# Annual Review of the South African SBT Fishery for the 16<sup>th</sup> Annual Meeting of the Commission

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#### 1. Introduction

The South African longline fishery started in the early 1960s. Southern bluefin tuna was one of the most common species caught in South African waters with more than 1 500 t estimated to be landed from 1961-1967. The fishery failed to develop as fishing interests turned to other more lucrative fish stocks such as hake and rock lobster. Subsequently, tuna longline fishing in the 1970s to 2002, in South African waters was dominated by foreign vessels from Japan and Chinese-Taipei through the issuing of bi-lateral agreements. These agreements were terminated in 2002, with the intention that marine resources within South Africa's EEZ should only be exploited by South Africans. Renewed interest by South Africans to conduct longline fishing for tuna and swordfish was developed in 1997 with the establishment of an experimental longline fishery. The South African longline fishery was recently formalized into a commercial fishery in 2005 when 20 swordfish-directed rights and 30 tuna-directed rights were made available for allocation. The fishery is thereby limited to a maximum of 50 vessels.

Currently southern bluefin tuna is only caught in South Africa by means of swordfish and tuna longline vessels. The swordfish longline vessels are domestic vessels that mainly target swordfish, yellowfin and bigeye within South Africa's EEZ and catch southern bluefin tuna as by-catch. These vessels set after dusk, using shallow sets, squid bait and light sticks. The longline system used is based on the American system, i.e. monofilament mainline used. The tuna longline vessels target yellowfin, bigeye and southern bluefin tuna. South Africa is currently in the process of developing this relatively 'new' sector of its fishery and notes that no suitable domestic vessels exists for this fishery. Furthermore, South Africans are not suitably skilled to target tuna using longline. Consequently, there is a large reliance on chartering of foreign vessels to source suitable vessels for reflagging and for skills transfer to South Africans.

## 2. Operational Constraints on Effort

### Regulatory Measures

- The South African longline fishery is restricted to a maximum of 50 vessels.
- Within the longline fishery only tuna Right Holders are allowed to engage in chartering of foreign vessels.
- The fishery is currently restricted to a TAC of 40t. The TAC is further apportioned with 10 t allocated to the swordfish-directed fishery on an Olympic system and the remaining 30 t is individually apportioned to each tuna-directed Right Holder.
- Once the quota is reached the southern bluefin fishery is closed and no further landing of bluefin is permitted.
- Observer coverage is 100% for all charter vessels and a target of 20% is required for the domestic vessels.
- All catches are landed in South Africa with 100% monitoring of landings.
- Catch logbooks are required to be completed on a daily basis.
- VMS reporting to the South African base station is mandatory for all vessels.
- Southern bluefin less than 6 kg is not permitted to be landed.
- At seas transshipments are not permitted. Transshipments in port is allowed on the authority of a permit and must be monitored.
- Catch statistical documents are required to be issued with the export of any southern bluefin.
- Export permits are required for the export of any marine product.
- 3. Catch and Effort

In 2008, 10 of 25 active vessels reported catches of southern bluefin. The total reported catch (live weight) was 45.5 t. The longline vessels are unable to target southern bluefin for any substantial period of time given the small country quota. Hence, the southern bluefin catches can best be described as a by-catch to targeting of swordfish, bigeye and yellowfin. The total effort deployed by the whole fleet in 2008 was 4.3 million hooks. The nominal CPUE for southern bluefinin 2008 is 10.6 kg per 1000 hooks. No southern bluefin is

permitted in the tuna pole fishery. Although the recreational fishery is in theory allowed to catch 10 southern bluefin per person per day, this in practice is not realized as the fishing grounds for southern bluefin is too far offshore to be targeted by the recreational fishery. In future, the South African legislation will be amended to ensure no recreational take of southern bluefin.





Fig. 1 South African SBT catch and effort data (1998-2008).

South African catch of southern bluefin has increased significantly from 1 t in 1998 to over 40 t live weight in 2008 (Fig. 1). This increase is partly attributed to the ten fold increase in effort. Effort increased from 0.4 million hooks in 1998 to over 4 million hooks in 2008 (Fig. 1). However, Fig. 2 indicates that over this period there has also been an increase in nominal CPUE from 2.1 kg.1000 hooks<sup>-1</sup> to 10.6 kg.1000hooks<sup>-1</sup>. The Nominal increase in CPUE may be attributed to many factors such as skippers becoming more experienced, change of fishing areas, change in availability of southern bluefin, and change in the targeting strategies of the fleet.



Fig. 2. Nominal South African SBT CPUE (1998-2008)

5. Annual Fleet Size and Distribution

In 2008, the swordfish longline fleet comprised of 12 vessels and the tuna longline fleet comprised 13 active vessels. The vessels mainly focused fishing activities within the South African EEZ, particularly along the south and east coast of South Africa.

6. Historical Fleet Size and Distribution

From 1998 to 2001 most of the longline fishing activity was conducted along the west coast of South Africa. Since, the development of processing facilities at Richard's Bay the fishing effort of local vessels gradually shifted to the east coast of South Africa where higher catch rates of swordfish and yellowfin are obtained. The addition of charter vessels resulted in many of the tuna vessels fishing along the south coast of South Africa since 2005. On average, more than 90% of the fishing effort is conducted with South Africa's EEZ. Over the last 5 years the average number of active longline vessels have been 24. Although the number of active vessels may be as high as 50 vessels in theory, many right holders have not activated their rights because of the challenges in sourcing of suitable vessels, low catch rates of most species, and high fuel and freight costs.

#### 7. Fisheries Monitoring

Observer coverage is aimed at 100% of all foreign vessel fishing trips and 20% of domestic vessel fishing trips. In 2008, 100% coverage was obtained for foreign fishing vessels and 14% for domestic vessels. Observer duties include monitoring compliance with permit conditions, recording catch composition, obtaining size frequencies, and conducting biological sampling etc.

#### 8. Other Factors

#### Import/Export Statistics

All southern bluefin catches are exported. South Africa does not have a market for bluefin and hence none is reported to be imported.

#### <u>Markets</u>

Southern bluefin is mainly exported to Japan and USA.