

French Fisheries and the U.S. MMPA Imports Rule¹

April 12, 2022

I. Executive Summary

The French fishing sector is one of the largest in the European Union and exports several thousand tons of seafood annually to the US. Exports stem from metropolitan France as well as several French territories, including Antarctic territories, New Caledonia, and French Polynesia. Exported products are both processed (e.g., fishmeal and canned goods) and unprocessed (e.g., tuna fillets) from a variety of fishing sectors including trawls, gillnets, and longlines.

Under the Marine Mammal Protection Act (MMPA), the U.S. government “shall ban” all seafood imports caught with fishing gear that kills or seriously injures marine mammals “in excess of United States standards.”² To implement the requirement, the National Marine Fisheries Service (NMFS) issued the MMPA Imports Rule,³ setting out standards that nations must demonstrate to continue exporting fish to the United States after December 31, 2022. Under the Rule, France must apply for and receive a “comparability finding” from NMFS which is essentially a determination that France’s bycatch and bycatch program meet U.S. standards.⁴

This report provides a brief assessment of France’s export fisheries, its marine mammal populations, potential bycatch issues, and France’s legal regime related to bycatch, as applied to the MMPA Imports Rule. The assessment focuses primarily on fisheries in the Atlantic Ocean, as the majority of France’s fisheries operate in Atlantic waters, with an emphasis on gillnet and midwater trawl fisheries that are likely to have bycatch issues.

As detailed below, France meets some of requirements of the MMPA Imports Rule; however, it is unlikely France will be able to demonstrate a “comparable” bycatch program for all export fisheries, particularly for its trawl and gillnet fisheries operating in the Bay of Biscay. Through both EU and French legislation, the intentional killing of marine mammals is prohibited across French fisheries. French fisheries have limited bycatch monitoring systems, including observers, in place for some gear types, and the French government has made some efforts to reduce bycatch through mechanisms like pinger requirements. Bycatch estimates from France and its territories are not widely available and were not submitted to NMFS for inclusion in the 2020 List of Foreign Fisheries (LOFF), but some can be found for select gear types and areas.

France’s most at-risk marine mammals, based on the most recent abundance estimates and bycatch/stranding data, are the Northeast Atlantic common dolphin (*Delphinus delphis*) and harbor porpoise (*Phocoena phocoena*). Based on observer data, these species are primarily impacted by paired midwater trawls used to capture hake, seabass, albacore, and anchovies; paired bottom trawls used to capture hake, gurnard, and whiting; and trammel nets used to capture anglerfish and sardines. Incorporating mammal stranding data suggests that additional

¹ Authors: Zak Smith, Eva May, Sarah Dolman, Kate O’Connell, Sarah Uhlemann, and Dianne DuBois.

² 16 U.S.C. § 1371(a)(2).

³ 81 Fed. Reg. 54,415 (Aug. 16, 2016).

⁴ 50 C.F.R. § 216.24(h)(6).

gear types, including gillnets and Danish seiners, are responsible for bycatch of these small cetaceans as well. Some of these fisheries are likely exceeding sustainable limits for common dolphins and may be exceeding sustainable limits for harbor porpoises.

However, it is difficult to fully assess the comparability of most French territorial and metropolitan fisheries without adequate observer coverage, and publicly available bycatch data is limited. Even fisheries with onboard observers have a low percentage of fleet coverage, and France has not demonstrated that it has implemented more extensive, EU-required observer programs. Mitigation techniques laid out in legislation are also often vague. While the French Minister for the Sea has announced recent, delayed steps to reduce bycatch, many of these actions are research-based rather than action-based (and several existed previously and are not, in fact, new measures), and existing actionable steps are unlikely to be strong enough to demonstrably reduce bycatch before the end of 2022, especially if their full implementation occurs slowly, as has been the case in many EU fisheries and in France's history with marine mammal conservation policies.

We conclude it is unlikely that France will be able to demonstrate that it meets the U.S. MMPA Imports Rule for a number of its trawl and gillnet fisheries, and thus France should face a U.S. ban on imports from these fisheries. While France's recent efforts are a step forward, their impact is not yet fully known, and available data shows that bycatch-induced stranding numbers are still high. The voluntary and action-scarce nature of many of France's efforts makes them unreliable as a basis for a comparability finding. France lacks a dedicated observer scheme to robustly monitor bycatch levels and has not announced how it will calculate bycatch limits. As such, it is unlikely France will be able to demonstrate that serious injury and mortality from its trawl and gillnet fisheries do not exceed bycatch limits.

Based on this assessment, we strongly urge NMFS to require France to fully demonstrate that it meets the various components of the MMPA Imports Rule and respond in detail to points herein. Barring this legally-required showing, NMFS must ban the import of fish and fish products from relevant fisheries starting on January 1, 2023.

Map of France



Figure 1. Map of France. Source: <https://geology.com/world/france-satellite-image.shtml>.

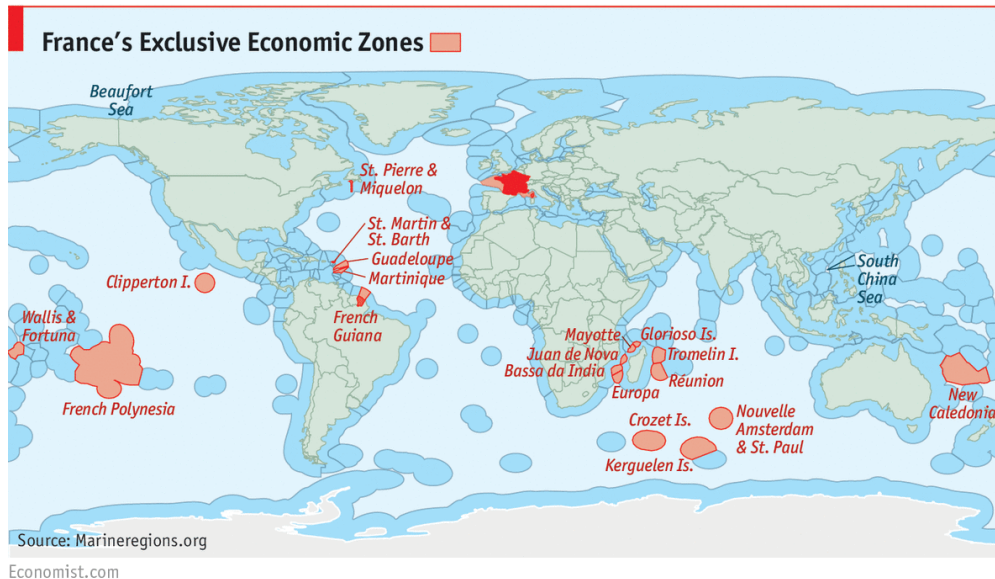


Figure 2. Map of France's global marine territories. Source: <https://www.economist.com/graphic-detail/2016/01/13/drops-in-the-ocean-frances-marine-territories>.

II. Export Fisheries

A. Overview

The French fishing fleet is one of the largest in the European Union,⁵ bringing in around 480,000 tons of catch annually.⁶ French fishing waters include European waters (European Atlantic, English Channel, North/Celtic Seas, Mediterranean Sea), the French Caribbean, French Guiana, and some areas of the high seas and the Atlantic, Southern, and Indian Oceans.⁷ Metropolitan France (European France, not including the French territories) has averaged over 6,500 fishing vessels annually in the past five years, with about 80% having a length under 15m and 50-75% having a length under 12m.⁸ Thirty percent of the French fishing labor force is overseas, and over 50% works in the Northeast Atlantic.⁹

B. European-Based Fisheries

Fishing areas with the highest French fishing employment numbers include the Bay of Biscay, the Celtic Sea, the Mediterranean Sea, and the North Sea.¹⁰ While France is a net importer of seafood, it does export to nations within and outside of the EU. In 2017-2019, the French government reported 3,128 tons; 2,934 tons; and 2,827 tons, respectively, of seafood exports to the United States.¹¹

French government records show that its largest (by volume) exports to the US from 2014 to 2019 were fishmeal/powder; salmon; cod; toothfish; unspecified marine fish (filleted and not filleted); mollusks and invertebrates; and fish roe, eggs, and livers.¹² US import records show that the largest imports from France (by volume) from 2010 to 2020 were fishmeal; prepared scallops; salmon; and toothfish.¹³

The 2020 LOFF lists several dozen fisheries exporting from metropolitan France, including those targeting Atlantic cod, various tuna species, Atlantic mackerel, and sardines. French territories export from fisheries focusing on species such as tuna, toothfish, redfish, and various

⁵ FAO Country Showcase, “Sustainable Fisheries and Aquaculture Management – France,” FAO, accessed June 3, 2021, <https://www.fao.org/country-showcase/item-detail/en/c/1278489/>.

⁶ FAO Country Profiles, “The French Republic,” FAO, accessed June 2, 2021, <https://www.fao.org/fishery/facp/FRA/fr>.

⁷ Comité National des Pêches Maritimes et des Élevages Marins (CNPMM), *French Fisheries*, CNPMM, 2016, https://www.comite-peches.fr/wp-content/uploads/2016/01/Brochure_la-p%C3%AAche-fran%C3%A7aise_EN_FINAL.pdf.

⁸ FAO Country Profiles, “The French Republic”; Ministère de la Mer, “Public Policies: Fisheries and Aquaculture,” French Ministry of the Sea, accessed June 10, 2021, <https://www.mer.gouv.fr/peche-et-aquaculture>; Christine Avelin, *Les Données: The Fisheries and Aquaculture Sector in France (2020): Production – Firms – Trade – Consumption*, France AgriMer (November 2020); Hélène Peltier et al., “Small Cetacean Bycatch as Estimated from Stranding Schemes: The Common Dolphin Case in the Northeast Atlantic,” *Environmental Science & Policy* 63, (September 2016): 7-18, <https://doi.org/10.1016/j.envsci.2016.05.004>.

⁹ FAO Country Showcase, “Sustainable Fisheries.”

¹⁰ Avelin, *Les Données: The Fisheries*.

¹¹ Christine Avelin, *Les Données: Commerce Extérieur des Produits de la Pêche et de L’aquaculture – Données et Bilans*, France AgriMer (December 2020).

¹² *Ibid.*

¹³ NOAA Fisheries, “Foreign Fishery Trade Data,” NOAA, accessed June 10, 2021.

crustaceans.¹⁴ Several of France’s recurring, large exports to the US are processed products, and the origin of those products is unknown. Metropolitan France has over 200 processing firms – primarily producing salted, smoked, dried, and canned products¹⁵ – and imports many seafood products from other countries,¹⁶ so it is feasible that some of its imports could be processed into meal or other products that are then exported to the US.

Regardless of difficulties determining origin, the MMPA Imports Rule applies to these products, defining “fish and fish product” to include “any marine finfish . . . whether fresh, frozen, canned, pouched, or otherwise prepared,” including highly processed fish products.¹⁷ If France is an intermediary nation for seafood products, it must comply with the MMPA Imports Rule’s provisions for intermediary nations.¹⁸

Year	Export Volume (Tons)	Export Value (1000€)	Primary Products
2014	3,264	24,942	Fishmeal, Salmon, Toothfish, Mollusks/Inverts
2015	2,874	25,411	Fishmeal, Toothfish, Mollusks/Inverts, Salmon
2016	3,948	29,169	Fishmeal, Salmon, Marine Fish, Toothfish
2017	3,128	21,580	Fishmeal, Salmon, Mollusks/Inverts, Marine Fish
2018	2,934	16,534	Fishmeal, Mollusks/Inverts, Salmon, Marine Fish
2019	2,827	18,097	Fishmeal, Surimi, Salmon, Cod

Table I. French exports to the US, as reported by the French government.¹⁹

¹⁴ NOAA Fisheries, “2020 Final List of Foreign Fisheries (LOFF),” accessed June 1, 2021. https://s3.amazonaws.com/media.fisheries.noaa.gov/2020-10/LOFF_2020_IAICRS_508.pdf?null.

¹⁵ Avelin, *Les Données: The Fisheries*.

¹⁶ European Commission, “EU Trade Statistics (Including United Kingdom),” European Commission, accessed June 11, 2021, <https://trade.ec.europa.eu/access-to-markets/en/statistics?includeUK=true>.

¹⁷ Fish and Fish Product Import Provisions of the Marine Mammal Protection Act, 50 C.F.R. § 216.3; 81 Fed. Reg. at 54,396.

¹⁸ Fish and Fish Product Import Provisions of the Marine Mammal Protection Act, 50 C.F.R. § 216.24(h)(9)(iv).

¹⁹ Avelin, *Les Données: Commerce*. (2020); Christine Avelin, *Données et bilans de France AgriMer: Commerce extérieur des produits de la pêche et de l’aquaculture 2018*, France AgriMer (July 2019); Éric Allain, *Données et bilans de France AgriMer: Commerce extérieur des produits de la pêche et de l’aquaculture 2015*, France AgriMer (August 2016); Christine Avelin, *Données et bilans de France AgriMer: Commerce extérieur des produits de la pêche et de l’aquaculture 2016*, France AgriMer (July 2017); Christine Avelin, *Données et bilans de France AgriMer: Commerce extérieur des produits de la pêche et de l’aquaculture 2017*, France AgriMer (May 2018); Éric Allain, *Données et bilans de France AgriMer: Commerce extérieur des produits de la pêche et de l’aquaculture 2014*, France AgriMer (August 2015).

C. Territorial Fisheries

The LOFF and NOAA’s trade database list exports from French territories. However, this trade data cannot be cross-checked in foreign fishery trade databases. While the French government releases annual fishery trade reports for the fisheries of metropolitan France (see section B. above), these reports do not include territorial fisheries’ products. Governments of France’s territorial areas do not release their own, comparable reports.

While NOAA’s trade database contains records of exports from French Guiana, French Polynesia, St. Pierre & Miquelon, Reunion, and New Caledonia in the past ten years, French Guiana and Reunion are not included in the LOFF. According to NMFS’s trade database, Reunion’s primary exports to the US over the past ten years are tuna, swordfish, and toothfish.²⁰ Under French fisheries, the LOFF does list Reunion as one of the vessel operating areas in three different instances (all of which are for tuna exports), and the US Federal Register notice notes that NOAA considers Reunion to be an intermediary nation.²¹ NOAA notes French Guiana’s limited export history as the reason for its absence from the LOFF;²² French Guiana had one export record to the US in the past ten years from 2016.²³

In the NOAA trade database, New Caledonia’s primary export to the US is shrimp, with one instance of tuna listed in the past decade, and the LOFF lists only a tuna fishery for the country; shrimp in New Caledonia is produced through coastal aquaculture.²⁴ French Polynesia’s exports are more varied, but its largest exports to the US are tuna and dolphinfish; the LOFF indicates that French Polynesian fisheries are considered mixed fisheries as they do not solely target tuna or dolphinfish, rather they catch multiple species at a time. French Polynesia’s longlining fishery is its only fully developed pelagic fishery, and the nation exports its tuna catches primarily to Hawai’i and Japan.²⁵ According to the trade database, St. Pierre & Miquelon’s largest exports to the US are halibut and cod; halibut, cod, tuna, other ground/flatfishes, and crustaceans are listed in the LOFF.

D. Fishing Gear

French fisheries use several different gear types. Primary gear types listed in the LOFF (for metropolitan France) are trawls, purse seines, and longlines. Trawl varieties include midwater paired trawls (PMT), bottom trawls (PTB), and general midwater, pelagic, and demersal trawls. France also uses gillnets, which are considered high risk for marine mammal bycatch, in its exporting sardine fisheries and some tuna fisheries.²⁶ Outside of metropolitan France, gear types

²⁰ NOAA Fisheries, “Foreign Fishery Trade.”

²¹ Fish and Fish Product Import Provisions of the Marine Mammal Protection Act 2020 List of Foreign Fisheries, 85 Fed. Reg. at 15117 (May 1, 2020); NOAA Fisheries, “2020 Final List.”

²² 85 Fed. Reg. at 15118.

²³ NOAA Fisheries, “Foreign Fishery Trade.”

²⁴ Théau Gontard and Guylain de Coudenhove, *Economic Monitoring Study: The Fisheries Sector in New Caledonia*, SPC Fisheries Newsletter #141 (May-August 2013).

²⁵ Erickson Smith, “Subsistence Subsiding: Eighty Years of Change in French Polynesia’s Fisheries,” *Atlas for Sustainability in Polynesian Island Cultures and Ecosystems*, Sea Education Association (2013), accessed June 20, 2021.

²⁶ NOAA Fisheries, “2020 Final List.”

noted in the LOFF include longlines (both surface and bottom set), trawls, and pots/traps for crustaceans and toothfish.²⁷ Products across gear types are exported to the US. Hand-operated gear (handlines, hand poles, dip nets) and dredge-based fisheries are noted as exempt in the LOFF. Research indicates that dredges present a low risk for small cetacean bycatch in the Bay of Biscay (located on France’s coast), which may have informed NOAA’s decision to classify dredge fisheries as exempt.²⁸

Based on the LOFF, it appears France may export from several high bycatch fisheries. A recent study concluded that the majority of common dolphin bycatch in the Bay of Biscay (a high-risk bycatch area) stems from pelagic sea bass fisheries, pelagic albacore fisheries, and gillnet and trammel net fisheries.²⁹ France has exported both albacore and seabass to the US in the past decade.³⁰ Another study noted significant bycatch stemming from gillnets fishing for hake, trammel nets fishing for anglerfish, and PMT fishing for seabass, hake, and mackerel.³¹ Of these, seabass and mackerel captured in trawls are noted explicitly on the LOFF. Trammel nets fishing for sardines appear on the LOFF, but anglerfish do not appear in NOAA’s import records for France or France’s export records for the US.

III. Marine Mammals

A. Overview

French fisheries overlap in area with almost thirty different marine mammals, including both cetacean and pinniped species. Some species have multiple subpopulations in French fishing waters, while others simply pass through French waters during seasonal migrations. The most frequently encountered cetacean species in French waters are the common dolphin, harbor porpoise, striped dolphin, long-finned pilot whale, Risso’s dolphin, and common bottlenose dolphin.

Species Name	Abundance Estimate	Year of Estimate	IUCN Status
Common dolphin*	634,286 (Eu. Atlantic)	2016	Least Concern Globally ^α
Harbor porpoise*	466,569 (Eu. Atlantic); 19,928 (summer, Bay of Biscay); 26,556	2016; 2011-2012; 2011-2012	Vulnerable in European Waters;

²⁷ *Ibid.*

²⁸ Hélène Peltier et al., “Can Modelling the Drift of Bycaught Dolphin Stranded Carcasses Help Identify Involved Fisheries? An Exploratory Study,” *Global Ecology and Conservation* 21 (March 2020): <https://doi.org/10.1016/j.gecco.2019.e00843>.

²⁹ *Ibid.*

³⁰ NOAA Fisheries, “Foreign Fishery Trade.”

³¹ Hélène Peltier et al., “In the Wrong Place at the Wrong Time: Identifying Spatiotemporal Co-occurrence of Bycaught Common Dolphins and Fisheries in the Bay of Biscay (NE Atlantic) from 2010 to 2019,” *Frontiers in Marine Science* 8 (April 2021): <https://doi.org/10.3389/fmars.2021.704005>.

^α Note that the 2018 evaluation of CD as part of the EU’s Marine Strategy Framework Directive found them to be threatened in the English Channel, North Sea, and Celtic Sea.

	(summer, English Channel) ^β		Least Concern Globally ^ζ
Striped dolphin*	372,340 (Eu. Atlantic)	2016	Least Concern Globally
Long-finned pilot whale*	152,071 (Eu. Atlantic)	2005-2007	Least Concern Globally
Risso's dolphin*	11,069 (Eu. Continental shelf); 2,461 (summer in Bay of Biscay); 84 (summer in English Channel) ^δ	2016; 2011-2012; 2011-2012	Least Concern Globally, potentially vulnerable but lacking data
Common Bottlenose dolphin*	27,700 (Eu. Atlantic)	2016	Least Concern Globally
Fin whale	98,000 (North Atlantic)	2017	Vulnerable
Sperm whale	360,000 (Globally)	2002	Vulnerable
Cuvier's beaked whale	2,286 (Eu. Atlantic)	2005	Least Concern Globally
Minke whale	156,000 (Northern Atlantic)	2015	Least Concern Globally
Harbor seal	65,000 (Eastern Atlantic)	2016	Least Concern Globally
Sowerby's beaked whale	3,518 (Eastern Atlantic)	2007	Least Concern Globally
Blue whale	1000-3000 (N. Atlantic)	2018	Endangered
Grey seal	66,000 (NW Atlantic)	2016	Least Concern Globally
White-beaked dolphin	37,700 (North Sea)	2005	Least Concern Globally
Atlantic white-sided dolphin	15,510 (European waters)	2016	Least Concern Globally

Table II. Most common marine mammals in European Atlantic waters, for which abundance estimates exist in the IUCN database.³² * indicates species most often seen as bycatch.

B. Species of Most Concern

The two marine mammal species with the highest incidence of fishing gear interactions – according to bycatch and stranding records – are the Northeast Atlantic common dolphin and the

^β winter in Bay = 4,643; winter in Channel = 26,417.

^ζ Note that the 2018 evaluation of HP as part of the EU's Marine Strategy Framework Directive found them to be threatened in the Celtic Sea and Bay of Biscay.

^δ Winter in Bay = 1,373; winter in Channel = 229.

³² IUCN Red List, www.iucnredlist.org; Emeline Pettex et al., *Suivi Aérien de la Mégafaune Marine en France métropolitaine – Rapport final*, SAMM Program, November 2014.

harbor porpoise. Common dolphins in the area are primarily found in the Bay of Biscay, with the most recent population estimate (2016) being around 634,286 in the waters on and offshore of the European continental shelf (the Northeast Atlantic), according to the European Atlantic Assessment Unit.³³ This estimate encompasses a large area of water, while bycatch estimates often are more localized and focus on subpopulations.³⁴ Bycatch is considered to be a major threat to common dolphins.³⁵ France's 2018 report to the Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish, and North Seas (ASCOBANS) evaluated the common dolphin as threatened in the Celtic Sea and the Bay of Biscay because of bycatch.³⁶ While also found in the Mediterranean, their numbers have declined there, with recent surveys suggesting low abundance.³⁷

The harbor porpoise was among the most abundant cetaceans found in 2016 Small Cetaceans in the North Sea and Adjacent Waters (SCANS)-II surveys of the European Atlantic, with an estimated 466,569 harbor porpoises residing in the area.³⁸ France's Marine Megafauna Aerial Survey (SAMM) Program's 2011-2012 surveys found harbor porpoises were the most abundant species in the English Channel.³⁹ While of least concern status globally, harbor porpoises in various European waters are more at risk.⁴⁰ In the above-referenced 2018 ASCOBANS report, harbor porpoises were evaluated as threatened in the English Channel, the North Sea, and the Celtic Sea due to bycatch.⁴¹ Bycatch in fishing gear is the largest source of anthropogenic-caused mortality for harbor porpoises,⁴² though they are also impacted recently by climate-induced shifts in their habitat.⁴³

C. Other Mammals of Metropolitan France

Other marine mammals in French fishing waters are the striped dolphin, Risso's dolphin, bottlenose dolphin, and the long-finned pilot whale. The striped dolphin population in the European Atlantic was estimated at around 372,340 in 2016 surveys, making it the third most

³³ ICES, *Workshop on Fisheries Emergency Measures to Minimize Bycatch of Short-Beaked Common Dolphins in the Bay of Biscay and Harbor Porpoise in the Baltic Sea (WKEMBYC)*, ICES Scientific Reports, 2020, Volume 2, Issue 43.

³⁴ *Ibid.*

³⁵ ICES, *EU Request on Emergency Measures to Prevent Bycatch of Common Dolphin (*Delphinus delphis*) and Baltic Proper Harbor Porpoise (*Phocoena phocoena*) in the Northeast Atlantic*, ICES Special Request Advice, May 26 2020.

³⁶ ASCOBANS, *2016-2019 National Report: France*, National Reports of ASCOBANS Parties, July 2020.

³⁷ G. Braulik, T. A. Jefferson, and G. Bearzi., "Delphinis delphis. The IUCN Red List of Threatened Species 2021: e. T134817215A199893039," IUCN Red List, accessed June 20, 2021, <https://www.iucnredlist.org/species/134817215/199893039>.

³⁸ G. Braulik, G. M. Amano, and A. Bjørge, "Phocoena phocoena. The IUCN Red List of Threatened Species 2020: e. T17027A50369903," IUCN Red List, accessed June 20, 2021, <https://www.iucnredlist.org/species/17027/50369903>.

³⁹ Pettex et al., *Suivi Aérien*.

⁴⁰ WISE Marine, "Marine Mammals," Marine Information System for Europe, accessed June 20, 2021, <https://water.europa.eu/marine/state-of-europe-seas/state-of-biodiversity/marine-mamals>.

⁴¹ ASCOBANS, *2016-2019*.

⁴² HELCOM, *Number of Drowned Mammals and Waterbirds in Fishing Gear*, HELCOM Core Indicator Report (July 2018).

⁴³ Braulik, "Phocoena phocoena."

abundant cetacean species in the surveys.⁴⁴ Striped dolphins are also the most common cetacean in the Mediterranean Sea and are generally considered to be of least concern status. Risso’s dolphin was estimated by 2016 surveys to have around 11,069 individuals in the European Atlantic, where it is most commonly found in waters off of Ireland and Scotland.⁴⁵ The long-finned pilot whale has a smaller range globally than the cetaceans above, but its most recent (2005-2007) estimated population in European waters is 152,071 individuals, with another two, smaller (<2000) resident populations in the Mediterranean Sea.⁴⁶ French cetaceans all face threats from fishing in addition to a mixture of threats from energy exploration, climate change, and anthropogenic pollution. However, as noted by the International Council for the Exploration of the Sea (ICES), the extent of bycatch risks faced by several marine mammals in the European Atlantic is not fully understood due to low data availability and fishery observer coverage sitting well below 1% for many fleets in the Northeast Atlantic.⁴⁷

Other cetaceans found in French waters are short-finned pilot whales, common bottlenose dolphins, fin whales, sperm whales, Cuvier’s beaked whales, rough-toothed dolphins, orcas and pygmy killer whales, short-beaked common dolphins, blue whales and humpback whales (though both are only ‘visitors’ rather than residents off the French coast), Sowerby’s beaked whales, Sei whales, minke whales, pygmy sperm whales, northern bottlenose whales, and false killer whales. Relevant pinnipeds include grey seals, Mediterranean monk seals, ringed seals, and harbor seals. Eurasian otters are also present in relevant waters.

Species Name	Abundance Estimate	Year of Estimate	IUCN Status
Striped dolphin	117,880 (West Med.)	1991	Vulnerable
Common dolphin	5200	2018	Endangered
Sperm whale	300-600 (NW Med.)	Early 2010s	Endangered
Risso’s dolphin	1783-2550 (NW Med.)	2012	Data Deficient
Long-finned pilot whale	<2000	2012-2017	Data Deficient
Common bottlenose dolphin	Low 10,000s	2008	Vulnerable
Med monk seal	600-700	Mid-2000s	Endangered

Table III. Most common marine mammals in the Mediterranean Sea.⁴⁸

⁴⁴ G. Braulik, “*Stenella coeruleoalba*. The IUCN Red List of Threatened Species 2019: e. T20731A50374282,” IUCN Red List, accessed June 20, 2021, <https://www.iucnredlist.org/species/20731/50374282>.

⁴⁵ J. Kiszka and G. Braulik, “*Grampus griseus*. The IUCN Red List of Threatened Species 2018: e. T9461A50356660,” IUCN Red List, accessed June 20, 2021, <https://www.iucnredlist.org/species/9461/50356660>.

⁴⁶ G. Minton, R. Reeves, and G. Braulik, “*Globicephala melas*. The IUCN Red List of Threatened Species,” IUCN Red List, accessed June 21, 2021, <https://www.iucnredlist.org/species/9250/50356171>.

⁴⁷ ICES, *EU request*.

⁴⁸ IUCN Red List; SPA/RAC, *Common Indicator 4: Population abundance of selected species – Marine Mammals, Mediterranean 2017 Quality Status Report*.

D. Marine Mammals of French Territories

Outside of metropolitan France, the waters surrounding French territories also contain marine mammals that potentially interact with fisheries. In New Caledonian waters, additional marine mammals include the melon-headed whale, which is also found in the waters of French Polynesia. Antarctic minke whale, Blainville’s beaked whale, the dwarf sperm whale, spinner dolphins, Byrde’s whale, the goose-beaked whale, Fraser’s dolphin, the pantropical spotted dolphin, and the rough-toothed dolphin also inhabit French Polynesian waters.⁴⁹ In French Southern and Antarctic waters (TAAF), there are Antarctic fur seals, Antarctic minke whales, Commerson’s dolphin, the hourglass dolphin, leopard seals, southern elephant seals, Southern species of long-finned pilot whales and right whales, Weddell seals, and the subantarctic fur seal. Finally, the waters surrounding France’s St. Pierre & Miquelon in North America contain the Atlantic white-sided dolphin, gray seals, harp seals, hooded seals, the North Atlantic minke whale, the white-beaked dolphin, and the Atlantic harbor seal. Some mammals in the waters off of metropolitan France also appear in French territorial waters, such as the common dolphin, though there are differing subpopulations in different areas.

Species Name	Territorial Area	Abundance Estimate	Year of Estimate	IUCN Status
False killer whale	New Caledonia	None for SW Pacific	NA	Near Threatened Globally
Melon-headed whale	French Polynesia	None for South Pacific	NA	Least Concern Globally
Pygmy killer whale	French Polynesia; TAAF	Not available – sightings are rare	NA	Least Concern Globally
Sperm whale	French Polynesia; New Caledonia	None for South Pacific	NA	Vulnerable Globally
Indo-Pacific bottlenose dolphin	New Caledonia	No local estimate available	NA	Near Threatened
Atlantic white-sided dolphin	St. Pierre & Miquelon	51,640 (eastern N. America)	2006	Least Concern Globally
Fin whale	St. Pierre & Miquelon	3,522 (Atlantic Canada)	2007	Vulnerable Globally
Killer whale	TAAF	25,000 (Antarctic)	2001	Data Deficient
Long-finned pilot whale	TAAF	200,000 (Antarctic)	1976-78	Least Concern Globally

Table IV. Most common marine mammals in French territorial waters.⁵⁰

⁴⁹ See Cétaces de Polynésie Française <https://www.temanaotemoana.org/wp-content/uploads/2013/09/70913ApprochePlaquetteA4HD.pdf>.

⁵⁰ IUCN Red List.

E. Endangered, Threatened, and Protected (ETP) Species

Within the various mammal populations found in French waters, conservation statuses range from least concern to endangered. Those that are endangered, threatened, and protected should be given special interest in NMFS's determinations of comparability. IUCN considers Mediterranean monk seals as endangered (having recently improved from their critically endangered status), along with blue whales, the Black Sea subpopulation of common bottlenose dolphins, and the Mediterranean subpopulation of short-beaked common dolphins. The Mediterranean common bottlenose dolphin subpopulation, fin whales, sperm whales, Cuvier's beaked whales, and the short-beaked common dolphin are listed as vulnerable by the IUCN. Atlantic right whales, sei whales, orcas, and blue whales in European waters are considered threatened by WISE-Marine,⁵¹ and Eurasian otters, northern bottlenose whales, and false killer whales are considered by IUCN to be near threatened. The EU's 2018 status assessment of marine mammals found common dolphins to be threatened in the English Channel and North and Celtic Seas. The same assessment found harbor porpoises to be threatened in the Celtic Sea and Bay of Biscay. These are all areas with French fishing activity. Finally, the EU considers common dolphins in its waters to have a largely unfavorable status.⁵² All cetaceans are considered protected species (see Section V for more details).

IV. Bycatch

A. Introduction

In a 2017 report assessing various nations' bycatch and the MMPA Imports Rule, Calderan et al. listed France as a country that has "known bycatch problems."⁵³ The LOFF contains no bycatch estimates for export fisheries of metropolitan France or lists these bycatch estimates as unknown. One estimate of 0 is provided for the exempt scallop dredge fishery. The LOFF contains four bycatch estimates for exporting French territory fisheries. Three of these are for TAAF fisheries and do not include numbers for all relevant marine mammals, and one, similarly incomplete, is for a French Polynesian fishery. This lack of bycatch data on the LOFF suggests France and its territories largely did not report bycatch numbers in progress reports submitted to NMFS. However, France does report bycatch numbers to three multilateral entities: the IWC, ASCOBANS, and ICES. The French government itself does not have publicly available, consistent bycatch reports published on its Ministry websites, though it did publish some bycatch numbers as part of a recent comprehensive stranding report for the 2020-2021 winter season.

Cetacean bycatch numbers submitted to both IWC and ASCOBANS stem from on-vessel fisheries observers. From 2015 to 2018, based on data submitted to IWC, the most common gear type used by French vessels whose observers recorded cetacean bycatch incidents was paired midwater trawls, followed by trammel nets and set gillnets. Common dolphins were captured in the highest numbers, especially in the hake, blue whiting, and European seabass fisheries, though

⁵¹ WISE Marine, "Marine Mammals."

⁵² ICES, *Workshop on Fisheries*.

⁵³ Susannah Calderan & Russell Leaper, *Investigations of Countries Exporting Seafood to the US Which May be Subject to Regulation Under the MMPA Bycatch Rule With Respect to Cetaceans*, World Wildlife Fund, April 2017.

also in albacore fisheries to a lesser extent. Primary target species in gillnets were cod, mackerel, sole, and monkfish.

In 2016-2018, based on onboard observer data submitted to ASCOBANS, common dolphins captured in paired midwater trawls were also the most frequently bycaught cetacean in relevant waters. Harbor porpoises were the second most frequently captured cetacean in both datasets. However, it is important to note the small percentage of French fishing vessels that were equipped with observers who gathered these data – as low as 0.1% of total fishing effort in some gear types.⁵⁴ ASCOBANS reports do not specify observer levels for specific gear types, but they do note that French observer levels range between 0.1 and 1% of vessels in a given fishery, with only trawling fisheries reaching levels as high as 5%. ASCOBANS reports do not include target species alongside gear type.

ICES data stems from both fisheries observers and from the Pelagis Observatory’s studies estimating bycatch from reported stranding numbers. ICES uses this data to report on EU member states’ compliance with and progress on European Commission regulations.⁵⁵ ICES also uses this data to help inform its own recommendations to the European Commission. While raw bycatch data are not publicly available, summaries are available in ICES Working Group on Bycatch of Protected Species (WGBYC) reports. According to the 2019 report, in 2017, the most common gear type in FAO Fishing Area 27.8 (Bay of Biscay) that bycaught dolphins was paired midwater trawls. The report also noted a strong cetacean bycatch risk highlighted in interactions between French Danish seiners and paired midwater trawls.⁵⁶ In its 2020 report – using 2018 data – paired midwater trawls are also implicated, though the report does not break down numbers by gear type as the 2019 report does.⁵⁷

EU law does not mandate a minimum observer coverage percentage in fisheries, and neither does French law (see section V for more details – observers are mandated, but not as percentages of effort). The observers listed in ASCOBANS reports are ‘fisheries observers’ rather than observers working as part of a ‘dedicated observer scheme’ – fisheries observers collect data about catch but are not specifically on board to monitor nets and other gear for cetaceans. Additionally, researchers have noted that in French fisheries, fishing métiers that may pose the largest threat to common dolphins are under-sampled by observer programs, leading to underestimates of actual bycatch.⁵⁸ Some scientists have also noted that fisher behavior may change due to the presence of an observer.⁵⁹

B. An Alternative Approach to Bycatch Quantification: Stranding Data

Marine mammal stranding data is another approach to estimating bycatch. France reports stranding numbers to IWC, ICES, and ASCOBANS along with its bycatch numbers. While

⁵⁴ ASCOBANS, 2016-2019.

⁵⁵ Sara Bonanomi et al., *Working Group on Bycatch of Protected Species (WGBYC)*, 1 no. 51, ICES Scientific Reports, 2019. <http://doi.org/10.17895/ices.pub.5563>.

⁵⁶ *Ibid.*

⁵⁷ Mikel Basterretxea et al., *Working Group on Bycatch of Protected Species (WGBYC)*, 2 no. 81, ICES Scientific Reports, 2020. <https://doi.org/10.17895/ices.pub.7471>.

⁵⁸ Peltier et al., “In the Wrong Place at the Wrong Time.”

⁵⁹ Peltier et al., “Small Cetacean Bycatch as Estimated.”

reported bycatch numbers remain below 100 in these datasets, stranding numbers are often as high as several hundred for a single cetacean species in a given region and year. Like bycatch data, stranding data suggest that common dolphins are most frequently stranded, followed by harbor porpoises, in French metropolitan waters. ICES reported that 84% of the 793 cetaceans that stranded in the Bay of Biscay (along the French Atlantic coast) between February 1 and March 31, 2017 were common dolphins.⁶⁰ The following year, 80% of the 807 cetaceans that France reported as in the same area were common dolphins.⁶¹

While strandings are not always due to interactions with fisheries, research demonstrates that most common dolphin strandings in the Bay of Biscay are linked to fishing gear mortality. In 2019, 80% of autopsied stranded common dolphins in the Bay of Biscay showed signs of lethal interactions (entanglements etc) with fishing gear, suggesting that interactions with fisheries caused their deaths.⁶² Sixty-one percent of common dolphins stranded and examined in the Bay of Biscay in 2018 showed evidence of bycatch.⁶³ A study of common dolphin stranding-based unusual mortality events (UMEs) from 1990 to 2019 found that between 49% and 92% of dolphins involved in UMEs each year showed evidence of bycatch.⁶⁴ Recorded numbers of stranded dolphins on the French Atlantic coast have been increasing since 2016, with 2019 being a record year for strandings over the past forty years.⁶⁵

Recently, scientists have worked to estimate bycatch based on stranding numbers to complement observer bycatch data. A recent study using reverse drift modeling suggested that observer estimates could have missed up to 1,650 dolphins per year, on average, in estimated bycatch that occurred between 1990 and 2009 in EU fisheries.⁶⁶ The same study examined Northeast Atlantic common dolphins from unusual stranding events in 2017, determining that 95% of examined individuals exhibited evidence of death from fishing gear.⁶⁷ Further, numbers of stranded common dolphins with bycatch marks (e.g. rope marks from entanglement) reported by France to ASCOBANS – along with estimated mortality – increased from 2016 to 2019.⁶⁸ Scientists at the International Fund for Animal Welfare (IFAW) have also theorized that as much as 90% of bycaught dolphins in the Bay of Biscay sink to the bottom of the Bay, suggesting that even the incorporation of stranding numbers in bycatch estimates still excludes the majority of bycaught dolphins.⁶⁹

⁶⁰ Bonanomi et al., *Working Group*.

⁶¹ Basterretxea et al., *Working Group*.

⁶² France3, “Dolphins, Victims of Accidental Captures in the Bay of Biscay,” FranceTVInfo, January 12, 2020, <https://france3-regions.francetvinfo.fr/bretagne/dauphins-victimes-captures-accidentelles-golfe-gascogne-1773133.html>.

⁶³ *Ibid.*

⁶⁴ Peltier et al., “In the Wrong Place.”

⁶⁵ France3, “Following the Massacre at the Start of the Year, France Wants to Fight Against the Stranding of Dolphins,” FranceTVInfo, March 22, 2019, <https://france3-regions.francetvinfo.fr/bretagne/suite-hecatombe-ce-debut-annee-france-veut-lutter-contre-echouages-dauphins-1642772.html>.

⁶⁶ Peltier et al., “Can Modelling the Drift.”

⁶⁷ Peltier et al., “Can Modelling the Drift.”

⁶⁸ ASCOBANS, *2016-2019*.

⁶⁹ Aurore Morin, “Bycatch Issue: a Focus on the Bay of Biscay, a Crisis Zone for Dolphins,” IFAW Expert Opinions, accessed June 22, 2021, <https://www.ifaw.org/people/opinions/bycatch-bay-of-bisca-dolphin-crisis>.

Other researchers have also investigated the link between bycatch and strandings, using the latter to estimate the former. French scientists have done so, again, in the case of the Northeast Atlantic common dolphin,⁷⁰ and others have more generally gathered evidence of interactions with fishing gear from stranded marine mammals, exhibiting that this is a growing, worthwhile scientific field.⁷¹ The drift modeling study referred to above found that, combined, the UK and France estimated common dolphin 2007-2011 bycatch calculated from stranding data at levels a full order of magnitude *higher* than those estimated via observer programs.⁷²

The French Ministry of the Sea published bi-weekly cetacean strandings reports on its website for the duration of the winter 2020-2021 fishing season (December 2020 – April 2021) and is continuing to do so for the winter 2021-2022 fishing season (December 2021 – April 2022). The last of the 2020-2021 reports summarized strandings, bycatch, and mitigation data and information for this season. This is the only report found containing official bycatch estimates from the French government. Stranding numbers for 2020-2021 were lower than the previous two winter seasons but remained concerningly high. The report shows that pelagic trawls captured the highest number of observer-reported common dolphins, followed by trammel nets and gillnets.⁷³ More importantly, the report discusses Pelagis Observatory findings that – based on reverse drift modeling for the winter 2020-2021 season – an estimated 3,900 common dolphins were incidentally captured in the Bay of Biscay. The government has not yet released a comparable report for 2021-2022, as the fishing season is still ongoing.

Recent ICES reporting on reducing common dolphin bycatch also noted that stranding models pushed 2017-2019 bycatch estimates for French fisheries past ICES-estimated Potential Biological Removal (PBR) levels.⁷⁴ A 2021 study concluded that – based on drift modeling – between 2016 and 2019 (years that set records for stranded common dolphins on the French Atlantic coast), fishing areas of French trammel nets had the most overlap with predicted origin areas of stranded dolphins, followed by French gillnetters and French paired midwater trawls targeting seabass and hake.⁷⁵ These findings suggest that, while strandings data cannot replace observer data⁷⁶, the two need to both be considered in order to have a more complete picture of bycatch sources and risks, especially given France’s low observer coverage in most fisheries.

⁷⁰ Peltier et al., “Small Cetacean Bycatch as Estimated;” H el ene Peltier et al., “The Contribution of Stranding Data to Monitoring and Conservation Strategies for Cetaceans: Developing Spatially Explicit Mortality Indicators for Common Dolphins (*Delphinus delphis*) in the Eastern North-Atlantic,” *Ecological Indicators* 39 (April 2014): 203-214, <https://doi.org/10.1016/j.ecolind.2013.12.019>.

⁷¹ Nicole M. Adimey et al., “Fishery Gear Interactions From Stranded Bottlenose Dolphins, Florida Manatees and Sea Turtles in Florida, U.S.A.,” *Marine Pollution Bulletin* 81, no. 1 (April 2014): 103-115, <https://doi.org/10.1016/j.marpolbul.2014.02.008>; Marie Christine M. Obusan et al., “Stranding Events in the Philippines Provide Evidence for Impacts of Human Interactions on Cetaceans,” *Ocean & Coastal Management* 134 (December 2016): 41-51, <https://doi.org/10.1016/j.ocecoaman.2016.09.021>.

⁷² Peltier et al., “Small Cetacean Bycatch as Estimated...”

⁷³ France Gouv de Mer (a), *Suivi des Captures Accidentelles de Petits C etac es Durant la P eriode  a Risque (D ecembre 2020  a Avril 2021)*, Gouvernement de France, 2021, Bulletin No. 12, https://mer.gouv.fr/sites/default/files/2021-07/Bulletin-capture-cetaces_S12bis_Bilan.pdf.

⁷⁴ ICES, *Workshop on Fisheries*.

⁷⁵ Peltier et al., “In the Wrong Place at the Wrong Time.”

⁷⁶ ICES, *Bycatch of Small Cetaceans and Other Marine Animals – Review of National Reports Under Council Regulation (EC) No. 812/2004 and Other Information*, ICES Advice, September 11, 2018.

C. Species of Most Concern

1. Common Dolphin

Several studies have found that common dolphin mortality exceeds or likely exceeds PBR in the Bay of Biscay where trawl and gillnet fishing occur. A 2012 study suggested that conservation measures should reduce common dolphin bycatch by at least half of the then-current level in the Bay of Biscay trawl and gillnet fisheries in order to be below PBR.⁷⁷ Unfortunately, available IWC reports for France do not date back farther than 2015, but early 2010s ASCOBANS national reports from France suggest that Bay of Biscay bycatch numbers have increased since 2012, based on both observer and stranding network data.⁷⁸ ICES noted that 2014, 2016, and 2018 estimates for bycatch of common dolphins suggested the potential for larger population impacts by exceeding sustainable levels and accepted thresholds.⁷⁹

Following a request from the European Commission, ICES advice in a 2020 publication called for temporary, seasonal closures of fisheries impacting common dolphins in the Bay and an overall reduction in fishing levels of 40% annually in order to help reduce bycatch levels below PBR.⁸⁰ In another 2020 report aimed at all European fisheries, ICES estimated the common dolphin PBR level at 4,927 annually across the Northeast Atlantic, noting that observer estimates of bycatch were just under this number, while stranding estimates were well above it.⁸¹ The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) has suggested that nations use a more precautionary, modified PBR of 985 individuals in the Northeast Atlantic, well-surpassed by ICES' estimated 2015-2020 common dolphin mortality of 6405.⁸² Other scientists have calculated potential bycatch limits using the International Whaling Commission's Catch Limit Algorithm (CLA) rather than PBR, yielding a 2019 estimated bycatch limit of at most 1547 common dolphins throughout the Northeast Atlantic.⁸³ In this case, CLA was calculated under three different management scenarios, with the most conservative scenario yielding an estimate of 227 dolphins. Pelagic scientists report that if more than 1.7% of the Bay of Biscay population of common dolphins dies from general human activities, the entire population is in danger.⁸⁴ So far, fishery closures have not been put in place by France, nor any reductions in fishing efforts.

⁷⁷ Laura Mannocci et al., "Assessing the Impact of Bycatch on Dolphin Populations: The Case of the Common Dolphin in the Eastern Atlantic," *PLoS ONE* 7, no. 2 (February 2012): <https://doi.org/10.1371/journal.pone.0032615>.

⁷⁸ ASCOBANS, *2014 Annual National Report: France*, National Reports of ASCOBANS Parties, August 2015.

⁷⁹ ICES, *Bycatch of Small Cetaceans*; ICES, *Workshop on Fisheries*.

⁸⁰ ICES, *EU request*.

⁸¹ ICES, *Bycatch of Protected and Potentially Vulnerable Marine Vertebrates – Review of National Reports Under Council Regulation (EC) No. 812/2004 and Other Information*, ICES Advice, September 22 2020.

⁸² Fiona Bigey et al., *Workshop on Estimation of Mortality of Marine Mammals due to Bycatch*, 3 no. 106, 2021, <https://doi.org/10.17895/ices.pub.9257>.

⁸³ Antonello Sala et al., *Review of the Implementation of the EU Regulation on the Incidental Catches of Cetaceans (STECF-19-07)*. European Commission Scientific, Technical, and Economic Committee for Fisheries (STECF), (2019). <https://stecf.jrc.ec.europa.eu/documents/43805/2489016/STECF+19-07+-+Incid+catches+cetaceans.pdf/3485bafd-4350-40af-8d72-0226a68cb86e>.

⁸⁴ France3, "Dolphins, Victims."

2. Harbor Porpoise

Harbor porpoises, though they have lower numbers of stranded/bycaught individuals than common dolphins, are also at risk. IUCN considers the harbor porpoise near threatened in European waters.⁸⁵ Across the EU, harbor porpoises are considered by ICES to have an “unfavorable-bad” population status, and ICES noted that their 2016 bycatch levels in the Celtic Sea may have exceeded acceptable thresholds.⁸⁶ The above-referenced report also used CLA to determine harbor porpoise bycatch limits in “waters around SW France, Portugal, Spain” under the same three scenarios, yielding a limit of zero under each scenario.⁸⁷ Maps from corresponding literature show that FAO fishing area 27.8 overlaps – in part – with these waters.⁸⁸ Recorded French bycatch of harbor porpoises has occurred in FAO fishing areas 27.8 (Bay of Biscay) and 27.7 (primarily the Celtic Sea and Eastern Channel)⁸⁹, and a recent ICES report also confirms French bycatch in area 27.7.⁹⁰ Additionally, the report outlined that examinations of 2018 Bay of Biscay and English Channel stranded harbor porpoises revealed bycatch/fishery interaction evidence in 47% of examined Bay porpoises and 36% of examined Channel porpoises.⁹¹ By 2019, ICES’ Bycatch Working Group had announced its concerns about bycatch levels for harbor porpoises not only in the Baltic, but also in the Iberian and Celtic Seas.⁹²

3. Pinnipeds

While France reports cetacean bycatch numbers to various cetacean-focused organizations like IWC, pinniped and other marine mammal bycatch statistics are sparse. Additionally, European and French conservation and bycatch legislation generally focuses more on cetaceans than on other marine mammal species, aside from the inclusion of Mediterranean monk seals and Eurasian otters in one piece of European legislation (detailed in the section below).

There is some evidence of interactions, as ICES reports note two grey seals and two harbor seals captured in 2013 and 2014 observed French fisheries,⁹³ as well as evidence of fishing gear interactions in stranded grey and harbor seals (21% of those examined and 14% of those examined, respectively).⁹⁴

⁸⁵ Temple, H. J. & Terry, A. (2007). *The Status and Distribution of European Mammals*. IUCN Red List of Threatened Species – Regional Assessment. *Note that this assessment is from 2007, but the IUCN has not performed another comprehensive European assessment on harbor porpoises since this publication, so it is the most recent assessment available.

⁸⁶ ICES, *Bycatch of Small Cetaceans*.

⁸⁷ Sala et al. *Review*.

⁸⁸ Philip S. Hammond et al. “Cetacean Abundance and Distribution in European Atlantic Shelf Waters to Inform Conservation and Management,” *Biological Conservation* 164, (August 2013): 107-122, <https://doi.org/10.1016/j.biocon.2013.04.010>.

⁸⁹ IWC Data Portal, www.data.iwc.int; ASCOBANS, 2016-2019.

⁹⁰ ICES, *2020 Report Working Group on Bycatch of Protected Species*, ICES Scientific Reports vol. 2 issue 81, September 22 2020.

⁹¹ *Ibid*.

⁹² Client Earth, *European Parliament Event Briefing: The Bycatch Threat in EU Waters*, NGO Briefings, December 2019.

⁹³ ICES, *Bycatch of Small Cetaceans*.

⁹⁴ ICES, *2020 Report Working Group*.

D. Fisheries Responsible for Bycatch

French fisheries use similar gear types for multiple target species. In accessible bycatch data reports for France based on in which numbers and bycatch events stem from fishery observers, the primary gear types in which bycatch has occurred in the past five years (in order) are paired midwater trawls, trammel nets, and set gillnets.⁹⁵ In a recent common dolphin stranding-based bycatch estimate study, the most relevant gear types were trammel nets, gillnets, and paired midwater trawls.⁹⁶ Here, “most relevant” refers to gear types used in areas that most often overlapped with areas that stranded dolphins (whose bodies exhibited evidence of fishing interactions) were modeled to have originated from. Noted bycatch areas in the same time period are primarily the Bay of Biscay and the English Channel/Celtic Sea.⁹⁷ According to observer data submitted to IWC and ASCOBANS, paired midwater trawls tend to involve bycatch numbers an order of magnitude higher than other gear types in the Bay of Biscay.⁹⁸ Paired midwater trawls and gillnets) are used to target European anchovies, hake, seabass, sardines, Atlantic cod, monkfish and sole, and Atlantic mackerel, all of which are seen in the LOFF, NOAA’s import records, French export records, or a combination of the three. Trammel net fishing, particularly for anglerfish, though also an issue, is not discussed in depth in this report, as these fisheries do not export to the US directly, based on the LOFF. However, it is still important to take note of the bycatch problem these fisheries pose, should their products enter the US through third parties.

While we can conclude that paired midwater trawls and gillnets present an ongoing, significant bycatch issue, it is important to note that the data found for this report does not fully encompass France’s bycatch across all gear types and cumulatively within different fisheries. France is obligated to report bycatch numbers to both IWC and ASCOBANS and was obligated to report these numbers to NOAA by the end of November 2021. The bycatch numbers in the IWC and ASCOBANS reports, as stated above, were produced by observers, who only cover a small percentage of total vessels in each fleet. Additionally, some fishing gear types, such as longlines, do not have observer requirements from the French government, and we do not see them represented in France’s bycatch reports to its various international agreements. Further, until at least 2019, the observers that were in place were fisheries observers, *not* observers that were part of a dedicated scheme that focuses on bycatch (see more in section V).

E. Bycatch in Other Areas of French Fishing

1. Mediterranean Sea

In Mediterranean waters, the most at-risk species are the endangered Mediterranean monk seal and Mediterranean sperm whale. Monk seals face bycatch threats primarily from set nets

⁹⁵ IWC Data Portal, ASCOBANS, 2016-2019.

⁹⁶ Peltier et al., “In the Wrong Place at the Wrong Time.”

⁹⁷ IWC Data Portal; ASCOBANS, 2016-2019.

⁹⁸ *Ibid.*

(gillnets, trammel nets, ghost nets), though some gillnets are now banned in the Mediterranean.⁹⁹ Mediterranean monk seal bycatch is not reported to IWC or ASCOBANS, as these are cetacean-focused organizations, though France is required to report any monk seal bycatch, whether dead or alive, to the FAO.¹⁰⁰ These data do not seem to be publicly available online via the FAO website and are not reported in the LOFF. France’s fishing efforts in the Mediterranean are largely situated in the western part of the sea, whereas monk seals are most commonly found in the eastern half; it is possible that French Mediterranean fisheries do not interact with monk seals.¹⁰¹

Bycatch is also a large issue for sperm whales in the area. There are few estimates for French bycatch in the Mediterranean Sea that can be found in official French reports, but the primary gear type threatening sperm whales is pelagic driftnets, which have been officially banned in the Mediterranean since 2001.¹⁰² The use of illegal driftnets has continued in the area, but France seemed to have finally cracked down on its illegal driftnet fisheries by the early 2010s.¹⁰³ France reported two stranded Mediterranean sperm whales to IWC in 2016, and another two stranded whales were found along the French Mediterranean coast in 2018, but France has not reported bycatch of any Mediterranean sperm whales to IWC in the past five years.¹⁰⁴ IWC reports do not indicate if these stranded whales exhibited signs of fishery interactions.

France has reported some bycatch of striped dolphins in the Mediterranean to IWC – stemming from midwater otter trawls targeting anchovies.¹⁰⁵ Striped dolphin strandings have also been reported in French metropolitan waters and, more specifically, the Mediterranean Sea.¹⁰⁶ Fourteen percent of examined stranded Mediterranean striped dolphins in 2018 showed signs of bycatch.¹⁰⁷ While these dolphins are vulnerable in the Mediterranean, exact and recent estimates of abundance are not available.

2. Territorial Waters

⁹⁹ Consortium for Wildlife Bycatch Reduction, “Mediterranean Monk Seal,” Consortium for Wildlife Bycatch Reduction, accessed June 21, 2021, <https://www.bycatch.org/focus-species/mediterranean-monk-seal>; Caterina Fortuna, “Cetacean bycatch in the Mediterranean Sea,” (presentation to the European Commission on behalf of the IWC Scientific Committee),

<https://ec.europa.eu/environment/nature/natura2000/platform/documents/B.2%20Fortuna.pdf>.

¹⁰⁰ FAO GFCM, *Recommendation GFCM/35/2011/5 on fisheries measures for the conservation of the Mediterranean monk seal (Monachus monachus) in the GFCM Competence Area*, 2011.

¹⁰¹ FAO GFCM, *The State of Mediterranean and Black Sea Fisheries 2020*, FAO, 2020; Marine Mammal Commission, “Mediterranean Monk Seal,” MMC, accessed June 22, 2021, <https://www.mmc.gov/priority-topics/species-of-concern/mediterranean-monk-seal/>.

¹⁰² IUCN, “Alert on the Mediterranean sperm whale subpopulation,” IUCN Cetacean Specialist Group, accessed June 22, 2021, <https://iucn-csg.org/alert-on-the-mediterranean-sperm-whale-subpopulation/>.

¹⁰³ Oceana, “Unintended Targets: Why These Whales and Dolphins are Being Pushed to the Edge of Extinction,” Oceana, accessed June 22, 2021, <https://oceana.org/blog/unintended-targets-why-these-whales-and-dolphins-are-being-pushed-edge-extinction/>.

¹⁰⁴ IWC Data Portal; IUCN, “Alert on the Mediterranean.”

¹⁰⁵ IWC Data Portal.

¹⁰⁶ IWC Data Portal.

¹⁰⁷ ICES, *2020 Report Working Group*.

Bycatch data from France's territories are limited or not available. There are no records of ASCOBANS national reports submitted by any of France's territorial areas, as ASCOBANS is focused on specific European waters. In its national reports to ASCOBANS, France only reports on bycatch and stranding numbers for FAO Fishing Areas 27.8 and 27.7, the Bay of Biscay and the Irish Sea/West of Ireland/Porcupine Bank/English Channel (here, primarily the English Channel), respectively.

French reports to the IWC cover a wider range of French fishing areas, noting which fishing area each separate bycatch report stems from. In its annual reports to IWC, France does include bycatch and stranding numbers from the French Caribbean, the South Pacific, and the Indian Ocean, which suggests that these numbers come from vessels flying French territories' flags rather than those flying France's flag, though this is not certain.

In the LOFF, France's TAAF Patagonian toothfish fishery, using fish pots, traps, and bottom longlines, reported 0.3 bycaught Southern elephant seals and 0.7 bycaught sperm whales. A separate LOFF entry for Patagonian toothfish caught only with bottom longlines in the TAAF reported 1.17 bycaught Southern elephant seals. Other mammals in this entry were reported to have 0 bycatch. TAAF bottom longline Antarctic toothfish fisheries in the LOFF reported 0 bycatch of killer whales, leopard seals, and Weddell seals. French Polynesia's pelagic longline mixed species fishery reported 0 bycatch of false killer whales and short-finned pilot whales but did not provide bycatch numbers for other marine mammals. No bycatch numbers were provided for New Caledonian, St. Pierre & Miquelon, and remaining TAAF and Polynesian fisheries.

Aside from some reporting in IWC reports and these limited entries in the LOFF, bycatch numbers are not readily available for French territories. However, in examining the IWC data for France and its territories, no bycatch has been reported in areas aside from European waters (English, Eastern Channels; Bay of Biscay; Mediterranean) since 2015 – either bycatch is not being reported for territorial areas, or no bycatch has occurred in those areas since 2015, which seems unlikely.

From 2013 to 2015, the most commonly bycaught species in the French Caribbean (as reported to IWC) were common bottlenose dolphins and short-finned pilot whales. In French Polynesia, the same time period saw spinner dolphins, humpback whales, and sperm whales as the most bycaught species. In New Caledonian waters, the most bycaught species were short and long-finned pilot whales and Longman's beaked whales. As the LOFF lists bycatch for French territory fisheries, like its metropolitan fisheries, largely as "unknown," these data cannot be thoroughly compared to what France has reported to the US.

V. National Legislation/Regulation

A. Introduction

Several actors play a role in regulating French fishing efforts. The European Commission oversees French and other EU Member State fishing fleets and European fish stock rules. The French Directorate of Maritime Fisheries and Aquaculture (DPMA), under the French Ministry of the Environment, Energy, and the Sea (MEEM) manages general fishing and aquaculture

operations in France.¹⁰⁸ Policies created by the DPMA are implemented by the Interregional Directors for the Sea (DIRM).

Within the French government, since 1995, the Secretary General for the Sea (SG Mer) coordinates fishery control goals and is meant to ensure policies are properly implemented.¹⁰⁹ The French AgriMer government sector has an interdisciplinary fisheries and aquaculture council that brings together stakeholders to monitor fishing and aquaculture products in the French market. Finally, in 2020, the French government created a new Ministry for Maritime/Marine Affairs, headed by the Minister of the Sea (also a new position), who works alongside other federal-level ministers to regulate aquaculture and ocean production and other maritime policies.¹¹⁰ France's Research Institute for the Exploitation of the Sea (Ifremer) contributes to novel research to aid in understanding marine ecosystems.¹¹¹ Finally, France's Programme ObsMer manages the nation's required at sea observers (see more below).¹¹²

B. European Legislation

As an EU member, France is subject to both national-level French fishing regulations and broader EU regional regulations. The majority of France's legislative guidelines for marine mammals stem from EU regulations and directives, of which there are several relating to fisheries and bycatch. Vessels flying the French flag must register under the EU Fleet Register database, aiding in EU monitoring of fishing activity.¹¹³ The EU's Common Fisheries Policy (CFP, Council Regulation 1380/2013) also applies to all EU Member States and is the primary fisheries legislation focused on maintaining sustainable fisheries. One obligation laid out in the CFP is to maintain sustainable economic, environmental, and social conditions when exploiting resources.¹¹⁴ CFP directs states to use ecosystem-based fisheries management approaches, minimize negative impacts of fisheries on the marine environment, and achieve Good Environmental Status (GES) of marine areas by 2020, which includes the option for implementing emergency measures for especially threatened marine biological resources.¹¹⁵ EU Council Regulation 2017/1004 (EU-MAP) is the primary regulatory piece for marine data collection related to the CFP. In complying with its data collection requirements for this regulation, France carries out its ObsMer program, which places observers on vessels to collect information on gear, fishing areas, catch composition, and environmental factors.¹¹⁶

¹⁰⁸ Ifremer, "Public Policy Support: Fish Farming," France Ifremer, accessed June 15, 2021, <https://wwz.ifremer.fr/en/Public-policy-support/Aquaculture/Fish-farming>.

¹⁰⁹ Ministère de la Mer, "Public Policies."

¹¹⁰ Hans Uwe Mergener, "Paris: New Ministry for Maritime Affairs," Europäische Sicherheit & Technik, accessed June 16, 2021, <https://esut.de/en/2020/07/meldungen/21610/paris-neues-ministerium-fuer-maritime-angelegenheiten/>.

¹¹¹ *Ibid.*

¹¹² ICES, *2020 Report Working Group*.

¹¹³ European Commission, "Fleet Register," EU European Commission, accessed August 15, 2021, https://webgate.ec.europa.eu/fleet-europa/index_en.

¹¹⁴ Regulation (EU) No 1380/2013 of December 11 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC [2013] OJ L354/22.

¹¹⁵ (EU) No 1380/2013.

¹¹⁶ Ifremer, "Observation of Catches at Sea," France Ifremer, accessed July 1, 2021, <https://sih.ifremer.fr/Ressources/ObsMer>.

Prior to 2018, the primary EU regulation for bycatch issues was Council Regulation (EC) 812/2004, which laid out mitigation measures for cetacean bycatch in EU fishing operations. EC 812/2004 outlined i) the mandatory use of acoustic deterrent devices (pingers) in vessels over 12m long in certain areas and using certain gear types;^ε ii) requirements for EU Member States to monitor and assess pinger use and its impacts on bycatch levels; iii) instructions to Member States to create monitoring schemes for cetacean bycatch using observers on certain vessels; and iv) obligations of Member States to present annual reports on their efforts.¹¹⁷

However, in April 2019, the European Parliament voted for the repeal of 812/2004, replacing it with EC 2019/1241, which meshed together thirty smaller pieces of conservation legislation, entitling it the Regulation on the Conservation of Fishery Resources and Protection of Marine Ecosystems through Technical Measures.¹¹⁸ This regulation potentially strengthened some aspects of bycatch reduction but weakened others. Article 3 of the regulation lays forth several objectives, including a bycatch objective: “Technical measures shall in particular contribute to ... ensur[ing] that incidental catches of sensitive marine species ... are minimized and where possible eliminated.”¹¹⁹ Article 3 is followed by an article on “targets,” stating that “[t]echnical measures shall aim to ensure that ... incidental catches of marine mammals ... do not exceed levels provided for in Union legislation and international agreements that are binding on the Union.”¹²⁰ Despite the reference to “levels provided for in Union legislation,” we were unable to find any Union legislation that provided specific incidental catch thresholds for any marine mammals and researchers have noted that a lack of quantified conservation objectives is an ongoing issue in European bycatch legislation.¹²¹

The regulation then provides several common technical measures that are meant to contribute to meeting the regulation’s objectives and targets. For example, it places a general restriction on the use of certain gear (e.g., prohibiting the use of driftnets longer than 2.5 km).¹²² In addition, the regulation has technical measures targeted at specific areas and species, like the mandated use of pingers on bottom-set gillnet and entangling net vessels over 12m in length in certain areas (e.g. Baltic Sea, some ICES sub-division areas) to limit bycatch of cetaceans.¹²³ While such measures are important, they are only meaningful if they are rigorously implemented and assessed for

^ε Bottom-set gillnets and entangling nets, as well as drift nets, during specific times of year, based on ICES subdivisions and in areas of the Baltic Sea.

¹¹⁷ Council Regulation (EC) No 812/2004 of April 26, 2004 Laying Down Measures Concerning Incidental Catches of Cetaceans in Fisheries and Amending Regulation (EC) No 88/98 [2004] OJ L150/12.

¹¹⁸ S.J. Dolman et al., “Implications of New Technical Measures Regulation for Cetacean Bycatch in European Waters,” *Marine Policy* 124 (February 2021): <https://doi.org/10.1016/j.marpol.2020.104320>.

¹¹⁹ Regulation (EU) 2019/1241 of June 20 2019 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures, Amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and Repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2009, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005 [2019] OJ L198/105. Article 3.

¹²⁰ *Id.* At Article 4.

¹²¹ Rogan, E., Read, A. J., & Berggren, P. (2021). Empty Promises: The European Union is Failing to Protect Dolphins and Porpoises from Fisheries By-Catch. *Fish and Fisheries* 22(4), pp. 865-869. <https://doi.org/10.1111/faf.12556>.

¹²² *Id.* at Articles 7 – 9.

¹²³ *Id.* at Annex XIII. Part A (note that use of pingers is directed at limiting incidental catch of cetaceans, not all marine mammals).

effectiveness. Furthermore, the pinger requirement fails to capture many vessels given that 94% of French gillnet vessels are under 12m in length.¹²⁴

It is also important to note that while France performed trials with pingers in the early stages of EC 812/2004, it did not implement the use of pingers as mandated in EU law from 2006-2014.¹²⁵ France's use of pingers has since expanded, but this kind of delay in implementing portions of conservation policies is concerning. And there is no evidence that when pingers are required that France is taking "necessary steps to monitor and assess ... the effects of acoustic deterrent device use over time in the fisheries and areas of concern" as required by EU regulation.¹²⁶

The regulation also mandates annual monitoring schemes in specific fisheries, on vessels over 15m in length. In France, however, 80% of vessels have a length under 15m.¹²⁷ Those relative to France include pelagic trawls in the English Channel and Bay of Biscay, pelagic trawls in the Mediterranean, bottom gillnets in certain sections of the Bay of Biscay and English Channel, and high-opening trawls in the Bay of Biscay and English Channel.¹²⁸ While 812/2004 noted that these observer schemes should be designed as a means to estimate cetacean bycatch rates, 2019/1241 does not include this note.

The new regulation removes 812/2004's obligation for annual reports on the implementation of bycatch mitigation measures. Additionally, the new regulation requires joint recommendations made with unanimous agreement between States to pass new measures, which relies heavily on States cooperating and taking their own initiatives. Member States 'may' put mitigation measures or gear restrictions in place, but these are not explicitly required by the EU. If Members choose to adopt new measures, they are obligated to share them with other EU States and make information about them publicly available.¹²⁹

The EU Habitats Directive is also relevant to marine mammal bycatch. This legislation – 1992/43/EEC – requires the use of "effective measures" to avoid and monitor bycatch in EU fisheries. The Habitats Directive also specifically forbids the deliberate capture and killing of species listed in Annex IV of the regulation, which lists sensitive species in the area. These species also are required to have a protective system and a monitoring system in place for their

¹²⁴ Rogan et al. (2021).

¹²⁵ Fiona L. Read, Peter G. H. Evans, and Sarah J. Dolman, *Cetacean Bycatch Monitoring and Mitigation under EC Regulation 812/2004 in the Northeast Atlantic, North Sea and Baltic Sea from 2006 to 2014*, WDC, 2017.

¹²⁶ See Regulation (EU) 2019/1241 of June 20 2019 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures, Amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and Repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2009, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005 [2019] OJ L198/105. Annex XIII. Part A.

¹²⁷ Rogan et al. (2021).

¹²⁸ Regulation (EU) 2019/1241 of June 20 2019 on the Conservation of Fisheries Resources and the Protection of Marine Ecosystems Through Technical Measures, Amending Council Regulations (EC) No 1967/2006, (EC) No 1224/2009 and Regulations (EU) No 1380/2013, (EU) 2016/1139, (EU) 2018/973, (EU) 2019/472 and (EU) 2019/1022 of the European Parliament and of the Council, and Repealing Council Regulations (EC) No 894/97, (EC) No 850/98, (EC) No 2549/2009, (EC) No 254/2002, (EC) No 812/2004 and (EC) No 2187/2005 [2019] OJ L198/105. Annex XIII, Part A.

¹²⁹ (EU) No 2019/1241.

incidental capture and killing, and States are required to make an effort to reduce these incidental impacts so that the species are not negatively affected.¹³⁰ All cetacean species are listed in Annex IV, as are Mediterranean monk seals and Eurasian otters.

Finally, the EU Marine Strategy Framework Directive (MSFD) 2008/56/EC also provides relevant guidance and rules for European fisheries. This legislation requires the industry to assess impacts of different pressure sources on the marine environment, one of which is “incidental non-target catches.”¹³¹ In achieving “good environmental status,” States must take these pressures into account and use their trends in developing targets for this achievement. The MSFD also calls for the maintenance of biological diversity with the aid of data collected in fisheries.¹³² Importantly, the MSFD and Habitats Directive operate differently than regulations – Directives in the EU are more open-ended in how their goals can be achieved by each member state.¹³³ This leaves open the possibility that qualitative language such as “good” and “effective” can be interpreted subjectively by states like France.

In July 2020, the European Commission, after being pressured by environmental NGOs¹³⁴, opened infringement proceedings against France, Spain, and Sweden with respect to the Habitats Directive and Common Fisheries Policy requirements.¹³⁵ The Commission noted France’s lack of a proper bycatch monitoring scheme, conservation measures, and pinger control and inspection with respect to common dolphins and harbor porpoises.¹³⁶ After noting France’s lack of protection for these cetaceans, the Commission gave France three months to take action to reduce bycatch of each species, with recommendations for how to do so stemming from NGOs, including seasonal closures and pinger mandates.¹³⁷ The Commission also promised emergency actions – such as forced fishery closures – to protect the cetacean species.¹³⁸ By December 2020, though, neither France nor the Commission had taken concrete steps to additionally reduce bycatch levels of either species.¹³⁹ Since then, France produced a joint recommendation with Spain and Portugal to address bycatch of common dolphins and harbor porpoises, but the EU’s Scientific, Technical, and Economic Committee for Fisheries (STECF) found in spring 2021 that

¹³⁰ Council Directive (EEC) 92/43 of May 21, 1992, on the Conservation of Natural Habitats and of Wild Fauna and Flora [1992] OJ L206/7.

¹³¹ Directive 2008/56/EC of June 17 2008 Establishing a Framework for Community Action in the Field of Marine Environmental Policy (Marine Strategy Framework Directive).

¹³² ICES, *Roadmap for ICES Bycatch Advice on Protected, Endangered, and Threatened Species*, ICES Advisory Committee, 2020.

¹³³ Rogan et al. (2021).

¹³⁴ Katharina Khalife, “WDC Leads Call for EU Commission to Take Legal Action Against 15 Governments Over Dolphin Deaths,” Policy News, July 10, 2019, <https://uk.whales.org/2019/07/10/wdc-leads-call-for-eu-commission-to-take-legal-action-against-15-governments-over-dolphin-deaths/>.

¹³⁵ Dolman et al., “Implications”; Europe1, “Accidental Catches of Dolphins: The Minister of the Sea Promises More Controls,” October 11, 2020, <https://www.europe1.fr/faits-divers/prises-accidentelles-de-dauphins-la-ministre-de-la-mer-promet-plus-de-controles-3997766>.

¹³⁶ European Commission, “July Infringements Package: Key Decisions,” July 2, 2020, https://ec.europa.eu/commission/presscorner/detail/en/INF_20_1212.

¹³⁷ ICES, “Emergency Measures to Prevent Bycatch of Dolphins and Porpoises,” May 26, 2020, <https://www.ices.dk/news-and-events/news-archive/news/Pages/EmergencyBycatchMeasures.aspx>.

¹³⁸ Danny Groves, “Thousands of Dolphin Deaths Likely in Spain and France as EU Fails to Act,” Whale and Dolphin Conservation, December 1, 2020, <https://uk.whales.org/2020/12/01/thousands-of-dolphin-deaths-likely-in-spain-and-france-as-eu-fails-to-act/>.

¹³⁹ *Id.*

the recommendation's proposed measures were not sufficient.¹⁴⁰ The European Commission has yet to make a decision about the joint recommendation's effectiveness. France's efforts over the past year (detailed in subsection e. below) have still not included closures, reduced fishing effort, or mandatory mitigation measures.

The EU also rolled out its Biodiversity Strategy for 2030 in May of 2020, which further emphasizes the need to achieve GES, through means such as requiring states to reduce or eliminate bycatch of sensitive species.¹⁴¹ The language of the strategy mentions increased data collection toward this end but does not further elaborate on actions to reduce bycatch. The strategy notes that a new fisheries action plan will be developed toward furthering marine conservation and protection – stakeholder input is currently being gathered for this development.¹⁴²

C. Agreements and Commissions

In addition to EU regulations, France and its territories are also beholden to directives and guidelines from regional groups, including ASCOBANS, the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea, and Contiguous Atlantic Area (ACCOBAMS), the IWC, several RFMOs, ICES, and Pelagos Sanctuary. As a member of both ASCOBANS and ACCOBAMS, France has agreed to both cetacean conservation groups' resolutions and agreement details. Both ACCOBAMS and ASCOBANS have a history of bycatch mitigation efforts. ACCOBAMS recommends that nations put monitoring programs in place to support its efforts to mitigate impacts of fishing interactions with small cetaceans, implement gear bans in place, and use pingers to help alleviate bycatch in the Black and Mediterranean Seas.¹⁴³ ACCOBAMS does not publicly publish annual reports from its Member States, but a 2020 report from its scientific committee noted that France had not properly implemented the Agreements' Conservation Plan for Mediterranean Common Dolphins.¹⁴⁴ ASCOBANS has monitoring programs in place and encourages technological development in reducing bycatch with the goal of approaching zero mortality in the long-term and maximum one percent mortality in the short-term.¹⁴⁵ ASCOBANS publishes annual reports for Member States that include information about monitoring programs and mitigation efforts for various stressors – France did not cover bycatch in its 2020 report, but bycatch was part of its 2016-2019 reports.

The IWC focuses on cetacean science and management, and in 2016, the IWC announced its support for a new Bycatch Mitigation Initiative (BMI). The collaborative project is working toward improving bycatch assessments, testing mitigation methods, and working with a range of

¹⁴⁰ Coalition Clean Baltic, "EU Scientific Body Confirms Stronger Bycatch Measures are Needed to Protect Bay of Biscay Common Dolphins and Baltic Proper Harbor Porpoises," April 15, 2021, <https://ccb.se/2021/04/eu-scientific-body-confirms-stronger-bycatch-measures-are-needed-to-protect-bay-of-biscay-common-dolphins-and-baltic-proper-harbour-porpoises/>.

¹⁴¹ European Commission, "Questions and Answers: EU Biodiversity Strategy for 2030 – Bringing Nature Back Into Our Lives," EU Press Corner Questions and Answers, May 20, 2020.

¹⁴² European Commission, "Action Plan to Conserve Fisheries Resources and Protected Marine Ecosystems: Your Opinion Counts – Take Part in Targeted Consultation," EU News Announcement, October 25, 2021.

¹⁴³ Resolution 4.9 Fisheries Interactions with Cetaceans, 2010, ACCOBAMS-MOP4/2010/Res4.9.

¹⁴⁴ ACCOBAMS, *Report of the Thirteenth Meeting of the Scientific Committee of ACCOBAMS*, February 2020.

¹⁴⁵ Resolution No. 5: Monitoring and Mitigation of Small Cetacean Bycatch, 2016, ASCOBANS Resolution 8.5.

stakeholders to reduce bycatch.¹⁴⁶ Membership in some of these groups like IWC also includes reporting, often on bycatch (e.g., much of the bycatch data in this report stems from IWC data), stranding, and abundance numbers. ICES, an intergovernmental body, also does not directly create regulations, but members are given advice by its scientists on a number of issues, including prevention and mitigation of marine mammal bycatch.¹⁴⁷ ICES advice often informs EU-wide regulations.

France is a member of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), whose conservation measures and regulations are applicable to French Antarctic fisheries. These fisheries primarily target toothfish. CCAMLR-covered operations have relatively high observer coverage percentages and report low bycatch numbers.¹⁴⁸ CCAMLR marine mammal conservation measures are primarily focused on minimizing bycatch in trawl fisheries – e.g., by implementing gear modifications – and requiring the use of marine mammal exclusion devices in certain trawl fisheries.¹⁴⁹ French trawling fisheries in TAAF areas are listed as exempt in the LOFF.

France’s Indian Ocean tuna fisheries are covered by the Indian Ocean Tuna Commission (IOTC), which prohibits intentional setting of purse seines on cetaceans and encourages/requires, depending on Member State-specific laws, data collection related to incidental captures of cetaceans.¹⁵⁰ IOTC also prohibits the use of large driftnets on its high sea areas.¹⁵¹ France also must report Southern Indian Ocean fishery efforts, including bycatch, to the Southern Indian Ocean Fisheries Agreement, which it did from 2009 to 2018.¹⁵²

Some regional French fisheries are subject to Inter-American Tropical Tuna Commission (IATTC) resolutions and measures – those focusing on marine mammals primarily stem from the IATTC’s Dolphin Safe measures and the Agreement on the International Dolphin Conservation Program (AIDCP). The IATTC and AIDCP, unlike the IOTC, do not call for Member States to refrain from intentional purse seine setting on dolphins; instead, the AIDCP has a goal of reducing mortality to levels approaching zero via the setting of Dolphin Mortality Limits.¹⁵³ Although France is a party to IATTC, it has not ratified AIDCP. However, the European Union has ratified AIDCP.¹⁵⁴ ICCAT does not seem to have passed any binding marine mammal bycatch regulations.

¹⁴⁶ IWC, “Bycatch,” IWC Conservation Management, accessed June 25, 2021, <https://iwc.int/bycatch>.

¹⁴⁷ ICES, *Bycatch of protected*.

¹⁴⁸ Calderan and Leaper, *Investigations of Countries*.

¹⁴⁹ Conservation measure 25-03 Minimisation of the Incidental Mortality of Seabirds and Marine Mammals in the Course of Trawl Fishing in the Conservation Area, 2020, CCAML-39; Conservation Measure 51-02 Precautionary catch limitation on *Euphasia superba* in Statistical Division 58.4.1, 2008, CCAMLR-XXVII.

¹⁵⁰ Resolution 13-04 on the Conservation of Cetaceans, 2013, IOTC-CMM-13-04.

¹⁵¹ FAO and UNEP, *Abandoned, Lost, or Otherwise Discarded Fishing Gear*, 2016, FAO Fisheries & Aquaculture Technical Paper 523.

¹⁵² SIOFA, *SIOFA Observer Data and Database Rev. 2*, SC-05-INFO-02 Info Paper.

¹⁵³ IATTC, “IATTC – International Dolphin Conservation Program (IDCP),” IATTC, accessed July 1, 2021, <https://www.iatcc.org/IDCPENG.htm>.

¹⁵⁴ *Ibid.*

Some French territorial fisheries are parties to the Western and Central Pacific Fisheries Commission (WCPFC). WCPFC has both a vessel monitoring system program and a regional observer program for vessel monitoring.¹⁵⁵ Based on the number of interactions noted in the observer program, WCPFC has put in place binding cetacean conservation measures specific to purse seining, including a prohibition on deliberate [setting on/encirclement of] cetaceans, reporting of cetacean bycatch and attempting live releases, and reporting on implementation of these measures through the observer program.¹⁵⁶ In addition, in an effort to reduce serious injury and mortality of cetaceans, the WCPFC has developed a series of guidelines for best handling practices of marine mammals, specifically cetaceans for both purse seine and longline vessels fishing in the WCPFC area.¹⁵⁷

France is also a member of several FAO groups. As a party to the General Fisheries Commission for the Mediterranean (GFCM), France is meant to adhere to a 2012 recommendation that involves monitoring and mitigating incidental cetacean capture in fisheries, placing restrictions on gillnets, and releasing live cetaceans who are captured during fishing operations in the Mediterranean and Black Seas.¹⁵⁸ This recommendation also involves data reporting requirements, including incidental catch numbers. GFCM also requires its members to capture no monk seals in the Mediterranean.¹⁵⁹ Recently agreed upon GFCM/43/2019/2 enhances conservation efforts for cetaceans in relevant waters.¹⁶⁰ However, compliance with FAO commission rules is voluntary, as these are more guidelines and goals than codified regulations. As a member of the Western Central Atlantic Fishery Committee (WECAFC), France is directed to prioritize – among other things – implementing FAO international bycatch and discards guidelines, though WECAFC noted in its 2014-2020 strategic plan that not all members have been successful with these efforts.¹⁶¹ Other FAO groups that France is a member of, such as the Fishery Committee for the Eastern Central Atlantic (CECAF), do not seem to have structured resolutions around marine mammal bycatch.

D. National Legislation

Within French law, a public ordinance from 2011 – applicable to French waters and its territories’ waters – lists which marine mammals are protected and bans intentional killing, harassment/disturbance, and commercial trade of these species and their products.¹⁶² While the

¹⁵⁵ Resolution on Conservation and Management Measures – CMM 2004-04, WCPFC, 2004.

¹⁵⁶ Conservation and Management Measure for Protection of Cetaceans from Purse Seine Fishing Operations – CMM 2011-03, WCPFC, 2011.

¹⁵⁷ <https://www.wcpfc.int/doc/supplemm-2011-03/best-practices-safe-handling-and-release-cetaceans>

¹⁵⁸ GFCM/36/2012/2 on Mitigation of Incidental Catches of Cetaceans in the GFCM Area of Application, GFCM 2012.

¹⁵⁹ Recommendation GFCM/35/2011/5 on Fisheries Measures for the Conservation of the Mediterranean Monk Seal (*Mobachus monachus*) in the GFCM Competence Area, GFCM, 2011.

¹⁶⁰ Paolo Carpentieri, “Incidental Catch of Vulnerable Species in the Mediterranean: an Overview of the ‘MedBycatch Project’ and of the Results from ‘SoMFi 2020’,” (presented at the 5th Conference on Cetacean Conservation in South Mediterranean Countries, April 2021).

¹⁶¹ WECAFC, *Strategic Plan 2014-2020*, FAO WECAFC, accessed July 2, 2021, <https://www.fao.org/3/i5096t/i5096t.pdf#page=30>.

¹⁶² IWC, “Extent of Whale and Dolphin Watching,” IWC Whale Watching Handbook, accessed July 5, 2021, <https://wwhandbook.iwc.int/en/country-profiles/france>.

ordinance is not universal to all marine mammals (e.g., it does not include sea otters), it covers nearly all bycatch-relevant species for French fisheries.¹⁶³ The ordinance was amended in 2018 to require captains to declare all bycaught marine mammals in their gear and again in 2020 to clarify provisions related to harassment and the list of protected marine mammals.¹⁶⁴ A 2017 note published by the French government details the obligation to report stranded, adrift, dead, or distressed marine mammals to the Pelagis Observatory, which hosts the scientific coordinator of France's National Stranding Network.¹⁶⁵ The stranding network covers the entire metropolitan French coastline and, on average, examines around 80% of stranded animals, with publicly available data presented online.¹⁶⁶ This obligation is part of France's marine mammal monitoring program to protect biodiversity.

Pelagis is also involved in the data collection program France uses to help achieve GES under the MSFD. France's SAMM program, coordinated by Pelagis researchers and other scientists, began in 2011-2012 to collect abundance and density estimates for cetaceans, birds, and sea turtles.¹⁶⁷ These surveys are set to occur every 7-10 years, with the second iteration having occurred in the winter 2020-2021 season. The Census of Marine Mammals and Other Pelagic Megafauna by Aerial Observation (REMMOA) program is similar to SAMM and took place in 2008-2015 across metropolitan French waters and French territorial waters. This program is headed by the French Office of Biodiversity but has not run any surveys since 2015.¹⁶⁸ Further, the REMMOA report that stemmed from these surveys outlines species density and observation numbers but does not include estimates of abundance.

A 2019 report summarizes France's current bycatch monitoring efforts finding: 1) observers for 0.1 to 1.0% of total fishing effort – varying by gear type – with up to 5% for midwater pair trawl (PTM) vessels; 2) 0.03% of total bycatch reported by fishermen directly; and 3) 90% of stranded animals were assessed on-site, and 10% of stranded animals underwent a pathological investigation.¹⁶⁹ Similar efforts occurred in 2016-2018, with 2018 including an additional dedicated observer scheme for a pair of PTM vessels and different numbers for self-reporting by fishermen. The French government report summarizing Bay of Biscay-based efforts and data for bycatch and stranding mitigation in winter 2020-2021 (discussed in part III) notes that attempts were made to have 5% observer coverage on both pelagic trawls and gillnets, though this is not

¹⁶³ Order of July 1, 2011, Establishing the List of Marine Mammals Protected on National Territory and the Terms of Their Protection, JORF No. 0171 of July 26, 2011,

<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000024396902>.

¹⁶⁴ Order of September 6, 2018, amending the Order of July 1, 2011, Establishing the List of Marine Mammals Protected on National Territory and the Terms of Their Protection, JORF No. 0225 of September 29, 2018, <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000037444411>; Order of September 3, 2020 amending the order of July 1, 2011 setting the list of marine mammals protected on national territory and the terms of their protection, JORF No. 0240 of October 2, 2020, <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000042387221>.

¹⁶⁵ Note of April 27, 2017, Relating to the Reporting of Stranded or Adrift Marine Mammals, Dead or in Distress, for Their Scientific Exploitation, BO MEEM No. 2017/9 of May 25, 2017.

¹⁶⁶ ASCOBANS, 2016-2019.

¹⁶⁷ Observatoire Pelagis, "SAMM: Aerial Monitoring of the Marine Megafauna," Pelagis, accessed October 15, 2021, <https://www.observatoire-pelagis.cnrs.fr/pelagis/programmes/samm/?lang=en>.

¹⁶⁸ Observatoire Pelagis, "REMMOA: A Programme of Naturalist Observations of the Overseas Territories," Pelagis, accessed October 15, 2021, <https://www.observatoire-pelagis.cnrs.fr/pelagis/programmes/remmoa/?lang=en>.

¹⁶⁹ ASCOBANS, 2016-2019.

part of codified law.¹⁷⁰ A March 2021 press release stated that this 5% coverage was achieved across fisheries, but specific gear types were not mentioned.¹⁷¹ Another government report summarizing similar efforts for winter 2021-2022 notes the 2022 observer coverage goal as 3% of fishing effort.¹⁷² As previously discussed, dedicated observer schemes are more directly focused on monitoring for cetaceans, while general fisheries observers are typically in place to observe fishery catch that is brought on board. Often, bycaught cetaceans are removed from nets and lines before catch is brought onboard.¹⁷³

In 2019, France decreed the mandatory use of pingers on pelagic trawling vessels greater than 12m long. Pingers were fitted on three pairs of French paired midwater trawl vessels in the Northern Bay of Biscay in 2019, which are thought to effectively mitigate 65% of potential bycatch, based on experimental trials.¹⁷⁴ France also began an experimental eDNA program in 2019 to help identify marine mammals in the Iroise Sea, off Brittany.¹⁷⁵ These research efforts have yet to translate to national, codified legislation.

E. Recent Updates and Efforts

Since late 2020, the French government announced steps to implement more measures to address the nation's bycatch, focusing primarily on the common dolphin and – to a lesser extent – harbor porpoise in the Bay of Biscay. In February 2021, the Minister announced seven measures to reduce bycatch: i) mandatory declarations of bycatch as part of the landings obligation (a part of EU fisheries legislation requiring 100% of catch in gear to be hauled onboard; since 2019); ii) surveying and gathering data from cetacean strandings, publishing the data, and reporting progress on mitigation actions (bi-monthly reports posted on the Minister of the Sea website since December 2020); iii) placing pingers on all trawling boats interacting with cetaceans and working toward increased technological development for bycatch mitigation (since January 2021); iv) a three-month aerial observation program to achieve better abundance estimates (winter 2020/2021); v) test the use of cameras on gillnet vessels in the Bay of Biscay (since February 2021 – 20 **volunteer** vessels, or roughly 0.04% of the fleet, was the goal for the end of 2021 – but as of February 2022, only 18 vessels were equipped with cameras¹⁷⁶); vi) a joint project with Spain and Portugal – other large fishing presences in the Bay – to better estimate and limit bycatch and interactions between vessels and cetaceans (March 2021 start); and vii) a **voluntary** observation campaign on trawlers and gillnetters (December 2020 – April 2021; 499

¹⁷⁰ France Gouv. de Mer (a), *Suivi des Captures*.

¹⁷¹ Ministère de la Mer, “Captures Accidentelles de Petits Cétacés en Atlantique: Suivi du Plan D’Action,” July 23, 2021, <https://www.mer.gouv.fr/captures-accidentelles-de-petits-cetaces-en-atlantique-suivi-du-plan-daction>.

¹⁷² France Gouv. de Mer (b), *Suivi des Captures Accidentelles de Petits Cétacés Durant la Période à Risque Hiver 2021-2022*. Gouvernement de France, 2021, Bulletin No. 1, accessed March 15, 2022, https://mer.gouv.fr/sites/default/files/2022-01/_%24220201_Bulletin_n2_VF.pdf.

¹⁷³ Anonymous, personal communication, November 8, 2021.

¹⁷⁴ ASCOBANS, *2016-2019*.

¹⁷⁵ *Ibid.*

¹⁷⁶ Ifremer, “Why is it so Hard to Reduce Dolphin Incidental Captures [Scientist’s World #7],” July 6, 2021, <https://wwz.ifremer.fr/Actualites-et-Agenda/Toutes-les-actualites/Pourquoi-est-il-si-difficile-de-reduire-les-captures-accidentelles-de-dauphins-Parole-de-scientifique-7>; France Gouv. de Mer (b), *Suivi des Captures*.

days at sea have been observed in winter 2021-2022, with a goal of 3% observer coverage across fishing efforts for the 2022 year¹⁷⁷).¹⁷⁸

The fifth measure, involving placing cameras on gillnets, is part of a new program that tests remote electronic monitoring in fisheries. The program is being implemented in three phases: testing on five gillnet vessels, expansion to 15 more gillnet vessels, and developing machine learning to analyze the video, GPS, and haul sensor data. This program aims to increase knowledge around cetacean interactions with and bycatch in gillnet fisheries in the Bay of Biscay. The expected deadline for placing equipment on 20 vessels was December 2021, though as of February 2022, only 18 vessels were equipped.¹⁷⁹ If video will not be captured and fully analyzed until – potentially – January 2023, it will not be useful for establishing comparability with NMFS efforts to monitor and mitigate bycatch.

While these measures expand camera and observer use on boats, vessel operators are under no legal obligations to adhere to requests for observers or cameras under these specific directives. The increase in camera and observer use is not a requirement, but a request for voluntary cooperation from vessel operators. Fishers have expressed frustration at the idea that they need additional oversight,¹⁸⁰ suggesting that many may not be fully willing to place observers and/or cameras onboard. Additionally, the one, large piece of advice not taken by the Minister is that of temporal closures in several French fishing areas. The Minister announced in late 2020 that she would not be implementing fishery closures and has kept to this promise thus far.

Further, several of these “new” efforts are not actually making changes, as they describe processes and methods that already exist.¹⁸¹ Declaration of bycatch by vessel captains has already been required under French law since 2018, through the amendment to the 2011 ordinance of protection for marine mammals. Vessels larger than 12m are required to report electronically, whereas smaller vessels submit information in paper format.¹⁸² Since 2019, similar cetacean stranding reports have been published on the French Ministry of Food and Agriculture’s website. Trawlers have already been required to be equipped with pingers under EU law since early 2020. The aerial survey program is not a new concept, but rather the second iteration of France’s existing SAMM program (albeit 8-9 years after the first – just beyond NMFS’s cutoff range for reliable abundance estimates).

France is not alone in contributing to bycatch in relevant areas – as noted above, Spain and Portugal also fish and interact with cetaceans in the Bay of Biscay. The three countries have

¹⁷⁷ France Gouv. de Mer (b), *Suivi des Captures Accidentelles*.

¹⁷⁸ France Gouv de Mer, “The Fight Against Accidental Capture of Small Cetaceans in the Atlantic: The 7 Commitments Made by the French State, Fishermen, and Scientists,” Gouvernement de France, accessed June 15, 2021, https://mer.gouv.fr/sites/default/files/2021-02/C%C3%A9tac%C3%A9s_infographie_site_english.pdf.

¹⁷⁹ France Gouv de Mer (a), *Suivi des Captures*; France Gouv de Mer (b), *Suivi des Captures*.

¹⁸⁰ Europêche, “Mandatory Cameras Overshadow the Revision of Fisheries Control Rules,” March 11, 2021, <https://europeche.chil.me/attachment/2d04db3b-04b7-4837-99f3-da7cd2f258cb>.

¹⁸¹ Sea Shepherd, “French Government Measures to Protect Dolphins Fall Short,” February 24, 2021, <https://www.seashepherdglobal.org/latest-news/french-government-commitments-dolphins/>.

¹⁸² The government has noted that there can be issues integrating bycatch information from the paper reports, especially from the *fiche de pêche* (fishing forms) required of vessels <10m. https://mer.gouv.fr/sites/default/files/2021-07/Bulletin-capture-cetaces_S12bis_Bilan.pdf.

announced the above-referenced joint project – CetAMBICion – to run from March 2021 through March 2023 – that aims to create a multilateral, coordinated strategy in monitoring, managing, and assessing populations and bycatch levels of cetaceans in the Bay of Biscay and the Iberian Coast. The project is funded by the EU through the MSFD.¹⁸³ This project aims to move toward achieving GES in the area by undertaking a risk assessment of cetacean bycatch in the Bay and on the Coast and using this new knowledge to inform new mitigation measures with the help of cooperative agencies (e.g. ASCOBANS, ICES) and policy makers.¹⁸⁴ However, some NGOs and scientists have criticized CetAMBICion for not taking enough action to protect cetaceans in dire need of reduced bycatch numbers and conservation aid. Some say that the research objectives are repetitive of already-performed analyses, and that concrete actions such as further implementing recommendations from scientific groups like ICES would be more effective at this time.¹⁸⁵

F. Governance in French Territories

Outside of metropolitan France, French territories are also subject to French and EU regulations, though it is difficult to determine the level to which these are enforced abroad. The French Polynesian EEZ contains many protected areas, in part due to the number of marine mammals in these waters.¹⁸⁶ French Polynesia has designated marine sanctuaries throughout its domestic waters to protect sharks and marine mammals, which are abundant in these waters.¹⁸⁷ In New Caledonia, disturbing or hunting any species listed as protected in their waters (which includes dolphin and whale species) is not allowed.¹⁸⁸ Information regarding legal mandates and their enforcement for marine mammal protection in French territories is sparse.

The exception to this appears to be French Polynesia, which has established an extensive protective legal framework for marine mammals. Marine mammals are listed in “Category B” of the French Polynesian Environment Code, which prohibits the mutilation, harassment, capture or take, consumption and hunting, as well as possession of these animals.¹⁸⁹ In addition, French Polynesia has taken action to mitigate threats to marine mammals, including the creation of a sanctuary within its EEZ, the establishment of a monitoring center to help identify and map the

¹⁸³ France Gouv de Mer, “Protection of Cetaceans: France and Spain Announce the Launch of the Cetambicion Project,” March 18, 2021, <https://www.mer.gouv.fr/protection-des-cetaces-la-france-et-lespagne-annoncent-le-lancement-du-projet-cetambicion>.

¹⁸⁴ ASCOBANS, “CetAMBICion Project Kicks Off,” March 9, 2021, <https://www.ascobans.org/en/news/cetambicion-project-kicks>.

¹⁸⁵ Clara Bauer-Babef, “Scientists, NGOs Says Marine Cetambicion Project is Waste of ‘Precious Time’,” EURACTIV France, March 30, 2021, <https://www.euractiv.com/section/energy-environment/news/scientists-ngos-says-marine-cetambicion-project-is-waste-of-precious-time/>.

¹⁸⁶ Yellow Flag Guides, “Protected Marine Area,” Yellow Flag Guide: French Polynesia, accessed July 1, 2021, <https://en.pf.yellowflagguides.com/zoom/protected-marine-area/>.

¹⁸⁷ Government of French Polynesia, *Marine Protected Areas in French Polynesia*, n.d., https://www.sprep.org/attachments/VirLib/French_Polynesia/mpa-french-polynesia-brochure.pdf.

¹⁸⁸ Clarke, P. & David, C. (2011). New Provincial Environmental Legislation in New Caledonia: Continuity and Reform in Environmental Governance in a French Pacific Territory. *Asia Pacific Journal of Environmental Law*, Springer. <https://hal.archives-ouvertes.fr/hal-02117052>.

¹⁸⁹ <https://www.service-public.pf/diren/preserver/especes/#code>.

presence of marine mammals in the area and the implementation of a stranding network.¹⁹⁰ Further, the Direction de Ressources Marins et Minières (DRMM) collects fishing effort data and maintains a registry of vessels, and has also contracted a private entity, CREOCEAN, to oversee an observer and port sampling program for its longline fisheries for albacore and yellowfin tuna.¹⁹¹

Outermost French regions – e.g., French Guiana and Reunion – had a history of not properly implementing EC 812/2004, but it is not clear if these implementation issues have been resolved since the passing of its replacement.¹⁹²

VI. France’s Compliance with the MMPA Imports Rule

A. MMPA Imports Rule Requirements

Under the U.S. Marine Mammal Protection Act (MMPA), the U.S. government “shall ban” all seafood imports caught with fishing gear that kills or seriously injures marine mammals “in excess of United States standards.”¹⁹³ In applying this requirement, the U.S. “shall insist on reasonable proof” from the exporting nation of the effects of its exporting fisheries on marine mammals – i.e., its marine mammal bycatch.¹⁹⁴

To implement this provision, NMFS issued its MMPA Imports Rule.¹⁹⁵ Under the Rule, for France to continue exporting fish to the United States after December 31, 2022, the nation must apply for and receive a “comparability finding” from NMFS for each export fishery, which is essentially a determination that France’s bycatch and bycatch program as applied to each fishery meets U.S. standards.¹⁹⁶

Under the Rule, for export fisheries operating within France’s EEZ to receive a comparability finding, France must show:

- (1) France “[p]rohibits the intentional mortality or serious injury of marine mammals in the course of commercial fishing in the fishery;” and

¹⁹⁰ SPREP. 2017. Whales in a Changing Ocean Conference Report. <https://www.sprep.org/attachments/2017SM28/Officials/French/WP%202012.1.1-Att.1%20-%20Year%20of%20the%20Whale%20Final%20Report.pdf>.

¹⁹¹ Jo Gascoigne, Chrissie Sieben and Charles Daxboek. 2018. Marine Stewardship Council Final Report of the French Polynesia Albacore and Yellowfin Longline Tuna Fishery.

¹⁹² Fiona L. Read, Peter G. H. Evans, and Sarah J. Dolman, *Cetacean Bycatch Monitoring and Mitigation under EC Regulation 812/2004 in the Northeast Atlantic, North Sea, and Baltic Sea From 2006 to 2014*, Whale and Dolphin Conservation, 2017.

¹⁹³ Moratorium on Taking and Importing Marine Mammals and Marine Mammal Products, 16 U.S.C. § 1371(a)(2).

¹⁹⁴ *Ibid.*

¹⁹⁵ Fish and Fish Products Import Provisions of the Marine Mammal Protection Act, 81 Fed. Reg. 54,415 (Aug. 16, 2016).

¹⁹⁶ Taking and Related Acts in Commercial Fishing Operations Including Tuna Purse Seine Vessels in the Eastern Tropical Pacific Ocean, 50 C.F.R. § 216.24(h)(6).

(2) For any fishery deemed an export fishery on NMFS’s LOFF, France “maintains a regulatory program” for the fishery “that is comparable in effectiveness to the U.S. regulatory program.”

To demonstrate a comparably effective regulatory program, France must show it maintains a program “that includes[] or effectively achieves comparable results as” the following components:

- (a) “Marine mammal assessments . . . for stocks . . . that are killed or seriously injured in the fishery;”
- (b) “An export fishery register,” listing all fishing vessels in the fishery, including time, season, gear type, and target species;
- (c) Regulatory requirements that include:
 - (i) A requirement that vessel operators report all marine mammal injury or death;
 - (ii) A requirement that fishers implement measures to reduce mortality/serious injury;
- (d) Monitoring procedures in the export fishery to estimate mortality/serious injury from the fishery and cumulatively from other export fisheries on the same marine mammal stocks;
- (e) Calculation of bycatch limit for marine mammals taken in fishery. The “bycatch limit” is the potential biological removal (PBR) level or a “comparable scientific metric;” and
- (f) Demonstration that mortality/serious injury from the fishery (and cumulatively with other export fisheries) “[d]o[es] not exceed the bycatch limit.”¹⁹⁷

Under both the MMPA and the MMPA Imports Rule, France bears the burden of demonstrating each export fishery meets these requirements. The Rule states that the “harvesting nation shall submit . . . an application . . . , along with documentary evidence demonstrating” the conditions have been met “for each” fishery.¹⁹⁸

Accordingly, in order to achieve a comparability finding under the MMPA Imports Rule, France must demonstrate and document that it meets each of the conditions listed above or that it maintains a regulatory program that “effectively achieves comparable results,” a strict standard.

B. France Fulfills Some Requirements of the MMPA Imports Rule but Some French Export Fisheries Do Not Meet All U.S. Standards

As detailed above, to continue exporting seafood to the United States, France bears the burden of demonstrating both that it bans the intentional killing and serious injury of marine mammals during commercial fishing and that it “maintains a regulatory program” for the fishery “that is comparable in effectiveness to the U.S. regulatory program.” This requires that France have a regulatory program including (or somehow achieving comparable effectiveness as including) stock assessments, a fisheries register, marine mammal bycatch reporting, mitigation requirements, bycatch monitoring, and calculation and proof that bycatch does not exceed PBR or a comparable metric.¹⁹⁹

¹⁹⁷ *Ibid.* § 216.24(h)(6)(iii)(C).

¹⁹⁸ Moratorium on Taking..., 16 U.S.C. § 1371(a)(2); Taking and Related Acts..., 50 C.F.R. § 216.24(h)(5).

¹⁹⁹ 50 C.F.R. § 216.24(h)(6)(iii)(C).

Based on our assessment of publicly available information, France is unlikely to be able to meet this burden in at least some of its export fisheries. While France bans the intentional killing of relevant marine mammals, France does not provide for marine mammal surveys for all stocks, does not appear to require an adequate fisheries register, and based on publicly-available information, does not maintain adequate regulatory requirements for bycatch, including requiring reporting, mitigation measures, bycatch monitoring, and calculating PBR. As such it is unlikely France will be able to demonstrate that serious injury and mortality from many of its export fisheries do not exceed PBR.

1. France Bans the Intentional Killing and Serious Injury of Relevant Marine Mammals

The MMPA Imports Rule requires that, to export seafood to the United States, France must demonstrate that it “[p]rohibits the intentional mortality or serious injury of marine mammals in the course of commercial fishing in the fishery.”²⁰⁰ France bans the intentional killing, physical injury, and disturbance of relevant marine mammals, through its 2011 ordinance.²⁰¹

2. Based on Publicly Available Information, France Does Not Maintain a Regulatory Program “Comparable in Effectiveness” to the U.S. Program for All Export Fisheries

As detailed above, under the MMPA Imports Rule, France must demonstrate it “maintains a regulatory program” for each export fishery “that is comparable in effectiveness to the U.S. regulatory program,” including the six components laid out in the Rule or that it effectively achieves comparable results as maintaining such a program.²⁰²

a. France Does Not Conduct Regular Marine Mammal Assessments for Stocks Interacting with Its Fisheries

The MMPA Imports rule requires that France demonstrate that it “maintains a regulatory program that provides for ... [m]arine mammal assessments ... for stocks ... that are killed or seriously injured in the fishery” or that the nation achieves “comparable ... effectiveness” to the U.S. program of regular stock assessments.²⁰³ It is critical that stock assessments for bycaught stocks be conducted; without this information, it is impossible to know whether bycatch is below PBR.

France does not have a regulatory program requiring or providing for regular stock assessments. Nonetheless, it produces semi-regular assessments for some stocks via various survey efforts conducted by the Pelagis Observatory. For example, France’s SAMM program surveys marine mammal populations in French metropolitan fishing waters every 7-10 years. The first SAMM program took place from 2011-2012. The second iteration of these surveys was just performed. It

²⁰⁰ 50 C.F.R. § 216.24(h)(6)(iii)(C).

²⁰¹ Order of July 1, 2011 Establishing the List of Marine Mammals Protected on National Territory and the Terms of Their Protection, JORF No. 0171 of July 26, 2011.

²⁰² 50 C.F.R. § 216.24(h)(6)(iii)(C).

²⁰³ 50 C.F.R. § 216.24(h)(6)(iii)(C).

is not clear if France is using data for NMFS comparability purposes from these recent survey efforts or from the original survey efforts in 2011-2012. The data from the initial SAMM program was not fully processed into a technical report until 2014 – two years after the surveys were performed. However, France notes that abundance estimates are expected to be prepared from this new data by the end of 2021.²⁰⁴

While the SAMM and other programs, like the REMMOA program, are valuable, they do not provide the rigor or scope of the U.S. regulatory program, which produces detailed stock assessments at least every three years (annually for strategic stocks) and relies on abundance surveys that are no more than eight years old.²⁰⁵ Overall, France lacks regulations or directives that require or provide for regular assessment of marine mammal stocks that interact with its many export fisheries, despite the fact that it has the both the resources and ability to fully monitor marine mammal stocks and bycatch. France can and must provide for regular stock assessments for marine mammals that interact with export fisheries within its waters to meet the MMPA Imports Rule. While France may be able to demonstrate comparable effectiveness for some fisheries, such as those covered by the recent SAMM program taking place in winter 2020/2021, NMFS must deny comparability for any French fishery for which France does not initiate and demonstrate that it provides for regular stock assessments.

b. France Requires an Export Fishery Registry but Does Not Appear to Maintain All Necessary Information

The MMPA Imports Rule requires that export nations either maintain an “export fishery register” listing all fishing vessels in the fishery, including time, season, gear type, and target species or effectively achieve comparable results as maintaining such a registry.²⁰⁶ French vessels are required to be registered with the EU Fleet Register.²⁰⁷ This database includes vessel identification information, gear type, and technical vessel information, but the publicly accessible database does not list target species or fishing season, nor is it clear if such information is collected. France does report exported products to the EU, accessible in the EU trade database, but these are not listed on a vessel-by-vessel basis.

While the EU maintains a registry, it does not appear to include information on time or season and area of operation or the target species for each vessel. As such this registry does not meet the requirements of the MMPA Imports Rule of maintaining a comprehensive registry of the time, season, and target species for each fishing vessel. This information is essential for managers (and NMFS) to understand and monitor the fishery’s operation and ultimately its bycatch.

²⁰⁴ France Gouv de Mer (a), *Suivi des Captures*.

²⁰⁵ See NMFS, Guidelines for Preparing Stock Assessment Reports Pursuant to the 1994 Amendments to the MMPA (2016), available at <https://www.fisheries.noaa.gov/national/marine-mammal-protection/guidelines-assessing-marine-mammal-stocks> (“unless compelling evidence indicates that a stock has not declined since the last census, the Nmin estimate of the stock should be considered unknown if 8 years have transpired since the last abundance survey”).

²⁰⁶ 50 C.F.R. § 216.24(h)(6)(iii)(C).

²⁰⁷ European Commission, “Fleet Register,” EU European Commission, accessed August 15, 2021, https://webgate.ec.europa.eu/fleet-europa/index_en.

c. Based on Publicly Available Information, France Does Not Maintain Adequate Regulatory Requirements for Bycatch for All Export Fisheries

Next, under the MMPA Imports Rule, France must demonstrate it has a regulatory program that both requires marine mammal reporting and requires fishers to implement measures to reduce mortality/serious injury or “effectively achieves comparable results as” U.S. requirements. As discussed below, available evidence does not support a finding that France meets the latter requirement for all export fisheries.

i. France Requires Reporting of Incidental Marine Mammal Deaths and Injuries

The MMPA Imports Rule requires that exporting nations require that vessel operators “report all intentional and incidental mortality and injury of all marine mammals in the course of commercial fishing operations” or achieve comparable results to such a requirement.²⁰⁸ As noted in the above section on French law, fishers are required to report any specimen of marine mammal accidentally caught in fishing gear.²⁰⁹ We note that despite the technical legal requirement, there are concerns about proper enforcement, and it is not clear if any reliable reporting takes place and, if it does, whether such data are incorporated into French bycatch reports or if these reports are publicly available.²¹⁰

ii. Based on Publicly Available Information, France Does not Require that Fishers Implement Measures to Reduce Mortality/Serious Injury Comparable to the United States in All Export Fisheries

Next, under the MMPA Imports Rule, France must maintain regulatory requirements that require fishers to implement measures to reduce mortality/serious injury or “effectively achieves comparable results” as requiring such measures.²¹¹

As detailed in the above sections on French and EU law, there are some regulations and directives establishing a goal of reducing marine mammal bycatch and interactions in fisheries. Generally, fishers are instructed through regulations such as the EU Habitats Directive and 2019/1241 to reduce marine mammal mortality. For example, mitigation measures include bans on driftnets, mandated use of pingers on bottom-set gillnet and on pelagic trawling vessels greater than 12m long in certain areas, but mitigation measures do not appear to be required in all fisheries that have bycatch problems.

²⁰⁸ 50 C.F.R. § 216.24(h)(6)(iii)(C).

²⁰⁹ Order of September 6, 2018 amending the Order of July 1, 2011 Establishing the List of Marine Mammals Protected on National Territory and the Terms of Their Protection, JORF No. 0225 of September 29, 2018.

²¹⁰ See, e.g., Ifremer, “Why is it so Hard to Reduce Dolphin Incidental Captures [Scientist’s World #7],” July 6, 2021, <https://wwz.ifremer.fr/Actualites-et-Agenda/Toutes-les-actualites/Pourquoi-est-il-si-difficile-de-reduire-les-captures-accidentelles-de-dauphins-Parole-de-scientifique-7> (“But the declarations of accidental catches made by fishermen, French and foreign, are incomplete at this stage and do not allow sufficiently reliable and detailed estimates to understand their origin and evolution.”).

²¹¹ 50 C.F.R. § 216.24(h)(6)(iii)(C).

Moreover, available evidence demonstrates that French fisheries are not complying with bycatch mitigation policies and requirements. NMFS need look no further than the European Commission’s own July 2020 “legal action against [France] for failing to comply with [its] obligations under EU law.”²¹² As discussed above, the European Commission brought infringement proceedings against France (and Spain and Sweden) to take action to reduce bycatch. The Commission’s infringement decision noted that, “[d]espite well-documented evidence of [dolphins and harbor porpoises] being caught in fishing gear, the problem persists” and “France, Spain and Sweden have not taken sufficient action to monitor by-catches ... nor made full use of the possibilities that the Common Fisheries Policy provides to comply with their obligation under the Habitats Directive and protect these species.”²¹³ The Commission also found that “France has not entirely transposed the obligations related to the establishment of a coherent monitoring scheme of the bycatch and the subsequent taking of conservation measures” and has “failed to ensure effective control and inspection regarding the obligation for fishing vessels to use ‘pingers’ to scare porpoises away from nets as required under the Common Fisheries Policy to prevent such by-catches in the most vulnerable areas.”²¹⁴

In addition, also in July 2020, a Paris Administrative Court found that France had “delayed implementing concrete actions in view of the recurrent episodes of excess cetacean mortality” and that “[t]his delay constitutes a failure by the State to comply with its obligations under European Union law, in particular its obligation to protect cetaceans and control fishing activities.”²¹⁵ We have not found any evidence that France has remedied these problems. In light of the above, it is unlikely France will be able to demonstrate that it maintains a regulatory regime that requires all export fisheries to implement measures to reduce mortality/serious injury.²¹⁶ While we were able to identify some regulatory bycatch mitigation requirements, we were unable to confirm that such measures meet or are achieving the results contemplated by comparable U.S. standards. We urge NMFS to insist that France demonstrate that those measures are appropriate for the export fisheries at issue and actually mitigate bycatch.

d. France Has Some Monitoring Procedures to Estimate Bycatch for Some but Likely Not for all Export Fisheries

The MMPA Imports Rule also requires France to demonstrate it has monitoring procedures in place to estimate mortality and serious injury for each export fishery both individually and cumulatively for each stock or that the nation effectively achieves comparable results as conducting such monitoring.²¹⁷ While France appears to monitor bycatch through observers in some fisheries, it is unclear whether all export fisheries must carry observers, what level of observer coverage is maintained, and whether observers report marine mammal bycatch. NMFS must insist that France demonstrate adequate bycatch monitoring for each export fishery.

²¹² European Commission, “July Infringements Package: Key Decisions,” July 2, 2020, https://ec.europa.eu/commission/presscorner/detail/en/INF_20_1212.

²¹³ Ibid.

²¹⁴ Ibid.

²¹⁵ <https://www.seashepherdglobal.org/latest-news/france-condemned-dolphins/>; and see <https://www.tellerreport.com/life/2020-07-08-state-sentenced-for-accidental-catch-of-dolphins.Bkfm3nB7yP.html>.

²¹⁶ 50 C.F.R. § 216.24(h)(6)(iii)(C).

²¹⁷ 50 C.F.R. § 216.24(h)(6)(iii)(C).

Specifically, France’s strategies to monitor bycatch levels are underdeveloped. France is directed to have dedicated, cetacean bycatch monitoring schemes for trawls and gillnets in ICES areas VI, VII, and VIII through Annex XIII of EC 2019/1241. The European Commission’s infringement proceeding and the Paris Administrative Court findings demonstrate that France has not fully developed these schemes to meet even EU policy. Based on reports to ASCOBANS, France has general fisheries observers on some vessels, but it is thought that general fisheries observers may miss marine mammal bycatch that is not brought directly onboard, as they are not monitoring in-water nets and catches.

According to French reports to ASCOBANS, observer coverage varied across fisheries: 0.1 to 1.0% coverage was in place via fisheries observers (types and targets of fisheries not specified), depending on gear type, from 2016 to 2019; a dedicated observer scheme was in place for one pair of paired midwater trawls in 2018; and up to 5% of paired midwater trawls had fisheries observers in 2018-2019.²¹⁸ France’s 2020 report to ASCOBANS does not include information about observer programs.

France noted its aspirations from winter 2020-2021 for 5% observer coverage in Bay of Biscay gillnet and pelagic trawl vessels. While a July 2021 press release notes a general observer coverage of 5% of the French fishing effort, it is not clear which fisheries were covered.²¹⁹ France now notes 3% observer coverage as the desired amount for winter 2021-2022.²²⁰ We note that the MMPA calls for a minimum of 20% observer coverage in Category I fisheries, which are defined as those with “frequent” marine mammal bycatch compared to PBR.²²¹ Observers in US fisheries collect critical data for cumulative and fishery-based bycatch estimates. Yet the theoretically maximum percentage of observers in a French fishery is 5%, facially insufficient in these circumstances. Further, stranding studies and modeling show that cumulative estimated bycatch (from observers) of common dolphins for French fisheries is also likely missing many individuals that are unreported and either sink or drift ashore. France also did not report any bycatch numbers to NMFS in the initial LOFF.

In sum, based on publicly available information, France is unlikely to be able demonstrate that its monitoring meets the MMPA Imports Rule requirements for all export fisheries. Observer coverage is limited, even for likely high-bycatch fisheries; it is not clear what monitoring is required for other fisheries, and the monitoring that does take place has been found to be insufficient. Critically, if France was adequately monitoring, it would have had bycatch numbers to report to NMFS to include in the 2020 LOFF. Because the LOFF contains no bycatch numbers for any of France’s metropolitan fisheries and extremely limited bycatch numbers for territorial fisheries, it is unlikely France had such information to report. It is impossible for France to demonstrate its fisheries’ bycatch does not exceed PBR without adequate monitoring. NMFS must insist that France demonstrate adequate bycatch monitoring for each export fishery.

²¹⁸ ASCOBANS, *2016-2019*.

²¹⁹ Ministère de la Mer, “Captures Accidentelles de Petits Cétacés en Atlantique: Suivi.”

²²⁰ France Gouv de Mer (b), *Suivi des Captures*.

²²¹ Interim Exemption for Commercial Fisheries, 16 U.S.C. § 1383a Sec. 114(e)(1).

e. France Has Not Announced a Bycatch Limit for its Export Fisheries

The MMPA Imports Rule requires France to calculate a bycatch limit for marine mammals taken in each fishery.²²² The “bycatch limit” is PBR or a “comparable scientific metric.”²²³ France has not announced how or if it will calculate bycatch limits for its marine mammal populations. Some general guidelines for European waters exist, such as ASCOABANS’ 1.7% of harbor porpoise populations and ICES and OSPAR-proposed PBR numbers for common dolphins, but the French government has not published any reports outlining its chosen methodology for setting bycatch limits relative to any of its marine mammal species.

f. France Is Unlikely to Be Able to Demonstrate that Mortality/Serious Injury from Export Fisheries is Below the Bycatch Limit

Finally, the MMPA Imports Rule requires France to demonstrate that mortality/serious injury from the fishery and cumulatively with other export fisheries “[d]o not exceed the bycatch limit.”²²⁴

Based on our assessment, France will not be able to demonstrate that mortality/serious injury from its export fisheries “[d]o not exceed the bycatch limit.” Even if France has the data to calculate PBR (which it may have for certain fisheries covered by the recent SAMM program), because it does not adequately monitor bycatch, it will not be able to demonstrate that bycatch does not exceed PBR for each export fishery.

Where data are available, they often support a finding that bycatch is not sustainable. For example, reports from external organizations note that bycatch levels of common dolphins in the Bay of Biscay are likely unsustainable. Based on IWC, ICES, and ASCOBANS data, along with the French government’s own published winter 2020-2021 bycatch and stranding report, French fisheries with the highest bycatch numbers – paired midwater trawls, trammel nets, bottom trawls, and gillnets – are likely collectively surpassing sustainable thresholds for common dolphins and harbor porpoises.

And while available reports show small bycatch numbers for some French Mediterranean fisheries, we did not find data on sperm whale bycatch and cumulative bycatch data for other cetaceans in the region. Thus, publicly available data does not support a finding that bycatch levels for French Mediterranean fisheries are below acceptable thresholds for those fisheries.

3. Comparability of French Territory Fisheries

Across French territories, New Caledonia and French Polynesia have the highest strandings numbers reported to IWC, but, again, there are no bycatch numbers for these areas in IWC’s reports. It will not be possible to determine whether French territories’ bycatch and bycatch

²²² 50 C.F.R. § 216.24(h)(6)(iii)(C).

²²³ 50 C.F.R. § 216.3

²²⁴ 50 C.F.R. § 216.24(h)(6)(iii)(C).

program are comparable without bycatch data and additional legislative information, and we were unable to locate any publicly available information on additional mitigation measures that territorial governments may have implemented. Available data does demonstrate that there is a lack of proper abundance estimates for species subpopulations in French Pacific waters – these species were last surveyed through the REMMOA program, which, as noted previously, did not report on abundance estimates. Without additional data on abundance and bycatch in French territorial fisheries, it will be difficult for France to demonstrate comparability.

Finally, we note that French territorial fisheries that fall under RFMO jurisdiction may be subject to a different set of criteria as the United States is a member of number of these RFMOs. We did not assess such fisheries in this report.

VII. Conclusion

Within French metropolitan fisheries, the lack of bycatch data outside of mandated observer programs makes it difficult to determine the comparability of these fisheries/gear types. Stranding data helps to build more comprehensive bycatch estimates, but the French government has not officially declared if these data will be used to determine bycatch estimates, and it is not possible to pinpoint specific fisheries (i.e., including both gear and target catch) using these data. While aspects of French and EU legislation are similar to the MMPA (e.g., making intentional killing of relevant marine mammals illegal), the EU has a history of struggling with compliance in its fisheries, with France specifically facing infringement proceedings. Further, gaps remain under existing legislation, compliance and implementation issues aside.

Pelagic (i.e., midwater) trawls and gillnets are the most problematic gear types used in French fisheries that export to the US. These gear types operate in many areas, but the Bay of Biscay fishing area has the highest bycatch and stranding numbers, and fisheries here pose the highest risk to cetaceans. Paired midwater trawls targeting hake, seabass, and blue whiting are not likely to meet standards. Gillnets also pose a significant threat in the Bay of Biscay, especially those targeting cod, sole, and monkfish. While France’s bycatch program as a whole has clear gaps, these fisheries in particular are most likely to be capturing marine mammals beyond acceptable thresholds.

Though the French government has attempted to improve its fisheries comparability chances, the government’s mandates appear to focus on voluntary actions from fishermen and increasing repetitive research rather than direct, necessary action. There is certainly room for concern that the actions the government has taken will not have a significant or timely enough impact to create the conditions needed for a comparability finding by the end of 2022, especially given France and its territorial areas’ history of lags in implementation time and full compliance with relevant legislation (see, e.g., France’s compliance with EC 812/2004). Fishery legislation tends to focus on vessels over 12m long, but most French vessels are under this length, which means that required observer programs and mitigation techniques exclude key contributors to bycatch. EU members themselves have noted that vessel length does not necessarily correlate with bycatch numbers, suggesting that programs focusing on vessel size as an indicator of bycatch

levels may be missing crucial data.²²⁵ While it is difficult to make specific comparability findings for French fisheries overall, there are certainly indications that France still needs to improve its efforts before NOAA makes its final determinations in 2022.

²²⁵ Fiona L. Read et al., *Cetacean Bycatch Monitoring*.