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## Management Procedures<sup>1</sup> Dialogue with Commission

PREPARED BY: IOTC SECRETARIAT

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**Venue:** A consultative Workshop on the evaluation of management procedures<sup>1</sup> will be held at Busan, Korea on April 26<sup>th</sup> followed by another half-day session on the 28<sup>th</sup> of April at the Commission meeting itself .

### Background within the IOTC

At the Commission meeting in 2012, a resolution was adopted (i.e. Resolution 12/01 followed by Resolution 13/10 incorporating key points of the precautionary principle). The key points of this resolution covers the following tenets below:

“The Resolution 12/01:

- AGREES, in accordance with paragraph 1 of Article IX of the IOTC Agreement, to the following:
  - To apply the precautionary approach, in accordance with relevant internationally agreed standards, in particular with the guidelines set forth in the UNFSA, and to ensure the sustainable utilization of fisheries resources as set forth in Article V of the IOTC Agreement.
  - In applying the precautionary approach, the Commission shall adopt, after due consideration of the advice supplied by the Scientific Committee, stock-specific reference points (including, but not necessarily limited to, target and limit reference points), relative to fishing mortality and biomass, and associated harvest control rules, that is, management actions to be taken as the reference points for stock status are approached or if they are breached”

In Resolution 13/10 the following were agreed to:

ACKNOWLEDGING that continuing dialog between scientists and managers is necessary to define appropriate HCRs for the IOTC tuna and tuna-like stocks;

ADOPTS in accordance with paragraph 1 of Article IX of the IOTC Agreement, that:

1. When assessing stock status and providing recommendations to the Commission, the IOTC Scientific Committee should apply the following interim target and limit reference points for the species of tuna and tuna-like species listed in **Table 1**.  $B_{MSY}$  refers to the biomass level for the stock that would produce the Maximum Sustainable Yield;  $F_{MSY}$  refers to the level of fishing mortality that produces the Maximum Sustainable Yield.

**Table 1.** Interim target and limit reference points.

Stock	Target Reference Point	Limit Reference Point
Albacore	$B_{MSY}; F_{MSY}$	$B_{LIM} = 0.40 B_{MSY}; F_{LIM} = 1.40 F_{MSY}$
Bigeye tuna	$B_{MSY}; F_{MSY}$	$B_{LIM} = 0.50 B_{MSY}; F_{LIM} = 1.30 F_{MSY}$
Skipjack tuna	$B_{MSY}; F_{MSY}$	$B_{LIM} = 0.40 B_{MSY}; F_{LIM} = 1.50 F_{MSY}$
Yellowfin tuna	$B_{MSY}; F_{MSY}$	$B_{LIM} = 0.40 B_{MSY}; F_{LIM} = 1.40 F_{MSY}$
Swordfish	$B_{MSY}; F_{MSY}$	$B_{LIM} = 0.40 B_{MSY}; F_{LIM} = 1.40 F_{MSY}$

2. These interim target and limit reference points shall be assessed and further reviewed by the IOTC Scientific Committee and the results shall be presented to the Commission for adoption of species-specific reference points. If applicable, the IOTC Scientific Committee should endeavour to apply the interim reference points in the provision of advice on the status of stocks and on recommendations for management measures.

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<sup>1</sup> Management Procedures are analogous to management Strategy Evaluation (MSE)

3. The IOTC Scientific Committee shall assess, as soon as possible and more particularly through the management strategy evaluation process (MSE) process, the robustness and the performance of the interim reference points, specified under paragraph 1 and other reference points based on the guidelines of International agreements taking into account: i) the nature of these reference points – target or limits, ii) the best scientific knowledge on population dynamics and on life-history parameters, iii) the fisheries exploiting them, and iv) the various sources uncertainty.
4. In addition the IOTC Scientific Committee shall develop and assess potential harvest control rules (HCRs) to be applied, considering the status of the stocks against the reference points assessed in paragraph 3 for albacore, bigeye tuna, skipjack tuna, yellowfin tuna and swordfish. Based on the results of the MSE and considering the guidelines set forth in the UNFSA and in Article V of the IOTC Agreement, the IOTC Scientific Committee will recommend to the Commission HCRs for these tuna and tuna-like species, which among other factors, taking account of the following objectives:
  - a) For stocks which assessed status will match with the lower right (green) quadrant of the Kobe Plot, aim at maintaining the stocks in a high probability within this quadrant;
  - b) For stocks which assessed status will match with the upper right (orange) quadrant of the Kobe Plot, aim at ending overfishing with a high probability in as short a period as possible;
  - c) For stocks which assessed status will match with the lower left (yellow) quadrant of the Kobe plot, aim at rebuilding these stocks in as short a period as possible;
  - d) For stocks which assessed status will match with the upper left quadrant (red), aim at ending overfishing with a high probability and at rebuilding the biomass of these stocks in as short a period as possible.

### Rationale

As a basis for this, the IOTC has embarked on an exercise to conduct an evaluation of management procedures<sup>1</sup> using harvest control rules in view of management objectives identified. Many of the CPC's are still unfamiliar with what a harvest control rule is and what the Management Objective for the fisheries are. To illustrate this point, a series of workshops with the Commission and key member countries shall be held to inform and enhance dialogue on these elements. Through these dialogues, IOTC is embarking on an exercise similar to what CCSBT undertook with their member countries in the late 1990's and early 2000's and similar to those currently underway at WCPFC and ICCAT. The process shall entail a series of dialogues, or consultations, with the CPC's to develop a common understanding of and approaches to best achieve Management Objectives through harvest control rules with limit and target reference points which consider the uncertainties in stock condition and dynamics and the Commission's tolerable risks of failure in achieving Management Objectives within acceptable time-frames using tiered and feedback based approaches. This is the second of a set of consultative workshops that would need to take place over the next few years.

As a result of having common objectives with ABNJ-GEF project (Objective 1.1.4 of the GEF Project), FAO ABNJ would support the funding of the G-77 countries that would like to participate in this event, and cover travel for the facilitators and experienced analysts. The estimated budget for this event is shown on the next page.



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**DRAFT AGENDA** (Time: 09:00 – 17:00)

**Facilitator:** Dr. Doug Butterworth

1. Registration
2. **OPENING OF THE MEETING AND ARRANGEMENTS**
3. **OVERVIEW OF THE EVALUATION OF MANAGEMENT PROCEDURES IN THE IOTC (RISHI/TOM)**
4. **IOTC SCIENTIFIC COMMITTEE RECOMMENDATIONS AND PROCESS JUSTIFICATION (SC CHAIR: TOM NISHIDA)**
5. **WHAT IS A MP/MSE: WHY IS IT IMPORTANT? DOUG BUTTERWORTH**
6. **INTRODUCING THE NOTION OF OVERFISHING, OVERFISHED AND RISK TO THE FISHERY AND THE RESOURCE: AN EVALUATION OF THE INTERIM REFERENCE POINTS USING THESE CONCEPTS (RISHI SHARMA)**
7. **STATUS OF THE MPE/OM'S IN IOTC (SKIPJACK – NOKOME BENTLEY)**
8. **STATUS OF THE MPE/OM'S IN IOTC (ALBACORE – IAGO MOSQUEIRA)**
9. **DEFINING OBJECTIVES FOR MANAGEMENT PROCEDURES (PERFORMANCE MEASURES WITH CRITERIA PROPOSED BY SC AND WPM - ALL)**
10. **GROUP DISCUSSION ON WHAT OBJECTIVES WE COULD DEFINE FOR MANAGEMENT PROCEDURES –WITH EXAMPLES**
11. **HOMEWORK- WHAT PERFORMANCE MEASURES ARE IMPORTANT FOR YOUR CPC. COME UP WITH SOME KEY OBJECTIVES**

#### **DAY 2**

12. **DEFINE YOUR OBJECTIVES (BASED ON HW OF APRIL 26<sup>TH</sup> )**
13. **GROUP EXERCISES: WITH MP'S AND OUTCOMES OF THEM USING SKJ AND ALB OM'S WITH RESPECT TO THE OBJECTIVES**
14. **CAN WE AGREE ON SOME SET OF OBJECTIVES AND MP'S FOR EVALUATION OF ALB AND SKJ**