Effective in Japanese: 2025. xx. xx

Fisheries Management Standard

Guidelines for Auditors
- Indicators of Conformity -
Version 3.0

MEL Council

I. Introduction

This document shows the criteria for deciding whether the Applicant conforms to the Fisheries Management Standard, Version 3.0 (hereinafter referred to as "FMS") of Marine Eco-Label Japan (MEL). This document, which is intended to be utilized as guidelines when MEL certification auditors conduct audit of applicants, provides explanations of the respective requirements of the FMS, and illustrates evidentiary materials for deciding conformity as well as evidence, concepts, etc. for judgment.

In addition to this document, the template of assessment report, "Checklist for Auditors on Fisheries Management Standard" and "Requirements for Certification Body Certifying Fisheries Management Standard" should contribute to uniformizing the quality of MEL certifications.

It should be noted that the materials, concepts, etc. described in this document and its appendices are examples, and that if more proper evidence is available, the name and summary of the evidence as well as the grounds and reasons for conformity of that evidence should be described in the comments section.

II. Criteria for Certification

Fisheries management certification shall not be granted in any of the following situations:

- When there is **one or more major non-conformities** against one of the principles of requirements for FMS,
- When there are **four or more minor non-conformities** against one of the principles of requirements for FMS.

III. Terms and Definitions Used for Evaluation

- **Major Non-Conformity**: A situation where the audit team concludes there is no information and evidence to demonstrate conformity of the applicant organization's fisheries procedures with the requirement of the FMS.

- **Minor Non-Conformity**: Although information and evidence exist to demonstrate the target fishery with the requirement of the FMS, the audit team concludes those information and evidence are not sufficient to demonstrate the conformity of the target fishery with the requirement of the FMS.

- **Observation**: A situation where, while it is not a non-conformity with the requirement of the FMS, the audit team notes that there is a room for improvement, or a risk of falling into a non-

conformity.

- **Conformity**: A situation where the audit team concludes that there exists sufficient information and evidence indicating conformity with the requirement of the FMS.

- **Not Applicable:** A situation where the audit team concludes that the requirement and indicator of the FMS is not applicable for the applicant.

IV. Body Text

1. Requirements concerning a management system

(Fisheries must be operated under an effective management system)

In this section, the Applicant's status of compliance with the Japanese Fishery Act and related laws on the management of resources is checked and confirmed.

1.1 Existence of established and proper fisheries management system

1.1.1 Acquisition of fishery license and permission

Requirement: 1.1.1	
The unit of certification shall be operated legally in accordance with national legislation, such as acquiring fishery license and permission necessary for operating the fisheries from the competent authority (i.e. national or prefectural governments).	
Indicator: (a)	
(a) Whether the unit of certification is operated legally in accordance with followings. ☐ Existence of license/permission necessary for operating the fishery by the unit of certification issued by the competent authority such as the relevant national/local government. ☐ Existence of documents which verifies the legality of the fishery by the unit of certification in case that the unit of certification is not required for the license nor permission.	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist
Guidance for Auditors:	
For the requirement 1.1.1, a copy of the license, permission or the like which is necessary for operating the fishery must be confirmed, or if applicable, it is possible to assess the requirement by confirming that the unit of certification is lawful even without any permission or license. The latter case is based on the background that anybody can, in principle, be freely engaged in fishery in Japan, while on the other hand specified (a great number of) capture fisheries are respectively under public regulations from the standpoint of serving the public interest (resource management and fisheries adjustment).	
Examples of Evidence:	
A copy of fishery license issued by the Minister of Agriculture, Forestry and Fisheries and/or a copy of permission issued by local government or interviews to the department in charge of local	

government (to obtain a written consent if possible).

1.1.2 Management system

Requirement: 1.1.2	
An organization and system shall be established to manage the fishery of which the unit of certification is a part.	
Indicator: (a)	
(a) Whether organizations and arrangements (such as a fisheries cooperative association, national/local organization, official research institute, etc.) which manage the fishery are established. ☐ References on the management organizations and arrangements for the fishery of which the unit of certification is a part	
Evaluation: (a)	
・ Major non-conformity	Not established
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Established
Guidance for Auditors:	
The requirement 1.1.2 is assessed by confirming with the materials showing the management system of the unit of certification concerned. In Japan, there are fisheries management bodies from a small-scale one on a village basis to the one on a State basis and further to a regional fisheries management body for international stocks. Although resource management is conducted systematically in these small-scale fisheries management bodies, there may not exist sufficient documented materials due to conventions. Consequently, for the materials to supplement such insufficiency, it is possible to collect interviews, etc. with constituent members of the bodies concerned and market participants, and use such interviews, etc. as evidence.	
Examples of Evidence:	
Organization chart of management bodies for the unit of certification (local government, fishing cooperative, fishers, Fisheries Adjustment Commissions, Japan Coast Guard, etc.) showing their roll allotment.	

1.1.3 Understanding of status of the fishery

Requirement: 1.1.3	
Information of the current state of the fishery of which the unit of certification is a part shall be collected, including the following items: (a) Outline of the fishery of which the unit of certification is a part, (b) Fishing gears and fishing methods, (c) Catch volume and fishing effort.	
Indicator: (a)	
(a) Outline of the fishery of which the unit of certification is a part ☐ Collected and maintained references on a summary of the marine capture fishery (such as fishing period and fishing-ground map	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist
Indicator: (b)	
(b) Fishing gears and fishing methods ☐ Collected and maintained references on a schematic diagram on the fishing gears and fishing methods	
Evaluation: (b)	
・ Major non-conformity	Not exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist
Indicator: (c)	
(c) Catch volume and fishing effort ☐ Collected and maintained information on catch volume and fishing efforts ☐ Method of collecting the above information	
Evaluation: (c)	
・ Major non-conformity	Not exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist

Guidance for Auditors:
As for the requirement 1.1.3, as it is necessary to determine the current status of the unit of certification, the requirement is confirmed by materials as shown below.
Examples of Evidence:
1) Fishing rights, fishing season, fishing grounds, etc. 2) Diagram of fishing gear 3) Catch data, fishing license, resource management agreement

1.1.4 Proper working conditions and human rights of workers

Requirement: 1.1.4	
Workers shall be secured proper working conditions and there shall be no violations of workers' human rights.	
Indicator: (a)	
(a) Workers shall be treated fairly, with appropriate wages, welfare, and working conditions in accordance with the Mariners Act and labor relevant laws and regulations. Proper health management and working environment shall be secured. ☐ Documents such as work regulations and employment contracts, medical examination records, or interview materials related to them.	
Evaluation: (a)	
• Major non-conformity	Not exist
• Minor non-conformity	N/A
• Observation	N/A
• Conformity	Exist
Indicator: (b)	
(b) There shall be no violations of workers' human rights, such as forced labor, child labor, non-payment of wages, or confiscation of passports Fishing gear and fishing methods ☐ Evidence of no guidance or recommendation from the Marine Labor Officer or the Labor Standards Inspection Office ☐ Materials indicating grievance mechanism for victim relief	
Evaluation: (b)	
• Major non-conformity	Not exist
• Minor non-conformity	N/A
• Observation	N/A
• Conformity	Exist
Guidance for Auditors:	
Employment regulations recognized by supervisory agencies serve as one of the evidences for ensuring working environments and conditions. Requirement 1.1.4 allows for the evaluation of requirements by verifying the employment regulations and medical examination records of each company composing the applicant, in cases where such regulations are necessary for corporate organizations. Requirement 1.1.4 examines whether the applicant's organization maintains an appropriate working environment and does not violate workers' human rights, and it should be noted that this requirement applies to all employers, including those in the fishing industry.	

For small-scale management entities with fewer than 10 employees, where the creation of work regulations is not mandatory, the evaluation of working environments and conditions can be ensured by confirming agreements regarding the essential items to be included in the employment regulations and efforts related to health management through interviews.
Examples of Evidence:
1) Work regulations, employment contracts, health certificates, and etc.

1.2 Compliance and surveillance with regulations and arrangements concerning the unit of certification and the target stock

1.2.1 Compliance with regulations and arrangements

Requirement: 1.2.1	
The unit of certification shall be operated in compliance with the relevant regulations and arrangements by national and local governments under the effective and appropriate monitoring, control and surveillance.	
Indicator: (a)	
(a) Whether an effective fisheries management system, including monitoring, control and surveillance, for the fishery of which the unite of certification is a part exists in accordance with relevant laws and regulations ☐ Existence of laws and regulations to effectively manage the fishery of which the unite of certification is a part ☐ Existence of the effective management system for the fishery of which the unite of certification is a part operates in accordance with relevant laws and regulations	
Evaluation: (a)	
・ Major non-conformity	No exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist
Indicator: (b)	
(b) Whether measures on the penalties against the laws and regulation including the fishery management measures exist and the penalties are appropriately executed to the violation against the laws and regulation including the fishery management measures. ☐ Existence of the record of appropriate execution of the penalties to the violation	
Evaluation: (b)	
・ Major non-conformity	No exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist
Guidance for Auditors:	
As for the requirement 1.2.1, as it is necessary that not only the unit of certification but also the unit of certification concerned in total should comply with the laws and regulations by State and local government and that there exist some measures to be taken in the case of non-compliance of these laws and regulations and furthermore, as it is necessary to determine whether the national/local	

government laws and regulations are complied with. Whether the requirement is satisfied is assessed by confirming the materials as shown below.
Examples of Evidence:
1) Laws and regulations relating to target fisheries (Fishery Act, Fisheries Adjustment Rules, Act on the Protection of Fishery Resources, etc.) 2) Penalties and measures of violation of laws and regulations mentioned above (local government report the actual conditions)

1.2.2 Participatory management and ensuring transparency

Requirement: 1.2.2	
Decision-making process regarding the management of the fishery shall be transparent and ensure the participation of stakeholders including relevant fishers, scientists, the government and other interested parties.	
Indicator: (a)	
(a) Whether relevant fishers, researchers, administration officers and other relevant stakeholders are involved in the decision-making process in the fisheries management system under which the unit of certification is managed in order to be both participatory and transparent ☐ Existence of documents on the organization chart for the decision-making arrangement and participation list on the relevant stakeholders	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (b)	
(b) Whether any decision-making process with transparency exists. ☐ Existence of the rules for the decision-making process and the record of discussion	
Evaluation: (b)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Guidance for Auditors:	
In assessing the requirement 1.2.2, as it is necessary to adequately determine whether the relevant fishers, researchers, administrative officers and relevant stakeholders are involved in decision-making process, or whether consensus-building process is established, the requirements are assessed through confirming the materials as shown below.	
Examples of Evidence:	
1) Organization chart and name list of Fisheries Adjustment Committee. 2) Minutes of meetings on Fisheries Adjustment Committee.	

1.2.3 Establishment of a regional cooperation system

Requirement: 1.2.3	
A regional or wide-area resource management system for utilizing the stock under consideration shall be established. If the stock under consideration is internationally managed (such as transboundary stocks, straddling stocks, highly migratory stocks), the fishery shall be operated in compliance with the resource management measures set by the relevant management authorities.	
Indicator: (a)	
(a) Whether, in case that the stock under consideration is managed at the international level, a cooperative international/regional/bilateral stock management system or organization exists, as appropriate, that is concerned with the management of the whole stock unit over its entire area of distribution in addition to national/local system or organization to manage the stock under consideration. ☐ Existence of a regional stock management system or organization ☐ Existence of an international stock management system or organization	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist
・ Not applicable	The stock under consideration is not a transboundary fish stock, straddling fish stock, highly migratory fish stock nor high seas fish stock and not to be managed at the international level.
Indicator: (b)	
(b) Whether, in case that the stock under consideration is managed at the international level, the fishery of which the unit of certification is a part is in compliance with stock management measures in accordance with national/local laws and regulations, which are also consistent with relevant regional/international laws and regulations. ☐ Existence of management measures for the fishery including the penalties against the measures and a report on execution of the penalties as applicable.	
Evaluation: (b)	
・ Major non-conformity	Not exist
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	Exist
・ Not applicable	The stock under consideration is not a transboundary fish stock,

	straddling fish stock, highly migratory fish stock nor high seas fish stock and not to be managed at the international level.
Guidance for Auditors:	
In assessing the requirement 1.2.3, it is necessary to adequately determine whether there exist any regional or wide-area stock management system (in case the stock under consideration is managed internationally) and whether the stock management measures provided by the relevant body. The requirements are assessed through confirming the materials shown below.	
Examples of Evidence:	
1) Fisheries committee and/or Fishery Adjustment Commission covering multi regions. 2) Penalties and measures of violation of laws and regulations mentioned above.	

1.2.4 Precautionary approach and adaptive management

Requirement: 1.2.4	
Fishery management shall be carried out in a precautionary manner, considering various uncertainty associated with fisheries resources, ecosystem and resource management. Furthermore, a mechanism shall be available to adaptively modify and improve management measures, in response to the state of the stock under consideration and of the ecosystems.	
Indicator: (a)	
(a) Whether a mechanism exists in order to change and improve management measures in an adaptive manner to unexpected changes of the situation on the stock under consideration and relative matters due to environmental changes, etc. ☐ Existence of the mechanism of precautionary measures and adaptive management	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Guidance for Auditors:	
In assessing the requirement1.2.4, it is necessary to adequately determine “awareness of uncertainty and implementation status of precautional fisheries management”, “awareness of uncertainty and status of reflection upon fisheries management” and “introduction of monitoring and adaptive management.” The confirmation of the following will contribute to the adequate assessment of the requirement.	
Examples of Evidence:	
1) Whether the necessity of precautionary approach and adaptive management in view of various uncertainties associated with fishery resources, ecosystem and stock management is explicitly indicated in the standards. 2) Whether the consideration of precautionary approach in view of various uncertainties associated with fishery resources, ecosystem and stock management is explicitly described in the management plan, etc. 3) Whether the system for adaptive management is explicitly described in the management plan, etc. 4) Whether the implementation status of precautionary measures can be checked and confirmed by a report, the minutes of a meeting, etc. 5) Whether the implementation of adaptive management can be checked and confirmed by a report, the minutes of a meeting, etc.	

1.2.5 Agreement formation concerning multifaceted utilization

Requirement: 1.2.5	
In case that activities other than fishery production are carried out in the fishing operation areas of the unit of certification, continuous discussions among the parties involved regarding the effectiveness of management measures are held, and the contents of these discussions should be maintained.	
Indicator: (a)	
(a) Whether a room to dialogue the effectiveness of management measures among the stakeholders as applicable and the discussion records exists, taking into account the multipurpose nature of the use pattern in waters ☐ Existence of a room to dialogue the effectiveness of management measures among the stakeholders besides fishery related stakeholders as applicable ☐ Existence of the discussion records of the dialogue	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
・ Not applicable	No specific activities other than fisheries
Guidance for Auditors:	
In assessing the requirement 1.2.5, it is necessary to adequately determine “whether the consultation in which wide-area stakeholders other than fishers (if applicable) participate is set up and the contents of consultation are recorded.” The confirmation of the following will contribute to the adequate assessment of the requirement.	
Examples of Evidence:	
1) Rules and regulations and/or name list of Sea Use Committee and/or Fishery Adjustment Commissions. 2) Minutes of meetings of organizations mentioned above.	

1.2.6 Dissemination of management rules

Requirement: 1.2.6	
Information on management rules and fishing activities shall be available to the public.	
Indicator: (a)	
(a) Whether information on fishery management system, initiatives by the fishers, etc. is available to the public ☐ Publication/disclosure of the information	
Evaluation: (a)	
・ Major non-conformity	Not published/disclosed
・ Minor non-conformity	Published/disclosed with partial lack of evidence
・ Observation	Published/disclosed but required to be improved
・ Conformity	Published/disclosed
Guidance for Auditors:	
In assessing the requirement 1.2.6, it is necessary to adequately determine “whether the information on the management rules and fishers’ effort is provided to the persons other than fishers. The confirmation of the following will contribute to the adequate assessment of the requirement.	
Examples of Evidence:	
Pamphlet, web site and other information sources for recreation fishers to notice closed season and areas of target fisheries.	

2. Requirements on the Stock Under Consideration

(Stock under consideration is maintained at a level that allows its sustainable utilization)

2.1 Understanding of biological information

Requirement: 2.1	
Biological information of the stock under consideration shall be collected, including the following items: (a) Distribution and migration, (b) Age, growth and life span, (c) Maturity and spawning.	
Indicator: (a)	
(a) Distribution and migration ☐ Existence of collected and maintained knowledge and publications concerning distribution ☐ Existence of collected and maintained knowledge and publications concerning migration	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (b)	
(b) Age, growth and life span ☐ Existence of collected and maintained knowledge and publications concerning age and life span ☐ Existence of collected and maintained knowledge and publications concerning growth	
Evaluation: (b)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (c)	
(c) Maturity and spawning ☐ Existence of collected and maintained knowledge and publications concerning maturity ☐ Existence of collected and maintained knowledge and publications concerning spawning	
Evaluation: (c)	

・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist

Guidance for Auditors:

The requirement 2.1 can be assessed by confirming the "materials showing biological knowledge of the stock under consideration."

In Japan, in the case of fish species subject to TAC (total allowable catch) shown in the Fisheries Stock Assessment in the waters around Japan, etc. biological knowledge on the stock under consideration is comprehensively provided, so that the auditor had better confirm this biological knowledge.

In case the stock under consideration is of such a regional species as sakura-ebi (small pink shrimp) and kotamagai (a kind of bivalve; macridiscus melanaegis), academic journals and research reports by the experiment and research institute of the prefectures concerned can be used to confirm the biological knowledge.

Examples of Evidence:

1) Assessment of Fishery Resources in Japan
https://abchan.fra.go.jp/hyouka/
2) Status of Fishery Resources in the World
http://kokushi.fra.go.jp/index-2.html

2.2 Scientific evidence

Requirement: 2.2	
Scientific evidence for determining the status and trends of the stock under consideration shall be collected and maintained.	
Indicator: (a)	
(a) Whether the following scientific evidence data are collected and maintained for the management of the stock under consideration, based on international standards such as FAO Guidelines for the routine collection of capture fishery data (hereinafter referred to as FAO Guidelines). ☐ Existence of collected and maintained data on the catch volume ☐ Existence of collected and maintained data on the fishing effort ☐ Existence of collected and maintained other data necessary for the assessment of the stock under consideration	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Guidance for Auditors:	
The requirement 2.2 can be assessed by confirming the "materials showing the existence of scientific evidence of the stock under consideration." In Japan, in the case of fish species subject to TAC (total allowable catch) shown in the Fisheries Stock Assessment in the waters around Japan, etc. the data necessary for the stock assessment of the stock under consideration is collected, so that the auditor had better confirm these data. In the case of the stocks whose stock assessment employs a VPA (Virtual Population Analysis), data are collected including not only monthly fish catch and fishing effort by fishery type, but also statistics by fishing-ground, age-length, length-weight, length composition, age composition, and maturity rate by age. However, these data are often collected even if no stock assessment by VPA is conducted. This is because the period during which the data can be used is short, and there occurs a failure in tuning, etc. so that careful attention is required as another stock assessment technique is employed. In case the stock under consideration is of such a regional species, such as sakura-ebi (small pink shrimp) and kotamagai (a kind of bivalve; macridiscus melanaegis), academic journals and research	

reports by the experiment and research institute of the relevant prefectures can be used to confirm the biological knowledge.
Examples of Evidence:
1) Assessment of Fishery Resources in Japan https://abchan.fra.go.jp/hyouka/ 2) Status of Fishery Resources in the World http://kokushi.fra.go.jp/index-2.html

2.3 Consideration of catches by non-target fisheries and resilience

Requirement: 2.3	
The resource assessments shall also take into account the total fishing mortality caused by other fisheries utilizing the stock under consideration within its distribution area, as well as the resilience of the stock.	
Indicator: (a)	
(a) Whether the assessment of the stock under consideration considers trend and status on catch by the fishery of which the unit of certification is a part and others and this assessment considers total fishing mortality on that stock from all sources such as discards, incidental mortality and catches in all fisheries over its entire area of distribution. ☐ Data on the trend and status by the fishery of which the unit of certification is a part ☐ Data on the trend and status by other fisheries	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (b)	
(b) Whether management measures for the stock under consideration consider the impacts on the stock under consideration of all the fisheries utilizing that stock under consideration over its entire area of distribution. ☐ Consideration of the impacts on the stock under consideration of all the fisheries utilizing that stock under consideration over its entire area of distribution	
Evaluation: (b)	
・ Major non-conformity	Not considered
・ Minor non-conformity	Considered with partial lack of evidence
・ Observation	Considered but required to be improved
・ Conformity	Considered
Indicator: (c)	
(c) Whether the assessment of the current status and trends of the stock under consideration takes into account the structure and composition of that stock which contribute to its resilience. ☐ Consideration of the structure and composition of that stock which contribute to its resilience.	
Evaluation: (c)	
・ Major non-conformity	Not considered

・ Minor non-conformity	Considered with partial lack of evidence
・ Observation	Considered but required to be improved
・ Conformity	Considered

Guidance for Auditors:

The requirement 2.3 can be assessed by confirming whether the "materials showing that the data covering the entire subpopulation are collected."

In Japan, in the case of fish species subject to TAC (total allowable catch) which are shown in the Fisheries Stock Assessment in the waters around Japan, etc., as for the indicators 2.3(a) and (b), the stock assessment and the ABC (Allowable Biological Catch) formulation, are carried out by subpopulation, so that data and influences other than the applicants are naturally taken into consideration. As for the indicator 2.3(c), a future forecast of stock amounts after implementation of new allotments is calculated, and it is designed to ensure resilience of stocks.

Even if the applicant is engaged in such small-scale fisheries as harvesting abalone, lobster, etc., as for the indicators 2.3(a) and (b), there may be a problem of the geographical range of each subpopulation but data on catch volume etc. are collected nationwide through the official statistics by the Ministry of Agriculture, Forestry and Fisheries. In addition, as for the indicator 2.3 (c) as well, restricted length based on the matured size and restriction on capture fishery during spawning season are formulated by each prefecture, and maintaining stocks are considered and stocks are recovered. However, if the stock under consideration is not a major biological stock, it is necessary to confirm whether an independent survey is conducted.

Examples of Evidence:

1) Assessment of Fishery Resources in Japan
https://abchan.fra.go.jp/hyouka/
2) Status of Fishery Resources in the World
http://kokushi.fra.go.jp/index-2.html

2.4 Disclosure of stock assessment and results

Requirement: 2.4	
Assessment of the current status and tends of the stock under consideration shall be conducted based on the collected information, and the assessment results shall be incorporated into the decision-making process for management. The assessment methodology and results shall be made publicly available in a timely manner.	
Indicator: (a)	
(a) Whether an assessment is conducted with the best scientific evidence available. Further, whether an adaptive management with precautionary approach is implemented with regard to the result of the assessment. ☐ Implementation of an assessment with the best scientific evidence available ☐ Implementation of the adaptive management with precautionary approach based on the assessment above	
Evaluation: (a)	
・ Major non-conformity	Not implemented
・ Minor non-conformity	Implemented with partial lack of evidence
・ Observation	Implemented but required to be improved
・ Conformity	Implemented
Indicator: (b)	
(b) Whether the assessment is reflected in decision-making process to formulate the resource management policy and the resource management agreement (or an equivalent) regarding the stock under consideration. ☐ Existence of a report or minutes showing the reflection	
Evaluation: (b)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (c)	
(c) Whether the fishery management organization or arrangement receives and responds in a timely manner the best scientific evidence available related to 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, and the fishery management organization or arrangement convenes regularly, as needed, to manage the integrated process of information collection, stock assessment, planning, formulation of the management objectives and targets,	

establishing management measures and enforcement of fishery rules and regulations.

☐ Existence of a comprehensive fishery management organization or arrangement which receives and responds in a timely manner the best scientific evidence available

☐ Existence of a fishery management organization or arrangement which conducts comprehensive fishery management.

Evaluation: (c)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist

Indicator: (d)

(d) Whether the methodology and results of assessments of the current status and trends of the stock under consideration are available to the public in a timely manner.

☐ Disclosure of the methodology and results of assessments of the current status and trends of the stock under consideration

Evaluation: (d)	
・ Major non-conformity	Not disclosed
・ Minor non-conformity	Disclosed with partial lack of evidence
・ Observation	Disclosed but required to be improved
・ Conformity	Disclosed

Guidance for Auditors:

The requirement 2.4 can be assessed by confirming the "materials showing whether the stock assessment on the target subpopulation is conducted and its results are disclosed."

In MEL, the "Best Scientific Evidence Available" is defined as the information disclosed in the "Fisheries Stock Assessment in the waters around Japan" and "Trend of Stock under consideration" made and disclosed every year by the official committee meeting comprised of domestic scientists, fishers and administrative officers, and in "the Current Status of Stock under consideration" compiled by the Scientific Committee of Regional Fisheries Management Body or its equivalent scientific advice or the fishers' or regional traditional knowledge which is objectively verifiable.

The examination results of the above committee are also disclosed every year on the website of Fisheries Agency in Japan. Therefore, the reports can be retrospectively confirmed on the website of Fisheries Agency on the indicators of the Checklist (a),(b),(c) and (d) for the stock under consideration subject to TAC.

Furthermore, in a management body where the applicant runs small-scale regional fishery and where on a voluntary basis in addition to those on the national and prefectural basis, although the catch volume recovers considerably thanks to voluntary restrictions, such information is disclosed by researchers in many cases as there is little for the management body itself to enjoy any merit from information disclosure. In such a body, the matters such as the indicator of the Checklist (a) validity of applied reference point, the indicators (b) and (c) validity of its own management objectives and management guidelines, and the indicator (d) validity of substitute stock assessment by such means as annual fluctuation of CPUE are confirmed not only with the materials such as reports of scientific examination but also with operation rules describing a precautionary and adaptive operation system where the operation is suspended under such unexpected poor catch as shown in the item 1.2.6 or fish catch records and the like.

Examples of Evidence:

1) About TAC: Fisheries Agency
https://www.jfa.maff.go.jp/j/suisin/index.html

2) Minutes of meetings about TAC: Fisheries Policy Council, Fisheries Adjustment Commissions and Fisheries Agency.
https://www.jfa.maff.go.jp/j/council/seisaku/honkaigi/index.html
https://www.jfa.maff.go.jp/j/suisin/s_kouiki/index.html

3) Minutes of meetings about TAC: Public hearing from fishers and other stakeholders.
https://www.jfa.maff.go.jp/j/suisin/s_koukan/index.html

4) Assessment of Fishery Resources in Japan
https://abchan.fra.go.jp/hyouka/

5) Status of Fishery Resources in the World
https://kokushi.fra.go.jp/index-2.html

2.5 Establishment of stock management measures

Requirement: 2.5	
There shall be publicly-defined target reference point and limit reference point, or proxies for the stock under consideration set on the basis of the best scientific evidence available, in order to maintain or recover the stock at levels consistent with achieving Maximum Sustainable Yields (MSY) or a suitable proxy.	
Indicator: (a)	
(a) Whether stock under consideration and "limit reference point" or a suitable proxy are defined with precautionary approach and based on the best scientific evidence available in the management objectives. In addition, whether the "target reference point" is set to achieve the MSY or a suitable proxy in average and the "limit reference point" is defined to avoid recruitment overfishing and irreversible or very slowly reversible influence. ☐ Existence of the appropriate definitions of the stock under consideration and "limit reference point", "target reference point" or those substitute proxies under the management objectives	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (b)	
(b) Whether the management objectives and management measures to achieve the management objectives exist based on the Best Scientific Evidence Available and consistent with the long-term sustainable use of the fisheries resources under management and management measures to achieve the management objectives exist. ☐ Existence of management objectives (including those equivalent thereto) ☐ Existence of management measures (including those equivalent thereto)	
Evaluation: (b)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (c)	
(c) Whether outcome indicators exist to achieve management objectives of the stock under consideration concerning "limit reference point," "target reference point" or those substitute proxies for the sustainable fisheries.	

☐ Existence of outcome indicators (including those equivalent thereto)	
Evaluation: (c)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (d)	
(d) Whether, in the case of small-scale and/or data limited fisheries, fisheries governance and management systems for those fisheries are prepared, with due consideration to the availability of data and the fact that management systems can differ substantially for different types and scales of fisheries. ☐ Existence of small-scale fisheries or data limited fisheries ☐ Existence of a management system for small-scale fisheries and data limited fisheries	
Evaluation: (d)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
・ Not applicable	Not classified into small-scale nor data limited fisheries
Indicator: (e)	
(e) Whether, in the case of small-scale and/or data limited fisheries, the knowledge of traditional fisheries, fishers and fishery regions is objectively verified and applied into the fisheries management system. ☐ Existence of verification methods of the knowledge of traditional fisheries, fishers and fishery regions is objectively	
Evaluation: (e)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
・ Not applicable	Not classified into small-scale nor data limited fisheries
Guidance for Auditors:	
The requirement 2.5 can be assessed by confirming the “materials showing that the target reference point such as MSY and limit reference point or scientific substitute level are disclosed”.	

Japan's revised Fishery Act establishes target reference points and limit reference points based on MSY theory. These reference values are of two types: those related to the stock level, such as SSB (Spawning Stock Biomass), and those related to fishing pressure, such as Fishing Coefficient. In 2.5 (a), target reference points and limit reference points for stock levels, and target reference points for fishing pressure need to be confirmed. These values are necessary for drawing the Kobe Plot, and the Kobe Plot (or an alternative such as the Majuro Plot) is desirable, to explain the balance between the fishery as the catcher and the resource as the caught to interested parties in a way that is easy to understand. In particular, the limit reference point for stock level is indispensable because it is the criterion to determine whether the stock under consideration is overfished or not in Indicator 2.7.

For fish species for which ABCs are established based on the revised Fishery Act, reference points and ABCs are calculated based on the "Basic Rules for Calculating ABCs (Appendix 1)". This rule establishes the Harvest Control Rule for determining ABC based on the precautionary approach. The "management measures" to be confirmed in 2.5 (b) are these Harvest Control Rules. The three points to be confirmed are: 1) the existence of the Harvest Control Rule, 2) the long-term achievement target of the Harvest Control Rule (e.g., SSB above MSY level), and 3) the scientific basis for the effectiveness of the Harvest Control Rule (e.g., future projections).
In determining the harvest control rules for the above-mentioned fish species, the Fisheries Policy Council and the Stakeholders' meetings deliberated and decided on harvest control rules such that "have an 80% or greater probability of exceeding the target reference point for the spawning stock biomass in 10 years". The outcome indicators to be confirmed in (c) above are the medium-term results such as "the amount of spawning stock biomass exceeding the target reference point in 10 years," as indicated in the parentheses above.

For fish species subject to TAC as stipulated in the revised Fishery Act, (a) and (b) can be confirmed in the "Fishery Resource Assessment of Waters Surrounding Japan" and (c) in the "Fisheries Policy Deliberation Documents". TACs for international resources managed by regional fisheries management organizations are also usually established through the same procedures, and can be confirmed using the annual reports of the regional fisheries management organizations cited in "Current Status of International Fisheries Resources". As for salmons as well, in order to maintain the historical high level, the remaining amount of parent fish required for egg collection is set as the allowable catch amount (return amount - required parent fish amount), and this required parent fish amount = limit reference point = target reference point.

Resources that are not directly managed by the government under the revised Fishery Act, such as

resources that are ubiquitous in local areas, are not included in the "Fishery Resource Assessment of Waters around Japan". In such cases, it is required for the applicant to collect the following materials so that the assessment and review can be conducted in accordance with the above.

1) Published stock assessments (research reports by prefectural experiment and research institutes, etc., and articles published in academic journals) (It is desirable to develop management reference points based on the "Basic Rules for ABC Calculation" and to draw Kobe plots)

2) Stock assessments that are unpublished but can be accessed by permission or application (e.g., papers that require permission to cite the author, such as documents of international conferences) (It is desirable to develop management reference points based on the "Basic Rules for ABC Calculation" and to draw Kobe plots).

3) If the absolute value of the resource is not estimated, the CPUE or other management reference points and academic papers that demonstrate their scientific validity (e.g. simulations using operating models)

Examples of Evidence:

1) Basic rules to calculate ABC

https://abchan.fra.go.jp/references_list/FRA-SA2024-ABCWG02-01.pdf

http://abchan.fra.go.jp/references_list.html

2) Assessment of Fishery Resources in Japan

https://abchan.fra.go.jp/hyouka/

3) Status of Fishery Resources in the World

https://kokushi.fra.go.jp/index-2.html

5) Number of catches, collecting eggs and releases in each river. Hokkaido National Fisheries Research Institute, The National Research and Development Agency, Japan Fisheries Research and Education Agency (FRA)

https://www.fra.go.jp/shigen/salmon/river.html

2.6 Compliance with TAC

Requirement: 2.6	
If a Total Allowable Catch (TAC) system is implemented for the stock under consideration, it shall be complied with by the fishery of which the unit of certification is a part.	
Indicator: (a)	
(a) Whether TAC system is compiled if such system is implemented and complied. ☐ Compliance with TAC	
Evaluation: (a)	
・ Major non-conformity	The TAC system is not complied.
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	The TAC system is complied.
・ Not applicable	The TAC system is not applicable.
Guidance for Auditors:	
The requirement 2.6 can be assessed by confirming the "materials such as official fisheries statistics showing compliance with TAC". As the Fisheries Agency supervises TAC under the national laws of Japan and the catch results and discloses the results thereof every year, these disclosed data are confirmed. As TAC is allocated to, and managed under, each type of fisheries, compliance with the allocated amount by the fishery to which the applicant belongs is also confirmed with this material. If TAC is set for the fish species other than those for which TAC is set under the national laws, e.g. red snow crab and coast flying fish fishery, the items are confirmed by reference to the materials such as records of "tripartite council of red snow crab industry" as TAC is not disclosed on the website for such regionally distributed stock.	
Examples of Evidence:	
1) Report: Number of catches. Fisheries Agency. https://www.jfa.maff.go.jp/j/suisin/#link6 2) Report: Number of catches, collecting eggs and releases in each river. Hokkaido National Fisheries Research Institute, The National Research and Development Agency, Japan Fisheries Research and Education Agency (FRA) https://www.fra.go.jp/shigen/salmon/river.html 3) Regional management of Red Snow Crab: Fisheries Agency. https://www.jfa.maff.go.jp/j/suisin/s_kouiki/nihonkai/attach/pdf/index-328.pdf	

2.7 Prevention of overfishing

Requirement: 2.7	
The stock under consideration is not overfished. Necessary measures are taken in a timely manner to avoid recruitment overfishing if the stock is below the reference point where stock recovery measures are required to be taken.	
Indicator: (a)	
(a) Regarding the resource level, the definition of overfished condition is established. ☐ Existence of the definition of overfished threshold such as reference point (including those equivalent thereto)	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
Indicator: (b)	
(b) The stock under consideration is not overfished. ☐ Resource status of the stock under consideration	
Evaluation: (b)	
・ Major non-conformity	Overfished
・ Minor non-conformity	Not overfished with partial lack of evidence
・ Observation	Not overfished but required to be improved
・ Conformity	Not overfished
Indicator: (c)	
(c) Whether management measures specify the actions to be taken in the event that the status of the stock under consideration drops below levels consistent with achieving management objectives that allow for the restoration of the stock to such levels within a reasonable time frame. This consideration is required to pertain to species introductions or translocations that have occurred historically and which have become established as part of the natural ecosystem. ☐ Preparation of management measures specifying the actions to be taken in the event that the status of the stock under consideration drops below levels consistent with achieving management objectives (including those equivalent thereto)	
Evaluation: (c)	
・ Major non-conformity	Not prepared
・ Minor non-conformity	Prepared with partial lack of evidence

・ Observation	Prepared but required to be improved
・ Conformity	Prepared

Guidance for Auditors:

The requirement 2.7 can be assessed by confirming the “materials showing that the overfished condition of the stock under consideration is prevented.”

The "threshold for being considered as overfished" in 2.7 (a) is defined in the "Basic Rules for ABC Calculation (Appendix 1)" as a significantly lower sustainable production level due to recruitment overfishing when the parent stock is below its limit reference point. In 2.7 (b), the determination of whether or not the stock under consideration is overfished or not, should be based on the stock level and not catch pressure: whether or not if the spawning stock biomass (or its proxy indicator) falls below the associated limit reference point. 2.7 (c) identifies special recovery measures to be taken when spawning biomass or its proxy indicator falls below the limit reference point. Under the "Basic Rules for Calculating ABC," the ABC decreases exponentially when the stock is below the limit reference point, which means that there are special recovery measures. However, internationally, it is normal for ABC = 0 when below the limit reference point, and the MEL also has a system that does not certify when below the limit reference point.

For fish species subject to TAC as stipulated in the revised Fishery Act, the results of (a) through (c) can be confirmed in the "Fishery Resource Assessment of Waters Surrounding Japan". The TAC for international resources managed by regional fisheries management organizations is also usually established through the same procedures, and can be confirmed using the "Current Status of International Fisheries Resources" and the annual reports of the regional fisheries management organizations cited in the above.

Furthermore, in a management body where the applicant runs small-scale regional coastal fishery and where restriction is imposed on a voluntary basis in addition to those on the national and prefectural basis, various substitute measures are taken to avoid recruitment overfishing. The examples include 1) discontinuing fishing activities even during fishing season if CPUE becomes below a certain value (sand launce), and 2) having a certain number of parent fish escape (salmon) to secure the Spawning Stock Biomass. If only MSY is the management objective, limit reference point is treated as equals to (=) target reference point. In addition, the permanent preserve, similar to the Marine Protected Area (MPA), designated all over the country targeting abalone and the like is a measure to prevent overfishing in a sense that a certain level of Spawning Stock Biomass is secured. In the farming type of rotational harvesting of scallop, which becomes mature at the age of one, three demarcated areas comprised of mature population at the age of one to three are

protected in the four rotational harvesting schemes.
Examples of Evidence:
1) Basic rules to calculate ABC https://abchan.fra.go.jp/references_list/FRA-SA2024-ABCWG02-01.pdf http://abchan.fra.go.jp/references_list.html 2) Assessment of Fishery Resources in Japan https://abchan.fra.go.jp/hyouka/ 3) Status of Fishery Resources in the World https://kokushi.fra.go.jp/index-2.html

3. Requirements on Consideration for Ecosystem

(Appropriate measures are implemented for the conservation of the ecosystem.)

In this section, it is checked and confirmed whether efforts are made to reduce the influence which the applicant's fishery directly or indirectly has on population other than the target biological stock or environment.

3.1 Establishment of Ecosystem-Conscious Management System

3.1.1 Information for assessment of impact on non-target species and ecosystem

Requirement: 3.1.1
Scientific information shall be collected and maintained on the following items to assess the impact of the fishery by the unit of certification on non-target species and the ecosystem: (1) Catch and discard of non-target stocks (2) Bycatch of endangered species by the target fishery and efforts for conservation (3) Essential habitats for the stock under consideration (e.g. spawning and nursery sites) (4) Impact of the fishing gears used and lost on the ecosystem (including the marine environment such as seabed) (5) Predator-Prey interaction in the food-web regarding the stock under consideration (6) Balance of whole ecosystem (i.e. whether the ecosystem is not severely disturbed)
Indicator: (a)
(a) Whether adequate, reliable and current data and other information of followings exist: (1) List of species caught, bycatched, and/or discarded other than the stock under consideration, and information and evaluation on those species regarding the magnitude and the adverse impact by the fishery of the unit of certification, such as overfishing and other impacts that are likely to be irreversible. (2) Information and evaluation of the impact by the unit of certification on the endangered species, collected in accordance with applicable international standards and practice. (3) Information and evaluation of the impact by the unit of certification on the essential habitats for the stock under consideration and vulnerable habitats. (Not only the area directly affected by the fishing operation but also including the whole area of habitats in relation.) (4) Information and evaluation of the impact of fishing gears used by the unit of certification on the ecosystems, including the impact of lost gears. (5) Information and evaluation of the role of the stock under consideration in the food-web to determine whether the fishing of the stock is causing severe adverse impacts on the dependent predator species, if the stock under consideration is a key prey species in the ecosystem.

(6) Information and evaluation of the likelihood and magnitude of the impact on the structure and function of the ecosystem by the fishery of the unit of certification, collected in accordance with applicable international standards and practice to enable timely scientific advice.

☐ Existence of collected and maintained information referred in (1) – (6) above.

Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist

Guidance for Auditors:

Besides the requirements shown in the FMS and indicators shown in the Checklist, further points to note on the information for assessment of impact on non-target species and ecosystem referred in the indicator 3.1.1 are as follows:

(1) Non-target catches and discards

Among bycatch species, as for landed fish and shellfish other than certified species, records of landing are to be confirmed. As for other bycatch species including release and discards, a detailed species list and bycatch mortality should be compiled, including rare species, from direct surveys or commissioned surveys by the applicant, and the estimated quantity should be confirmed. This table for precautionary measures is essential. In some cases, many reports and previous studies have already been published on common bycatch cases in the fishery under review, and it is important for interested parties to compare and verify the transparency and reliability of the content of the assessment.

(2) Endangered species

Lists of internationally designated species and the Red List are available in the Ministry of the Environment. For these species, as a management plan and action guidelines are established by the national government as a management body or by the prefecture of the applicant location, establishment of these investigation system should be confirmed. Furthermore, the stock assessment of endangered species (such as cetaceans and sea animals) can be confirmed with the materials such as the Status of International Fishery Resources.

(3) Important habitat

This indicator is assessed by confirming the materials such as the “Overview on the ecology of biological stock under consideration” and the management plan of by-caught biological stock and the like for other items.

(4) Fishing gears and lost gears

As the impacts varies by the fishery type, e.g. influence on the seabed by bottom trawling and ghost fishing by lost fishing gears, the details of influence are confirmed in the literature and the like.

(5) Dependent predators

The requirements are assessed here by confirming such materials as the "General review on the Ecology of the Stock under consideration" and by the by-catch marine lives for the other items. Furthermore, whether or not it is described in the "Fisheries Stock Assessment in the waters around Japan" is confirmed. The feeding habit of rare species (such as cetaceans and sea animals) which may be by-caught can be confirmed with the materials found in the Status of International Fishery Resources by the Fisheries Agencies.

(6) Ecosystem structure and function

The possible adverse effect such as chemical contamination by use of organotin compound and warming by CO2 emissions can also be included in this indicator.

Examples of Evidence:

1) Marine Mammals Information Database. National Museum of Nature and Science.
https://www.kahaku.go.jp/research/db/zoology/marmam/index.php
2) List of endangered species. Ministry of Environment.
https://www.env.go.jp/nature/kisho/global/list.html
3) Red list. Ministry of Environment.
https://www.env.go.jp/nature/kisho/hozen/redlist/index.html
4) Assessment of Fishery Resources in Japan
https://abchan.fra.go.jp/hyouka/doc2024/
https://kokushi.fra.go.jp/index-2.html
5) Reducing the incidental bycatch of seabirds in longline fisheries. Fisheries Agency.
https://www.jfa.maff.go.jp/j/koho/bunyabetsu/pdf/umidori_keikaku160315_a.pdf
6) Scientific and management framework on the conservation of shark species. Fisheries Agency.
https://www.jfa.maff.go.jp/j/koho/bunyabetsu/pdf/samerui_keikaku160315_a.pdf
7) Q & A the incidental bycatch of whales. Fisheries Agency.
https://www.jfa.maff.go.jp/j/whale/attach/pdf/bycatch-15.pdf
8) Guidelines on management of sea lions. Fisheries Agency.
https://www.jfa.maff.go.jp/j/press/sigen/pdf/140806-01.pdf
9) Guidelines on conservation of sea turtles.
http://www.env.go.jp/nature/kisho/guideline/SeaTurtle_Handbook.pdf

10) Management plan of seals in Hokkaido. Hokkaido prefectural office.
https://www.pref.hokkaido.lg.jp/ks/skn/yasei/azarashi/kanri.html
https://www.pref.hokkaido.lg.jp/ks/skn/azarashikeikaku.html
11) Guidelines on conservation of endangered species in Hokkaido. Hokkaido prefectural office.
https://www.pref.hokkaido.lg.jp/fs/1/1/1/3/4/6/3/3/_/%E5%B8%8C%E5%B0%91%E9%87%8E%E7%94%9F%E5%8B%95%E6%A4%8D%E7%89%A9%E7%A8%AE%E5%9F%BA%E6%9C%AC%E6%96%B9%E9%87%9D(HP%E7%89%88).pdf
12) Management plan of brown bear in Hokkaido. Hokkaido prefectural office.
https://www.pref.hokkaido.lg.jp/ks/skn/higuma/higuma.html
13) Habitat of brown bear. Hokkaido prefectural office.
http://www.biodic.go.jp/reports/2-6/ad087.html
14) Development of Trawl Fishing Technology to Mitigate Impacts on Marine Ecosystem. Nagasaki University.
https://www.jstage.jst.go.jp/article/suisan/73/5/73_5_835/_pdf
15) Ghost Fishing by Lost Trap. Fisheries Research Agency.
https://www.jstage.jst.go.jp/article/suisan/72/5/72_5_930/_pdf
16) Estimation of Fuel Oil Consumptions and CO2 Emission from Japanese Fishing Vessels. National Research Institute of Fisheries Engineering.
https://agriknowledge.affrc.go.jp/RN/2010792523.pdf
17) International Convention on the Control of Harmful Anti-Fouling Systems on Ships. Ministry of Foreign Affairs.
https://www.mofa.go.jp/mofaj/gaiko/treaty/pdfs/treaty156_4a.pdf

3.1.2 Consideration for ecosystem

Requirement: 3.1.2	
The target fishery shall be operated with consideration for minimizing adverse impact on the non-target species and the ecosystems, based on the results of items 3.1.1 (1) – (6).	
Indicator: (a)	
(a) Existence of the following management objectives and outcome indicators (including those equivalent thereto), taking into account the assessment results of 3.1.1: (1) 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 does not threaten those non-target stocks with recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible, and outcome indicators consistent with achieving the management objectives. (2) Management objectives that seek to ensure that endangered species are protected from adverse impacts resulting from interactions with the unit of certification, including recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible, and outcome indicators consistent with the achieving management objectives. (3) Management objectives that seek to avoid, minimize or mitigate impacts of the unit of certification on essential habitats for the stock under consideration and on habitats that are highly vulnerable, and outcome indicators consistent with achieving the management objectives. (4) Management objectives that seek to avoid, minimize or mitigate the damage by the fishing gears and lost gears of the unit of certification, and outcome indicators consistent with achieving the management objectives. (5) Management objectives that seek to avoid severe adverse impacts on dependent predators resulting from fishing on the stock under consideration that is a key prey species, and outcome indicators consistent with achieving the management objectives. (6) Management objectives that seek to minimize adverse impacts of the unit of certification on the structure and function of the ecosystem, and outcome indicators consistent with achieving management objectives. ☐ Existence of management objectives and outcome indicators above including those equivalent thereto.	
Evaluation: (a)	
・ Major non-conformity	Not exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved

・ Conformity	Exist
Indicator: (b)	
(b) Whether management measures designed to achieve the management objectives referred in 3.1.2 (a) (1) – (6) and management measures that minimize unwanted catch and discards, where appropriate, and reduce post-released mortality where incidental catch is unavoidable exist. ☐ Existence of appropriate management measures above	
Evaluation: (b)	
・ Major non-conformity	Not Exist
・ Minor non-conformity	Exist but required to be improved
・ Observation	Exist with partial lack of evidence
・ Conformity	Exist
・ Not applicable	N/A
Indicator: (c)	
(c) Whether the methodology and results of the analysis of the most probable adverse impacts of the unit of certification on the ecosystem are made publicly available in a timely manner, respecting confidentiality where appropriate. ☐ Disclosure of the information on the impact of the unit of certification on the ecosystem	
Evaluation: (c)	
・ Major non-conformity	Not disclosed.
・ Minor non-conformity	Disclosed with partial lack of evidence
・ Observation	Disclosed but required to be improved
・ Conformity	Disclosed
・ Not applicable	N/A
Guidance for Auditors:	
Besides the requirements shown in the FMS and indicators shown in the Checklist, followings are required to be considered: The requirement is assessed by confirming compliance with the “guidelines on management of endangered species and the like.” As for seabirds, cetaceans and marine mammals and the like, the requirements are confirmed with such materials as a management plan and management guidelines. It is confirmed whether the management plan of such species as sea birds and sharks caught as by-catch in the longline fishery is established and implemented by the State or the prefectures where the applicant is located.	

As for cetaceans, it is confirmed whether or not any instruction for handling the case in cetacean's entering set net are provided by the State as a management body.

As for marine mammals, some population is increasing by protection. In case damage to fisheries caused by such species is increasing and threatening survival of fisheries, it is confirmed whether or not such adaptive management plan as enabling marine capture fisheries and harmful animals to coexist is established and implemented by the State as a management body or by the prefecture where the applicant is located.

For sea turtles, the requirements are confirmed by materials showing compliance with the regulations such as the Act on the Protection of Fishery Stocks and the Fisheries Adjustment Act of the prefecture (where the Applicant is located) as a management body.

It is confirmed that no organotin compound regulated internationally is used on the ship's bottom or fish nets. It is confirmed whether energy-saving facilities and LED are installed for CO2 reduction as necessary.

Examples of Evidence:

1) Reducing the incidental bycatch of seabirds in longline fisheries. Fisheries Agency.
https://www.jfa.maff.go.jp/j/koho/bunyabetsu/pdf/umidori_keikaku160315_a.pdf
2) Scientific and management framework on the conservation of shark species. Fisheries Agency.
https://www.jfa.maff.go.jp/j/koho/bunyabetsu/pdf/samerui_keikaku160315_a.pdf
3) Q & A the incidental bycatch of whales. Fisheries Agency.
https://www.jfa.maff.go.jp/j/whale/attach/pdf/bycatch-15.pdf
4) Guidelines on management of sea lions. Fisheries Agency.
https://www.jfa.maff.go.jp/j/press/sigen/pdf/140806-01.pdf
5) Guidelines on conservation of sea turtles.
https://www.env.go.jp/nature/kisho/guideline/SeaTurtle_Handbook.pdf
6) Management plan of seals in Hokkaido. Hokkaido prefectural office.
https://www.pref.hokkaido.lg.jp/ks/skn/yasei/azarashi/kanri.html
https://www.pref.hokkaido.lg.jp/ks/skn/azarashikeikaku.html
7) Guidelines on conservation of endangered species in Hokkaido. Hokkaido prefectural office.
https://www.pref.hokkaido.lg.jp/fs/1/1/1/3/4/6/3/3/_/%E5%B8%8C%E5%B0%91%E9%87%8E%E7%94%9F%E5%8B%95%E6%A4%8D%E7%89%A9%E7%A8%AE%E5%9F%BA%E6%9C%AC%E6%96%B9%E9%87%9D(HP%E7%89%88).pdf

3.1.3 Conservation of environment at the fishing ground and habitat

Requirement: 3.1.3	
The unit of certification shall contribute to the conservation of the fishing ground environment and the habitat of the stock under consideration.	
Indicator: (a)	
(a) Whether the applicant, which operates the unit of certification, contributes to conserving environment which covers fishing ground and habitat for the stock under consideration. Examples: conservation of a seaweed bed or a tidal flat, environmental beautification and conservation of a coastal zone, conservation of a river or lake ecosystem, environmental conservation during fishing activities ☐ Contribution of the applicant for environmental conservation at the fishing grounds and the habitat for the stock under consideration ☐ Proper collection of fishing-related wastes such as plastic products, and promotion of recycling and other circular utilization ☐ Materials outlining measures to reduce fuel consumption of vessels used	
Evaluation: (a)	
・ Major non-conformity	Not contributing
・ Minor non-conformity	Contributing with partial lack of evidence
・ Observation	Contributing but required to be improved
・ Conformity	Contributing
Guidance for Auditors:	
The requirement 3.1.3 is assessed by confirming "records on habitat conservation activities" and other documents. There are various instances showing contributions in coastal fishery. Examples of the contributions include self-restraint in the use of neutral detergents, removal of beach waste and drifting waste on the ocean, recovery of heavy oil drifting ashore due to an oil spill accident, Afforestation in the upper reaches of a river, holding of training or learning sessions on environmental conservation, and seaweed bed raising activities.	
Examples of Evidence:	
1) Activities considering environment. Kyoto prefectural office. https://www.pref.kyoto.jp/suiji/12400011.html	

3.2 Consideration for the ecosystem in the associated culture/enhancement fisheries

3.2.1 Production of artificial seedlings considering the ecosystem

Requirement: 3.2.1	
Production and release of artificial seedlings shall be conducted with due consideration given to maintaining the biological characteristics and genetic diversity of the species.	
Indicator: (a)	
(a) Whether permission (permission for private use, water rights, etc.) necessary for seed production is acquired. ☐ Acquisition of permission or licenses for seed production facilities, wherein consideration for the natural environment is required.	
Evaluation: (a)	
・ Major non-conformity	No permission is acquired.
・ Minor non-conformity	N/A
・ Observation	N/A
・ Conformity	The permission id acquired.
・ Not applicable	No associated fish farming nor resource enhancement
Indicator: (b)	
(b) The subpopulation of released artificial seedlings is considered and measures are taken for the preservation of genetic diversity. ☐ Measures for preservation of the subpopulation (such as transplant release) ☐ Measures for preservation of genetic diversity (such as the management of number of parent fish)	
Evaluation: (b)	
・ Major non-conformity	No measures are implemented.
・ Minor non-conformity	Although measures are implemented, there is a portion with no evidence.
・ Observation	Although the measures are implemented, there is a room for improvement.
・ Conformity	The measures are implemented.
・ Not applicable	No associated fish farming nor resource enhancement
Indicator: (c)	
(c) Whether the parent fish used for seed production has no record of subculture, and the applicant takes measures to use the parent fish with clear capture record. ☐ The parent fish with capture record	

☐ The parent fish with no record of subculture	
Evaluation: (c)	
・ Major non-conformity	No measures are implemented.
・ Minor non-conformity	Although measures are implemented, there is a portion with no evidence.
・ Observation	Although the measures are implemented, there is a room for improvement.
・ Conformity	The measures are implemented.
・ Not applicable	No associated fish farming nor resource enhancement
Indicator: (d)	
(d) Whether the records of release (the number of releases, timing, size, etc.) are collected. Whether appropriate release methods (released size, appropriate growth stage, etc.) are implemented. ☐ Record of release data (the number of releases, release date, size, etc.) ☐ Considerations of appropriate release methods (growth stage, etc.)	
Evaluation: (d)	
・ Major non-conformity	No measures are implemented.
・ Minor non-conformity	Although measures are implemented, there is a portion with no evidence.
・ Observation	Although the measures are implemented, there is a room for improvement.
・ Conformity	The measures are implemented.
・ Not applicable	No associated fish farming nor resource enhancement.
Indicator: (e)	
(e) Whether measures are taken to prevent the spread of disease. ☐ System for diagnosis of fish disease ☐ Measures taken to prevent the spread of fish disease	
Evaluation: (e)	
・ Major non-conformity	No measures are implemented.
・ Minor non-conformity	Although measures are implemented, there is a portion with no evidence.
・ Observation	Although the measures are implemented, there is a room for improvement.
・ Conformity	The measures are implemented.
・ Not applicable	No associated fish farming nor resource enhancement
Guidance for Auditors:	

The requirement 3.2.1 is assessed by confirming "materials on the seed production facility's organization and performance records."

The indicator of the Checklist (a) is confirmed with permission for the seed production facility and other documents of the facility.

The indicator of the Checklist (b) is confirmed with the fact that the subpopulation is determined based on generic data and that the release is conducted based on determined results to maintain the subpopulation. In the case of salmon, it is confirmed with the survey and research report whether the monitoring of the number of salmons going upstream in the rivers only for natural spawning is conducted.

The indicator of the Checklist (c) is confirmed with production records on whether the seed is produced in accordance with Technical Guidelines to Reduce Impacts on Generic Diversity regarding Release of Artificial Seedlings. In the case of salmon, whether the seedlings are produced to maintain the race (subpopulation) of the river is confirmed.

The indicator of the Checklist (d) is confirmed with the statistical data.

The indicator of the Checklist (e) is confirmed with manuals that describes a management system (reporting in the event of an outbreak of fish disease and measures to be taken thereafter) that is adequately performed by an expert of fish disease or a person qualified as a fish epidemic prevention specialist (certified by the Japan Fisheries Resource Conservation Association).

Examples of Evidence:

1) Permit of seeding production. Blueprint of hatchery.
2) Genetic structure of chum salmon populations in Japan. Hokkaido National Fisheries Research Institute, Fisheries Research Agency
https://www.fra.go.jp/home/kenkyushokai/book/bulletin/files/bull39_39-04.pdf
3) Distribution of naturally spawning chum salmon populations in Hokkaido. Salmon and Freshwater Fisheries Research Institute.
https://www.hro.or.jp/upload/36369/o7u1kr0000000r0w.pdf
4) Monitoring report of salmon. Shiretoko White Paper. Shiretomo Data Center. Ministry of Environment.
https://shiretokodata-center.env.go.jp/data/research/annual_report/h23/ap4_11.html
5) Guidelines on Release of Artificial Seeds. The National Research and Development Agency. Japan Fisheries Research and Education Agency. Fisheries Agency.

https://www.jfa.maff.go.jp/j/koho/bunyabetsu/pdf/identeki_tayousei_sisin.pdf
6) Resource evaluation of subpopulation of halibut in the North Pacific in 2023. Tohoku National Fisheries Research Institute. Fisheries Research Agency
https://abchan.fra.go.jp/wpt/wp-content/uploads/2024/03/details_2023_60.pdf
7) Stock enhancement of halibut in the North Pacific. Fisheries Research Agency
https://www.yutakanaumi.jp/assets/file/pdf/saibai/2-2.pdf
8) Annual report of major prefectures (Salmon). The National Research and Development Agency. Japan Fisheries Research and Education Agency. Fisheries Agency.
https://www.fra.go.jp/shigen/salmon/index.html
9) Number of catches, collecting eggs and releases in each river. Hokkaido National Fisheries Research Institute, The National Research and Development Agency, Japan Fisheries Research and Education Agency (FRA)
https://www.fra.go.jp/shigen/salmon/kaiki.htmll
10) Manual on diagnosis of specific disease. Japan Fisheries Resource Conservation Association.
https://www.fish-jfrca.jp/02/pdf/H28diagnosticmanual.pdf
11) Manual on investigation of pathogen in salmon. The National Research and Development Agency, Japan Fisheries Research and Education Agency
https://www.fra.go.jp/gijutsu/project/pathology/files/manual/sakemasu_shitunai.pdf

3.2.2 Establishment of management objectives and measures for maintaining naturally reproduced population

Requirement: 3.2.2	
Management objectives shall be developed to maintain the natural reproductive stock components of the stock under consideration at a sustainable level, and management measures shall be implemented that are consistent with achieving these management objectives.	
Indicator: (a)	
(a) Whether such measures as tagging of released fish enable individual assessment of released and naturally-reproduced populations and hence the effect of releasing is assessed. (Whether the naturally-reproduced population is assessed) ☐ The effect of releasing is assessed by taking such measures as tagging of released fish	
Evaluation: (a)	
・ Major non-conformity	The effect of release is not assessed.
・ Minor non-conformity	Although the effect of releasing is assessed, there is a portion with no evidence.
・ Observation	Although the effect of releasing is assessed, there is a room for improvement.
・ Conformity	The effect of release is assessed.
・ Not applicable	No associated fish farming nor resource enhancement
Indicator: (b)	
(b) Whether management objectives for avoiding significant negative impacts of enhancement activities on the natural reproductive stock component of the stock under consideration and any other wild stocks from which the organisms for stocking are being removed and management measures designed to achieve the management objectives exist. ☐ Existence of management objectives, management measures (including those equivalent thereto)	
Evaluation: (b)	
・ Major non-conformity	Not Exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
・ Not applicable	No associated fish farming nor resource enhancement
Indicator: (c)	
(c) Whether efforts to assess and conserve habitat environment are undertaken in order to maintain	

the naturally-reproduced population.

☐ Efforts for conserving the habitat

Evaluation: (c)	
・ Major non-conformity	No measures are undertaken.
・ Minor non-conformity	Although measures are undertaken, there is a portion with no evidence.
・ Observation	Although the measures are undertaken, there is a room for improvement.
・ Conformity	The measures are undertaken.
・ Not applicable	No associated fish farming nor resource enhancement

Guidance for Auditors:

The requirement 3.2.2 is assessed by confirming survey reports on "releasing effect" and "releasing plan."

The indicator of the Checklist (a) is confirmed over whether the estimation is conducted over the by-catch ratio of the fish released with tagging recaptured.
The indicators of the Checklist (b) and (c) are confirmed with survey reports that in the case of salmon, the river only for natural spawning where no releasing is conducted is preserved (zoning), or efforts are undertaken to secure and develop a spawning bed for natural spawning in a river where wild and released populations coexist.

Examples of Evidence:

1) Resource evaluation of subpopulation of halibut in the North Pacific in 2018. Tohoku National Fisheries Research Institute. Fisheries Research Agency
https://abchan.fra.go.jp/wpt/wp-content/uploads/2024/03/details_2023_60.pdf
2) Stock enhancement of halibut in the North Pacific. Fisheries Research Agency
https://www.yutakanaumi.jp/assets/file/pdf/saibai/2-2.pdf
3) Distribution of naturally spawning chum salmon populations in Hokkaido. Salmon and Freshwater Fisheries Research Institute.
https://www.hro.or.jp/upload/36369/o7u1kr0000000r0w.pdf
4) Estimation of the population of wild chum salmon Oncorhynchus keta in Japanese hatchery rivers. Hokkaido National Fisheries Research Institute. Fisheries Research Agency.
https://www.jstage.jst.go.jp/article/suisan/79/2/79_12-00054/_pdf
5) Efficiency of natural reproduction of chum salmon in Chitose river, Hokkaido, Japan. Hokkaido National Fisheries Research Institute. Fisheries Research Agency.
https://www.jstage.jst.go.jp/article/suisan/79/4/79_12-00086S/_pdf

3.2.3 Monitoring the impacts of released seedlings on the stock under consideration and the ecosystem

Requirement: 3.2.3	
Monitoring is conducted on the stock under consideration and its habitat, and measures are taken to avoid the adverse impacts of the seedling release on the natural reproduction of the stock under consideration and the ecosystem.	
Indicator: (a)	
(a) Whether the stock under consideration is biologically and genetically monitored and confirmed that there are no morphological changes in the stock under consideration. ☐ Biological (fish size, age, number of roes, timing of migration) and implementation of genetic monitoring ☐ Confirmation of morphological changes to the stock under consideration	
Evaluation: (a)	
・ Major non-conformity	Not monitored and confirmed.
・ Minor non-conformity	Although monitored and confirmed, there is a portion with no evidence.
・ Observation	Although monitored and confirmed, there is a room for improvement.
・ Conformity	Monitored and confirmed.
・ Not applicable	No associated fish farming nor resource enhancement
Indicator: (b)	
(b) Whether following information about the impacts of release of artificial seedling on other species and the ecosystem exists: (1) Assessment of the extent to which non-target catches and discards by associated culture and enhancement activities threaten those non-target stocks with recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible. (2) Assessment of the impacts of associated culture and enhancement activities on endangered species with appropriate related data/information collected in accordance with applicable international standards and practices. (3) Assessment of the impacts of associated culture and enhancement activities on essential habitats for the stock under consideration and on habitats that are highly vulnerable to damage by the fishing gear of the unit of certification in the full spatial range of the relevant habitat, not just that part of the spatial range that is potentially affected by fishing. (4) Analysis of the effects of associated culture and enhancement activities on ecosystem structure,	

processes and function to develop timely scientific advice on the likelihood and magnitude of impacts with appropriate related data/information in accordance with applicable international standards and practices.

☐ Existence of information about impacts on other species and the ecosystem referred in (1) - (4) above

☐ Existence of information about the distributional area of seedling and growth after the seedling is released, including information to confirm that the natural reproductive stock component of enhanced stocks is not substantially displaced by stocked components

Evaluation: (b)

・ Major non-conformity	Not Exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
・ Not applicable	No associated fish farming nor resource enhancement

Indicator: (c)

(c) Whether following management objectives, management measures and outcome indicators (including those equivalent thereto) exist to avoid severe adverse impacts of release of artificial seedling on the natural reproduction of the stock under consideration and on the ecosystem:

(1) Management objectives that seek to ensure that non-target catches and discards by 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 and management measures designed to achieve the management objectives.

(2) Management objectives that seek to ensure that endangered species are protected from adverse impacts resulting from interactions with associated culture or enhancement activity, including recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible, outcome indicators consistent with achieving the management objectives and management measures, as necessary, designed to achieve the management objectives.

(3) Management objectives that seek to minimize adverse impacts of associated enhancement activities if applicable, on the structure, processes and function of aquatic ecosystems that are likely to be irreversible or very slowly reversible, outcome indicators consistent with achieving the management objectives and management measures, as necessary, designed to achieve the management objectives.

☐ Existence of management objectives, management measures and outcome indicators (including those equivalent thereto) referred in (1) – (3) above

Evaluation: (c)

・ Major non-conformity	Not Exist
・ Minor non-conformity	Exist with partial lack of evidence
・ Observation	Exist but required to be improved
・ Conformity	Exist
・ Not applicable	No associated fish farming nor resource enhancement.

Indicator: (d)

(d) Whether the methodology and results of the analysis of the most probable adverse impacts of the associated culture and enhancement activity on the ecosystem are made publicly available in a timely manner, respecting confidentiality where appropriate.

☐ Disclosure of the information on the impact of associated culture and enhancement activity on the ecosystem

Evaluation: (d)

・ Major non-conformity	Not disclosed
・ Minor non-conformity	Disclosed with partial lack of evidence
・ Observation	Disclosed but required to be improved.
・ Conformity	Disclosed
・ Not applicable	No associated fish farming nor resource enhancement

Guidance for Auditors:

The requirement 3.2.3 is assessed by confirming "scientific papers about genetic influences" and other documents.

The indicator of the Checklist (a) is confirmed with survey reports and scientific papers.

The indicator of the Checklist (b), information about the distributional area of seedling and growth is confirmed with follow-up survey reports on the released population. Furthermore, in terms of impacts on other species and the ecosystem, released populations are same as the natural populations, and influence of an increase in the number of populations due to releasing is confirmed with information about natural populations.

The indicator of the Checklist (c) is confirmed with the record of seed production on whether the seed is produced in accordance with technical guidelines for reducing the risk of an impact on genetic diversity.

Examples of Evidence:

1) Effectiveness of hatchery supplementation and its impacts on wild populations. Tokyo University of Marine Science and Technology.
https://www.jstage.jst.go.jp/article/suisan/82/3/82_WA2284/_pdf
2) Genetic structure of chum salmon populations in Japan. Hokkaido National Fisheries Research Institute. Fisheries Research Agency.
https://www.fra.go.jp/home/kenkyushokai/book/salmon/files/srr017_p09-12.pdf
3) Resource evaluation of subpopulation of halibut in the North Pacific in 2018. Tohoku National Fisheries Research Institute. Fisheries Research Agency
https://abchan.fra.go.jp/wpt/wp-content/uploads/2024/03/details_2023_60.pdf
4) Guidelines on Release of Artificial Seeds. The National Research and Development Agency. Japan Fisheries Research and Education Agency. Fisheries Agency.
https://www.jfa.maff.go.jp/j/koho/bunyabetsu/pdf/identeki_tayousei_sisin.pdf

End

Notes

Revision History:

Date of enactment in Japanese (Version 2.0): July 19, 2018
Revised in Japanese: September 19, 2018
Revised in Japanese (Version 2.1): January 23, 2019
Revised in Japanese (Version 2.2): October 1, 2022

Date of effectuation (Version 3.0, this document): month date, 2025