

Advice

Better protecting sharks through sustainable fishing and trade

Brussels, 7 August 2024

1. Background

On 11 January 2023, the European citizen's initiative (ECI) "Stop Finning – Stop the Trade"¹ was submitted, requesting the European Commission to stop the EU trade in loose shark fins.

On 5 July 2023, in its response to the initiative, the Commission committed to examine the opportunity of taking a legislative measure requiring sharks to be placed on the market – be it for consumption within the EU or for export – only with their fins naturally attached.

Taking such measures would come on top of the current EU "Fins Naturally Attached" policy. Under the "Shark Finning Regulation"², shark finning is forbidden on board of all vessels fishing in EU waters as well as everywhere else for vessels under the flag of an EU Member State. It is also prohibited to retain on board, tranship, or land shark fins separated from the shark carcasses. The fins can be removed only upon landing.

Some EU international partners, such as the USA, Canada, and the UK have recently taken trade measures to better protect shark populations.

¹ <u>https://citizens-initiative.europa.eu/initiatives/details/2020/000001_en</u>

² <u>Regulation (EU) No 605/2013 of the European Parliament and of the Council of 12 June 2013 amending Council</u> <u>Regulation (EC) No 1185/2003 on the removal of fins of sharks on board vessels</u>



In early 2024, the European Commission launched a call for evidence and a public consultation³ to allow stakeholders to express their views feeding into the ongoing impact assessment on the environmental, social, and economic consequences of a potential legal act that would restrict marketing and trade of loose shark fins.

2. Problems that the initiative aims to tackle

The European Commission's call for evidence identifies four problems that the initiative aims to tackle: 1) decrease in shark population, 2) increasing fishing pressure, 3) EU share of the responsibility, and 4) EU citizens' concern.

2.1. Decrease in shark population

The call states that "according to certain assessments, over one third of 500 existing shark species are threatened with extinction. The reduction of shark populations puts at risk the balance of marine ecosystems, essential for providing food and for climate mitigation and adaptation" ⁴.

The MAC observes that only a limited number of sharks species is marketed in the EU, stemming both EU fisheries and imports. Exports to third countries are a significant market as well, as detailed later.

Spain is particularly relevant with an important shark fishery as well as an important market: in accordance with the list of commercialised species drawn up by the Spanish authorities, up to 15 species of sharks can be marketed in the country. This has the goal of covering minor by-catches

³ <u>https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14158-Better-protecting-sharks-through-sustainable-fishing-and-trade_en</u>

⁴ According to IUCN, over one third of all species of sharks and rays are threatened by extinction. Sharks most prevalent in the shark fin trade, pelagic shark species, are under specific pressure. See: Pacoureau, N., Rigby, C.L., Kyne, P.M. et al. Half a century of global decline in oceanic sharks and rays. Nature 589, 567–571 (2021). https://doi.org/10.1038/s41586-020-03173-9.



of certain shark species mainly in the Mediterranean Sea, such as dogfish. However, shortfin mako sharks and blue sharks account for more than 90% of the commercialised species in Spain from international waters. It is to be noted that the list is currently subject to revision.

Looking more in detail at important species, the MAC would like to point out that only two shark species are actively targeted by the EU surface longline fishing fleet:

- Blue sharks (*Prionace glauca*) are the most widely targeted and traded sharks by EU fleets in all oceans: this specie is subject to international trade requirements by CITES since November 2023⁵ and most fishing takes place in the areas of competence of the four large tuna RFMOS; this shark specie has a high biological and reproductive growth rate compared to other pelagic species, e.g., shortfin mako.
- Shortfin mako sharks (*Isurus oxyrinchus*) are now subject to management in the Atlantic with a rebuilding programme including a *de facto* retention ban in place in the North Atlantic⁶ and allocated quota in the South Atlantic, while it can be captured in the Indian and Pacific Oceans (no catch limits or allocations yet available).
- Shark species targeted by other EU fleets include Smooth-hound sharks (*Mustelus* spp), Spiny dogfish (*Squalus acanthias*) and catsharks (*Scyliorhinus* spp., *Galeus melastomus*).

It is worth noting that, for pelagic longlining capturing sharks, the gear is set on the surface of open water at an average depth of 60m, which does not affect seabed habitats and coral reefs.

2.2. Increasing fishing pressure

⁵ Via an established system of permits and certificates that allows full documentation, including information on origin, destination and reason for marketing.

⁶ The total fishing mortality tonnage determines the permissible retention. It is currently set at zero retention due to the poor status of the stock and the mortalities still being too high to start rebuilding the stock.



The call states that "Growing demand for shark fins – considered a delicacy in some Asian nations – encourages increasing fishing pressure and compromises conservation efforts. An increased supply of meat from the sharks captured for their fins has contributed to development of separate supply chains and development of a shark meat market, in particular in Latin America".

In the view of the MAC, considering the reduction of the EU fishing fleet in recent years, shark fishing has considerably reduced when compared to other regions of the word (both in number of vessels and GTs and KW), including when compared to reported landings from the Atlantic in the past. Further, it would be incorrect to make the EU fishing fleet responsible for the global consumption of fins and the illegal production of fins by finning, as fins are not consumed in the EU, and this fleet is already legally required to land sharks with fins attached.

Despite the reference to an "increasing fishing pressure", the Commission Communication of 5 July 2023 notes a global decreasing trend in catches since 2000 (from 868 000 tonnes to 665 622 tonnes in 2020). RFMOs are starting to implement conservation measures (e.g., mako sharks) and setting catch limits (e.g., blue shark) that will further reduce mortality, especially when combined with mitigation measures. According to the FAO, more restrictive regulations in the market caused a reduction of the trade of shark fins: for example, the traded volume of shortfin mako fins decreased by 50% since 2003⁷.

The fishing grounds and the exploitation for sharks should be managed and controlled in all oceans through the adoption of management measures, as it is the case for other species of high commercial value.

In this respect, the EU fishing fleet already carries out management of the resource in EU waters, while also following existing RFMO management measures (however, there is a need for

⁷ https://www.fao.org/documents/card/en/c/CA3576EN



substantial improvement of management measures at the RFMOs' level). While post-release mortality rate is species-specific and depends on age, gender, hook time, temperature and other factors, overall, the survival rates of sharks released alive can be further improved by gear modifications and best handling practices, since mortality can often exceed 50%⁸.

2.3. EU share of the responsibility

The call states that "EU operators participate in the global shark fins and meat markets. The EU fisheries are responsible for around 12% of the global shark captures and 33% of the global frozen shark fins exports. The current EU rules forbid the finning on board of vessels but do not prevent (intra- and extra-EU) trade in fins cut off upon landing".

Worldwide, Spain is one of the main trading countries of shark products. In the EU, the commercialisation of fins is residual. Fins are a product that is almost entirely destined for export to Asian markets where it is in high demand with very high sales prices. However, there is consumption of the rest of the animal within the EU market. In certain intra-EU markets, particularly in the North Atlantic and in the Mediterranean, shark meat constitutes a part of the gastronomic culture for several centuries⁹. At the same time, blue shark meat is also exported to other countries with an important gastronomic tradition of meat from blue shark, such as Brazil, where it is an economic source of protein¹⁰.

Operators have not observed a growing trend in the commercialisation of shark meat. Under EU rules, fins are not cut off from the body until landing, preventing "finning" practices, and the

⁸ https://repository.library.noaa.gov/view/noaa/28914

⁹ Spain and Italy rank as the world's 2nd and 3rd largest consumers of shark meat, respectively.

¹⁰ Between 2017 and 2021, about 87,000 tonnes of blue shark meat were exported to outside of the EU. See: <u>Slee,</u> <u>B., Collis, M. (2023) Shark safeguards: Elevating EU controls on shark trade. Stichting IFAW (International Fund for</u> <u>Animal Welfare), The Hague, The Netherlands.</u>



traceability of the fins is ensured at every step of the supply chain. To meet the requirements to land the animal as a whole foreseen by Regulation (EU) 605/2013, the EU's processing industry made very significant investments to divide the sharks into parts and market them separately to the different markets.

Sharks are species that are used for a wide range of applications in the food industry, but also in animal feed, cosmetics, pharmaceuticals, and textiles. For the EU sector, the sustainability and proper exploitation of these fisheries is of vital importance.

From 2017 to 2019, the territorial waters of only six coastal nations incurred 50% of the global shark mortality¹¹. Four of these costal nations (Indonesia, Brazil, Mauritania, Mexico) have been identified as having high shark fishing mortality coinciding with insufficient regulatory capacity. The only measure identified with having an impact on reducing the mortality of endangered sharks is the prohibition of their capture and fisheries management measures¹².

2.4. EU citizen's concern

The call states that "The decrease in shark populations worries scientific experts, citizens and NGOs, who requested the European Commission to end trade in loose shark fins".

The MAC shares the concerns of EU citizens on the health of the oceans and shark populations. Nevertheless, citizens should be made aware that the main species that are object of catches by the EU fleet (blue shark, shortfin mako shark) are monitored by scientific institutes and that the populations are studied and regulated by different administrations responsible for fisheries

¹¹ Worm et al., "Global shark fishing mortality still rising despite widespread regulatory change", Science 383, 225– 230 (2024).

¹² While not actively targeted by the EU fleet, it is worth keeping in mind that, among other species, the oceanic whitetip sharks, is classified as critically endangered due to exemptions from retention bans.



management. Scientific information on the biological situation of these species is available and their exploitation should follow existing fishing regulations. At the same time, citizens should be aware that, at the RFMOs' level, for the majority of shark species caught in international waters, further management improvements could be made to effectively protect shark populations, including improvements of global reporting on catches and discards, and scientific advice.

Therefore, the European Commission should, on one hand, make a greater effort in raising awareness of citizens about fisheries management in the EU, and, on the other hand, work towards significantly improving available scientific data and promote the development and adoption of robust management procedures and effective conservation measures for shark populations in RFMOs to ensure their long-term sustainability.

3. Possible policy options

The call for evidence identifies five possible policy options: 1) no new action beyond what was announced in the Commission Communication of July 2023, 2) unilateral EU trade measures, 3) bilateral agreements with a selection of trade partners, 4) an EU ban on loose shark fins within the EU market and for international trade, and 5) an international prohibition of trade in loose shark fins.

The MAC supports the continued implementation of the EU's "Shark Fins Naturally Attached" policy, including through increased investments, capacity building, and efforts from the supply chain¹³ and public authorities. In this context, it is important to keep in mind recent decisions by

¹³ Since 2019, under the stewardship of the NGO Fishery Progress, the EU fleet is engaged in a <u>Fishery Improvement</u> <u>Project (FIP) for swordfish and blue shark</u> surface longline fisheries to value the work and efforts of the entire value chain, from the fishing vessel to the consumer. The FIP is addressing the main challenges faced by the shark fishery in the EU, as a unique initiative worldwide to improve fishing sustainability between the fleet and the industry. A total of 117 fishing vessels, representing the totality of the Spanish fleet and a high percentage of the EU fleet, are



international bodies, such as RFMOs, CITES¹⁴, BBNJ, CBD, CMS, as well as the recent revision of the EU Fisheries Control Regulation, which will positively impact shark conservation, sustainable use, trade, monitoring, surveillance, and control of fleet operations.

It should be born in mind that over 90% of the shark fin trade is now regulated under CITES. In this context, the MAC could support unilateral EU trade measures, in line with CITES and IUU regulations, and bilateral agreements with a selection of trade partners. Implementation is key and identification guides can assist customs and enforcement agencies in effectively implementing the regulations¹⁵. On the other hand, "an EU ban on loose shark fins within the EU market and for international trade" or an "international prohibition of trade in loose shark fins" would translate into a very significant economic loss for the EU's extractive and trading sectors. Fins are an important and valuable product: if their trade is prohibited, it could become a by-product with minimal economic value, and potentially even a cost for the operator, or reversely generate illegal traffic out of control of the authorities and of the officially established sector.

When determining the most appropriate policy option, the European Commission should seriously engage with the stakeholders of the entire value chain and with scientific institutes that have extensive knowledge about the status of shark fisheries in the EU and worldwide. Furthermore, the European Commission should increase the confidence of EU citizens on the

¹⁵ WCS ID Guides

engaged in the project - the majority operate in the Atlantic Ocean (71), then in the Eastern Pacific (37), Indian Ocean (14), and Central and Western Pacific (7). Some of the vessels operate in more than one ocean at different times of the year. The action plan of the project includes collaboration with the scientific community for the boarding of observers and experimental campaigns, self-imposed good practices on the retention of protected shark species and bycatch minimisation, among other actions.

¹⁴ In 2022, more than 160 governments agreed to include nearly 100 species of sharks and rays under Appendix II of CITES. Therefore, an export permit by the exporting country will be required, which will only be granted if the national CITES authorities verify that: (i) the export is not detrimental to the survival of the species, and (ii) the specimens are not obtained in contravention of the national laws.



sustainable management of EU fisheries, avoiding a shift in consumption to products with lower environmental and social sustainability conditions.

4. Likely impacts

The Commission committed to assessing the likely impacts for a well informed and facts-based possible future action, including environmental, economic, and social impacts.

Prior to undertaking possible measures, it is imperative to carry an assessment of the potential impacts. To ensure sustainable fisheries management, as required by EU Treaties, there should be scientific support from independent scientific institutes, which is currently lacking in the initiative. The examination of economic and social impacts should consider the value of these fisheries to the EU economy.

4.1. Environmental impacts

According to the call for evidence, the following topics will be examined: (i) effects of the EU measure on the global fishing pressure on sharks, (ii) impact on the health of shark populations, marine ecosystems and ecosystem services, including food provisioning and climate mitigation and adaptation, and (iii) possible shifting of fishing and trade patterns both for shark and other species.

The primary species targeted by EU operators is the blue shark and the sector has been developing a FIP with a focus on swordfish and blue shark. Under this project, there is a clear commitment to improve science, mitigation techniques, and increase fisheries observers on board. The ultimate goal is to obtain a MSC certification following a five-year action plan.



The introduction of a ban on loose shark fins within the EU market would not have any benefit on the fishing pressure on sharks, especially when accounting for the size of the EU fleet on the global market. A ban would primarily affect EU operators who adhere to strict traceability standards, while having minimal impact on third-country fleets. Since the EU imports insignificant quantities of shark fins, the impact on third country's fleets would be almost negligible.

The ban would compromise the economic viability of the EU shark fishery and, therefore, certain EU fishing operations would come to an end. In this scenario, valuable data and insights from the sector would be lost, compromising scientific advice.

Furthermore, the surface long-line fleet has limited potential to shift fishing efforts to other species such as swordfish or tuna, as fishing opportunities are already allocated and maximised (and even reduced for the EU).

4.2. Economic impacts

According to the call for evidence, the following topics will be examined: (i) economic consequences for the fisheries engaged in shark-fishing and trade, (ii) reaction of economic operators such as reflagging of EU vessels or disinvestment of and re-investment into third countries with a view to maintain business links with existing export markets; and possible creation of alternative economic activity, e.g., related to shark tourism (shark diving, etc.), and (iii) financial and administrative capacity of EU national administrations to put in place and enforcing the measures.

In the case of a ban on the sale of loose fins, the economic consequences would be negative for the EU fleet engaged in this fishery, mainly Spain and Portugal, leading to a divestment in the EU. Tourism-related actions, such as shark diving, would not realistically compensate for the negative



impact on the EU value chain. Since shark fisheries occur in international waters, shifting to other economic activities, such as shark tourism, would not really be an option.

Operators would likely seek decommissioning schemes or reflagging options. Shark fin exports alone represent a substantial annual revenue of 170 million euros. This income is crucial for an EU fleet already grappling with multiple crises and high energy prices. A shark fishery without fin trade would not be economically viable, as it constitutes approximately 50% of the income derived from the fishery.

The EU processing industry made significant investments to respect the EU's "Fins Naturally Attached" policy, including product traceability and the obligation to separate fins only after landing. Economic value was generated, and new investments were made in geographical areas dependent on fishing activities, generating employment that fixes the population. Therefore, a ban would likely lead to relocation of the business and employment to outside of the EU, in favour of countries with less stringent regulations.

4.3. Social impacts

According to the call for evidence, the following topics will be examined: (i) consequences on employment and social conditions in EU and non-EU regions with shark-related fishing, trading and tourism activity, and (ii) impacts on health in EU and non-EU shark-eating communities.

In the case of a ban on the sale of loose fins, there would be direct job losses within the EU fleet and in non-EU regions where EU landings occur as well as reduction in the various sectors of the supply chain (e.g., processing, transport, logistics), significantly impacting rural costal communities. Due to the different destination markets, which will continue, the body and fin supply chains have always been separate, further exacerbating the likely replacement of EU operators by operators in third countries.



Despite the ban, global demand for shark products will persist and third-country operators are likely to fill the market gap left by EU operators. In this regard, the 2 300 tonnes per year of shark fins produced by the EU will be wasted since operators will not be able trade them (since they are exported to Asian markets separated from the body). Furthermore, given the economic impact of the ban, € 170 million losses per year, the fleet will most probably have to halt the fishery. Considering that shark fins account for 5 to 10% of the total weight of the shark, halting the shark fishery would result in an additional loss of 46 000 tonnes of fish.

From a nutritional point-of-view, shark meat can be a source of proteins for human consumption, and support food security and income for coastal communities in several countries. At the same time, it is important to keep in mind that, due to their position at the top of the food chain and their longevity, sharks can accumulate higher levels of heavy metals than other species, so their consumption should not be excessive, especially in order to avoid overexposure to methylmercury toxicity¹⁶.

Sharks are harvested for their meat, fins, liver-oil, skin, teeth, and, more recently, cartilage for pharmaceutical purposes. So, there is a 100% use and no waste.

5. Recommendations¹⁷

¹⁶ On the evidence of a health risk due to the exposure to mercury in shark meat, see: Evers, D., et al, Global mercury concentrations in biota: their use as a basis for a global biomonitoring framework, Ecotoxicology. 2024; 33(4-5): 325–396, and Barcia, L., et al, Health Risk Assessment of Globally Consumed Shark-Derived Products, August 2022, Exposure and Health 15(6). It is important to keep in mind that, following advice from EFSA, the European Commission adopted provisions on the recommended maximum exposure level for mercury in fishery products. Accounting for the frequency of consumption, the benefits of consumption of shark meat can outweigh the risks, in line with international and national dietary recommendations.

¹⁷ Amongst the membership of the Executive Committee, EAPO expressed opposition to the approval of the present advice. In their view, the content of the advice goes beyond the area of competence of the MAC.



The MAC believes that, when determining the most appropriate policy option for better protecting sharks through sustainable fishing and trade, the European Commission should:

- a) Seriously engage with the stakeholders of the entire value chain and with scientific institutes that have extensive knowledge about the status of shark populations in the various RFMOs and the respective shark fisheries;
- b) Account for the limited number of shark species targeted by the EU fishing fleet and commercialised in the EU market as well as for the existing management and conservation measures in place in the EU and internationally;
- c) At the same time, intensify efforts at international level within the framework of RFMOs to allocate catch limits in line with scientific advice and further developing management procedures in all RFMOs for the most relevant commercialised species (blue sharks and shortfin mako sharks), adopt a precautionary approach and effective bycatch mitigation and mandatory best handling practices to reduce bycatch mortality of threatened shark species, and ensure adoption of a "Shark Fins Naturally Attached" policy by all RFMOs;
- d) Undertake greater efforts in raising awareness of citizens about ongoing and necessary initiatives to enhance sustainable fisheries management in the EU – it is important that EU citizens can trust all fish and seafood placed on the EU market has been sourced accordingly to the same high environmental and social standards, to avoid a shift in consumption to products with lower environmental and social sustainability conditions;
- e) Prioritise the proper implementation, including via investments, capacity building, and efforts from the supply chain and public authorities, of the existing "Shark Fins Naturally Attached" policy, control and the accurate traceability of all shark parts, RFMOs' conservation and fisheries management measures, and CITES's measures, and not an EU ban on loose shark fins within the EU market;



- f) Consider the implementation of an EU prohibition, ideally aligned with third countries, of the import into their markets of shark fins from third countries that do not apply a policy equivalent to the EU's "Shark Fins Naturally Attached" policy, while also ensuring respect of WTO's rules;
- g) When considering the likely environmental impacts of a ban, ensure the ongoing FIP for swordfish and blue shark is considered as well as the potential impact on fishing pressure, negative impacts on conservation and climate due to the replacement by third countries' fleets in the world market, and the loss of EU scientific data;
- h) When considering the likely economic impacts of a ban, account for the loss of revenue for the EU fleet, the divestment in the EU market, the significant investments made by the EU industry to follow the existing policy, and the likely relocation of businesses and employment to outside of the EU;
- When considering the likely social impacts of a ban, account for the loss of employment, particularly in rural costal communities, the increase in food waste, the nutritional aspects of shark meat, and the value of the fishery's by-products.



Annex¹⁸

1. FAO's Shark Fin Guide – Identifying sharks from their fins

In 2015, the FAO published a guide on shark fins, specifically on the identification of sharks from their fins¹⁹, covering 16 shark species that are globally distributed and are of major importance owing to either their conservation status or the fact that they are main target species for the international trade in fins. It includes illustrations of the standard arrangement of the fins for both juveniles and adult sharks, and factsheets on the blue shark and the shortfin mako shark.

2. Scientific advice on the blue shark stocks in the North Atlantic and South Atlantic

According to the available scientific advice, neither of the stocks exploited by the EU fleet in the Atlantic Ocean is overfished. Nevertheless, the Southern Atlantic stock is currently undergoing overfishing, while there is a 49.6% probability that the Northern Atlantic stock is overfished²⁰.

¹⁸ Amongst the membership of the Executive Committee, Oceana, Environmental Justice Foundation (EJF), and ClientEarth expressed disagreement with the inclusion of the present Annex in the advice and, therefore, do not endorse the text of the Annex.

¹⁹ https://openknowledge.fao.org/items/17e3fed1-25bf-4ddd-923b-aa01b3b9211d

²⁰ In relation to the South Atlantic, the <u>Executive Summary</u> of the ICCAT 2023 Blue Shark Stock Assessment Report stated that "The Committee indicates that catches of 27,711t (the estimated 2021 MSY) or less will immediately stop overfishing and will keep in stock in the green quadrant of the Kobe plot with at least a 54% probability", while, in relation to the North Atlantic, it stated "While the 2022 realized catch (22,057 t) for the North Atlantic stock will maintain the stock in the green quadrant of the Kobe plot with a high probability, the Committee noted that the current TAC (39,102 t) would have a very low probability (3%) of maintaining the stock in the same quadrant by 2033. Therefore, the Committee recommends that the Commission reduces the current TAC to catch levels that will maintain the stock in the green quadrant of the Kobe plot with a high probability".



<u>Fig. 1</u> - Kobe diagram for the South Atlantic blue shark stock (Source: ICCAT 2023 Blue Shark Stock Assessment Meeting Report)



<u>Fig. 2</u> - Kobe diagram of the North Atlantic blue shark stock (Source: ICCAT 2023 Blue Shark Stock Assessment Meeting Report)

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3. Fishing pressure

Surface longlining, the fishing gear used in these fisheries, represents 2.2% of the Spanish fleet. In terms of fishing capacity, the last 10 years, it is one of the Spanish fleets that has changed the least. In the number of ships, approximately 50 ships have been lost, while the KW and GTs remain practically the same throughout the period.





Fig. 3 - The right axis refers to the National Fishing Ground and the Left axis to the EU fishing ground, International waters and Surface longline. (Source Annual report on the activity of the Spanish fishing fleet 2023 (Data 2021).

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Regarding the balance of the surface longline fleet, in 2023 the fleet was in balance, although the profitability of the fleet has decreased substantially, and may even become unbalanced for this reason in 2024.



ICCAT has blue shark catch data, since 1970, for all Contracting Parties:



<u>Fig. 4</u> - Blue shark catches in ICCAT, above North Atlantic, below South Atlantic. (Source: ICCAT 2023 Blue Shark Stock Assessment Meeting Report)

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It is worth noting that, in the past years, the operators of processing, transformation, conservation and marketing of fishery products have reduced their presence in the market by about 14%, from 695 to 599 companies, according to the Spanish Economic and Social Council²¹.



Fig. 5 - Production volume of blue shark and mako shark in tons of FIP BLUES producers

4. Employment in the surface longline fishery

Personas ocupadas							
Región	Eslora	Segmento	2017	2018	2019	2020	2021
Atlántico Norte	18-24	NAO HOK1824 LLD	88	79			
	24-40	NAO HOK2440 LLD	343	469	480	377	353
Otras Regiones	24-40	OFR HOK2440 LLD	891	944	1.059	984	1.333
	>40	OFR HOK40XX LLD	458	517	538	551	514
Total			1.780	2.009	2.077	1.912	2.200

Tabla. Personas ocupadas en el Palangre de Superficie en España.

Fuente: Secretaria General de Pesca

²¹ <u>https://www.ces.es/documents/10180/5232164/Inf0323.pdf</u>



<u>Fig. 6</u> – Effective employment in the surface longline fishery by region, length of the fishing vessel, and segment (Source: Secretaria General de Pesca)

Around 2,200 people are directly employed by the Spanish surface longline fishery. These figures multiply almost exponentially when accounting for the next links in the value chain of the captured species, which work in the processing and conservation of the catches and the families dependent on fishing. These are particularly important in the ports of A Guarda, Vigo, Marín, and Burela in the region of Galicia, Spain.