



**MEMORANDUM OF UNDERSTANDING  
ON THE CONSERVATION OF  
MIGRATORY SHARKS**

CMS/Sharks/Outcome 4.2  
3 March 2023  
Original: English

4<sup>th</sup> Meeting of the Signatories (Sharks MOS4)  
Bonn, 28 February – 2 March 2023

**RECOMMENDATIONS TO SIGNATORIES  
TO IMPROVE REPORTING OF LANDINGS DATA  
FOR SPECIES LISTED IN ANNEX 1 OF THE SHARKS MOU**

1. At the 4th Meeting of the Signatories to the Memorandum of Understanding on the Conservation of Migratory Sharks, Recommendations to Signatories were adopted to provide guidance on improving reporting of landings data for species listed in Annex 1 of the sharks MOU. These recommendations were developed based on the information contained in [CMS/Sharks/MOS4/Doc.10.6](#).
2. For United Nations Food and Agriculture Organization (FAO) data to be used effectively for monitoring global trends of reported landings of listed shark species, improved data quality is required relating to taxonomic resolution, completeness of data, and quality control.

**Taxonomic Resolution:**

3. The level of uncertainty in the reported landings that may include Sharks MOU Annex 1-listed species is quite high in some regions.
  - a) Signatories should evaluate their national data collection and reporting systems and ensure that all landings are reported to species level (or genus when more appropriate);
  - b) Signatories should provide training, where necessary, to allow fishers, port staff and observers to consistently identify Sharks MOU-listed species to species-level through time;
  - c) Signatories should strengthen monitoring procedures at landing sites to ensure compliance, and to improve monitoring, education, and enforcement where necessary;
  - d) Collaborative efforts to improve taxonomic resolution of shark and ray landings should be encouraged between Signatories and other relevant non-Signatory Range States for which a high proportion of landings are reported under aggregated and generic categories. The technical expertise and capacity of Signatories reporting higher proportions of landings to species-specific level (including funding of fisheries observer programmes and training) are critical to improve global reporting;
  - e) The merits of introducing ASFIS codes to FAO for all Sharks MOU-listed species should be considered. Specifically, no ASFIS codes for Smoothnose Wedgefish currently exist;

- f) If possible, when improvements in reporting occur, reconstruct historical landings (catches) to minimize disruptions with time series.

**Completeness of data:**

- 4. Data reported to FAO were considered incomplete due to missing and inconsistent data for several species and nations, and more standardized data reporting is required.
  - a) Signatories are encouraged to compare national landings data with those data that have been collated by FAO (and other regional databases) and revise and harmonize sources to provide more accurate spatial and temporal data;
  - b) Signatories not currently reporting data to FAO are encouraged to submit their data, and to inform relevant bodies if there are specific issues that limit or prevent such reporting;
  - c) Signatories are encouraged to report landings of all Annex I-listed species to FAO. Specifically, given the complete absence of species-specific reported landings for 17 out of 35 Sharks MOU Annex 1-listed species at a global level, including some for which landings are suspected to occur occasionally;
  - d) National reporting systems should be evaluated and strengthened to facilitate recording of landings, especially in relation to fisheries operating in remote areas, artisanal and subsistence fisheries, and recreational fisheries;
  - e) Relevant Non-Signatory Range States should be encouraged to start reporting data to FAO for all Annex I-listed species.

**Quality control:**

- 5. Potential input errors were also identified, indicating that more robust quality control of landings data is required before data submission.
  - a) Signatories are encouraged to review and undertake more detailed quality control of the national landings data, including those that are reported to FAO (and other regional databases);
  - b) Signatories are encouraged to timely reply to FAO consultations regarding reported data to facilitate data correction and clarification of questionable data points;
  - c) Categories to submit species landings data should be reexamined to avoid perpetuating taxonomic errors. Signatories should not report their landings using outdated species categories and consider amending previously reported landings to the most updated taxonomy. Specifically, current ASFIS categories that may perpetuate taxonomic issues include: *Mobula japanica*, *M. rochebrunei*, *M. eregoodootenkee*, and *Pristis microdon*.