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1. Environmental justification

Conservation status of fin whales and sperm whales: The populations of fin whales (*Balaenoptera physalus*) and sperm whales (*Physeter macrocephalus*) in the Mediterranean Sea have experienced an inferred continuing decline in the number of mature individuals. The latest ACCOBAMS Survey Initiative (ASI), promoted by the Agreement on the Conservation of Cetaceans of the Black Sea, the Mediterranean Sea and the Contiguous Atlantic Area (ACCOBAMS), revealed that the number of fin whales in the region has decreased from an estimated 3,500 in the 90s to 1,800 between 2018 and 2019. Based on existing research, the Mediterranean is predicted to have a population of sperm whales ranging from 500 to 5,000 individuals, with the number of mature whales estimated to be between 250 and 2,500.

The International Union for Conservation of Nature (IUCN) maintained the sperm whale's classification on the Red List as "endangered" in its most recent assessment in December 2021, whereas the fin whale's status in the Mediterranean was altered from "vulnerable" to "endangered".³

Ship strikes are the primary source of human-induced mortality in the northern Mediterranean for these two species.⁴ This region has high and growing levels of marine traffic. The annual ship traffic in this area amounts to approximately 220,000 vessels, with commercial ships often sailing at speeds ranging from 14 to 20 knots, and ferries reaching speeds of up to 35 knots.⁵ According to navigation

¹ACCOBAMS Survey Initiative (2021). Estimates of abundance and distribution of cetaceans, marine mega-fauna and marine litter in the Mediterranean Sea from 2018-2019 surveys. Available under: https://accobams.org/wp-content/uploads/2021/11/ASI-Med-Report-updated.pdf.

² E Pirotta, E Carpinelli, A Frantzis, P Gauffier, C Lanfredi, D.S Pace, L.E Rendell (2021). *Physeter macrocephalus* (Mediterranean subpopulation). The IUCN Red List of Threatened Species 2021: e.T16370739A50285671. Available under: https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T16370739A50285671.en.

³ S Panigada, P Gauffier, G Notarbartolo di Sciara (2021). *Balaenoptera physalus* (Mediterranean subpopulation). The IUCN Red List of Threatened Species 2021: e.T16208224A50387979. Available under: https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T16208224A50387979.en.

⁴S Panigada & R Leaper (2009). Ship strikes in the Mediterranean Sea: assessment and identification of conservation and mitigation measures. Journal of Cetacean Research and Management.

⁵¹MO (2023). Designation of the north-western Mediterranean Sea as a Particularly Sensitive Sea Area. Resolution MEPC.380(80), adopted July 7, 2023.

data analysis (AIS), commercial vessels sailing in this area travel nearly 75% of the total distance at average speeds exceeding 10 knots.

Ship collisions with sperm whales and fin whales contribute significantly to the continued decline in the number of individuals of these two species. Their populations, given their slow growth and low reproductive rates, cannot replace specimens quickly enough to compensate for these losses, so there is a risk that collisions will end up being the determining factor that causes these species to disappear in this marine region.

The "Mediterranean Cetacean Migration Corridor" is a designated area of 46,385 km2 in the northwestern Mediterranean, located between the regions of Valencia, Catalonia, and the Balearic Islands. It was declared a Marine Protected Area (MPA) by Spain in 2018 through Royal Decree 699/2018. Shortly after, in 2019, it was also recognised as a Specially Protected Area of Importance for the Mediterranean (SPAMI) by the Barcelona Convention (UNEP/MAP).

It is an area of crucial importance for the survival of cetaceans in the Western Mediterranean. This is recognised in the aforementioned Royal Decree 699/2018. In addition to the fin whale, a species that maintains migratory patterns, this regulation also recognises the importance of this area for the conservation of other cetacean species such as the sperm whale, the bottlenose dolphin (*Tursiops truncatus*), striped dolphin (*Stenella coeruleoalba*), common dolphin (*Delphinus delphis*), pilot whale (*Globicephala melas*), Risso's dolphin (*Grampus griseus*) and Cuvier's beaked whale (*Ziphius cavirostris*); as well as sea turtles such as the loggerhead turtle (*Caretta caretta*), sharks and seabirds. The Ministry for the Ecological Transition and Demographic Challenge of Spain (MITECO) is currently developing the management plan for this MPA and SPAMI of high ecological value.

In 2021, Spain's Centre for Studies and Experimentation of Public Works (CEDEX) conducted a study to analyse the potential collision risk between marine mammals and maritime traffic in the Mediterranean Cetacean Migration Corridor. This study concluded that whales have suffered collisions with ships in the region, putting their population at risk; that without effective protective measures to mitigate the risk of collision, it is expected that populations of medium and large cetaceans will decline; and that implementing a speed reduction strategy would significantly decrease the probability of collisions and lethal injuries in the marine wildlife.⁶

Particularly Sensitive Marine Area: The risk of collisions with large whales in the northwestern Mediterranean has been recognized by the International Maritime Organization (IMO) by adopting it as a Particularly Sensitive Marine Area (PSSA) in order to protect the area's endangered and unique species from the impacts of maritime traffic and to preserve as far as possible their critical habitat and to establish a recommendation to reduce ship speeds to 10-13 knots.⁷

2. Endorsement by international institutions

Scientific studies have concluded that the presence of these cetaceans extends throughout the northwestern Mediterranean Sea. In this particular region of the Mediterranean, it is not feasible to anticipate the specific locations where these large whales may be found at any given time. Consequently, the possibility of ships altering their courses to prevent collisions with these whales is not a viable option. Therefore, the sole feasible solution to effectively avoid lethal ship collisions with these marine mammals is for ships to decrease their velocity. This is explicitly stated in the ACCOBAMS Resolutions adopted by Spain.

ACCOBAMS Resolution 7.12 (2019)⁸ states that "the speed, rather than the shape or displacement, of vessels is the most significant factor in ship strikes" and it further confirms that "the only effective measures to avoid serious injury and death of cetaceans from ship strikes at present are (a) avoidance

⁷ Ibid.

⁶ Ibid.

⁸ ACCOBAMS (2019). Resolution 7.12 on Ship strikes. ACCOBAMS-MOP7/2019/Doc38/Annex15/Res.7.12.

by ships of areas or times with high density of whales, including the establishment of shipping lanes or non-shipping zones, and (b) speed reductions in such areas or times, slowing ships down to speeds below 10-12 knots". Along the same lines, ACCOBAMS Resolution 8.18 (2022)⁹ reaffirms this: "where routing to keep whales and vessels apart is not possible, the only demonstrated measure to reduce fatal collisions with most large whales is to reduce speed". Based on the most reliable scientific evidence, it is quite unlikely for a whale to suffers lethal impacts if the ship's speed remains below 10 knots.¹⁰

Vessel speed reduction is a measure that is addressed in the work of the IMO,¹¹ the Convention on Biological Diversity,¹² the International Whaling Commission (IWC),¹³ the EU,¹⁴ and in the Spanish national framework,¹⁵ with the ACCOBAMS, the IUCN, and the IWC recommending a speed restriction of 10-12 knots.¹⁶

If we truly want to safeguard whales in this part of the Mediterranean and prevent population reduction, we must limit the speed of ships traversing the area.

The measure must have a mandatory character: In regions where ship speed reduction measures have been implemented, it has been shown that voluntary compliance with these measures is limited and ineffective.¹⁷ In order to achieve optimal results, it is imperative that speed reduction measures are made compulsory and applicable to all vessels, without any exemptions.¹⁸ Moreover, it is crucial to enforce this thorough surveillance of mandatory speed restrictions in order to guarantee adherence.

One advantage of implementing mandatory ship speed restrictions is the establishment of fair and equitable conditions for all shipping companies. This ensures that all companies are subjected to the same restrictions and that their adherence to these regulations does not result in any competitive disadvantages. This level playing field cannot be achieved through mere recommendations or voluntary measures, as confirmed by Resolution 8.17 (2022) ACCOBAMS.¹⁹ This resolution

⁹ ACCOBAMS (2022). Resolution 8.18 on ship strikes. ACCOBAMS-MOP8/2022/Doc31/Annex13/Res8.18. https://accobams.org/wp-content/uploads/2023/01/MOP8.Doc31_Annex13_Res8.18.pdf.

¹⁰ Vanderlaan, A. S. and Taggart, C. T. 2007. Vessel collisions with whales: the probability of lethal injury based on vessel speed. Marine Mammal Science 23:144-156; D Laist, A Knowlton, D Pendleton D (2014). Effectiveness of mandatory vessel speed limits for protected North Atlantic right whales. Endangered Species Research. Vol. 23. Doi: 10.3354/esr00586; R Constantine, M Johnson, L Riekkola, S Jervis, L Kozmian-Ledward, T Dennis, L Torres, N Aguilar de Soto (2015). Mitigation of vessel-strike mortality of endangered Bryde's whales in the Hauraki Gulf, New Zealand. Biological Conservation. Vol 186. Available under: https://doi.org/10.1016/j.biocon.2015.03.008.

¹¹ IMO (2023). Revised Guidelines for the reduction of underwater radiated noise from shipping to address adverse impacts on marine life. MEPC.1/Circ.906. paras. 6.23-6.25; IMO (2009). Guidance document for minimizing the risk of ship strikes with cetaceans. MEPC.1/Circ.674. para. 12.1.

¹²S Harding, N Cousins (2022). Review of the Impacts of Anthropogenic Underwater Noise on Marine Biodiversity and Approaches to Manage and Mitigate them. Technical Series No. 99. Secretariat of the Convention on Biological Diversity. CBD Technical Series No. 99. Available under: https://www.cbd.int/doc/publications/cbd-ts-99-en.pdf.

¹³ IWC (March 2022). Strategic Plan to Mitigate the Impacts of Ship Strikes on Cetacean Populations: 2022-2032' 19858 IWC.

¹⁴ European Commission (UE). Commission notice Guidance document on the strict protection of animal species of Community interest under the Habitats Directive (October 12, 2021) COM (2021) 7301 final. para (2-80).

¹⁵ Royal Decree 150/2023, of February 28, which approves the maritime space management plans of the five Spanish marine demarcations. Table 28, OEM5.

¹⁶ ACCOBAMS (2019). Recommendations from the joint IWC-IUCN-ACCOBAMS workshop to evaluate how the data and process used to identify important marine mammal areas (IMMAS) can assist in identifying areas of high risk for ship strikes. ACCOBAMS-MOP7/2019/Doc38/Annex15/Res.7.12.

¹⁷ J Morten, R Freedman, J Adams et al. (2022). Evaluating adherence with voluntary slow speed initiatives to protect endangered whales. Frontiers in Marine Science. Vol. 9. Available under: https://doi.org/10.3389/fmars.2022.833206.

¹⁸ Oceana (2023). Go slow, Whales below: Vessel strikes continue to threaten north Atlantic right whales. Available under: https://oceana.org/reports/go-slow-whales-below-vessel-strikes-continue-to-threaten-north-atlantic-right-whales/.

¹⁹ ACCOBAMS (2022). Resolution 8.17 Underwater noise. ACCOBAMS-MOP8/2022/Doc31/Annex13/Res8.17.

acknowledges that "applying mandatory measures provides an equal playing field level for the private sector".

Speed reduction has multiple environmental benefits: Slowing down the speed of ships yields several environmental benefits. Research has demonstrated that, out of the different operational strategies that can be used, decreasing the velocity of ships is the most cost-effective method for mitigating the environmental consequences of marine transportation. This measure effectively and immediately reduces emissions of greenhouse gases and atmospheric pollutants, including sulphur oxides (SOx), nitrogen oxides (NOx), and black carbon. It also mitigates underwater noise and reduces the risk of collision with marine fauna. In this regard, the aforementioned ACCOBAMS Resolution 8.17 (2022)²⁰ encourages contracting parties to: "promote the application of vessel speed reductions (e.g., slow steaming) as an operational measure that results into multi-environmental benefits, including the reduction of underwater noise and greenhouse gases emissions, as well as of the risk of ships strikes, and to promote such measures in the context of the proposal of Particularly Sensitive Sea Area in the North-western Mediterranean".

3. Legal rationale

Implementing a mandatory vessel speed reduction measure in the Cetacean Migration Corridor management plan would ensure Spain's compliance with various international and regional commitments to safeguard their biodiversity and specifically the habitat of endangered migratory species. These commitments include those under the United Nations Convention on the Law of the Sea (UNCLOS) (articles 192 and 194), the Convention on Biological Diversity (articles 8 and 22.1), the Convention on the Conservation of Migratory Species of Wild Animals (article 3.4), ACCOBAMS (article 2), and the SPAMI Protocol of the Barcelona Convention (articles 6 and 11). Additionally, Spain would fulfil its obligations under the European framework, as outlined in the Habitats Directive (article 12) and the Framework Directive on the Marine Strategy (descriptors 1, 4, and 11). Moreover, it would make a significant contribution to the United Nations Sustainable Development Goals (SDG), specifically target 14.2.

Importantly, the measure would implement Spanish regulations for the protection of biodiversity and the marine environment that apply to its Exclusive Economic Zone (EEZ).²¹ In addition, we emphasise the existence of Spain's Royal Decree 1727/2007, of December 21, which establishes protection measures for cetaceans. This regulation applies to maritime traffic in general (except for civil protection, maritime rescue and anti-pollution activities, maritime and air public security and national defence, which will be governed by their specific regulations, as stated in art. 3.6), establishing that the rights of free navigation and innocent passage will be exercised in the terms provided for in international law, although foreign vessels must comply with the measures decreed for the protection of cetaceans (art 3.7). The provisions of this royal decree will be applicable in waters subject to Spain's sovereignty, sovereign rights, or jurisdiction, which include internal waters, the territorial sea, the contiguous zone and the EEZ (art 3.1). Therefore, it is important to consider that collisions with cetaceans and, in certain cases, the emission of underwater noise, may represent a violation of the measures established in this royal decree.

In addition to being an environmentally necessary measure to safeguard populations of endangered sperm whales and fin whales within the framework of Spain's environmental jurisdiction over the Mediterranean Cetacean Migration Corridor, the obligation to reduce speed does not interfere with the objective of the free navigation in the EEZ but aims to reconcile the activity with the conservation objective of the AMP/SPAMI. The measure could be presented to the IMO through the article 211 (6) procedure of UNCLOS.

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²⁰ Ibid

²¹ Law 42/2007, of December 13, on Natural Heritage and Biodiversity; Law 41/2010, of December 29, on the protection of the marine environment.

In conclusion, the intense ship traffic at speeds exceeding 10 knots in the Mediterranean Cetacean Migration Corridor compromises the environmental condition of this site and its species. Consequently, this activity, as currently practiced, is incompatible with the conservation and protection goals of the Marine Protected Area. Therefore, maritime traffic must be regulated by Spain through a mandatory speed limit, in order to achieve an adequate reconciliation of this activity with the necessary protection of biodiversity in the area and to be able to effectively address the decline in the population of fin whales and sperm whales due to collisions with ships.

The Mediterranean Cetacean Migration Corridor management plan, which is currently being developed by MITECO, is the appropriate regulatory tool for implementing a binding speed limit as an effective management measure. The Plan allows responses to be made to environmental stressors, in this Marine Protected Area and SPAMI, where maritime transport at speeds greater than 10 knots poses the greatest threat to biodiversity. The proposed speed restriction measure guarantees that marine traffic activity is in line with the objective of safeguarding endangered cetacean species. Currently, there is no other solution that is less restrictive for the shipping sector while yet being equally effective and efficient, particularly in the immediate future.





















