MarinTrust Standard V2

Whole fish Fishery Assessment Report Template

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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: Peru		**Zip:**	
Tel. No.		**Fax. No.**	
Email address:		**Applicant Code**	
Key Contact:		**Title:**	
Certification Body Details			
Name of Certification Body:		**Global Trust Certification**	
Assessor Name	**CB Peer Reviewer**	**Assessment Days**	**Initial/Surveillance/ Re-approval**
Virginia Polonio	Geraldine Criquet	3	Surveillance 2
Assessment Period	To August 2021		
Scope Details			
Management Authority (Country/State)		Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA) Fisheries Development Institute (Chile) (IFOP)	
Main Species		Araucanian Herring (*Strangomera bentincki*)	
Fishery Location		FAO 87 Pacific Southeast - Chile EEZ Regions V to X	
Gear Type(s)		Purse seine	
Outcome of Assessment			
Overall Outcome		PASS	
Clauses Failed		NA	
CB Peer Review Evaluation		Approve	
Fishery Assessment Peer Review Group Evaluation		Approve see Appendix	
Recommendation		**APPROVE**	

Table 2. Assessment Determination

Assessment Determination
If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as Marin Trust raw material. Araucanian herring (*Strangomera bentincki*), Anchoveta (*Engraulis ringens*) and Chilean jack mackerel (*Trachurus murphy*) do not appear as Endangered or Critically Endangered on IUCNs Red List, nor does it appear in CITES; therefore, the three species are eligible for approval for use as Marin Trust by-product raw material. Araucanian herring (Sardina, Strangomera bentincki) and Chilean anchovy (anchoveta, *Engraulis ringens*) in the V-X Regions are harvested as part of a mixed pelagic fishery. These species are caught during the same period and area by industrial fleets that fish for both using the same fishing gear (which is non-selective). Discarding represents less than 10% of catches in industrial fisheries. The Subsecretaria de Pesca (Undersecretariat of Fisheries, SUBPESCA or SSP); positioned within the Chilean Ministry (MINECOM) provide policy settings and regulatory framework for domestic management of the sector. The Instituto de Fomento Pesquero (Fisheries Development Institute, IFOP) is the research arm; providing scientific advice to SUBPESCA on fisheries and aquaculture issues. A management plan for Araucanian herring (Chile V-X) is adopted. The plan sets lines of action to address biological, economic, social and ecological matters. Fixed and mobile temporal closures to protect spawning stock and juveniles are included. Catches are reported annually. Catch limits are modified in an adaptive way during the year to account for updated scientific data. Direct hydroacoustic surveys (Araucanian herring and Chilean anchovy) have been conducted biannually since 1999. According to the latest assessment CCT-PP (Scientific and Technical Committee formed by IFOP and SUBPESCA) confirmed that the Araucanian herring (V-X) is not overfished and overfishing is not happening. Anchovy stock and Jack mackerel stocks are also above limits in the last stock assessment carried out for these species. ETP, habitat and ecosystems do not present important changes from the previous assessment as the fishery still operate in the same way and impacts on these components of the ecosystem are not relevant. Therefore, Araucanian herring *Strangomera bentincki* whole-fish (Category A); Chilean Anchovy (*Engraulis rigens*) (Category A) and Chilean Jack mackerel (*Trachurus murphyi*) (Category C) are **APPROVED** for the production of fishmeal and/or fish oil under the current Marin Trust Whole fish Marin Trust Standard (v 2.0).
Fishery Assessment Peer Review Comments
Notes for On-site Auditor

Table 3 General Results

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

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	Araucanian herring (Sardina) *Strangomera bentincki*	58	A1	Pass
			A2	Pass
			A3	Pass
			A4	Pass
Category A	Chilean Anchovy (Anchoveta) *Engraulis ringens*	37	A1	Pass
			A2	Pass
			A3	Pass
			A4	Pass
Category C	Chilean Jack mackerel (Jurel) *Trachurus murphyi*	5	Pass	

Table 5 Species Categorisation Table

Common name	Latin name	Stock	IUCN Redlist Category[1]	% of landings	Management	Category
Araucanian herring (Sardina)	*Strangomera bentincki*	Chile EEZ V-X	LC	58	SUBPESCA	A
Chilean Anchovy (Anchoveta)	*Engraulis ringens*	Chile EEZ V-X	LC	37	SUBPESCA	A
Chilean Jack mackerel (Jurel)	*Trachurus murphyi*	Chile EEZ V-X	LC	5	SUBPESCA	C
The species have been categorised following the Marin Trust requirements and assuming the landings have not changed since the approval of the species as no new information of catch composition has been reported by the client. Therefore, Araucanian herring and anchovy are classified as A because landing are higher than 5% and account to nearly the total composition. Chilean jack mackerel has been assessed under category C because landings are less than 5 % but there is a management plan for the species in the study area.						

[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.	Yes
	M1.2	There is an organisation responsible for collecting data and assessing the fishery.	Yes
	M1.3	Fishery management organisations are publicly committed to sustainability.	Yes
	M1.4	Fishery management organisations are legally empowered to take management actions.	Yes
	M1.5	There is a consultation process through which fishery stakeholders are engaged in decision-making.	Yes
	M1.6	The decision-making process is transparent, with processes and results publicly available.	Yes
		Clause outcome:	**PASS**

M1.1 There is an organisation responsible for managing the fishery.

MINECON (Actions of Chile's Ministry of Economy, Development and Tourism) is the organism involved in promoting the development of the fisheries sector, along with the protection, conservation, and full use of resources and the marine environment. Chile's institutional structure involves governing the fisheries sector centres around three key organisations, with several other institutions providing additional research and enforcement:

- The Subsecretaria de Pesca (Undersecretariat of Fisheries, SUBPESCA or SSP); positioned within MINECOM; provides policy settings and regulatory framework.
- The Servicio Nacional de Pesca (National Fisheries Service, SERNAPESCA) is also based within MINECOM. Responsible for executing fisheries policy through enforcement.
- The Instituto de Fomento Pesquero (Fisheries Development Institute, IFOP) is the research arm of the institutional framework and the primary source of scientific advice to SUBPESCA.

The LGPA created under the regulation Ley N 1626, 21 December 21st, 1946 is the current law that these organisations follow to manage the fisheries in Chile.
Clause M1.1 is met.

M1.2 There is an organisation responsible for collecting data and assessing the fishery.

IFOP (Instituto de Fomento Pesquero) is the organization responsible for sampling stocks and carrying out annual acoustic surveys. IFOP is a non-profit organisation created in 1964 under a joint agreement between the Chilean government, the FAO, and the UN Development Program. (UNDP). IFOP'S public role is to support sustainable development of Chile's fishing sector.

A Scientific and Technical Committee for Small Pelagic fisheries (Comité Científico Técnico de Pesquerías de Pequeños Pelágicos, CCT-PP), formed by IFOP and SUBPESCA, analyse updates on stock status and catch projections and make official recommendations to the authorities. Further, South Pacific Regional Fisheries Management Organisation (SPRFMO) is coordinated with IFOP for highly migratory stocks caught in the mixed pelagic fisheries. Clause M1.2 is met.

M1.3 Fishery management organisations are publicly committed to sustainability.

IFOP gives advice to SUBPESCA to set up TAC (Biological Acceptable Catch; in Spanish CAB- Captura Aceptable Biologicamente) every fishing season. Overall TAC's are agreed for certain stocks, with a part under Conservation and Management Measures (CMM's) applying to international waters outside Chile's EEZ. Furthermore, as laid down in the LGPA (see M1.4) one of the

main objectives of the Act is to guarantee sustainability of Chile's marine resources. Long term management plans, which reference the Act, ensure rules are in place to achieve this objective. MINECON's mission statement, available on their website, is to generate feasible and sustainable development, with stable progressive equality in the allocation of economic interests. Clause M1.3 is met.

M1.4 Fishery management organisations are legally empowered to take management actions.

Created in 1976 and adopted for this fishery in 2013, the primary legal instrument for fisheries management in Chile has been la Ley General de Pesca y Acuicultura (LGPA) No. 20.657. The LGPA is a modification of the previous fisheries legislation, and includes:

• Commitments convened to manage the sustainable use and conservation of marine resources.

• Commitments convened to make key decisions on conservation measures based on scientific information above all other considerations. Recommendations of Scientific and Technical Committees (CCT-PP) have been made mandatory for all stakeholders.

The LGPA also includes commitments to develop management plans for any fishery with restricted access, and to review and update these plans every five years. Article 5 of the LGPA states that SUBPESCA should determine Biological Reference Points (BRP's) for all targeted stocks. Biologically Acceptable Catches (TAC's) and resource recovery plans are implemented under Article 9.

SUBPESCA resolution No 291/2015 states that all stocks should be exploited around the MSY level, and that the MSY is the objective to be considered when quotas are established. Clause M1.4 is met.

M1.5 There is a consultation process through which fishery stakeholders are engaged in decision-making.

Management Plans set lines of action to address biological, economic, social and ecological matters. There is consultation and evaluation of a series of harvest control rules and definitions of robust rules to allow viable mixed fisheries. Minutes of these and other CCT-PP meetings are published on the relevant websites. A National Fisheries Council created by the Fisheries and aquaculture Law LGPA No. 18.892, ensures the participation of all stakeholders in the fisheries and aquaculture sector. Clause M1.5 is met.

M1.6 The decision-making process is transparent, with processes and results publicly available.

The status of each managed stocks is annually public in the memorandum "Estado de situación de las principales pesquerías en Chile ". In this report information from the Committee for small fisheries and IFOP are taken into account by SUBPESCA to establish management plans.

Therefore, the system is transparent; all information is available in official websites. Should more details be needed they can be obtained under request. Clause M1.6 is met.

References

Ministerio de Economía, Fomento y Turismo MINECON https://www.economia.gob.cl/

http://out.easycounter.com/external/minecon.gov.cl

SUBPESCA http://www.subpesca.cl/portal/616/w3-channel.html

SERNAPESCA www.sernapesca.cl

IFOP https://www.ifop.cl/en

Comité Científico de Pesquerías de Pequeños Pelágicos (CCT-PP) 2021b. Reporte técnico de la primera sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos, año 2021. Subpesca. 9 pp.

https://www.subpesca.cl/portal/616/articles-110568_documento.pdf The South Pacific Regional Fisheries Management Organisation (SPRMO) https://www.sprfmo.int/	
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.	Yes
	M2.2	There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.	Yes
	M2.3	There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.	Yes
	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.	Yes
		Clause outcome:	**PASS**

M2.1 There is an organisation responsible for monitoring compliance with fishery laws and regulations.

Compliance both within and outside Chile's EEZ is monitored by a number of different entities:

• SERNAPESCA: Carry out audits of capture fisheries; implement surveillance and control of compliance with all legal provisions relating to fisheries. Health and environmental monitoring of aquaculture. Develop strategies and procedures for prevention, surveillance and control of high-risk diseases. Information and sectoral statistics. Managing fisheries and aquaculture records.

• Chilean Navy: Within Chile's Exclusive Economic Zone (EEZ) the Navy monitor an area covering approximately 4,542,990 km2 ensuring the prevention of depredation of natural resources by protecting the ecosystem from unauthorized activities.

• Observer Programme: There is a plan of reduction of the bycatch of the species that is reviewed periodically, and the information is used to establish the limits of additional catches in the fishery. Clause M2.1 is met.

M2.2 There is a framework of sanctions which are applied when laws and regulations are discovered to have been broken.

The LGPA defines a range of sanctions for offences including fishing with an unlicensed vessel, illegal discarding, incorrect logbook use, failure to report landings and fishing in a region or fishery other than the one for which the vessel is licenced. Other sanctions are in place for industrial vessels landing more fish than they have quota for. Depending on the offence, sanctions can include one or a combination of: monetary penalties; suspension of fishing licence; and revocation of licence. Clause M2.2 is met.

M2.3 There is no substantial evidence of widespread non-compliance in the fishery, and no substantial evidence of IUU fishing.

In 2005, a national action plan was approved with the aim of preventing, deterring and eliminating IUU fishing. The fishery is monitored and there is no currently no evidence of widespread IUU fishing activities. Chile is now involved in an international program to avoid illegal fishing; ''Acuerdo sobre medidas del Estado rector del Puerto "(Port State Measures). This program obliges landings from other countries to be controlled by Chile and applies to foreign flagged vessels fishing in Chilean waters. Clause M2.3 is met.

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.

Industrial vessels operate under mandatory VMS monitoring. SERNAPESCA carry out audits of capture fisheries; implementing surveillance and control of compliance. Within the EEZ the Chilean Navy monitor an area covering approximately 4,542,990. Km2 . SERNAPESCA makes public an annual report with the infractions registered by fleet. Clause M2.4 is met.

References

Ministerio de Economía, Fomento y Turismo MINECON https://www.economia.gob.cl/
http://out.easycounter.com/external/minecon.gov.cl
SUBPESCA http://www.subpesca.cl/portal/616/w3-channel.html
SERNAPESCA www.sernapesca.cl
IFOP https://www.ifop.cl/en
Comité Científico de Pesquerías de Pequeños Pelágicos (CCT-PP) 2021b. Reporte técnico de la primera sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos, año 2021. Subpesca. 9 pp.
https://www.subpesca.cl/portal/616/articles-110568_documento.pdf
The South Pacific Regional Fisheries Management Organisation (SPRMO) https://www.sprfmo.int/

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		**Araucanian herring (Sardina), *Strangomera bentincki***	
A1	**Data Collection - Minimum Requirements**		
	A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	Yes
	A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	Yes
		Clause outcome:	**PASS**

A1.1 Landings data are collected such that the fishery-wide removals of this species are known.

Fishery-dependent data is collected through port sampling of landings (SERNAPESCA Inspectors) and observer reports (IFOP). Further the commercial landings data, a fraction of the global TAC is for science purposes and are also considered as removals. In 2020 the landings were reporting at 321,307t. **(Figure 1)**

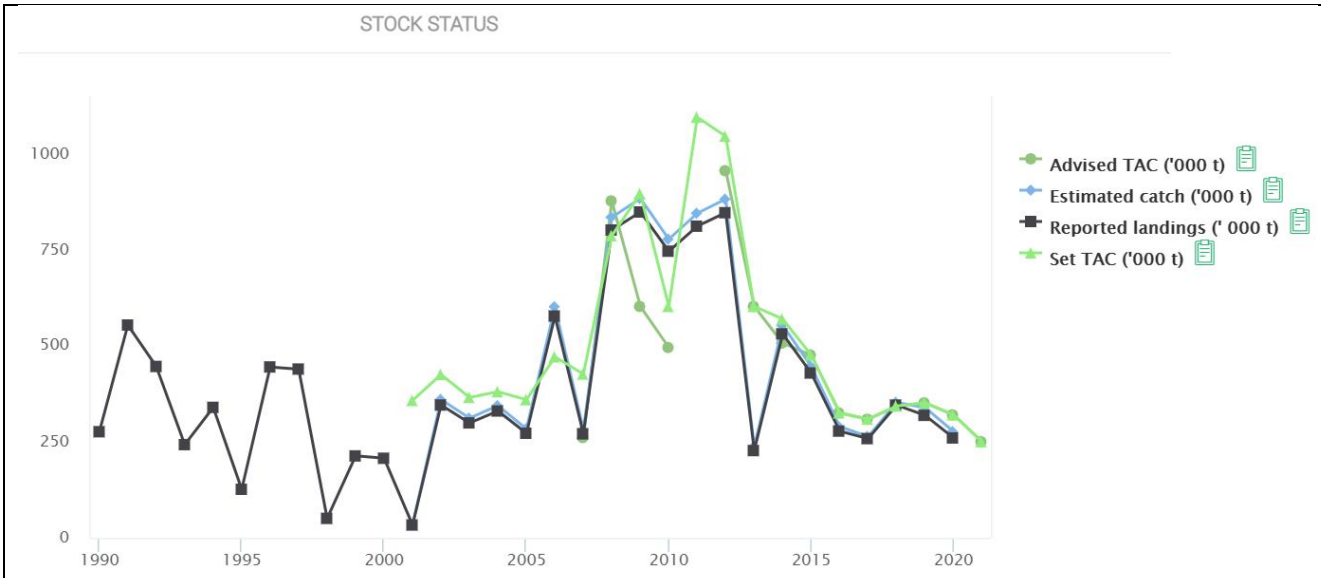

Figure 1. Historical landings of Araucanian herring in the study area. Source: fishsource
Therefore, landings data are collected, and clause A 1.1 is met.

A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.

The Araucanian herring is caught in a mixed pelagic fishery which is monitored by different acoustic surveys. These surveys are conducted biannually since 1999 by means of two cruises: RECLAS in January (summer season; over the recruitment period) and PELACES in May (autumn season). As this method does not consider stock reproductive dynamics, assessments of SSB for small pelagic fish with partial spawning is conducted through the Daily Egg Production Method (DEPM).

Data as spatial distribution, climate conditions and size distribution are also considered in the models to estimate the stock status. Therefore, sufficient additional information is collected to enable an indication of stock status to be estimated and clause A1.2 is met.

References

Basualto, M. J. Z., and J. C. Quiroz. 2017. Informe 1 de estatus. Convenio desempeño 2017. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales, año 2018 en sardina común v-x regiones: sardina común V-X regiones 2018. Subsecretaría de Economía y EMT / Septiembre 2017. 195 pp. IFOP.
https://www.portaltransparencia.cl/PortalPdT/

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.	Yes
	A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	Yes

	A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	Yes
	A2.4	The assessment is subject to internal or external peer review.	Yes
	A2.5	The assessment is made publicly available.	Yes
		Clause outcome:	**PASS**

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.

The Committee for small pelagic fisheries meets annually to evaluate the information from the landings, acoustic surveys and observer programs that IFOP carried over a biological year. All the data are analysed in the committee where representative of several stakeholders are included. With the conclusion a TAC is set up and the stock status is presented annually. Therefore, together with fishery-dependent data IFOP conduct annual stock status assessments which are presented every year to SUBPESCA through meetings of the Scientific Committee for Small Pelagics (CCT-PP) following the long-term management plan for fishery. Clause A 2.1 is met.

A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

Reference points are reviewed in the Scientific Committee for Small Pelagics (CCT-PP) when needed. For this species the reference points in place are as follows: BDRMS=60% BDPR or 55% BDo; BDlimit= 27.5 % BDo and FRMS= F60%BDR. Each annual assessment provides updates on reference points calculated relative to stock status. Stock status is referenced using Kobe plots Clause A2.2 is met.

A2.3 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

CCT-PP recommended a Biologically Acceptable Catch (TAC/TAC) for 2021 between 161,127 and 201,409 t, assuming a discard rate of 2%. Therefore, the removals have been considered appropriate as the results in the last stock assessment are above limits. Clause A2.3 is met.

A2.4 The assessment is subject to internal or external peer review.

Stock assessments and the management approach used in the fishery undergo detailed peer review through annual CCT-PP meetings. These peer reviews can be considered both internal and external as members of committees' present may also be outside the assessment process. Both IFOP and SUBPESCA have also commissioned external peer reviews, for example, a series of workshops were convened with experts from Peru. The Chilean authorities have also invited international experts to evaluate their setting of biological reference points within the MSY framework. Clause A2.4 is met.

A2.5 The assessment is made publicly available.

The information is publicly available in IFOP and SUBPESCA website, however, some information is under request. Clause A2.5 is met. Clause A 2.5 is met.

References

CMSCA. 2021. Acta 1-2021. Sesión vía online. Comité de Manejo de la Sardina Común la y Anchoveta; regiones de Valparaiso a Los Lagos. 4 pp.
https://www.subpesca.cl/portal/616/articles-110681_documento.pdf

MEFT. 2021b. Dec. Ex. Folio 202100025 Establece imputación conjunta de Sardina común y anchoveta entre las Regiones de Valparaíso a Los Lagos, año 2021. (Publicado en Página Web 04-03-2021) (F.D.O. 09-03-2021).

https://www.subpesca.cl/portal/615/w3-article-110135.html CCT-PP. 2021a. Informe técnico no1 de la segunda sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. 2021. 24 pp. https://www.subpesca.cl/portal/616/articles-110512_documento.pdf Basualto, M. J. Z. 2017. Informe 3 de Estatus. Convenio de Desempeño 2016. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales año 2017: Sardina común V -X Regiones. 190 pp. https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/P-483253_anchoveta_V_X.pdf

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.	Yes
	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.	Yes
	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).	Yes
		Clause outcome:	**PASS**

A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.

The TAC is set up every year following scientist recommendations and data from historical series of data and annual surveys. TAC's are divided into three categories: research, industrial and artisanal. The number of commercial landings permitted are subject to change depending on survey results. Normally TAC's are set up for two fishing seasons, effort may be controlled depending on the period of the year. By Chilean Law (LGPA Law No. 20.657) recommendations are provided as a TAC range with the lower limit 20% of actual TAC recommendations. Workshops have been provided by Government to demonstrate best fishing practice including minimising discards and bycatch. Therefore, because of this species is part of the small pelagic management plan, the fishing mortality is controlled by different strategies that allow to keep F below reference points. Clause A3.1 is met.

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.

Landings of this species are keeping below upper advised TAC's and have been decreasing over the years. Mortality has been decreasing over the years so there is a compliance with the limits set up in the annual advice. SERNAPESCA landings statistics has shown that removals of the biological year 2019/20 including 6 % discards are corrected by reaching 276,620 tonnes, below the annual TAC which was established at 321,207 t. Therefore, TAC is not regularly exceeded. Clause A3.2 is met.

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).

In Chile Blim or Proxy is used to inform management decisions rather than prohibit fishery removals. The Fisheries Act (LGPA) does not establish catch restrictions when stocks are below limit biomass (for social and economic reasons and to facilitate

further research). Instead a resource recovery plan must be implemented. Management committees are required to elaborate and implement such recovery plans (Article 9 LGPA); implying reductions in fishing mortality at levels below or equal to FRMS. Therefore, TAC's are set up to fit in these strategies that control the fishing pressure and allow the stock to be above references points. Clause A3.3 is met.

References

CMSCA. 2021. Acta 1-2021. Sesión vía online. Comité de Manejo de la Sardina Común la y Anchoveta; regiones de Valparaiso a Los Lagos. 4 pp.
https://www.subpesca.cl/portal/616/articles-110681_documento.pdf

MEFT. 2021b. Dec. Ex. Folio 202100025 Establece imputación conjunta de Sardina común y anchoveta entre las Regiones de Valparaíso a Los Lagos, año 2021. (Publicado en Página Web 04-03-2021) (F.D.O. 09-03-2021).
https://www.subpesca.cl/portal/615/w3-article-110135.html

CCT-PP. 2021a. Informe técnico no1 de la segunda sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. 2021. 24 pp.
https://www.subpesca.cl/portal/616/articles-110512_documento.pdf

SUBPESCA 2021. Estado actual de las principales pesquerías Chilenas. Año 2020

Basualto, M. J. Z. 2017. Informe 3 de Estatus. Convenio de Desempeño 2016. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales año 2017: Sardina común V -X Regiones. 190 pp.
https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/P-483253_anchoveta_V_X.pdf

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	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.	Yes
		Clause outcome:	**PASS**

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.

The most recent stock assessment is based on the information from the first scientific cruise of the year 2021 (RECLAS) and the first revision on the proposed range of Biologically Acceptable Capture. SSB was 46% below the target biomass reference point, BMSY proxy (SSB20/21/SSBMSY = 0.54), coming from a full exploitation situation in the previous report ((CCT-PP 2021a). Fishing mortality was found to be 38% below the reference point (F20/21/FMSY = 0.62), so the stock is overexploited (with a 38% probability of being collapsed) and is not being overfished (CCT-PP 2021a). In 2020, landings were 260,963 tonnes (7,537

from the industrial fleet; 253,426 from the artisanal fleet) (Sernapesca 2020). Considering a 6% discard (CCT-PP 2021a), total estimated catches are 276,620 tonnes (Figure2)

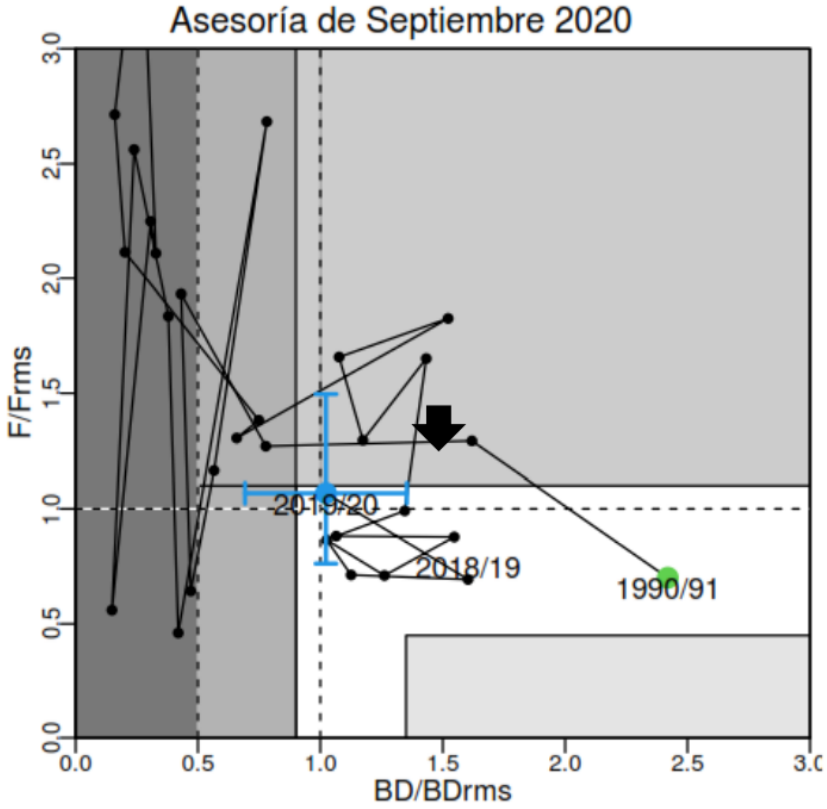

Figure 2. Kobe plots for Araucanian herring in Chile EEZ V to X. Source: SUBPESCA 2021.

Therefore, the stock status is not overfished, and overfishing is not happening (2% above BDRMS and F at 2.18 low below FRMS).

References

CMSCA. 2021. Acta 1-2021. Sesión vía online. Comité de Manejo de la Sardina Común la y Anchoveta; regiones de Valparaiso a Los Lagos. 4 pp.
https://www.subpesca.cl/portal/616/articles-110681_documento.pdf

MEFT. 2021b. Dec. Ex. Folio 202100025 Establece imputación conjunta de Sardina común y anchoveta entre las Regiones de Valparaíso a Los Lagos, año 2021. (Publicado en Página Web 04-03-2021) (F.D.O. 09-03-2021).
https://www.subpesca.cl/portal/615/w3-article-110135.html

CCT-PP. 2021a. Informe técnico no1 de la segunda sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. 2021. 24 pp.

Sernapesca. 2020. Fiscalización en Pesca y Acuicultura. Informe de actividades 2020. Servicio Nacional de Pesca y Acuicultura. 117 pp. Sernapesca.
http://www.sernapesca.cl/sites/default/files/ifpa_2020_0.pdf
https://www.subpesca.cl/portal/616/articles-110512_documento.pdf

SUBPESCA 2021. Estado actual de las principales pesquerías Chilenas. Año 2020

Basualto, M. J. Z. 2017. Informe 3 de Estatus. Convenio de Desempeño 2016. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales año 2017: Sardina común V -X Regiones. 190 pp.
https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/P-483253_anchoveta_V_X.pdf

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

Species Name	**Chilean Anchovy, *Engraulis ringens***	
A1	**Data Collection - Minimum Requirements**	
A1.1	Landings data are collected such that the fishery-wide removals of this species are known.	Yes
A1.2	Sufficient additional information is collected to enable an indication of stock status to be estimated.	Yes
	Clause outcome:	**PASS**

A1.1 Landings data are collected such that the fishery-wide removals of this species are known.

Fishery-dependent data is collected through port sampling of landings (SERNAPESCA Inspectors) and observer reports (IFOP directed). In 2020 landings were reported ay 179,021 tones. Therefore, landings are reported and clause A1.1 is met.

A1.2 Sufficient additional information is collected to enable an indication of stock status to be estimated.

Hydro acoustic surveys have been conducted biannually since 1999 by means of two cruises: RECLAS in January (summer season; over the recruitment period) and PELACES in May (autumn season). As this method does not consider stock reproductive dynamics, assessments of SSB for small pelagic fish with partial spawning are conducted through the Daily Egg Production Method (DEPM). Last survey was in January and the results are still being analysed but result from 2019 are available in SUBPESCA and are used for advice. Clause A1.2 is met.

References

CMSCA. 2021. Acta 1-2021. Sesión vía online. Comité de Manejo de la Sardina Común la y Anchoveta; regiones de Valparaiso a Los Lagos. 4 pp.
https://www.subpesca.cl/portal/616/articles-110681_documento.pdf

MEFT. 2021b. Dec. Ex. Folio 202100025 Establece imputación conjunta de Sardina común y anchoveta entre las Regiones de Valparaíso a Los Lagos, año 2021. (Publicado en Página Web 04-03-2021) (F.D.O. 09-03-2021).
https://www.subpesca.cl/portal/615/w3-article-110135.html

CCT-PP. 2021a. Informe técnico no1 de la segunda sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. 2021. 24 pp.

Sernapesca. 2020. Fiscalización en Pesca y Acuicultura. Informe de actividades 2020. Servicio Nacional de Pesca y Acuicultura. 117 pp. Sernapesca.
http://www.sernapesca.cl/sites/default/files/ifpa_2020_0.pdf
https://www.subpesca.cl/portal/616/articles-110512_documento.pdf

SUBPESCA 2021. Estado actual de las principales pesquerías Chilenas. Año 2020

Basualto, M. J. Z. 2017. Informe 3 de Estatus. Convenio de Desempeño 2016. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales año 2017: Sardina común V -X Regiones. 190 pp.
https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/P-483253_anchoveta_V_X.pdf

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.	Yes
	A2.2	The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.	Yes
	A2.3	The assessment provides an indication of the volume of fishery removals which is appropriate for the current stock status.	Yes
	A2.4	The assessment is subject to internal or external peer review.	Yes
	A2.5	The assessment is made publicly available.	Yes
		Clause outcome:	**PASS**

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.

Hydro acoustic surveys have been conducted biannually since 1999 by means of two cruises: RECLAS in January (summer season; over the recruitment period) and PELACES in May (autumn season). Together with fishery-dependent data IFOP conduct annual stock status assessments which are presented every year to SUBPESCA through meetings of the Scientific Committee for Small Pelagics (CCT-PP).

A2.2 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.

Biomass target reference points - BMSY proxy -are defined at 55% of virgin spawning stock biomass (SSB0). Limit reference points - Blim proxy – are set at 27.5% of SSB0. Target fishing mortality is associated with the fishing intensity that maintains BMSY, being estimated at FMSY proxy 60%BDPR. Each annual assessment provides updates on reference points calculated relative to stock status. SSBMSY for the stock is calculated according to the management plan. Stock status is referenced using Kobe plots (figure 3):

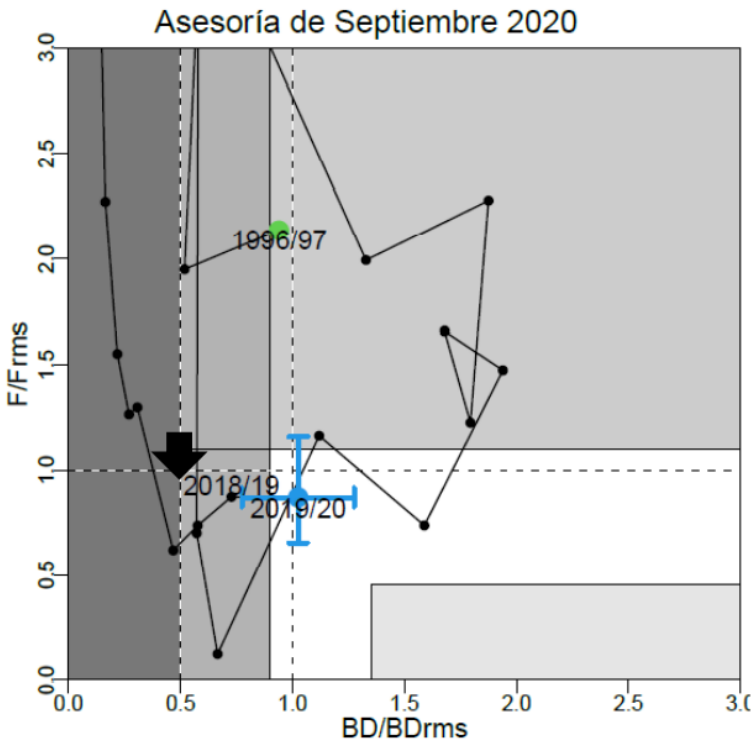

Figure 3. Kobe plot for Anchoveta in the region Valparaiso to Los Lagos. (SUBPESCA 2021).

A2.3 The assessment provides an estimate of the status of the biological stock relative to a reference point or proxy.
TAC's are defined every year following the scientific advice. For 2021 the TAC's was set up between 168,134 and 210,167 tonnes. TACs are available in the Ex. D. N 243/2019 where allocation for each fishery can be consulted. Clause A2.3 is met.

A2.4 The assessment is subject to internal or external peer review.
Stock assessments and the management approach used in the fishery undergo detailed peer review through annual CCT-PP meetings. These peer reviews can be considered both internal and external as members of committees' present may also be outside the assessment process. Both IFOP and SUBPESCA have also commissioned external peer reviews for their publications. The Chilean authorities have also invited international experts to evaluate their setting of biological reference points within the MSY framework. Clause A2.4 is met.

A2.5 The assessment is made publicly available.
Reports stock assessments and advice on TAC's can be found on IFOP and SUBPESCA websites. ACTAS published on SUBPESCA's website give summaries of the stock assessment process and confirm final decisions on TAC's. Stock-recruitment and spawning period are closely monitored by IFOP and published in monthly bulletins (INFORMES) which also contain details of closed seasons by area and general information on current stock status. All the information is available however some of them is under request. Clause A2.5 is met.

References

CMSCA. 2021. Acta 1-2021. Sesión vía online. Comité de Manejo de la Sardina Común la y Anchoveta; regiones de Valparaiso a Los Lagos. 4 pp.
https://www.subpesca.cl/portal/616/articles-110681_documento.pdf
MEFT. 2021b. Dec. Ex. Folio 202100025 Establece imputación conjunta de Sardina común y anchoveta entre las Regiones de Valparaíso a Los Lagos, año 2021. (Publicado en Página Web 04-03-2021) (F.D.O. 09-03-2021).
https://www.subpesca.cl/portal/615/w3-article-110135.html
CCT-PP. 2021a. Informe técnico no1 de la segunda sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. 2021. 24 pp.
Sernapesca. 2020. Fiscalización en Pesca y Acuicultura. Informe de actividades 2020. Servicio Nacional de Pesca y Acuicultura. 117 pp. Sernapesca.
http://www.sernapesca.cl/sites/default/files/ifpa_2020_0.pdf
https://www.subpesca.cl/portal/616/articles-110512_documento.pdf
SUBPESCA 2021. Estado actual de las principales pesquerías Chilenas. Año 2020
Basualto, M. J. Z. 2017. Informe 3 de Estatus. Convenio de Desempeño 2016. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales año 2017: Sardina común V -X Regiones. 190 pp.
https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/P-483253_anchoveta_V_X.pdf

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.	Yes
	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.	Yes
	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).	Yes
		Clause outcome:	**PASS**

A3.1 There is a mechanism in place by which total fishing mortality of this species is restricted.

The TAC is set up every year following scientist recommendations and data from historical series of data and biannual surveys. TAC's are divided into three categories: research, industrial and artisanal. The number of commercial landings permitted are subject to change depending on survey results. Normally TAC's are set up for two fishing seasons, effort may be controlled depending on the period of the year. By Chilean Law (LGPA Law No. 20.657) recommendations are provided as a range with the lower limit as 20% of actual recommendations. Workshops have been provided by Government to demonstrate best fishing practice including minimising discards and bycatch. Temporary closure orders have been issued by Government when high proportions of juvenile anchovy have been detected. When large quantities of juveniles are detected closure orders may be extended for periods of one week to fifteen days or more. A maximum catch limit per owner regime has been established for industrial sector (Regions V, VIII and X). All these strategies implemented allow control the fishing pressure and therefore there are mechanism to control F. Clause A3.1 is met.

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.

TACs are in place since 2001 and are split to accommodate commercial and research purposes. TAC's are allocated to the industrial fishery in three periods (January-April 85%, May-August 7% and September-December 7%) considering seasonality of the catch and temporal closures that protect spawning stock and recruits. TACs are set up initially and can be corrected after acoustic surveys. Further, TAC's are set up following different scenarios what allows certain flexibility to proceed depends on the status of the stock. In 2020 TAC for anchoveta in region V to X has been modified and then increased to 179,021 tonnes. Therefore, following this recommendation published in Informe Técnico (R.PESQ.) N° 173-2020 the removals are not exceeded as recommendations fits in the limits set up in the management plan for this fishery. Clause A3.2 is met.

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).

In Chile Blim or Proxy is used to inform management decisions rather than prohibit fishery removals. The Fisheries Act (LGPA) does not establish catch restrictions when stocks are below limit biomass (for social and economic reasons and to facilitate further research). Instead a resource recovery plan must be implemented. Management committees are required to elaborate and implement such recovery plans (Article 9 LGPA); implying reductions in fishing mortality at levels below or equal to FRMS. However due to removals are controlled following the advice, they are not exceeding the references points and therefore prohibitions are not needed. Further this year TAC has been reviewed and increased that means that the stock is not below limits (Subpesca 2020). Clause A3.3 is met.

References

CMSCA. 2021. Acta 1-2021. Sesión vía online. Comité de Manejo de la Sardina Común la y Anchoveta; regiones de Valparaiso a Los Lagos. 4 pp.
https://www.subpesca.cl/portal/616/articles-110681_documento.pdf

MEFT. 2021b. Dec. Ex. Folio 202100025 Establece imputación conjunta de Sardina común y anchoveta entre las Regiones de Valparaíso a Los Lagos, año 2021. (Publicado en Página Web 04-03-2021) (F.D.O. 09-03-2021).
https://www.subpesca.cl/portal/615/w3-article-110135.html

CCT-PP. 2021a. Informe técnico no1 de la segunda sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. 2021. 24 pp.

Sernapesca. 2020. Fiscalización en Pesca y Acuicultura. Informe de actividades 2020. Servicio Nacional de Pesca y Acuicultura. 117 pp. Sernapesca.
http://www.sernapesca.cl/sites/default/files/ifpa_2020_0.pdf
https://www.subpesca.cl/portal/616/articles-110512_documento.pdf

SUBPESCA 2021. Estado actual de las principales pesquerías Chilenas. Año 2020

Basualto, M. J. Z. 2017. Informe 3 de Estatus. Convenio de Desempeño 2016. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales año 2017: Sardina común V -X Regiones. 190 pp. https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/P-483253_anchoveta_V_X.pdf

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	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.	Yes
		Clause outcome:	**PASS**

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.
The most recent stock assessment includes information from the first scientific cruise of the year 2021 and the first revision on the proposed range of Biologically Acceptable Capture. SSB was 41% above the target biomass reference point, BMSY proxy (SSB20/21/SSBMSY = 1.41), confirming the recovery of the stock since 2017/18, and overpassing the target SSB since 2019/20 (CCT-PP 2021a). Fishing mortality was found to be 22% below the reference point (F20/21/FMSY = 0.78), so the stock is not overexploited and is not being overfished (CCT-PP 2021a). The condition is improving from the previous assessment from the CCT-PP (information from cruises and evaluations until October 2020), where SSB20/21/SSBMSY was estimated at 1.025, and F20/21/FMSY at 0.872 (CCT-PP 2020a). In 2020, catches were 166,244 tonnes (1,794 from the industrial fleet; 164,450 from the artisanal fleet) (Sernapesca 2020) (See figure 3 Kobe plot above).

Therefore, after reviewing TAC has been set up at 179.021 tonnes (9143.217 - 179.021 mt) following the article 153 a of the LGPA. Clause A4.1 is met.

References

CMSCA. 2021. Acta 1-2021. Sesión vía online. Comité de Manejo de la Sardina Común la y Anchoveta; regiones de Valparaiso a Los Lagos. 4 pp.
https://www.subpesca.cl/portal/616/articles-110681_documento.pdf
MEFT. 2021b. Dec. Ex. Folio 202100025 Establece imputación conjunta de Sardina común y anchoveta entre las Regiones de Valparaíso a Los Lagos, año 2021. (Publicado en Página Web 04-03-2021) (F.D.O. 09-03-2021).
https://www.subpesca.cl/portal/615/w3-article-110135.html
CCT-PP. 2021a. Informe técnico no1 de la segunda sesión del Comité Científico Técnico de Pesquerías de Pequeños Pelágicos. 2021. 24 pp.
Sernapesca. 2020. Fiscalización en Pesca y Acuicultura. Informe de actividades 2020. Servicio Nacional de Pesca y Acuicultura. 117 pp. Sernapesca.
http://www.sernapesca.cl/sites/default/files/ifpa_2020_0.pdf
https://www.subpesca.cl/portal/616/articles-110512_documento.pdf
SUBPESCA 2021. Estado actual de las principales pesquerías Chilenas. Año 2020
Basualto, M. J. Z. 2017. Informe 3 de Estatus. Convenio de Desempeño 2016. Estatus y posibilidades de explotación biológicamente sustentables de los principales recursos pesqueros nacionales año 2017: Sardina común V -X Regiones. 190 pp.
https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/P-483253_anchoveta_V_X.pdf

Links	
MARINTRUST Standard clause	**1.3.2.1.4**
FAO CCRF	**7.2.1, 7.2.2 (e)**

GSSI	**D6 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		**Chilean jack Mackerel, *Trachurus murphyi***	
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.	Yes
	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.	Yes
		Clause outcome:	PASS

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.

Fisheries removals are collected by the South Pacific Regional Fisheries Management Organization conducts a joint jack mackerel assessment and since 2013, catch limits are agreed for the assessment unit area and for the Convention area, in accordance with scientific recommendations. Commercial landing data, information, and decisions from all fishing countries are integrated into the assessment process. Therefore, Fishery removals of the species in the fishery under assessment are included in the stock assessment process. The catch data for the model sum values from various countries and form four “fleets”, which are intended to be consistent with the gear and general areas of fishing. The catches from each of these fleets are presented in figure below.

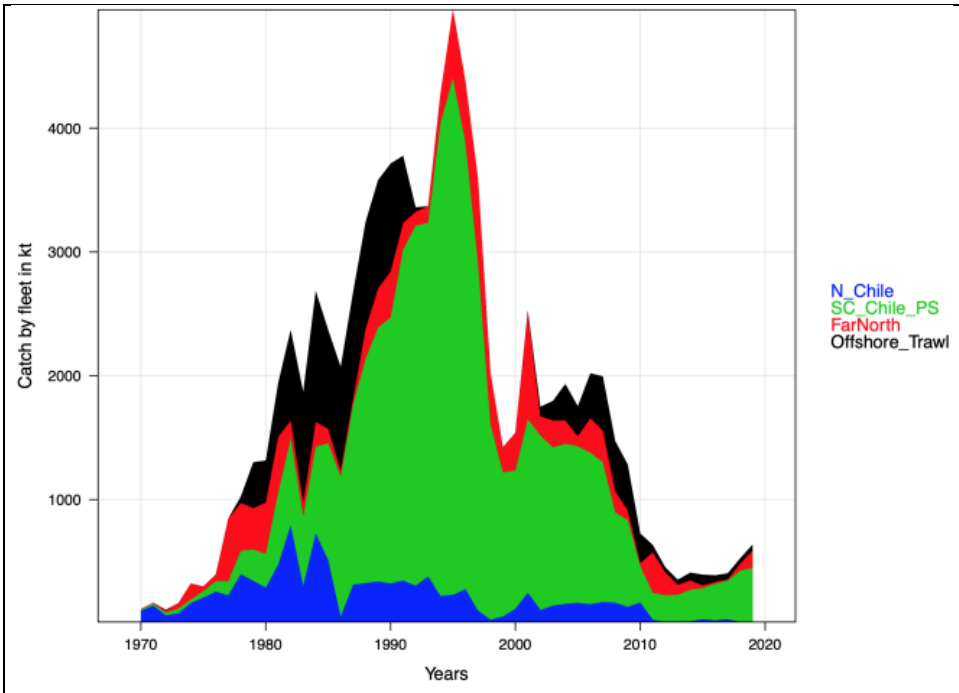

Figure 1. Catch of Jack mackerel by fleet. Green is the SC Chilean fleet, black is the offshore trawl fleet, red is the far north fleet, and blue in the northern Chilean fleet. SOURCE: SPRFMO-SC7

Length data are available from all major fisheries both inside and outside the EEZs. Length distributions from Chile and the older international fleet were converted into age distributions using annual Chilean age-length keys. The more recent length composition data from China and EU were converted to age compositions by applying Chilean age-length keys as compiled by quarter of the year and then aggregated. Therefore, Fishery removals of the species in the fishery under assessment are included in the stock assessment process. Clause C1.1 is met.

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.
Reference points remain as in previous assessment. BMSY is temporarily fixed at 5,500,000 tonnes and is used to determine the status of the stock; another BMSY (identified as SS BMSY in the SPRFMO report), dynamic and estimated annually, is at 4,328,000 tonnes and FMSY, also dynamic, is at 0.12 (SPRFMO 2019a). The estimated increase in biomass to reach BMSY, resulted from the fishing mortality rates decreasing in the past three years to 0.08 in 2019 and well below FMSY, along with the slight recruitment improvement. Catches are preliminarily reported at 637,811 tonnes in 2019 for the whole assessment unit, rising in the last five years (SPRFMO 2019b). Therefore, the stock is above limits reference points. (Figure).

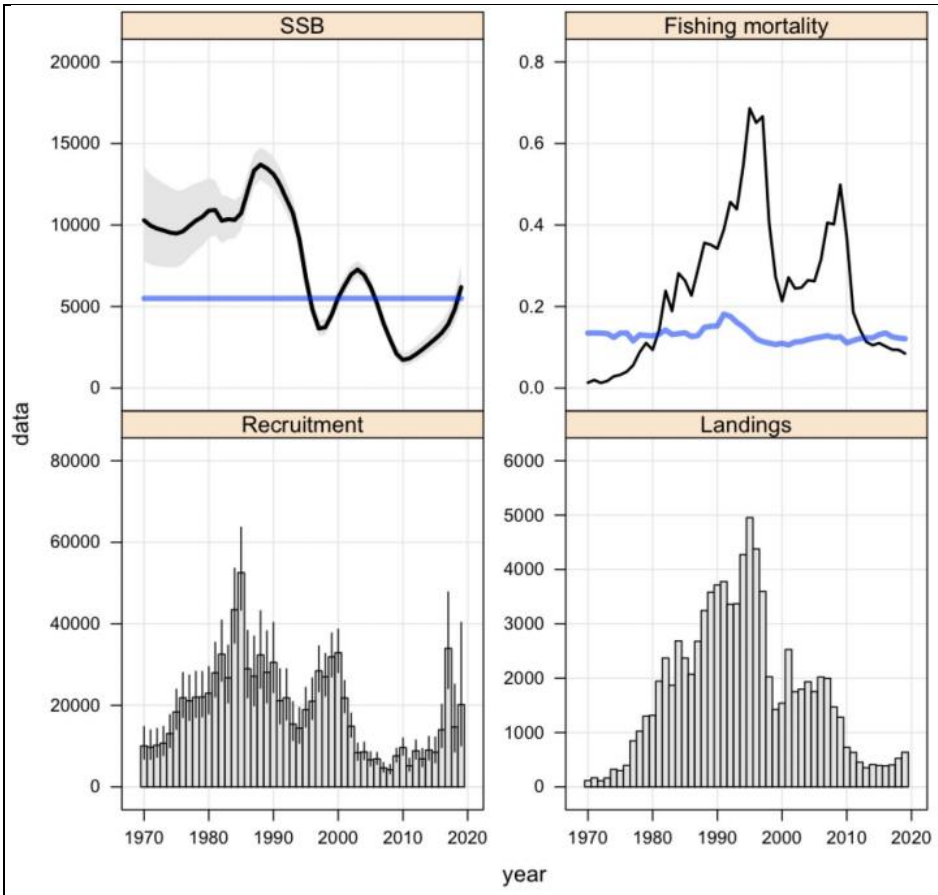

Figure 5. Model 1.00—single-stock hypothesis—summary estimates over time showing spawning biomass (kt; top left), recruitment at age 1 (millions; lower left) total fishing mortality (top right) and total catch (kt; bottom right). Blue lines represent the provisional BMSY (upper left) and dynamic estimates of FMSY (upper right). SOURCE: SPRFMO-SC7

References

SUBPESCA 2020, Programa de seguimiento de las principales pesquerías pelágicas de la zona norte de Chile, Regiones de Arica Parinacota y Coquimbo, año 2019.

IFOP 2021. Estado actual de las principales pesquerías chilenas, 2020.

SPRFMO. 2019d. 7th Scientific Committee Report - Annex 8. Jack Mackerel Technical Annex Rev1/1. SPRFMO. 7-12 October 2019 Havana, Cuba. 51 pp. SPRFMO. https://www.sprfmo.int/assets/2019-SC7/Reports/SC7-Report-Annex-8-JM-Tech-Annex-Rev1.pdf

Links	
MARINTRUST Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

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.	Yes
	F1.2	There is no substantial evidence that the fishery has a significant negative effect on ETP species.	Yes
	F1.3	If the fishery is known to interact with ETP species, measures are in place to minimise mortality.	Yes

	Clause outcome:	PASS

F1.1 Interactions with ETP species are recorded.

The fishery is known to interact with several ETP species: marine mammals, seabirds and sea turtles represent the totally of the incidental catches. The observer program has shown between 2017 and 2019 the following data:

The marine mammals represented 82.7% of the animals caught incidentally, with reports of capture from the limit north of the Arica region (18 ° 21´S) to Punta Cañas (24 ° 54´S), being the common sea lion (*Otaria flavescens*) who reported 97% of the captures of this group. The incidental catches of seabirds represented 17.1% of the captures with 842 captured animals, where the species belonging to the order suliformes (booby and cormorants) and charadriformes (gulls and terns) appear to be the largest catches. Regarding the procelariformes, the sooty shearwater (*Ardenna grisea*) was the one that showed the highest number of specimens captured equivalent to 99% of the birds in this group, with records between Pisagua (19 ° 35´S) and Punta Tres Picos (24 ° 20´S). The marine reptiles (turtles) on the other hand, represented 0.2% of the captures with 8 reports during the analysed period and which catches were observed mainly among the regions of Arica and Tarapacá. Therefore, the seasons and the areas where interactions happen have a key relationship with the fishery, that is one of the reasons of why closures are analysed, and they can be modified between fishing seasons. Regarding the reports of incidental mortality, the procelariforms were the ones that presented higher mortalities (72%), compared to coastal birds (18%) and mammals (10%), being the sooty shearwater, the species that represented 70% of the total mortalities reported in the period 2017-2019 (Vega et al; 2020).

Further, Specific logbook data for recording bycatch, incidental and ETP species capture according to FAO and ORP protocol (2017-2018) are available and they showed very similar information than reported by Vega at al; 2020 in the observer program. Therefore, there is evidence that the fishery does not have negative effect on ETPs species therefore, Interactions with ETP species are recorded and the fishery passes clause F1.1.

F1.2 There is no substantial evidence that the fishery has a significant negative effect on ETP species.

The discarding reduction plan established that all marine mammals, reptiles, penguins and other seabirds should be returned to the sea if not severely injured (MEFT 2019).

Regarding seabirds in the observed hauls the most representative bird, was the Sooty Shearwater (*Ardenna grisea*). This species is classified as declining the population; however, the total number of mature individuals is estimated at 8,800,000 therefore due to the most impact detailed by the observer was feeding on the catch the fishery does not represent negative impact for this species. Pink footed shearwater (*Ardenna creatopus*) is seen in mixed colonies with sooty shearwater but in less percentage. Further the population is considered vulnerable in the area but however the trends are unknown although long-term breeding season monitoring suggest stable populations. Same rationale was given to Peruvian booby (Sula variegate) which has defined as stable in the last stock assessment. The other species impacted has shown very low percentages of CIP (Table below). Further, the sea lions, is listed as Least concern in the IUCN red list. The global population is estimated at 222,5000 mature individuals and it is considered stable. Therefore, the fishery does not impact the population and it does not represent a risk for the colonies in the area as trends are positive for some of the most important local populations.

Table 1. Species, number of specimens and percentage of observed species during the different fishing season over the year. Source: Vega et al 2020

Nombre común	Nombre Científico	Captura	Muertos	Mort (%)	CIP	CV_{CIP}	MIP	CV_{MIP}
Lobo marino común	*Otaria flavescens*	3.948	5	0,13	1,30	374	0,002	2.464
Lobo fino austral	*Arctocephalus australis*	1	0	0	0,0003	5.513	-	-
Gaviota garuma	*Leucophaeus modestus*	6	6	100	0,002	5.513	0,002	5.513
Pelicano peruano	*Pelecanus thagus*	28	15	53,6	0,01	2.044	0,005	2.172
Piqueros	*Sula variegata*	98	58	59,2	0,03	2.745	0,019	2.089
Guanay	*Phalacrocorax bouganvilli*	47	15	31,9	0,02	4.339	0,005	3.906
Gaviotín monja	*Larosterna inca*	61	0	0	0,02	5.423	-	-
Gaviota de Franklin	*Larus pipixcan*	2	2	100	0,001	5.513	0,001	5.513
Pingüino de Humboldt	*Spheniscus humboldti*	9	1	11,1	0,003	2.524	0,0003	5.513
Albatros ceja negra	*Thalassarche melanophris*	1	1	100	0,0003	5.513	0,0003	5.513
Fardela blanca	*Ardenna creatopus*	8	8	100	0,003	5.513	0,003	5.513
Fardela negra	*Ardenna grisea*	582	390	67	0,19	2.981	0,128	2.997
Tortuga verde	*Chelonia mydas*	3	0	0	0,001	3.182	-	-
Tortuga laúd	*Dermochelys coriacea*	2	0	0	0,001	3.897	-	-
Tortuga cabezona	*Caretta caretta*	1	0	0	0,0003	5.513	-	-
Tortuga olivácea	*Lepidochelys olivacea*	2	0	0	0,001	3.897	-	-
Delfín oscuro	*Lagenorhynchus obscurus*	41	30	73,2	0,01	2.354	0,010	2.584
Delfín común	*Delphinus delphis*	56	16	28,6	0,02	2.340	0,005	2.711
Delfín nariz de botella	*Tursiops truncatus*	4	4	100	0,001	5.513	0,001	5.513
Delfín sin identificar	-	15	0	0	0,005	5.513	-	-

Mort (%) = Mortalidad = Número de animales muertos/Número de animales capturados
Captura Incidental Promedio (CIP) = Número de animales capturados/Número de lances observados
Coeficiente de Variación Captura Incidental Promedio (CV_{CIP})
Mortalidad Incidental Promedio (MIP) = Número de animales muertos/Número de lances observados
Coeficiente de Variación Tasa Mortalidad Incidental (CV_{MIP})

Regarding marine mammals, three species were identified but the incidental catches (CIP) were very low for all of them and further for turtles.

Araucanian herring along with other small pelagic of this ecosystem can be a main prey species for some seabird's population. Food availability is managed by defining Marine Protected Areas where breeding is located. Since 2014 the Government of Chile has established different protective areas being reaching a 40 % of coverture of the EZZ in 2018. Some of these areas are protective ensure the ETPs are not impacted by fishing activities.

Having said that, there is no substantial evidence that the fishery has a significant negative effect on ETP species. Clause F1.2 is met.

F1.3 If the fishery is known to interact with ETP species, measures are in place to minimise mortality.
The interaction of the fishery with ETP species is recently known after an analysis of the 2017-2019 time series. Several mitigation measures have been recommended in the recently published discard reduction plan. Developments to improve knowledge of potential impacts of the fishery on ETP species include:

- A software platform developed for the registry of incidental fishing in the operation of industrial fleets (XV-X).
- On-board vessel protocols for the release and treatment of ETP fauna.
- Training programs for crews of fishing vessels.
- Increase the coverage of on-board observers

In the last ACAP review it was accepted that even though Chile need to improve the modelling of impacts on seabirds the measures implemented for all the fisheries is working on reducing the bycatch. The Chilean NPOA states that mitigation measures agreed or to be developed will be applied in any fishery where the mortality of seabirds is > 0.05 birds/1000 hooks (Chile, 2007).

Mortality of ETPs species were rare observed however that is happening in very low percentage and for that reason mitigation measures are in place.

Further, the discarding reduction plan established that all marine mammals, reptiles, penguins and other seabirds should be returned to the sea if not severely injured (MEFT 2019c). There also is a measure in place specific to reduce interactions with the shearwater's populations: the prohibition to cast nets during the day in the vicinities of the nesting areas of the birds (SUBPESCA 2017d).

As mentioned above, there is a list of measures directed to reduce bycatch and mortality of unintended captures, but these are not specific for seabirds, but for all captures (SUBPESCA 2017d).

There is no substantial evidence that the fishery has a significant negative effect on ETP species. If the fishery is known to interact with ETP species, measures are in place to minimise mortality. Clause F1.3 is met.

References

Vega, R., L. Ossa, B. Suárez, M. Jiménez, S. Henríquez, A. González, R. Ojeda, and et al. 2020. Programa de observadores científicos: Programa de investigación y monitoreo del descarte y la captura de pesca incidental en pesquerías pelágicas, 2019-2020. INFORME FINAL. Convenio de Desempeño 2019. 442 pp.
https://www.ifop.cl/wp-content/contenidos/uploads/RepositorioIfop/InformeFinal/2020/P-581156.pdf

Cárdenas-Alayza, S., Crespo, E. & Oliveira, L. 2016. Otaria byronia. The IUCN Red List of Threatened Species 2016: e.T41665A61948292. https://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T41665A61948292.en.

BirdLife International. 2019. Ardenna grisea. The IUCN Red List of Threatened Species 2019: e.T22698209A154440143. https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T22698209A154440143.en.

ACAP. 2018. Agreement on the Conservation of Albatrosses and Petrels.
https://acap.aq/es/acap-acuerdo/204-acuerdo-sobre-la-conservacion-de-albatros-y-petreles/file

MEFT. 2019c. Decreto Exento 2186/2019. Establece nómina de especies objectivo y su fauna acompañante sometidas a los artículos 7oA, 7oB Y /oC de la Ley General de pesca y acuicultura para pesquería de Sardina Comun y anchoveta, Año 2019cuotas de captura de unidades de pesqueria de recursos pelágicos pequeños que indica sometidas a licencias transables de pesca, año 2020.
http://www.subpesca.cl/portal/615/articles-104596_documento.pdf

SUBPESCA. 2017d. Plan de reducción del descarte y de la captura de pesca incidental para la pesquería industrial y artesanal de sardina común (Strangomera bentincki) y anchoveta (Engraulis ringens) V-X regiones. Informe técnico (R.Pesq no 95/2017). SUBPESCA, Gobierno de Chile. 58 pp. SUBPESCA.

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.	Yes

	F2.2	There is no substantial evidence that the fishery has a significant negative impact on physical habitats.	Yes
	F2.3	If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.	Yes
		Clause outcome:	**PASS**

F2.1 Potential habitat interactions are considered in the management decision-making process.

Chile has established a great proportion of marine protected areas (MPAs), in 2018 Chile was one of the countries with more MPAs defined where fisheries activities take place, even above the international targets (SDGs and CBD- "Aichi target 11). All these areas are regulated under legislation and their effectiveness is monitored in the Technical Scientific Committee for Small Pelagics (CCT-PP) and managed by General Law on Fisheries and Aquaculture of 1991. To define these areas information from VMS is taken into account to enclose fishing grounds. Different information collected in surveys, observer program and directly from the fishery are further considered to define the closure areas for different seasons and fisheries. All the information is shared among the stakeholders involved in the CCT-PP where advices are given to SUBPESCA who finally decide the management strategies for all the component possible impacted by the fishery. Clause F2.1 is met.

F2.2 There is no substantial evidence that the fishery has a significant negative impact on physical habitats.

No direct habitat damage is known in purse seine fisheries. Such damage is unlikely due to the gear types used (Source SPRFMO 2014). Artisanal purse seines can reach dimensions of 30 fathoms depth by 240 fathoms length (approx. 55 m x 249 m) while industrial purse seines can reach up to 60 × 500 fathoms (approx. 110 m x 915 m). This assessment is focussed on industrial purse seine and in general, the impact of this fishing gear on the seafloor is not a subject under technical or scientific debate, since these nets are usually deployed at greater depths, where bottom contact does not occur.

Footprint of the fishery is also available due to the use of VMS therefore there is a monitoring system in place to avoid the entry in vulnerable and protected areas. Although as a pelagic fishery interaction with these areas are very rar. Clause F2.2 is met.

F2.3 If the fishery is known to interact with physical habitats, there are measures in place to minimise and mitigate negative impacts.

General Law (Ley de Pesca (L.G.P.A 20.657)) is in charge of managing the impact of the fisheries in the habitats. Measures are in place to monitor and control MPAs in Chile and to prevents the industrial fleet from entering the coastal zone to carry out extractive fishing operations. It has also become a conservation measure for the bulk of fishery resources that spawn near the coast and inland waters. The regulation is designed to protect coastal pelagic resources, being of benefit mainly to Araucanian herring and anchovy fisheries. Reserve zones may be temporarily suspended through authorizations for research fishing and dredging that allow temporary entries of industrial vessels into zones only in specific areas and only during specific periods. Marine ecoregions were listed and classification criteria identified in (Rovira and Herreros 2016), a comprehensive and integrated study of Vulnerable Marine Ecosystems (VME) in Chile. The modified version of the General Law for Fisheries and Aquaculture (SUBPESCA 2017e) includes a definition of VME (seamounts, hydrothermal vents, cold-water corals, submarine canyons) where fishing operations in contact with the seabed are forbidden.

Therefore, there are mechanism in place to minimise the impact on habitats and mitigate the possible negative impacts that the fishing activities might create.

Clause F2.3 is met.

References

Petit, I. J., A. N. Campoy, M.-J. Hevia, C. F. Gaymer, and F. A. Squeo. 2018. Protected areas in Chile: are we managing them? Revista Chilena de Historia Natural 91(1):1.

https://doi.org/10.1186/s40693-018-0071-z

SUBPESCA. 2017e. Ley General de Pesca y Acuicultura (texto actualizado incorpora modificación Ley N° 21.033). 189 pp. http://www.subpesca.cl/portal/615/articles-88020_documento.pdf

Rovira, J., and J. Herreros. 2016. Clasificación de ecosistemas marinos chilenos de la zona económica exclusiva. Departamento de Panificación y Políticas en Biodiversidad, División de Recursos Naturales y Biodiversidad. Ministerio del Medio Ambiente. 48 pp. MMA. https://mma.gob.cl/wp-content/uploads/2018/03/Clasificacion-ecosistemas-marinos-de-Chile.pdf

SUBPESCA. 2017e. Ley General de Pesca y Acuicultura (texto actualizado incorpora modificación Ley N° 21.033). 189 pp. http://www.subpesca.cl/portal/615/articles-88020_documento.pdf

SUBPESCA. Ecosistemas Marinos Vulnerables. Subpesca. https://www.subpesca.cl/portal/616/w3-propertyvalue-50833. https://www.subpesca.cl/portal/616/w3-propertyvalue-50833.html#collapse10

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.	Yes
	F3.2	There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.	Yes
	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.	Yes
		Clause outcome:	**PASS**

F3.1 The broader ecosystem within which the fishery occurs is considered during the management decision-making process.
Annual temporal closures for the Araucanian herring and anchovy fishery in V-X protects spawning stock and juveniles. These closures are mobile and depend on monitoring of the biological indicators. An introduction of a five mile artisanal-exclusive zone near the shoreline has provided significant protection to spawners and other shallow-water organisms from industrial fishing activities. A maximum catch limit per owner regime has been established for the industrial sector (Regions V, VIII and X). Fish stocks are known to be highly dependent on recruitment which in turn changes with environmental conditions and oceanographic conditions in the Chilean upwelling ecosystems like the El Niño and La Niña. The management plan includes a regular sampling for bio-oceanographic conditions in Biobío and Araucanía Regions (Subpesca 2016) however, the las t report was published in 2016 and there are no updates since then. Therefore, several components of the ecosystem are considered in the management of the fishery. Clause F3.1 is met.

F3.2 There is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem.
Due to the low trophic level of the species under consideration there can be an effect on other species which prey on the species under assessment. To account for predation of these species' models have been adapted. Models are taken into consideration resource competition between the fishery and top-predators (e.g. seabirds) to better understand the ecosystem needs. TACs are calculated considering different scenarios depends on environmental condition where ecosystem needs are also integrated. The more precautionary approach is taken, and reviews are in place over the year resulting in TACs modifications if needed. Therefore, the ecosystem needs are continuously presented in the management strategies and

therefore there is no substantial evidence that the fishery has a significant negative impact on the marine ecosystem. Clause F3.2 is met

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.
This stock is highly dependent on recruitment which in turn changes with environmental conditions and oceanographic conditions in the important Chilean upwelling ecosystem, like the El Niño and La Niña.
Conservation areas for both anchoveta and Araucanian herring have been identified. The relationship between the different stages of the species life cycle as well as spawning areas with oceanographic and ecological processes has been studied (Canales-Aguirre et al. 2017). There are annual temporal closures for this fishery to protect spawning and juveniles. (e.g. (MEFT 2018b)) .

These closures are mobile and depend on monitoring of the biologic indicators taking additional precaution in the allocation of the TACs every fishing season.

Further, the Ecosystem-based Fisheries Management (EBFM) concept has been integrated into the new Chilean Fisheries Act but many challenges are still preventing an ecosystem-level approach however new models are adopted to include ecosystems needs in the calculation of the TACs. Clause F3.3 is met.

References

Subpesca. 2016. Plan de Manejo para la Pesquería de Sardina Común y Anchoveta V a la X Regiones. 72 pp. http://www.subpesca.cl/institucional/602/articles-94523_documento.pdf.
MEFT. 2018b. Decreto Exento 417/2018. Establece veda biológica para el recurso Anchoveta en areay periodoque indica y fija porcentaje de especies como fauna acompañante que señala.a licencias transables de pesca, año 2019.
http://www.subpesca.cl/portal/615/w3-article-101810.html
Presencia e interacción del ensamble de aves marinas durante faenas de pesca industrial de cerco de anchoveta (Engraulis ringens) en la zona norte de Chile Centro de Investigación Aplicada del Mar S.A., CIAM Septiembre 2019.
R31 MEFT. 2016. Resolución Exenta N° 2746-2016. Aprueba Plan de Manejo para la Pesquería de Sardina Común y Anchoveta V a la X Regiones. 2 pp.
MEFT. 2018b. Decreto Exento 417/2018. Establece veda biológica para el recurso Anchoveta en areay periodoque indica y fija porcentaje de especies como fauna acompañante que señala.a licencias transables de pesca, año 2019.
http://www.subpesca.cl/portal/615/w3-article-101810.html
Porobic, J., E. A. Fulton, S. Frusher, C. Parada, M. Haward, B. Ernst, and D. Stram. 2018. Implementing Ecosystem-based Fisheries Management: Lessons from Chile's experience. Marine Policy 97:82-90.
http://www.sciencedirect.com/science/article/pii/S0308597X17307510
Canales-Aguirre, C. B., S. Ferrada-Fuentes, R. Galleguillos, H. H. Sepúlveda, O. E. Artal, and C. Parada. 2017. Identificación de áreas de conservación o resguardo para los recursos sardina común y anchoveta en la zona centro sur de Chile. Informe final FIPA 2016-34. 326 pp.
http://www.subpesca.cl/fipa/613/articles-96189_informe_final.pdf

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.

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)

Appendix

MarinTrust Fishery Assessment Peer Review Template

This section comprises a summary of the fishery being assessed against version 2 of the MarinTrust Standard.

Fishery under assessment	Araucanian Herring FAO 87 (2020-21)
Management authority (Country/State)	Chilean Undersecretary of Fisheries and Aquaculture (SUBPESCA) Fisheries Development Institute (Chile) (IFOP)
Main species	Araucanian Herring (*Strangomera bentincki*)
Fishery location	FAO 87 Pacific Southeast - Chile EEZ Regions V to X
Gear type(s)	Purse seine

Overall recommendation. (Approve/ Fail)	Approve

Summary: in this section, provide any additional information about the fishery that the reviewers feel is significant to their decision.
The invited external experts to review the stock assessments use to provide recommendations that usually are implemented once their feasibility is stablished.
General Comments on the Draft Report provided to the peer reviewer
Few fisheries in the world -as this one- collect data on ETP species to demonstrate the possible impacts on those species. This is an effort that should be imitated.

Summary of Peer Review Outcomes

Peer reviewers should review the fishery assessment report with the primary objective of answering the key questions listed in the table below. Where the situation is more complicated, reviewers may instead answer "See Notes".

	YES	NO	See Notes
A – Fishery Assessment			
1. Has the fishery assessment been fully completed, using the recognised MarinTrust fishery assessment methodology and associated guidance?	X		
2. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?	X		
3. Are the scores in the following sections accurate (i.e. do the scores reflect the evidence provided)?			
Section M - Management	X		
Category A Species	X		
Category B Species	n.a.		
Category C Species	X		
Category D Species	n.a.		
Section F – Further Impacts	X		

Detailed Peer Review Justification

Peer reviewers should provide support for their answers in the boxes provided, by referring to specific scoring issues and any relevant documentation as appropriate.

Detailed justifications are only required where answers given are one of the 'No' options. In other (Yes) cases, either confirm 'scoring agreed' or identify any places where weak rationales could be strengthened (without any implications for the scores).

Boxes may be extended if more space is required.

1. Is the scoring of the fishery consistent with the MarinTrust standard, and clearly based on the evidence presented in the assessment report?
Scoring agreed
Certification body response

2. Has the fishery assessment been fully completed, using the recognised MARINTRUST fishery assessment methodology and associated guidance?
Yes
Certification body response

3. Does the Species Categorisation section of the report reflect the best current understanding of the catch composition of the fishery?
Yes
Certification body response

3M. Are the scores in “Section M – Management” clearly justified?	
M1.1 There is an organisation responsible for managing the fishery.	
There is an organisation responsible for collecting data and assessing the fishery.	Yes
Fishery management organisations are publicly committed to sustainability.	Yes
Fishery management organisations are legally empowered to take management actions.	Yes
There is a consultation process through which fishery stakeholders are engaged in decision-making.	Yes
The decision-making process is transparent, with processes and results publicly available.	Yes
Certification body response	

3A. Are the “Category A Species” scores clearly justified?
Yes
Certification body response

3B. Are the “Category B Species” scores clearly justified?
n.a.
Certification body response

3C. Are the “Category C Species” scores clearly justified?
Yes
Certification body response

3D. Are the “Category D Species” scores clearly justified?
n.a.
Certification body response

3F. Are the scores in “Section F – Further Impacts” clearly justified?
Yes
Certification body response

Optional: General comments on the Peer Review Draft Report
The invited external experts to review the stock assessments use to provide recommendations that usually are implemented once their feasibility is stablished. Few fisheries in the world -as this one- collect data on ETP species to demonstrate the possible impacts on those species. This is an effort that should be imitated.
Certification body response