



Public Consultation Benchmark Framework V2.0

Summary of revised components

Section **D**

Start: 6 April 2020
End: 5 June 2020

■ Introduction

This document provides a summary of all the changes to the GSSI Benchmark Framework as proposed by the GSSI Expert Working Groups as part of the revision of the GSSI Global Benchmark Tool. The proposed changes are highlighted in blue.

The Expert Working Groups focused on updating and simplifying the Benchmark Framework while maintaining its robustness and its alignment with the FAO guidelines. The scope of the review focused on the following three areas:

Improvement of benchmark component language
Reduction of the number of components to reduce complexity
Inclusion of new FAO guidelines as supplementary components

The proposed changes are subject to a 60-day Public Consultation starting April 6 2020.

■ Understanding the framework

GSSI's Global Benchmark Tool is made up of 3 parts:

- Benchmark Process: steps a scheme goes through to be recognized by GSSI
- Benchmark Framework: information on GSSI Essential Components, grounded in the CCRF and FAO Guidelines, which a scheme needs to meet to be recognized by GSSI and information on GSSI Supplementary Components, which show a scheme's diverse approach
- Benchmark Result: the statement of GSSI Recognition and Benchmark Report

■ About the GSSI Benchmark Framework

The GSSI Benchmark Framework includes *GSSI Essential Components* which a seafood certification scheme must meet for recognition, and *GSSI Supplementary Components*, which allow schemes to show their diverse approach and help stakeholders understand where differences exist.

GSSI Essential Components

The GSSI Essential Components are grounded in the CCRF and FAO Guidelines. These are the full range of criteria, which a scheme needs to meet to be recognized by GSSI.

GSSI Supplementary Components

The GSSI Supplementary Components are defined by the GSSI Expert Working Groups and grounded in the CCRF and related FAO documents, ISO normative standards and ISEAL codes. Their purpose is to outline the status of existing practices in seafood certification and they can be built on going forward. A rationale for each GSSI Supplementary Component explains its value to both schemes and stakeholders. The Benchmark Process will verify if a seafood certification scheme meets GSSI Supplementary Components. Meeting GSSI Supplementary Components is not required for GSSI Recognition.

■ Structure of the Benchmark Framework

The *GSSI Essential Components* and *GSSI Supplementary Components* in the Benchmark Framework are structured in four Sections:

The Benchmark Framework is made up of four Sections:



GSSI Essential Components and GSSI Supplementary Components
for **Governance of a Seafood Certification Scheme**



GSSI Essential Components and GSSI Supplementary Components
for **Operational Management of a Seafood Certification Scheme**



GSSI Essential Components and GSSI Supplementary Components
for **Aquaculture Certification Standards**



GSSI Essential Components and GSSI Supplementary Components
for **Fisheries Certification Standards**

The sections consist of Performance Areas, each of which includes Elements organised by Topic:

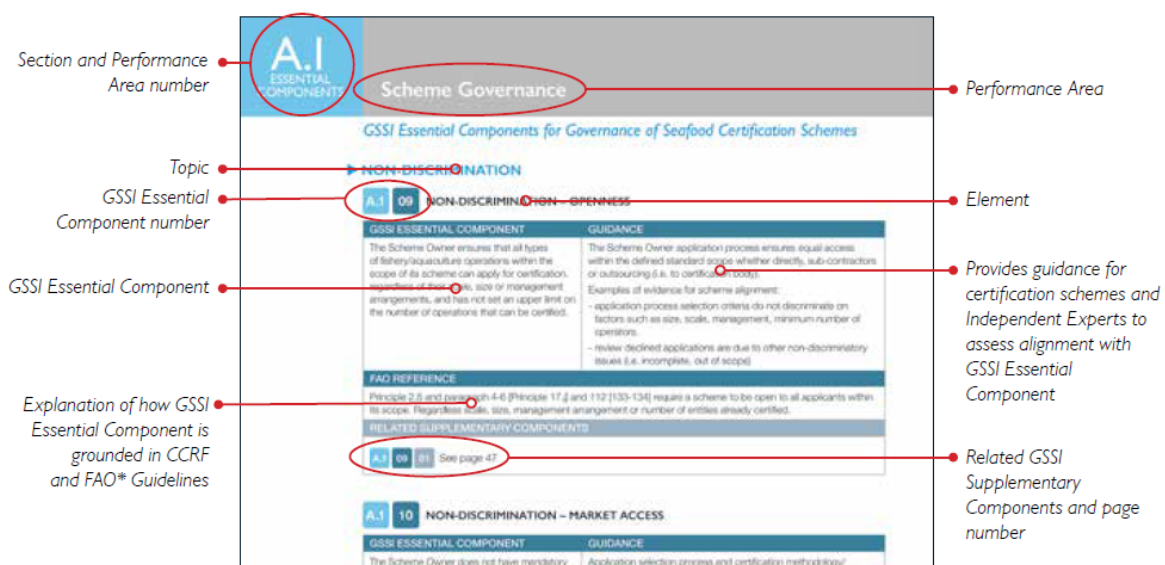


Component texts, Guidance section and reference

The component text is leading for Independent Experts to assess whether the Scheme Owner is in alignment with the components. If a component includes a list of minimum sub-criteria (“all”, “at least”), all criteria must be met (except when certain criteria are explicitly noted as not applicable for a particular scheme).

Each Component includes a Guidance section. The Guidance is intended to assist the Independent Experts and others in understanding the meaning of the component text and how conformity with that component should be assessed. Examples listed in the guidance are suggestions and not exhaustive. The possibilities for objective evidence can vary depending on the type and structure of the assessed Scheme Owner.

Finally, each Component includes a reference to the respective instruments on which it is based, such as the FAO Code of Conduct for Responsible Fisheries and FAO Guidelines, but also guidelines drafted by ISEAL, ISO & OIE.



■ Abbreviations

BC	Benchmark Committee
CCRF	Code of Conduct for Responsible Fisheries
FAO	Food and Agriculture Organization of the United Nations
FAO Guidelines	FAO Guidelines for Ecolabelling of Fish and Fishery Products from Marine/Inland Capture Fisheries, and FAO Technical Guidelines on Aquaculture Certification.
GSSI	Global Sustainable Seafood Initiative
IE	Independent Expert
ISEAL	Global membership association for sustainability standards
ISO	International Organization for Standardization
OIE	World Organization for Animal Health
SO	Scheme Owner (Seafood Certification Scheme)
UN	United Nations

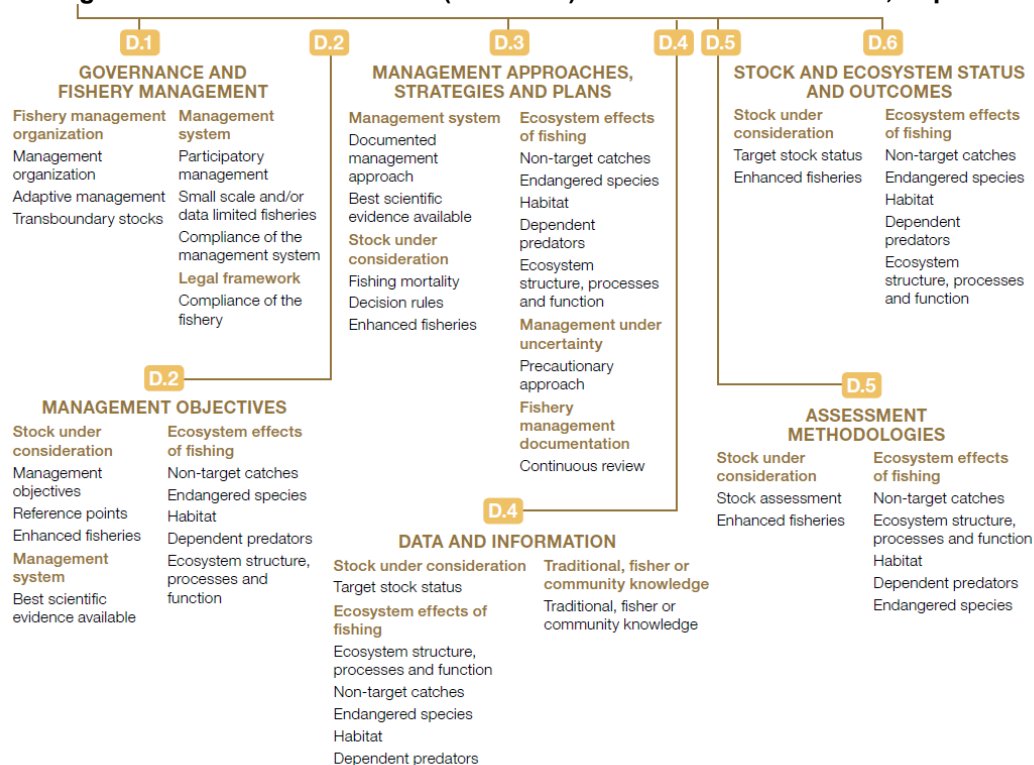
Section D: Fisheries

1. Revised structure

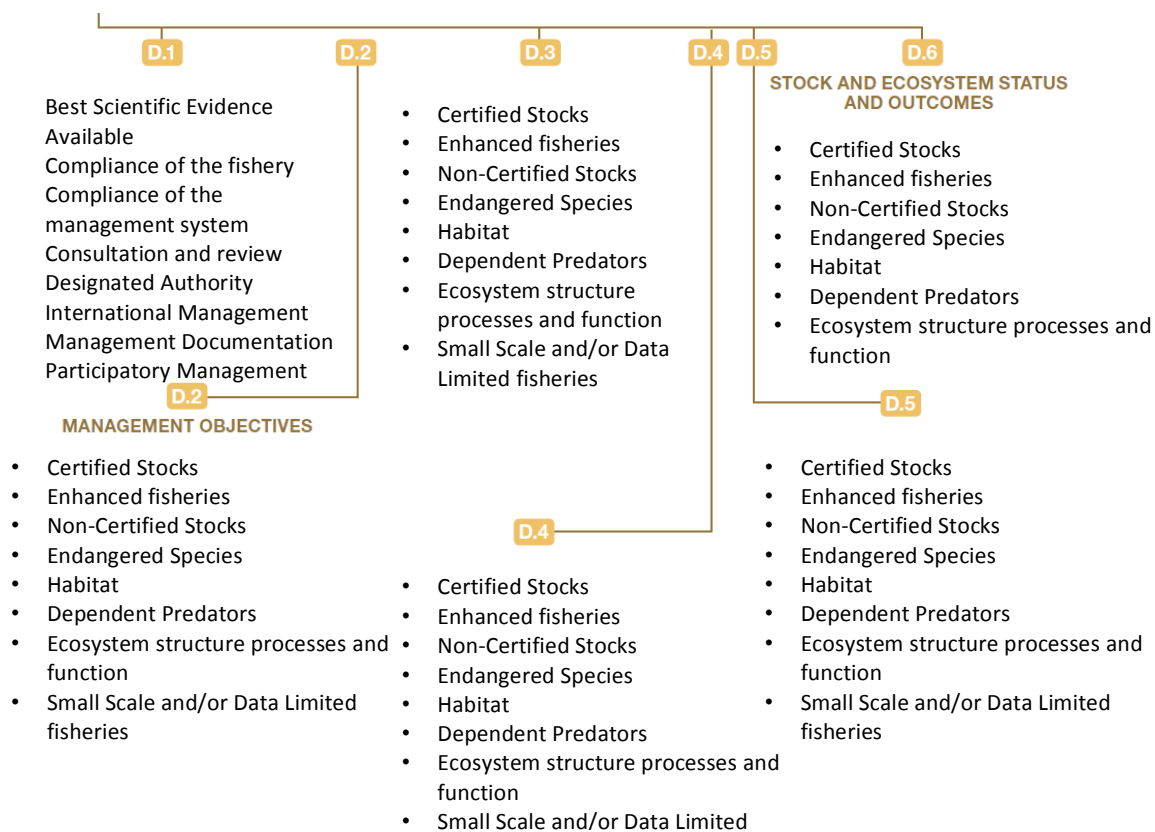
The Global Benchmark Tool is divided into different Performance Areas, Topics and Elements under those performance areas. Some Elements (such as Management system or Stock under consideration) can be found under multiple Performance Areas. This classification of component under these Performance Areas will be revised for Section D to provide a clearer structuring of the components. Section D will continue to be divided into Performance Areas and Topics, but will no longer have the third layer of topics. Additionally, some Performance Areas will be renamed and restructured. In the overview of the existing and new classification structure, the changes can be compared. In summary, the changes are as follows:

- Two level classification (performance areas and elements, topics layer removed)
- Performance Area 1 is renamed Governance and Management Approach (existing name: Governance and Fishery Management)
- Performance Areas are reordered. D.3 Management Approaches Strategies and Plans is now D.5 Management Measures.
- Performance Areas D.2 and D.6 now have the same eight Elements:
 1. Certified Stocks;
 2. Enhanced Fisheries;
 3. Non-Certified Stocks;
 4. Dependent Predators;
 5. Endangered Species;
 6. Habitat;
 7. Ecosystem structure, processes & function;
 8. Small Scale and/or Data Limited Fisheries (only D.2)
- Some Elements that were previously under Performance Areas D.2 and D.3 like Best Scientific Evidence and Documented Management Approach are now consolidated under performance Area D.1 (Governance and Management Approach).

Existing classification of Section D (Fisheries) into Performance Areas, Topics and Elements



New classification of Section D (Fisheries) into Performance Areas and Elements



2. Revised Components

Essential Component D1.02 has changed guidance text. The term “unit of verification” should be “unit of certification”, in line with the terminology throughout the Global Benchmark Tool.

<p>Current component text: The standard requires that the fishery management organization or arrangement receives and responds to in a timely manner the best scientific evidence available regarding the status of the stock under consideration and the likelihood and magnitude of adverse impacts of the unit of certification on the stock under consideration and the ecosystem.</p>	<p>New component text: Unchanged</p>
<p>Current guidance text: Best scientific evidence available is described in the Glossary. For the stock under consideration it can derive from assessments of stock status outside of what is regarded as a traditional “stock assessment”, accommodating techniques for data limited fisheries and including traditional knowledge, providing its validity can be objectively verified. The actions of the fishery management organization or arrangement in both receiving and responding to the best scientific evidence available must be in accordance with the Precautionary Approach (D.3.12). This Essential Component is also linked to those in D.4 that cover the collection and handling of data and information.</p>	<p>New guidance text: This essential component is about the taking into account of the best scientific evidence available by the Fishery Management Organization in a timely manner. This relates to both stock status and fishery impacts, hence all are mentioned in the component language. Best scientific evidence available is described in the Glossary. For the stock under consideration it can derive from assessments of stock status outside of what is regarded as a traditional “stock assessment”, accommodating techniques for data limited fisheries and including traditional knowledge, providing its validity can be objectively verified. The actions of the fishery management organization or arrangement in both receiving and responding to the best scientific evidence available must be in accordance with the Precautionary Approach (D.3.12). This Essential Component is also linked to those in D.4 that cover the collection and handling of data and information.</p>
<p>FAO reference: FAO Marine and/or Inland Guidelines for Ecolabelling 28 (35); 29.1 (36.1); 29.2 (36.2); 29.3 (36.4)</p>	

Supplementary Component D.1.05.03 has a revised guidance text. The guidance now includes specific reference to deep sea fishers, in line with the FAO Deep Sea Guidelines. The scope of this component has been made clearer by including this reference.

<p>Current component text: The standard requires the governance and fisheries management system under which the unit of certification is managed to be both participatory and transparent, including consultation with "responsible" deep sea fishers, to the extent permitted by national laws and regulations.</p>	<p>New component text: Unchanged</p>
<p>Current guidance text: In addition to the governance and fisheries management system being participatory and transparent (as per the parent Essential Component), this Supplemental Component requires to the Standard to include specific consultation with "responsible" deep sea fishers.</p>	<p>New guidance text: In addition to the governance and fisheries management system being participatory and transparent (as per the parent Essential Component), this Supplementary Component requires the Standard to include specific consultation with "responsible" deep sea fishers.</p>

The source of this Supplemental Component is the FAO Deep Sea Guidelines, which relate to fisheries on the high seas. Hence there is an international context for management of fisheries in areas beyond national jurisdiction which may go beyond the parent requirement. Note, however, that the wording of a Supplemental Component cannot be used as a justification for weakening the application of an Essential Component by implying that something is excluded from the Essential Component that might otherwise have been assumed to be included.

The source of this Supplemental Component is the FAO Deep Sea Guidelines, which relate to deep sea fisheries on the high seas. Hence there is an international context for management of fisheries in areas beyond national jurisdiction which may go beyond the parent requirement. To assess conformance, it would be useful (for example) if the scheme elaborated on the requirement for consultation with respect to fisheries in areas beyond national jurisdiction. Note, however, that the wording of a Supplementary Component cannot be used as a justification for weakening the application of an Essential Component by implying that something is excluded from the Essential Component that might otherwise have been assumed to be included.

FAO reference:

FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas (adopted 2008) 21 (vii); 79 and 80

Essential Component D1.07 has a changed guidance text , to clarify that the term management system is not the same as management organization. Both terms are defined in the glossary. In essence, management organization is the institution responsible for fisheries management (the “Designated Authority”), while a management system is a framework of processes and procedures.

Current component text:

The standard requires that the fisheries management system under which the unit of certification is managed operates in compliance with local, national and international laws and regulations, including the requirements of any regional fisheries management organization that exercises internationally recognized management jurisdiction over the fisheries on the stock under consideration.

New component text:

Unchanged

Current guidance text:

Under this Essential Component the standard requires that the fisheries management system must operate legally (locally, nationally and internationally); the legality of the fishery (i.e. compliance with applicable fishing regulations) is covered under other requirements in this Performance Area. For the purposes of clarity, this includes compliance with the rules and regulations of any RFMO/A that exercises internationally recognized management jurisdiction over fisheries on the stock under consideration in the high seas and implementation of the United Nations General Assembly (UNGA) Resolution 61/105, paragraphs 76-95 concerning responsible fisheries in the marine ecosystem.

New guidance text:

Under this Essential Component the standard requires that the fisheries management system must operate legally (locally, nationally and internationally); the legality of the fishery (i.e. compliance with applicable fishing regulations) is covered under other requirements in this Performance Area. [The term "fisheries management system" is distinct from the "fishery management organization or arrangement" Both of these terms are defined in the glossary.](#)

For the purposes of clarity, this Essential Component includes compliance with the rules and regulations of any RFMO/A that exercises internationally recognized management jurisdiction over fisheries on the stock under consideration in the high seas and implementation of the United Nations General Assembly (UNGA) Resolution 61/105, paragraphs 76-95 concerning responsible fisheries in the marine ecosystem.

FAO reference:

FAO Marine and/or Inland Guidelines for Ecolabelling + FAO CCRF (where listed)

Essential Component D.2.05 has a revised component text. Some words have been deleted to simplify the wording of the component.

Current component text:

The standard requires the existence of management objectives that seek to ensure that non-target catches and discards by the unit of certification of stocks other than the stock under consideration and any associated culture and enhancement activity do not threaten those non-target stocks with recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible.

New component text:

The standard **requires management** objectives that seek to ensure **that catches** and discards by the unit of certification of stocks other than the stock under consideration and any associated culture and enhancement activity do not threaten **those stocks** with recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible.

Current guidance text:

The term "target" in this Essential Component is used only in the context of "target stock status" in the Elements. This refers to the status of the stock under consideration only. "Non-target catches" refers to everything other than the stock under consideration.

New guidance text:

Unchanged

This Essential Component is explicitly and deliberately confined to the effects of non-target catches and discards by the unit of certification on those non-target species/stocks. Cumulative effects on non-target species/stocks are not included in the Ecolabelling Guidelines. They are not part of the Essential Components, but they are covered in the Supplemental Components. The component relating to enhancement activity may be "not applicable" to schemes that explicitly do not cover enhanced fisheries.

Examples of irreversible or very slowly reversible effects on bycatch species include excessive depletion of very long-lived organisms (see Glossary). To mitigate effects that are likely to be irreversible or very slowly reversible requires those effects to be made less severe such that they are no longer likely to be irreversible or very slowly reversible.

FAO reference:

FAO reference: FAO Marine and/or Inland Guidelines for Ecolabelling + FAO CCRF (where listed)

Essential Component D.3.03 has a revised guidance text. The scope of the component includes all sources of fishing mortality on the certified stock, including recreational fisheries and catches taken for research purposes. For completeness, these have been included in the guidance.

Current component text:

The standard requires that management measures for the stock under consideration consider the impacts on the stock under consideration of all the fisheries utilizing that stock under consideration

New component text:

Unchanged

over its entire area of distribution.	
<p>Current guidance text: This Essential Component addresses cumulative impacts of fishing from all sources on the stock under consideration as specified in the Ecolabelling Guidelines. Management measures for the stock under consideration must be based on an assessment of that stock which takes account of all removals from the stock over its entire area of distribution, i.e. not just by the unit of certification but by all fisheries that utilize that stock, including bycatch, discards, unobserved mortality, incidental mortality, unreported catches and catches taken outside of the unit of certification. These terms are not defined here, or in the Glossary. They are used collectively in this context to cover all as examples of possible descriptions of fishery removals of the stock under consideration.</p> <p>Area of Distribution is described in the Glossary based on a CITES reference for species, but this can apply to stocks in a fisheries context.</p>	<p>New guidance text: This Essential Component addresses cumulative impacts of fishing from all sources on the stock under consideration as specified in the Ecolabelling Guidelines. Management measures for the stock under consideration must be based on an assessment of that stock which takes account of all removals from the stock over its entire area of distribution, i.e. not just by the unit of certification but by all fisheries that utilize that stock, including (but not limited to) bycatch, discards, unobserved mortality, incidental mortality, unreported catches, recreational fisheries, catches taken for research purposes and catches taken outside of the unit of certification. These terms are not defined here, or in the Glossary. They are used as examples of possible descriptions of fishery removals of the stock under consideration.</p> <p>Area of Distribution is described in the Glossary based on a CITES reference for species, but this can apply to stocks in a fisheries context.</p>
<p>FAO reference: FAO Marine and/or Inland Guidelines for Ecolabelling 25 (32); 29.2bis (36.3);</p>	

Supplementary Component D.4.02.02 has a revised guidance text. The change to the guidance is based on the interpretation of the source text from the EAF and to provide the necessary clarification.

<p>Current component text: The standard requires the management system to ensure that available traditional, fisher and community knowledge about the ecosystem and the fishery of which the unit of certification is part is collected and validated to contribute to implementation and monitoring of EAF. Further, information about the local situation should be complemented by information from ecologically similar situations elsewhere.</p>	<p>New component text: Unchanged</p>
<p>Current guidance text: Under this Supplemental Component is the standard must require the collection and validation of traditional fisher and community knowledge to support implementation of EAF. This applies particularly to countries where information is not already available in reports and statistics.</p>	<p>New guidance text: The focus of this Supplemental Component is the broad data and information needs of EAF. In countries where these needs cannot be met through reports and statistics from various research institutes, agencies and ministries, there is often extensive traditional knowledge about the ecosystem and the fishery. The standard must require, where appropriate, the collection and validation of traditional fisher and community knowledge to support implementation of EAF.</p>
<p>FAO reference: FAO Technical Guidelines for Responsible Fisheries. 4. Fisheries management. 4.2. The ecosystem approach to fisheries (2003).2</p>	

Supplementary Component D.5.06.02 has a revised component and guidance text. The source document for this Supplementary Component is the FAO Guidelines on Bycatch Management and Reduction of Discards. To clarify the scope of the component and its nesting under its parent Essential Component, the word fisheries should be replaced with bycatch.

<p>Current component text: The standard requires that the management system addresses in fisheries management planning all significant sources of fishing mortality in the fishery of which the unit of certification is part and that such planning is based on an ecosystem approach to fisheries.</p>	<p>New component text: The standard requires that the management system addresses in fisheries bycatch management planning all significant sources of fishing mortality in the fishery of which the unit of certification is part and that such planning is based on an ecosystem approach to fisheries.</p>
<p>Current guidance text: The parent Essential Component requires an analysis of the effects of the unit of certification, including any enhancement activities, on ecosystem structure, processes and function. This Supplementary Component focuses on the requirement to address all significant sources of fishing mortality.</p>	<p>New guidance text: The parent Essential Component requires an analysis of the effects of the unit of certification, including any enhancement activities, on ecosystem structure, processes and function. This Supplementary Component focuses on the requirement to address all significant sources of fishing mortality in assessing fishing impacts on species/stocks taken as non-certified catches. Note that D.5.02 covers this requirement for certified stocks.</p>
<p>FAO reference: FAO Marine and/or Inland Guidelines for Ecolabelling 29.3 (36.4); 31 (41) + FAO CCRF</p>	

3. Newly added components

Essential Component D.1.06 on ecosystem structure, processes and function will be complemented by 4 instead of 1 Supplementary Components. These are the following.

Supplementary Component D.1.06.02 (new)

Component:

The standard requires that the Management System, in accordance with national legislation, recognizes and respects all legitimate tenure right holders and their rights, particularly in small scale fishing communities, and takes reasonable measures to identify and record legitimate tenure right holders and their rights, whether formally recorded or not.

Guidance:

This Supplementary Component expands on its parent Essential Component by focusing specifically on the need to recognize and protect legitimate tenure rights in small scale fisheries, including the taking of reasonable steps to identify those tenure rights in small scale fishing communities where they may not be formally recorded.

FAO reference:

FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2014); Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (2012)

Supplementary Component D.1.06.03 (new)

Component:

The standard requires that the Management System recognizes and takes into account the differential

impact of natural and human-induced disasters and climate change on all small-scale fisheries, and develops policies and plans to address climate change in fisheries, in particular strategies for adaptation and mitigation, where applicable, as well as for building resilience.

Guidance:

This Supplementary Component expands on its parent Essential Component by focusing specifically on the need to recognize and mitigate the impacts of natural and human-induced disasters and climate change on small scale fisheries, including the development of policies and plans.

FAO reference:

FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2014)

Supplementary Component D.1.06.04 (new)

Component:

The standard requires that the Management System enhances the capacity of small-scale fishing communities to participate in decision-making processes.

Guidance:

This Supplementary Component expands on its parent Essential Component by focusing specifically on the need to enhance the capacity of small-scale fishing communities to participate in decision-making processes.

FAO reference:

FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2014)

Essential Component D.2.10 (new) is intended to fill a gap in the Benchmark Tool. Currently there is not an essential component specifically covering management objectives for small scale fisheries. Paragraph 7.2.1 of the CCRF calls for the adoption of appropriate measures (not objectives), based on the best scientific evidence available, which are designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing countries. Paragraph 7.2.2 states that such measures should provide that the interests of fishers, including those engaged in subsistence, small-scale and artisanal fisheries, are taken into account. While this language refers specifically to "measures", the need for objectives for those measures is implied, particularly given the text is in section 7.2 which is titled "Management Objectives".

Component:

The standard requires that management objectives for the unit of certification and the stock under consideration take into account the interests of fishers engaged in subsistence, small-scale and artisanal fisheries, where applicable.

Guidance:

This Essential Component derives from paragraphs 7.2.1 and 7.2.2 of the CCRF. It cuts across the other components covering management objectives and looks for the requirement to take into account the interests of fishers engaged in small scale and artisanal fisheries in the development of these objectives. Section 7.2 of the CCRF is titled "Management Objectives". Paragraph 7.2.1 of the CCRF calls for the adoption of appropriate measures (not objectives), based on the best scientific evidence available, which are designed to maintain or restore stocks at levels capable of producing maximum sustainable yield, as qualified by relevant environmental and economic factors, including the special requirements of developing countries. Paragraph 7.2.2 states that such measures should provide that the interests of fishers, including those engaged in subsistence, small-scale and artisanal fisheries, are taken into account. While this language refers specifically to "measures", the need for objectives for those measures is implied, particularly given the text is in section 7.2 which is titled "Management Objectives".

FAO reference:

Paragraphs 7.2.1 and 7.2.2 of the CCRF

Supplementary Component D.2.10.01 (new) echoes one of the objectives of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2014) (paragraph 1.1(d)).

Component:

The standard requires that management objectives for the unit of certification and the stock under consideration promote the contribution of small-scale fisheries to an economically, socially and environmentally sustainable future for the planet and its people.

Guidance:

This supplemental component builds on its parent Essential Component by focussing on the contribution of small-scale fisheries to an economically, socially and environmentally sustainable future for the planet and its people.

FAO reference:

FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2014) (paragraph 1.1(d)).

Essential Component D.3.12 (new) is intended to fill a gap in the Benchmark Tool. Currently there is not an essential component specifically covering management measures for small scale fisheries. It derives from paragraph 32 of the Marine Ecolabelling Guidelines. Specifically, that paragraph deals with the ways in which certification standards address the use of less elaborate methods of stock assessment. The latter half of the paragraph reads "There is a variety of management measures commonly used in small scale or low value fisheries that nonetheless can achieve quite adequate levels of protection for stocks in the face of uncertainty about the state of the resource. A past record of good management performance could be considered as supporting evidence of the adequacy of the management measures and the management system."

Component:

The standard recognizes management measures commonly used in small scale fisheries can achieve adequate levels of protection for stocks in the face of uncertainty about the state of the resource and that a past record of good management performance could be considered as supporting evidence of the adequacy of the management measures and the management system.

Guidance:

This Essential Component derives from paragraph 32 of the Marine Ecolabelling Guidelines. It cuts across the other components covering management measures and seeks recognition within the certification scheme that less sophisticated management measures commonly used in small scale fisheries can still achieve adequate protection of stocks, providing uncertainty is properly addressed. The scheme could, for example, accept a past record of good outcomes under such management measures as evidence of their adequacy.

Supplementary Component D.4.07.01 (new) derives from paragraph 11.1 of the FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (2014). This states that: "States should establish systems of collecting fisheries data, including bioecological, social, cultural and economic data relevant for decision-making on sustainable management of small-scale fisheries with a view to ensuring sustainability of ecosystems, including fish stocks, in a transparent manner."

Component:

The standard requires the establishment of fisheries data collection systems, including bioecological, social, cultural and economic data relevant for decision-making on the sustainable management of small-scale fisheries, where appropriate.

Guidance:

This Supplementary Component builds on its parent Essential Component by looking for the requirement to establish data collection systems specifically for decision-making on the management of small scale fisheries. The "where appropriate" language is for cases where certification schemes do not have small scale fisheries within their geographic area of applicability.

Essential Component D.5.11 (new) is intended to fill a gap in the Benchmark Tool. Currently there is not an essential component specifically covering assessment methodologies for small scale fisheries. It derives from paragraph 32 of the Marine Ecolabelling Guidelines. Specifically, that paragraph deals with the ways in which certification standards address the use of less elaborate methods of stock assessment in small scale fisheries, noting that with higher uncertainty more precautionary approaches to managing fisheries on such resources will be required which may necessitate lower levels of utilization of the resource.

Component:

The standard does not preclude small scale fisheries from possible certification for Ecolabelling due to the use of less elaborate methods of stock assessment.

Guidance:

This Essential Component derives from paragraph 32 of the Marine Ecolabelling Guidelines. Specifically, that paragraph deals with the ways in which certification standards address the use of less elaborate methods of stock assessment in small scale fisheries, noting that with higher uncertainty more precautionary approaches to managing fisheries on such resources will be required which may necessitate lower levels of utilization of the resource.