Revised Commonwealth Fisheries Harvest Strategy Policy

Submission No.: 06

Submission by: CSIRO

Submission:

CSIRO comments

Below are CSIRO comments on the draft Harvest Strategy Policy (HSP). CSIRO has had an extensive involvement in the development and implementation of the previous policy and guidelines.

We appreciate the opportunity to comment but have kept feedback to a technical nature as far as possible.

1 Introduction

The HSP has seen a significant reduction in over-fishing and over-fished species since its introduction. Perhaps this could be acknowledged in the introduction.

3 Applying the Harvest Strategy Policy

3.1 Species categorisation

Categorising species as key commercial, secondary commercial and by-product does have implications for policy and management settings that are discussed below.

3.5 Reference points and proxies

Table 2 Proxy reference points – there appears to be an error here as secondary species are referred to in both the first and second rows. The first row should only refer to key commercial species. If secondary species are caught then this would appear to be fishery which catches a number of species and hence the second row applies.

The reference point proxy for secondary species is set at 0.4 of unfished biomass. However, given that they are not generally targeted (by definition), their biomass level will really be determined by interactions of these secondary species with the optimal level of the key commercial species. From our modelling work, some of these species may well end up with a considerably higher biomass than 40%. If RBCs (and consequently TACs) are set to attain a target reference point of 0.4 of the unfished level, then, for some species, the TAC is likely to be higher than what can or will be caught when they are taken in association with the key commercial species.

Limit reference points - as has been argued before, there is no biological reason to link the limit reference point to B_{MSY} as is currently the case in the Policy. This is a "rule of thumb" with little empirical basis. This also has implications for a species where B_{MSY} is estimated to be well below 40% (particularly in situations where steepness is assumed to be high) and hence the current proxy could see a limit reference point of well below 20%. It would be simpler to remove reference to 0.5 B_{MSY} and set B_{LIM} at 20%. Other (lower or higher) levels could be considered but only if they could be scientifically justified and tested. This is implied in the policy on page 12 (third paragraph). The

proxy for the limit reference point (Table 2) would then be limited to 0.2 of the unfished biomass with a note to the effect that scientifically defensible alternative levels may be considered.

3.8 Technical evaluation of harvest strategies

It is unclear what Commonwealth species would not be suitable for MSE testing. The issue is whether it is practical in terms of required resources to do the evaluation. This line should be deleted or clarified.

3.11 Rebuilding overfished stocks

There may be situations where a depleted stock does not rebuild due to environmental changes, sometimes known as regime shifts. A reference to such a situation (where it can be demonstrated or attributed to factors other than fishing) would be helpful as this has implications for rebuilding strategies. This point is also identified explicitly in the Bycatch Policy in Section 3.5.