines and policies as well as government standards and legislation could be benchmarked.

10. Conforming to a standard or a PAS/ATS (Conformance Assessment)

Conformance to a standard or a PAS/ATS means that the 'requirements' of the standard/specification are met as measured by Conformance Criteria. This process is called a conformity assessment or CA.

Conformity assessments can be undertaken by:

- First parties
- Second parties
- Third parties

First party

The management agency/fishery/supplier self-declares that the standard/specification has been applied. This is carried out internally within the company/organisation/association, usually by a separate department. It could then deliver a declaration to that effect - SDoC (Supplier's Declaration of Conformity).

The aim is to provide commercial partners or other stakeholders with the reassurance that a standard has been followed.

Second party

Verification is undertaken by a person or organization that has a user interest in the object, for example, a purchaser or another government department (e.g. Department of Environment). The aim is usually to obtain more independent assurance than under a first party arrangement. A statement is issued as to whether the product or process complies with the standards.

Third party

This is performed by a person or body that is independent of any party with an interest. It is usually called certification. Written assurance (a certificate) confirms that the product, service or system is in conformity with the standard.

The independent body is known as a Conformity Assessment Body (CAB) or a Certifying Body (CB). CABs/CBs are usually selected by the entity seeking certification.

Accredited Conformity Assessment Body (CAB) or Certifying Body (CB)

To ensure that CAB/CBs have the competence, credibility, independence and integrity to carry out third party conformance assessments i.e. certification, the CAB or CB should be formally recognized by an independent body, known as an accreditation body.

Accreditation bodies generally operate as non-profit organisations. JAS-ANZ is the government-appointed accreditation body for Australia and New Zealand. A private accreditation body, called Accreditation Services International, accredits CABs to certify against the MSC standard.

When applying for accreditation, CABs identify the scheme(s) they wish to be accredited for and go through a process to be accredited to enable them to certify against that particular scheme.

ISO has developed standards to accredit CABs and CBs, notably ISO 17065 (products, processes and services) and ISO 17021 (management systems). ISO 17065 has a number of requirements the CAB/CB must meet, including organizational structure, quality management system elements, competence of personnel and confidentiality. There must also be mechanisms for safeguarding impartiality and rules for monitoring any certification mark.

ISO/IEC 17011 sets out principles and guidelines for accreditation bodies themselves to ensure that that they are also credible. National bodies, such as JAS-ANZ are members of the International Accreditation Forum (IAF) which peer evaluates their procedures and processes against ISO 17011. These peer evaluation mechanisms have been created at regional and international levels, so that assurance is provided that accreditation bodies are operating in accordance with the ISO standard. Those who have passed such an evaluation become members of mutual recognition arrangements.

11. What is a scheme?

A scheme is the whole package of documents which sets out the rules and procedures for accreditation, certification, assessment and audit.

A typical certification scheme is constituted of the following elements:

(1) A SDO or SSO, in charge of developing standards or coordinating the standard development

process, preferably in consultation with a number of stakeholder groups.

(2) A clearly defined set of objectives that the scheme is aiming to achieve.

(3) A set of certification standards that describes the characteristics that a process or product should have to be certified by the scheme.

(4) A certification process (operated for example by one or more certification bodies [CBs]) that assesses conformity of a product or process to the certification standards.

12. Can a CAB also develop standards?

Yes. Provided international standards/guidelines for developing standards and undertaking CAs are followed. There should be a "firewall" between the standard setting part of the business and the CA part of the business.

CABs, such as BSI and SAI Global develop standards and PASs all the time. They also undertake third party CAs against these standards or specifications.

13. Traceability

Traceability is the process by which seafood (whether certified or not) can be tracked from their origins through all stages along the supply chain all the way to the retailer. It is fundamental to ensuring accurate labelling and food safety especially in the event of a product recall. ISO has developed a finfish traceability standard 12875:2011 and standards for crustaceans and molluscs are in development. Traceability standards are used internally by actors in the supply chain to ensure that any product they handle can be traced back to its origin and that there are compatible technologies to do so along the supply chain.

14. Chain of custody

Chain of custody (CoC) certification occurs against a chain of custody standard (process standard) audited by a third party to ensure that products labelled as coming from a certified fishery do come from that fishery. It is an additional certification add-on to certification of the fishery itself. The term 'chain of custody' is used when all steps, including processes, transportation and ownership of that product are accurately documented and proven secure from loss in traceability. Chain of custody has an identified start and end point for the product. For seafood, this can be at a point of harvest, of landing or first sale to a point of final consumer packaging. Chain of custody involves:

- Tracing the certified seafood back to incoming product from the certified fishery
- Segregating ll non certified product especially during transport, storage and processing
- Identifying and labelling (species/catch area) correctly at all times including storage and transport
- Trace checking mass balance backwards and forwards in the supply chain back to the certified fishery annually (at a minimum)
- Documenting procedures and keeping all records

Appendix 4

End of Project Workshop Agenda, Participant List and Presentations

Agenda for RFM Workshop 26 February 2015

0900-0910	**Welcome and Introduction** (objectives of the workshop)	Mark Boulter, Sydney Fish Market
0910-0950	**The RFM Project: Findings**	Sevaly Sen PI, Dave Garforth, SAI Global
	INTERNATIONAL RFM DEVELOPMENTS	
0950-1010	**GULF and BMP for Small Scale Fisheries**	Damon Morris; Louisiana Dept. of Wildlife and Fisheries,
1010-1040	**New Zealand: Alternative certification programs**	Jodie Campbell, MPI/George Clements; Deepwater Group
1040-1100	**COFFEE/TEA BREAK**	
	DOMESTIC INITIATIVES	
1100-1110	**Update on ASMI and Iceland RFM**	SAI Global
1110-1145	**MSC Western Australia** (small Scale fisheries focus)	Fisheries WA
1145-1200	**FRDC related project proposal**	CSIRO/AFMA
1200-1240	**LUNCH**	
1240-1310	**Short Primer**	Sevaly Sen
1310-1330	**PAS**	Todd Redwood, BSI
1330-1350	**Application of Private Standards**	Clare Winkel, BSI
1350-1425	**New approaches to assessment for data limited, multispecies fisheries**	SAI Global
1425-1450	**COFFEE**	
1450-1510	**Need of verification for fisheries management performance**	Prof. George Kailis, Notre Dame University
1510-1530	**Future Options for discussion**	
1530-1615	**Working Groups**	
1615-1645	**Working Group Presentations**	
1645-1700	**Discussion and wrap up**	
1800	**RECEPTION AND DINNER** **Blue Eye Dragon, 37 Pyrmont Street, Pyrmont NSW 2009 (opposite the Casino)**	

List of participants

NAME	TITLE	COMPANY
Aaron Irving	Executive officer	Pearl Producers Association
Allison Webb	Director Fisheries Management and Science	Fisheries Victoria
Andy Goulstone	Director of Commercial Fisheries	NSW DPI
Anthony Mercer	Business Manager Supermarkets, Di Costi's	De Costis
Armineh Madirossian	Head of Corporate Responsibility	Woolworths Ltd
Beth Gibson	Senior Manager Policy Environment Economics and Research	AFMA
Bob Kearney	Emeritus Professor of Fisheries Management	University of Canberra
Brad Warren	Executive Chairman	Oceanwatch
Brett Allen	Director of Marketing	SAIGlobal
Bryan Macdonald	Director, Strategic Projects	Northern Territory Fisheries
Clare Winkel	Client Manager / Compliance Specialist – Food	BSI Group ANZ
Crispian Ashby	Manager, Resource Planning	FRDC
Damon Morris	Program Manager, Sustainable Fisheries and Seafood	Louisiana Wildlife and Fisheries,USA
Darren Reynolds	Fisheries Manager	NSW DPI
Dave Garforth	Seafood Business Manager	SAI Global
Doug Ferrell	Manager, Resource Planning	NSW DPI
Eric Perez	Executive Officer	Queensland Seafood Industry Council
George Clement	Chief Executive	Deepwater Group, New Zealand
George Kailis	Professor of Management, Notre dame University	University of Notre Dame
Guy Leyland	Principal Executive Officer	WAFIC
Gus Danoun	Supply Manager	SFM
Heather Brayford	Director	Fisheries WA
Inga Sadovskaia	Senior Business Development Manager, Food Assurance	SAI Global
Jo-Ann Ledger	Co-Investigator	FRDC project: Extension of MSC Certification for Western Australian Fisheries
Jodie Campbell	Senior Analyst - Certification and Market Access	MPI, New Zealand
John Stewart	Senior Research Scientist	NSW DPI
Johnathon Davey	Executive Director	Seafood Industry Victoria
Josh Foster	Fisheries Manager	NSW DPI
NAME	**TITLE**	**COMPANY**
Kim Walshe	Acting Director General	Fisheries WA
Len Stephens	Managing Director, Seafood CRC	Seafood CRC

Lowri Price	Executive Officer	Oceanwatch
Kerry Cameron	Assistant Director, Sustainable Fisheries	Commonwealth Dept. of the Environment
Malcom Keag	Fisheries Resource Officer, Regulatory Reform and Assessment	Fisheries Queensland
Mark Boulter	Risk and Compliance Manager	SFM
Michael Woden	Program Manager, Wildcapture Fisheries	Oceanwatch
Neil Stump	Chief Executive	Tasmanian Seafood Industry Council
Oliver Wilson	Assessor	SAI Global
Olivia Tyler	Responsible Sourcing Manager	Woolworths Ltd
Pat Caleo	Manager, Australia&New Zealand	MSC
Renae Vajtauer	Executive Officer	Commonwealth Fishers Association
Rob Fish	Chairman	Northern Territory Seafood Council
Rob Gauta	Managing Director	Newcastle Fishing Cooperative
Ross Fidden	Chairman	Commercial Fishermens Cooperative, Newcastle
Sean Sloan	Director of fisheries and aquaculture policy	PIRSA
Sevaly Sen	Principal Investigator	RFM Project
Stephanie Williams	Corporate Social Responsibility & External Relations Manager	SFM
Todd Redwood	General Manager – Food, Supply Chain and Operations	BSI Group ANZ
Tricia Beatty	Executive Officer	NSW PFA