



**Joint MoP-SC Workshop on the Development of Harvest Strategies (WS2024-HSS)**

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# Potential Management Objectives and Performance Indicators for defined toothfish management areas

The SIOFA Secretariat on behalf of the Workshop Conveners

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<b>Distribution</b>	Public <input checked="" type="checkbox"/> Restricted <sup>1</sup> <input type="checkbox"/> Closed session document <sup>2</sup> <input type="checkbox"/>
<b>Abstract</b>	<p>At its 9<sup>th</sup> Annual Meeting, the SIOFA Scientific Committee considered the Potential Management Objectives and Performance Indicators for defined toothfish management areas that were originally drafted by the Joint MoP-SC Workshop on Harvest Strategy Management Objectives (WS2023-HSMO) and further refined the performance indicators, which were ultimately included in the SC9 report as Annex I.</p> <p>This paper reproduces Annex I of the SC9 report, for further consideration by WS2024-HSS.</p>

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<sup>2</sup> Documents available only to members invited to closed sessions.

## Potential Management Objectives and Performance Indicators for defined toothfish management areas

Table summarising potential Management Objectives by Objective Type, and Performance Indicators for **defined toothfish management areas**. Please note that these Management Objectives and Performance Indicators may be further revised during the harvest strategy development process.

No.	Objective Type	Potential Management Objective	Performance Indicators
1	Stock status	Maintain the stock at, or fluctuating around (i.e., as likely as not) 50% $B_0$ <sup>3</sup>	The stock is above 50% $B_0$ with a 50% probability or a suitable proxy of $B_0$ has a 50% probability of being above the target value
2	Risk/Safety	Ensure that it is very likely that the stock is above the limit reference point (LRP)	The stock is above 20% $B_0$ with a 90% probability
3	Economic, Yield	Maximise catch at a level consistent with Objectives 1 and 2, in accordance with the proportion of the stock in the SIOFA Area	
4	Economic, Catch rate	Maintain CPUE at a given rate/level that is representative of a period of fishery stability <sup>4</sup>	CPUE levels are about as likely as not to be around the level of that in the chosen representative CPUE
5	Economic, Stability	Minimise the variability of the catch limits from year to year that should be within a specific range	Define a reasonable level (%) of annual change that the model would allow between years in the harvest-control-rule-generated catch limits <sup>5</sup>
6	Social goals	<ul style="list-style-type: none"> <li>Maintain/create employment opportunities and contribute to food production</li> <li>Ensure safe and fair employment practices on vessels operating in these fisheries</li> </ul>	
7	Ecosystem goals	Maintain a healthy ecosystem	<ul style="list-style-type: none"> <li>Avoid significant adverse impacts on Vulnerable Marine Ecosystems</li> <li>Minimise the impact on species of special interest, and Endangered, Threatened, or Protected species</li> <li>Minimise the impact on any deepwater shark species listed in Annex 1 of CMM 12(2023)</li> <li>Minimise the impact on seabirds (CMM 13(2022))</li> </ul>

<sup>3</sup> Note that future work on MSE will evaluate alternative choices of the TRP and probability, for example 60% probability of being above 50%  $B_0$

<sup>4</sup> Different periods might be defined for the different toothfish SIOFA Management Areas, and should be further considered as a part of the harvest strategy development process

<sup>5</sup> To be further developed as part of the harvest strategy development process