



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

Hybrid, 29 June 2024

WS2024-HSS-INFO-01

Harvest strategies and timeline for the implementation of pre-assessments, assessments, management objectives and implementation

The SIOFA Secretariat on behalf of the Workshop Conveners

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Abstract	<p>At its 9th Annual Meeting, the SIOFA Scientific Committee considered the harvest strategies and timeline for the implementation of pre-assessments, assessments, management objectives and implementation that were originally drafted by SC8 and further updated the timeline by adding the implementation status of each task. The updated table was ultimately included in the SC9 report as Annex K.</p> <p>This paper reproduces Annex K of the SC9 report, for further consideration by WS2024-HSS.</p>

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² Documents available only to members invited to closed sessions.

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(Additional columns have been added to the timeline, originally developed by the Harvest Strategy Pre-Assessment Workshop, to record the implementation status of each step for orange roughy and Patagonian toothfish.)

Steps	SC		MoP			
		ORY	TOP		ORY	TOP
Step 1 Define management objectives				1. Specify management objectives: <ul style="list-style-type: none"> ➤ biological (including ecosystem considerations) e.g., ensuring long-term sustainability and productivity; recovering heavily depleted stocks ➤ socio-economic e.g., maintaining reasonable stability in catches for the industry 	<input type="checkbox"/>	<input type="checkbox"/>
	2. Propose reference points based on management objectives: limit reference points (B_{lim} and/or F_{lim}), and target reference points (B_{TARGET} and/or F_{TARGET})	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
				3. Select reference points	<input type="checkbox"/>	<input type="checkbox"/>
	4. Characterise the sources and values of uncertainties associated with the estimation of reference points (target and limit)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
				5. Specify acceptable levels of risk to be used in evaluating possible consequences of management actions, and time horizons for fishing mortality adjustments to avoid stock collapse, breaching limit reference point or achieve the target reference.	<input type="checkbox"/>	<input type="checkbox"/>
Step 2 Determine appropriate fisheries monitoring regime	1. Identify data collection and monitoring activities required to reliably evaluate resource status with respect to reference points	<input type="checkbox"/>	<input type="checkbox"/>			
				2. Implement data collection and monitoring programme to deliver consistent, high-quality data into the future.	<input type="checkbox"/>	<input type="checkbox"/>
	3. Determine how frequently to monitor (survey and/or assessments)	<input type="checkbox"/>	<input type="checkbox"/>			
Step 3 Develop candidate Harvest Control Rules	1. Propose candidate Harvest Control Rules (HCR): actions for controlling fishing mortality (F) or adjusting catch with respect to pre-defined, stock-specific, precautionary reference points for both biomass (B) and fishing mortality (F) were possible.	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
				2. Select HCR	<input type="checkbox"/>	<input type="checkbox"/>

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Steps	SC		MoP			
		ORY	TOP		ORY	TOP
	3. Conditions for Re-Evaluating Reference Points and HCR	<input type="checkbox"/>	<input type="checkbox"/>			
Step 4 Test HCR with MSE	1. Test HCR and compare expected performance of harvest strategies	<input type="checkbox"/>	<input type="checkbox"/>			
				2. Adopt appropriate harvest strategy	<input type="checkbox"/>	<input type="checkbox"/>
Step 5 Implement Harvest Strategy				1. Implement management changes based on HCR	<input type="checkbox"/>	<input type="checkbox"/>
	2. Monitor (survey and/or assessment) and assess stock(s)	<input type="checkbox"/>	<input type="checkbox"/>			
	3. Determine stock status relative to reference points	<input type="checkbox"/>	<input type="checkbox"/>			
				4. Determine if Harvest Strategy delivers the objectives	<input type="checkbox"/>	<input type="checkbox"/>
Step 6 Improve assessment and harvest strategy	1. Review reference points and HCR if needed	<input type="checkbox"/>	<input type="checkbox"/>			
	2. Define research requirements to improve the quantification and evaluation of uncertainty (i.e., risk analysis), as well as methodological developments required to reduce uncertainty.	<input type="checkbox"/>	<input type="checkbox"/>			