



Australian Government

Australian Fisheries Management Authority



# Response to Ministerial Direction – Eastern Tuna & Billfish Fishery

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The management arrangements proposed in this paper give effect to the Minister's Direction to AFMA and AFMA's initial response to the Direction in the *Future Operating Environment for Commonwealth Fisheries* released in December 2005.

The arrangements include the implementation of a TAE for the fishery, future consideration of a move to ITQs, the future requirements for observer coverage and monitoring of the fishery and the use of the Ecological Risk Assessment to manage the fishery.

These proposed management arrangements and associated implementation issues will be the basis of consultation with industry and progressed through the ETBF MAC and/or RAG through the first half of 2006. These consultations will generate the information required for the purposes of S.13(4) of the ETBF Management Plan 2005. Following further Board consideration in mid 2006, approved arrangements will be implemented in 2006 and 2007.

### Overview of Ministerial Direction

On 14 December 2005 the then Minister for Fisheries, Forestry and Conservation, Directed AFMA in accordance with section 91 of the *Fisheries Administration Act 1991*, to take immediate action in all Commonwealth fisheries to:

- a) Cease overfishing and recover overfished stocks to levels that will ensure long-term sustainability and productivity;
- b) Avoid further species from becoming overfished in the short and long term; and
- c) Manage the broader environmental impacts of fishing, including on threatened species or those otherwise protected under the *Environment Protection and Biodiversity Conservation Act 1999*.

The Minister also directed that AFMA take a more "strategic, science-based approach" to setting catch and/or effort levels in all Commonwealth fisheries through the development and implementation of a Commonwealth Harvest Strategy Policy.

Other key aspects of the Direction relevant to the ETBF are:

- a) Implement output controls in the form of ITQs by 2010 unless a strong case is made to the Minister that this would not be cost-effective or would be otherwise detrimental;
- b) Evaluate whether boat statutory fishing rights and boat permits are an impediment to autonomous adjustment and if so, phase these out in all fisheries by 2010;
- c) Minimise incentives for discarding by ensuring it is factored into the setting of catch limits;
- d) Enhance the monitoring of fishing activity, for example through increased use of vessel monitoring systems with daily reporting, on-board cameras and observers;



- e) Establish a system of independent surveys for all major Commonwealth fisheries by 1 January 2007 to increase the transparency and integrity of catch and effort information;
- f) Identify and implement any required spatial closures in fisheries:
  - Ensure where ongoing exclusion of fishing is proposed there is a coordinated approach with other relevant agencies to the identification of Marine Protected Areas.

AFMA is required to report to the Minister on progress of implementing the Direction in May 2006, November 2006 and May 2007.

## **Sustainable fishing in the ETBF**

### **Summary of recommended arrangements for MAC and industry consultation**

- 1 To meet the aim of allowing 9.5 million hooks to be set in the fishery, comprising of 7.0 million hooks in the mainland and Lord Howe Island AFZs and up to 2.5 million hooks in the balance of the fishery, it is proposed to set the initial TAE at 7.8 million hooks with sub-area factors of:
  - 1.0 for the mainland and Lord Howe Island AFZ;
  - 0.7 for the Norfolk Island area.; and
  - 0.2 for the balance of the WCPFC area.
- 2 That the matter of introducing ITQ management be considered in the fishery in the second year after the new Management Plan comes into effect (2008).
- 3 That the level of the observers be increased to the medium confidence level of 8.5% coverage and that: i) the program be implemented on an on-going basis; ii) that the level of coverage is reviewed every 3 years to ensure that it remains appropriate and; iii) that where practical and cost-effective, camera/remote systems replace observer coverage
- 4 That the nature of the independent survey for ETBF be based on increased observer coverage (see above) and increased scope of the proposed regional large scale tagging program by SPC, to provide an additional source of data on abundance and stock movement.
- 5 The implementation of the ETBF Management Plan will be a high priority for AFMA management once the buyout is completed.
- 6 There may be a need for further sub-area factors, area closures or restrictions to address other issues. Issues such as localised depletion of swordfish are already being addressed and will be examined further by the MAC and RAG over the next 18 months.



## Detailed Considerations

### MDs 1a) and 1 b) - Cease overfishing, recover overfished stocks and prevent species from becoming overfished in future

The most recent advice on the WCPO by the WCPFC Scientific Committee classifies ETBF species as:

Pacific bigeye tuna	overfishing but not overfished
Yellowfin tuna in the WCPO	overfishing but not overfished
SW pacific swordfish	Uncertain
Marlins	Uncertain
South Pacific albacore	not overfished

The classifications are based on the status of the stocks throughout the WCPO rather than those in the Australian area of influence.

As ETBF target species are highly migratory, the issues of current overfishing and preventing overfishing in the future are ones that will have to be addressed in the WCPFC. At the recent meeting of WCPFC some initial measures were agreed upon for yellowfin and bigeye. However, governance issues, the willingness and ability of each party to implement measures on domestic fishing fleets will have an impact on the effectiveness of the measures.

There is evidence however that swordfish, yellowfin and bigeye tuna demonstrate localised recruitment and depletion and may require separate action to ensure sustainability in the Australian area of influence. At present there is no indication of overfishing of yellowfin in the Australian area of influence, but there is evidence of CPUE declines for bigeye and serial depletion of swordfish.

To ensure future sustainability of ETBF stocks a limit on hook numbers will come into effect in 2007. The aim is to allow for 9.5 million hooks to be set in the fishery, comprising 7 million hooks in the mainland and Lord Howe Island AFZ and up to 2.5 million hooks in the balance of the fishery. The figures will be reviewed as further data becomes available, in the light of any decision about allocation in the Western and Central Pacific Fisheries Commission and any decisions made on resource sharing.

It is intended to give this effect through the following arrangements using sub-area factors under the Management Plan:



Zone	Number of hooks expected to be set	Sub-area factor	Number of clips decremented
Mainland and LHI AFZ	7,000,000	1.0	7,000,000
NI region	600,000	0.7	420,000
Everywhere else	1,900,000	0.2	380,000
<b>TOTAL</b>	<b>9,500,000</b>		<b>7,800,000</b>

Hence the Board intends setting an initial longline TAE under the Plan of 7.8 million clips for 2007 and the sub-area factors listed above under section 13 of the ETBF Management Plan.

There may be a need for further sub-area factors, area closures or restrictions to address other issues such as threatened, endangered or protected species and the localised depletion of swordfish. The need for further measures will be examined by the MAC and RAG over the next 18 months.

### **MDs 1c) and 4d) – Manage broader environmental impacts of fishing including on threatened and protected species**

Progress has been made in reducing catches of birds through mandatory use of tori lines, line weighting regimes and offal discharge restrictions. While the fishery is currently meeting the TAP objectives in all areas, it remains to be seen if this reduction is because of a change in bird behaviour and/or fishing patterns and whether it can be sustained over a period of time.

However observer reports indicate that there is poor compliance with the permit conditions. The MAC needs to consider how to improve understanding and acceptance of the requirements to ensure that there is widespread compliance with permit conditions. An at-sea surveillance program is an expensive undertaking and would be a final solution. Therefore, the MAC should consider a significant injection of funds to implement the model successfully used for the introduction of TEDs in the NPF. This involved employing a gear technologist to move from boat to boat assisting the fleet at sea over a period of 2 years followed by a period of comprehensive at sea inspections to ensure that gear was in place and being used correctly.

The outcome of the current ERA process for the ETBF will be used to prioritise management actions to address species at risk in the fishery. To monitor the impacts of the fishery on threatened, endangered and protected species and ensure compliance with anti-discarding policy the current observer program, or an electronic equivalent, will be an ongoing measure.

### **MDs 2 and 3 – Implement Harvest Strategies**

A new Harvest Strategy Framework will be applied to all Commonwealth managed fisheries by 2008. The framework sets the 'goalposts' for managing catches by setting agreed target and limit reference points and clear decision rules for each species.



Fisheries with an international component are exempted from the need to develop a harvest strategy policy if the relevant regional fisheries management organisation has an acceptable scientific process that sets a sustainable catch level. In the absence of a sustainable TAC set by the WCPFC the ETBF is required to develop a harvest strategy over the coming year, consistent with the national framework being developed by the Department of Agriculture Fisheries and Forestry (DAFF).

This will involve a considerable commitment of time and resources on the part of the MAC and the FAG. Given the similarities in the eastern and western tuna fisheries it would seem sensible for the two MAC/RAGs to work together on this matter over the coming year to develop harvest strategies in tandem.

In the absence of WCPFC management decisions, Australia will be advocating its domestic policy settings, based on the Harvest Strategy outcomes, in the WCPFC, as an example of best practice.

#### **MD 4a) – Implement output controls**

AFMA will be instituting a program of reviewing each of its input controlled managed fisheries. The AFMA Board has determined that the ETBF should not be reviewed until 2008 which will allow a period of time operating under the new Management Plan. This will ensure that there is a reasonable level of information to assess the impacts of the introduction of ITQs (eg cost effectiveness).

#### **MD 4 b) – Investigate whether boat SFRs/permits are an impediment to autonomous adjustment**

AFMA will be instituting an AFMA wide review of this issue and will include the grant of boat permits and the potential grant of boat SFRs, in the ETBF, in its considerations. This review will commence in 2006.

#### **MD 4c) – Minimise incentives for discarding**

AFMA's Future Operating Environment document sets out AFMA's objectives in relation to managing discards. Discarding occurs in the ETBF, particularly for species such as lancet fish, which are dumped in large numbers across the fleet.

AFMA policy is to reduce the level of discarding of non-target species in all Commonwealth fisheries by 50% by 2008 and eliminate discarding of target species by 2007. AFMA will shortly issue all MACs with guidelines to address bycatch. MACs will be asked to respond indicating how they will achieve the bycatch reduction targets set out in the guidelines.



#### **MD 4 e) – Enhance monitoring**

The expected reduction in the fleet through the buyback will result in a lesser number of observations than may be needed to provide meaningful information from the program within acceptable confidence limits unless there is an increase in the rate of observation.

In light of the expected reduced fleet, the level of the observers will be increased to the medium confidence level being 8.5% and the program should be implemented on an on-going basis. The objective is to maintain data quality by maintaining the sample size of the number of trips that are observed. The program should be reviewed every three years to ensure that it remains appropriate.

These programs are an integral part of a sound Harvest Strategy Framework and in the management of ecological risks in Commonwealth fisheries. They can be used for:

- measuring any discard and bycatch,
- validating logbook information,
- identifying fishing interactions with rare, threatened, endangered and protected species and informing management options to address these,
- implementing scientific programs, and
- monitoring compliance with fishery regulations.

Electronic monitoring solutions (E-monitoring) will be pursued by AFMA in order to reduce costs and improve data quantity and quality. E-monitoring includes monitoring fishing operations using vessel mounted camera systems and sensors, fishing position using VMS and catch against quota holdings using electronic quota monitoring.

#### **MD 4f) – Establish a system of independent surveys**

The scale of the stocks, the mobility of the species and the vagaries of longline fishing means that there is unlikely to be an independent survey method that could provide any independent estimate of abundance of the species. With these species, aerial surveys are unlikely to be effective and/or would be prohibitively expensive given the area that would need to be covered.

The most cost effective methods that could assist in providing confidence in abundance estimates would be:

- increased observer coverage to improve confidence in catch and effort reporting (as proposed above); and
- participation in a regional, large scale tagging program over several years, which would provide an additional source of data on abundance as well as valuable information concerning stock movement. SPC is currently considering



such a program and the provision of some funding would allow the scope, and hence usefulness, to be expanded.

#### **MD 4g) – Identify and implement spatial closures**

Resource sharing issues are currently under consideration in the ETBF. If a similar solution is adopted to that in the WTBF there are likely to be large spatial closures within the AFZ. AFMA will continue to work with DAFF and stakeholders on these proposals and will implement any government agreed resource sharing outcome.

Spatial management arrangements such as further sub-area factors, area closures or restrictions to address other issues such as threatened, endangered or protected species and the localised depletion of swordfish may be needed. These arrangements are to be examined by the MAC and RAG over the next 18 months.

#### **Compliance & Licensing**

Consistent with the Minister's Direction, including that many fisheries will be moving to quota management over the next 4 years, AFMA will be changing some of the ways it does business with the fishing industry to ensure there is a high level of integrity in fishery management arrangements and efficient administrative systems. Key initiatives are:

*E-licensing* to provide on-line access to licensing entitlements held by fishers within 3 years. It will enable industry to self-service licensing and quota transactions and reduce the long-term costs to AFMA and industry.

*Improved quota monitoring* in fisheries subject to quotas or effort limits to ensure that TAC/TAE is not exceeded and those individuals who exceed their entitlements do not devalue the investments of other quota holders.

Progressively move to *monthly quota reconciliation* for all quota fisheries to ensure that quota is closely monitored and fishers can reconcile as soon as possible after any overcatch occurs. Implementation of quarterly quota reconciliation in the SESSF will be the first step in 2006.

VMS will be rolled out to the entire fleet. Changes to the VMS are required to meet the increased obligations arising from placing VMS on all the fleet. Those fisheries that do not have VMS will be required to fit suitable VMS units by 1 July 2007. Further information on VMS requirements will be provided in the next few months.

*Administrative penalties* will be increasingly used to improve the cost- effectiveness of compliance. The policy and legal requirements for this will be developed over the next 2 years with full implementation in 2008.



Given many fisheries will be moving to TAC/ITQ management over the next 4 years AFMA will be working with MACs to develop *consistent management frameworks* to reduce long-term costs.

**Australian Fisheries Management Authority**

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