



MarinTrust Standard V2

Whole fish Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Application details and summary of the assessment outcome			
Name:			
Address:			
Country:		Zip:	
Tel. No.		Fax. No.	
Email address:		Applicant Code	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:			
Assessor Name	CB Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Assessment Period			
Scope Details			
Management Authority (Country/State)			
Main Species			
Fishery Location			
Gear Type(s)			
Outcome of Assessment			
Overall Outcome			
Clauses Failed			
CB Peer Review Evaluation			
Fishery Assessment Peer Review Group Evaluation			
Recommendation			

Table 2. Assessment Determination

Assessment Determination
Fishery Assessment Peer Review Comments
Notes for On-site Auditor

Table 3 General Results

General Clause	Outcome (Pass/Fail)
M1 - Management Framework	
M2 - Surveillance, Control and Enforcement	
F1 - Impacts on ETP Species	
F2 - Impacts on Habitats	
F3 - Ecosystem Impacts	

Table 4 Species- Specific Results

List all Category A and B species. List approximate total percentage (%) of landings which are Category C and D species; these do not need to be individually named here

Category	Species	% landings	Outcome (Pass/Fail)
Category A			
Category B			
Category C			
Category D			

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category ¹	% of landings	Management	Category
Species categorisation rationale						

¹ <https://www.iucnredlist.org/>

MANAGEMENT

The two clauses in this section (M1, M2) relate to the general management regime applied to the fishery under assessment. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. A fishery must meet all the minimum requirements in every clause before it can be recommended for approval.

M1 Management Framework – Minimum Requirements		
M1.1	There is an organisation responsible for managing the fishery.	
M1.2	There is an organisation responsible for collecting data and assessing the fishery.	
M1.3	Fishery management organisations are publicly committed to sustainability.	
M1.4	Fishery management organisations are legally empowered to take management actions.	
M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making.	
M1.6	The decision-making process is transparent, with processes and results publicly available.	
		Clause outcome:
M1.1	There is an organisation responsible for managing the fishery.	
M1.2	There is an organisation responsible for collecting data and assessing the fishery.	
M1.3	Fishery management organisations are publicly committed to sustainability.	
M1.4	Fishery management organisations are legally empowered to take management actions.	
M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making.	
M1.6	The decision-making process is transparent, with processes and results publicly available.	
References		
Links		
MARINTRUST Standard clause	1.3.1.1, 1.3.1.2	
FAO CCRF	7.2, 7.3.1, 7.4.4, 12.3	
GSSI	D.1.01, D.4.01, D2.01, D1.07, D1.04,	

M2 Surveillance, Control and Enforcement - Minimum Requirements		
M2.1	There is an organisation responsible for monitoring compliance with fishery laws and regulations.	
M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.	
M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.	
M2.4	Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.	
		Clause outcome:
M2.1	There is an organisation responsible for monitoring compliance with fishery laws and regulations.	
M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.	
M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.	
M2.4	Compliance with laws and regulations is actively monitored, through a regime which may include at-sea and portside inspections, observer programmes, and VMS.	

References	
Links	
MARINTRUST Standard clause	1.3.1.3
FAO CCRF	7.7.2
GSSI	D1.09

CATEGORY A SPECIES

The four clauses in this section apply to Category A species. Clauses A1 - A4 should be completed for **each** Category A species. If there are no Category A species in the fishery under assessment, this section can be deleted. A Category A species must meet the minimum requirements of all four clauses before it can be recommended for approval. The clauses should be completed by providing sufficient evidence to justify awarding each of the requirements a pass or fail rating. The species must achieve a pass rating against all requirements to be awarded a pass overall. **If the species fails any of these clauses it should be re-assessed as a Category B species.**

Species Name		
A1	Data Collection - Minimum Requirements	
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.
		Clause outcome:
<p>A1.1 Landings data are collected such that the fishery-wide removals of this species are known.</p> <p>A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.</p>		
References		
Links		
MARINTRUST Standard clause		1.3.2.1.1, 1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF		7.3.1, 12.3
GSSI		D.4.01, D.5.01, D.6.02, D.3.14

A2	Stock Assessment - Minimum Requirements	
	A2.1	A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.
	A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.
	A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.
	A2.4	The assessment is subject to internal or external peer review.
	A2.5	The assessment is made publicly available.
		Clause outcome:
<p>A2.1 A stock assessment is conducted at least once every 3 years (or every 5 years if there is substantial supporting information that this is sufficient for the long-term sustainable management of the stock), and considers all fishery removals and the biological characteristics of the species.</p> <p>A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.</p> <p>A2.3 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.</p> <p>A2.4 The assessment is subject to internal or external peer review.</p> <p>A2.5 The assessment is made publicly available.</p>		

References	
Links	
MARINTRUST Standard clause	1.3.2.1.2, 1.3.2.1.4, 1.3.1.2
FAO CCRF	12.3
GSSI	D.5.01, D.6.02, D.3.14

A3	Harvest Strategy - Minimum Requirements	
	A3.1	There is a mechanism in place by which total fishing mortality of this species is restricted.
	A3.2	Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.
	A3.3	Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).
Clause outcome:		
<p>A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.</p> <p>A3.2 Total fishery removals of this species do not regularly exceed the level indicated or stated in the stock assessment. Where a specific quantity of removals is recommended, the actual removals may exceed this by up to 10% ONLY if the stock status is above the limit reference point or proxy.</p> <p>A3.3 Commercial fishery removals are prohibited when the stock has been estimated to be below the limit reference point or proxy (small quotas for research or non-target catch of the species in other fisheries are permissible).</p>		
References		
•		
Standard clause 1.3.2.1.3		
Links		
MARINTRUST Standard clause	1.3.2.1.3, 1.3.2.1.4	
FAO CCRF	7.2.1, 7.22 (e), 7.5.3	
GSSI	D3.04, D6.01	

A4	Stock Status - Minimum Requirements	
	A4.1	<p>The stock is at or above the target reference point, OR IF NOT:</p> <p>The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure OR IF NOT:</p> <p>The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.</p>
Clause outcome:		

A4.1 The stock is at or above the target reference point, OR IF NOT:

The stock is above the limit reference point or proxy and there is evidence that a fall below the limit reference point would result in fishery closure **OR IF NOT:**

The stock is estimated to be below the limit reference point or proxy, but fishery removals are prohibited.

References

Links

MARINTRUST Standard clause	1.3.2.1.4
FAO CCRF	7.2.1, 7.2.2 (e)
GSSI	D6 01

CATEGORY B SPECIES

Category B species are those which make up greater than 5% of landings in the applicant raw material, but which are not subject to a species-specific research and management regime sufficient to pass all Category A clauses. If there are no Category B species in the fishery under assessment, this section can be deleted.

Category B species are assessed using a risk-based approach. The following process should be completed once for each Category B species.

If there are estimates of biomass (B), fishing mortality (F), and reference points

It is possible for a Category B species to have some biomass and fishing mortality data available. When sufficient information is present, the assessment team should use the following risk matrix to determine whether the species should be recommended for approval.

TABLE B(A) - F, B AND REFERENCE POINTS ARE AVAILABLE

Biomass is above MSY / target reference point	Pass	Pass	Pass	Fail	Fail
Biomass is below MSY / target reference point, but above limit reference point	Pass, but re-assess when fishery removals resume	Pass	Fail	Fail	Fail
Biomass is below limit reference point (stock is overfished)	Pass, but re-assess when fishery removals resume	Fail	Fail	Fail	Fail

Biomass is significantly below limit reference point (Recruitment impaired)	Fail	Fail	Fail	Fail	Fail
	Fishery removals are prohibited	Fishing mortality is below MSY or target reference point	Fishing mortality is around MSY or target reference point, or below the long-term average	Fishing mortality is above the MSY or target reference point, or around the long-term average	Fishing mortality is above the limit reference point or above the long-term average (Stock is subject to overfishing)

If the biomass / fishing pressure risk assessment is not possible

Initially, the resilience of each Category B species to fishing pressure should be estimated using the American Fisheries Society procedure described in Musick, J.A. (1999). This approach is used as the resilience values for many species and stocks have been estimated by FishBase and are already available online. For details of the approach, please refer to Appendix A. Determining the resilience provides a basis for estimating the risk that fishing may pose to the long-term sustainability of the stock. Table B(b) should be used to determine whether the species should be recommended for approval.

TABLE B(B) - NO REFERENCE POINTS AVAILABLE. B = CURRENT BIOMASS; B_{AV} = LONG-TERM AVERAGE BIOMASS; F = CURRENT FISHING MORTALITY; F_{AV} = LONG-TERM AVERAGE FISHING MORTALITY.

B > B_{av} and F < F_{av}	Pass	Pass	Pass	Fail
B > B_{av} and F or F_{av} unknown	Pass	Pass	Fail	Fail
B = B_{av} and F < F_{av}	Pass	Pass	Fail	Fail
B = B_{av} and F or F_{av} unknown	Pass	Fail	Fail	Fail
B > B_{av} and F > F_{av}	Pass	Fail	Fail	Fail
B < B_{av}	Fail	Fail	Fail	Fail
B unknown	Fail	Fail	Fail	Fail
Resilience	High	Medium	Low	Very Low

Assessment Results

Species Name		
B1	Species Name	
	Table used (Ba, Bb)	
	Outcome	
References		
Links		
MARINTRUST Standard clause		1.3.2.2, 4.1.4
FAO CCRF		7.5.1
GSSI		D.5.01

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Species Name		
C1	Category C Stock Status - Minimum Requirements	
	C1.1	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.
		Clause outcome:
<p>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.</p> <p>C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.</p>		
References		
Links		
MARINTRUST Standard clause		1.3.2.2
FAO CCRF		7.5.3
GSSI		D.3.04, D5.01

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

D1	Species Name			
	Productivity Attribute	Value	Score	
	Average age at maturity (years)			
	Average maximum age (years)			
	Fecundity (eggs/spawning)			
	Average maximum size (cm)			
	Average size at maturity (cm)			
	Reproductive strategy			
	Mean trophic level			
	Average Productivity Score			
	Susceptibility Attribute	Value	Score	
	Overlap of adult species range with fishery			
	Distribution			
	Habitat			
	Depth range			
	Selectivity			
	Post-capture mortality			
	Average Susceptibility Score			
	PSA Risk Rating (From Table D3)			
	Compliance rating			
References				
<i>Standard clauses 1.3.2.2</i>				

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk	Medium productivity/ Medium risk	High productivity/ Low risk
	Score 3	Score 2	Score 1
Average age at maturity (years)	>4	2 to 4	<2
Average maximum age (years)	>30	10 to 30	<10
Fecundity (eggs/spawning)	<1 000	1 000 to 10 000	>10 000
Average maximum size (cm)	>150	60 to 150	<60
Average size at maturity (cm)	>150	30 to 150	<30
Reproductive strategy	Live bearer, mouth brooder or significant parental investment	Demersal spawner "berried"	Broadcast spawner
Mean trophic level	>3.25	2.5–3.25	<2.5

Susceptibility attributes		High susceptibility/ High risk	Medium susceptibility/ Medium risk	Low susceptibility/ Low risk
		Score 3	Score 2	Score 1
Availability	1) Overlap of adult species range with fishery	>50% of stock occurs in the area fished	Between 25% and 50% of the stock occurs in the area fished	<25% of stock occurs in the area fished
	2) Distribution	Only in the country/ fishery	Limited range in the region	Throughout region/ global distribution
Encounterability	1) Habitat	Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom)	Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs)	Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic)
	2) Depth range	High overlap with trawl fishing gear (20 to 60 m depth)	Medium overlap with trawl fishing gear (10 to 20 m depth)	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth)
Selectivity		Species >2 times mesh size or up to 4 m length	Species 1 to 2 times mesh size or 4 to 5 m length	Species <mesh size or >5 m length
Post capture mortality		Most dead or retained Trawl tow >3 hours	Alive after net hauled Trawl tow 0.5 to 3 hours	Released alive Trawl tow <0.5 hours

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4

D4 Species Name			
Impacts On Species Categorized as Vulnerable by D1-D3 - Minimum Requirements			
D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
Outcome:			
Evidence			
D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
References			
Links			
MARINTRUST Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	

FURTHER IMPACTS

The three clauses in this section relate to impacts the fishery may have in other areas. A fishery must meet the minimum requirements of all three clauses before it can be recommended for approval.

F1		Impacts on ETP Species - Minimum Requirements	
F1.1	Interactions with ETP species are recorded.		
F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.		
F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.		
			Clause outcome:
<p>F1.1 Interactions with ETP species are recorded.</p> <p>F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species.</p> <p>F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality.</p>			
References			
Links			
MARINTRUST Standard clause		1.3.3.1	
FAO CCRF		7.2.2 (d)	
GSSI		D4.04, D.3.08	

F2		Impacts on Habitats - Minimum Requirements	
F2.1	Potential habitat interactions are considered in the management decision-making process.		
F2.2	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.		
F2.3	If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.		
			Clause outcome:
<p>F2.1 Potential habitat interactions are considered in the management decision-making process.</p> <p>F2.2 There is no substantial evidence that the fishery has a significant negative impact on physical habitats.</p> <p>F2.3 If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.</p>			
References			
Links			
MARINTRUST Standard clause		1.3.3.2	
FAO CCRF		6.8	
GSSI		D.2.07, D.6.07, D3.09	

F3		Ecosystem Impacts - Minimum Requirements	
F3.1	The broader ecosystem within which the fishery occurs is considered during the management decision-making process.		
F3.2	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.		

F3.3	If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.	
Clause outcome:		
<p>F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.</p> <p>F3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.</p> <p>F3.3 If one or more of the species identified during species categorisation plays a key role in the marine ecosystem, additional precaution is included in recommendations relating to the total permissible fishery removals.</p>		
References		
Links		
MARINTRUST Standard clause	1.3.3.3	
FAO CCRF	7.2.2 (d)	
GSSI	D.2.09, D3.10, D.6.09	

SOCIAL CRITERION

In addition to the scored criteria listed above, applicants must commit to ensuring that vessels operating in the fishery adhere to internationally recognised guidance on human rights. They must also commit to ensuring there is no use of enforced or unpaid labour in the fleet(s) operating upon the resource.

Appendix A - Determining Resilience Ratings

The assessment of Category B species described in this assessment report template utilises a resilience rating system suggested by the American Fisheries Society. This approach was chosen because it is also used by FishBase, and so the resilience ratings for many thousands of species are freely available online. As described by FishBase, the following is the process used to arrive at the resilience ratings:

“The American Fisheries Society (AFS) has suggested values for several biological parameters that allow classification of a fish population or species into categories of high, medium, low and very low resilience or productivity (Musick 1999). If no reliable estimate of r_m (see below) is available, the assignment is to the lowest category for which any of the available parameters fits. For each of these categories, AFS has suggested thresholds for decline over the longer of 10 years or three generations. If an observed decline measured in biomass or numbers of mature individuals exceeds the indicated threshold value, the population or species is considered vulnerable to extinction unless explicitly shown otherwise. If one sex strongly limits the reproductive capacity of the species or population, then only the decline in the limiting sex should be considered. We decided to restrict the automatic assignment of resilience categories in the Key Facts page to values of K , t_m and t_{max} and those records of fecundity estimates that referred to minimum number of eggs or pups per female per year, assuming that these were equivalent to average fecundity at first maturity (Musick 1999). Note that many small fishes may spawn several times per year (we exclude these for the time being) and large live bearers such as the coelacanth may have gestation periods of more than one year (we corrected fecundity estimates for those cases reported in the literature). Also, we excluded resilience estimates based on r_m (see below) as we are not yet confident with the reliability of the current method for estimating r_m . If users have independent r_m or fecundity estimates, they can refer to Table 1 for using this information.”

Parameter	High	Medium	Low	Very low
Threshold	0.99	0.95	0.85	0.70
r_{max} (1/year)	> 0.5	0.16 - 0.50	0.05 - 0.15	< 0.05
K (1/year)	> 0.3	0.16 - 0.30	0.05 - 0.15	< 0.05
Fecundity (1/year)	> 10,000	100 - 1000	10 - 100	< 10
t_m (years)	< 1	2 - 4	5 - 10	> 10
t_{max} (years)	1 - 3	4 - 10	11 - 30	> 30

[Taken from the FishBase manual, “Estimation of Life-History Key Facts”, <http://www.fishbase.us/manual/English/key%20facts.htm#resilience>]

Glossary

Non-target: Species for which the gear is not specifically set, although they may have immediate commercial value and be a desirable component of the catch. OECD (1996), Synthesis report for the study on the economic aspects of the management of marine living resources. AGR/FI(96)12

Target: In the context of fishery certification, the target catch is the catch of stock under consideration by the unit of certification – i.e. the fish that are being assessed for certification and ecolabelling. (GSSI)