



## A Call For the Adoption of Best Practices for Bycatch<sup>1</sup> Mitigation by Tuna RFMOs

**International Workshop on tuna RFMO management issues relating to bycatch**  
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The International Seafood Sustainability Foundation (ISSF) is a global partnership among the tuna industry, science and WWF, the world's leading conservation organization. ISSF's mission is to undertake science-based initiatives for the long-term conservation and sustainable use of tuna stocks, reducing bycatch and promoting ecosystem health. ISSF believes that many bycatch issues are common to these RFMOs and that it would be effective for these management organizations to follow a common bycatch mitigation approach.

### **Summary of Current Bycatch Measures**

ISSF is concerned that the approaches taken to mitigate bycatch by the tuna RFMOs (RFMOs) differ, sometimes substantially.

- While all RFMOs have general data collection and reporting requirements, it is not obvious to what degree RFMO members comply in reporting data for all/most bycatch species.
- All RFMOs have observer programs for some of their fisheries. Coverage varies greatly, from nearly 100% on large purse seiners in the Pacific Ocean, to zero coverage in other fisheries.
- Reporting of discards also varies by RFMO and species. Some RFMOs have mandatory reporting of discards for some species in some fisheries.
- Several RFMOs have adopted measures to address bycatch of small tunas, mostly through the prohibition of some fishing gears at some times in some areas. Some RFMOs also have mandatory retention of target tunas, but with exemptions for tuna that are "unfit for human consumption". Two RFMOs have mandated FAD monitoring-management plans.
- All RFMOs have a number of measures to limit or reduce bycatch of non-tuna species, notably for sharks, sea turtles and sea birds. The shark resolutions are more or less homogeneous across the RFMOs, calling for full utilization, release of some vulnerable non-target shark species, and recording of catches. The turtle resolutions aim primarily to analyze information such as on the use of circle hooks to reduce turtle catch rates. All RFMOs have adopted measures to assess the impact of fisheries (particularly longline) on seabirds, and several have adopted specific management measures. In terms of marine mammals, one RFMO has limits on dolphin mortality as well as measures to reduce incidental dolphin mortality.

### **A Proposal for Best Practices for Bycatch Mitigation**

The 1995 UN Fish Stocks Agreement (UNFSA) provides useful text that can be used as the basis for best practices to address bycatch issues. In particular, Article 10 calls upon RFMOs to:

"10(d) obtain and evaluate scientific advice, review the status of the stocks and assess the impact of fishing on non-target and associated or dependent species;"  
and,

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<sup>1</sup> The term "bycatch" has been defined and used in different ways. ISSF proposes that RFMOs use the term broadly to include the catch of non-target individuals, whether they are discarded or not, such as in the following definition:

*Bycatch: The unintended catch in a fishing operation of species other than the target species, or individuals of the target species that are of undesirable size. Bycatch can either be discarded (dead or alive) or landed.*

"10(f) compile and disseminate accurate and complete statistical data, as described in Annex I, to ensure that the best scientific evidence is available, while maintaining confidentiality where appropriate;"

Furthermore, Annex I of UNFSA provides rather detailed guidance on the types of data to be collected and reported for both target and non-target species, including discard statistics.

Based on the UNFSA requirements, and taking note of some of the measures that some RFMOs have already adopted, ISSF proposes the adoption of the five Best Practices listed below. These five practices are presented together with a series of mechanisms that would help achieve the various objectives, as well as annotations and examples.

### **Best Practices for Bycatch Management by Tuna RFMOs**

<b>PRACTICE</b>	<b>MECHANISMS</b>	<b>NOTES</b>
<b>1. RFMOs require that members collect and report fishery data on bycatch</b>	<ul style="list-style-type: none"> <li>- Adopt measures for mandatory reporting of basic catch (including discards) and fishing effort statistics for both target and non-target species</li> <li>- Adopt measures to ensure adequate observer program coverage on all major fisheries</li> </ul>	<ul style="list-style-type: none"> <li>- Statistics should be by gear and species.</li> <li>- The disposition of discards (dead/alive) should be collected</li> <li>- Adequate observer program coverage may depend on the type of fishing operations and the frequency of encounters between different species and the fishing gear. RFMOs should determine the level of coverage that is adequate and this could include electronic surveillance.</li> </ul>
<b>2. RFMOs disseminate fishery data on bycatch</b>	<ul style="list-style-type: none"> <li>- Ensure that the scientific committee includes bycatch data and analyses in its reports.</li> <li>- Make aggregated data available in the public domain</li> </ul>	<ul style="list-style-type: none"> <li>- Ensure that confidentiality of non-aggregated (operational) data is maintained.</li> </ul>
<b>3. RFMOs evaluate the impact of their fisheries on bycatch species and encourage ecosystems research</b>	<ul style="list-style-type: none"> <li>- Empower the scientific committees to analyze the bycatch information as well as biological data on bycatch species to assess the impact.</li> <li>- Ensure that sufficient resources are given to scientists for this purpose</li> <li>- Encourage research, including modeling, that can lead to a better understanding of the cumulative impacts of tuna fisheries on the marine ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>- As there are many bycatch species in many tuna fisheries, priorities need to be established. Highest priority should be given to non-target species that are known to be vulnerable due to their life-history characteristics.</li> <li>- A risk-based impact assessment of the effects of fishing can be used to first help establish priorities, followed by explicit analytical assessments.</li> <li>- Ecosystems research should contribute towards the goals of a Precautionary Approach to management in terms of avoiding detrimental impacts on the ecosystem, as well as towards better informing the management of fisheries.</li> </ul>
<b>4. RFMOs adopt measures that minimize waste</b>	<ul style="list-style-type: none"> <li>- Adopt measures to minimize discards of target species</li> </ul>	<ul style="list-style-type: none"> <li>- One way to minimize discards is through mandatory retention of fish. However, there are also other alternatives such as identifying time/area strata where fishing would typically lead to high catches of undesired fish as measured by the ratio of non-target to target catches.</li> </ul>
<b>5. RFMOs adopt measures to mitigate bycatch</b>	<ul style="list-style-type: none"> <li>- Adopt fishery/gear-specific measures for bycatch mitigation that are based on scientific advice</li> <li>- Encourage research on gear modifications and/or changes</li> </ul>	<ul style="list-style-type: none"> <li>- Mitigation techniques will vary depending on the fishery and the species. In general, techniques that can reduce bycatch without impacting substantially the catch rates of target species should be promoted. Mitigation techniques may include the following (there is no silver bullet):</li> </ul>

PRACTICE	MECHANISMS	NOTES
	to fishing operations that will reduce bycatch	<ul style="list-style-type: none"> <li>• bycatch limits or caps for species and species groups;</li> <li>• promote fishing operations that reduce interactions and bycatch (e.g., avoiding fishing times or areas with high bycatch);</li> <li>• giving preference for use of gear that reduces bycatch;</li> <li>• use gear modifications (tori poles, hook design, excluder devices, acoustic deterrents, etc.); and</li> <li>• release of live discards whenever possible, and define best practices to maximize survival after release</li> </ul> <p>- The collaboration from the fishing industry should be sought in identifying/testing techniques, as fishers possess great expertise on this matter.</p> <p>- Many bycatch issues are common to all Oceans. Thus, RFMOs should collaborate to find best practices together.</p>