



## ICCAT ■ INTERNATIONAL COMMISSION FOR THE CONSERVATION OF ATLANTIC TUNAS

### 16. Review of performance statistics (e.g. average catch over projection period) and possible modifications

The Group reviewed several performance statistics and noted that several clarifications (noted, below in **Section 26**) would be requested from Panel 2. The Group discussed aspects of the calculation of different performance statistics but specific calculations and definitions will be further elaborated by or in conjunction with Panel 2.



# Preliminary performance metrics as used in Trials Specifications Document

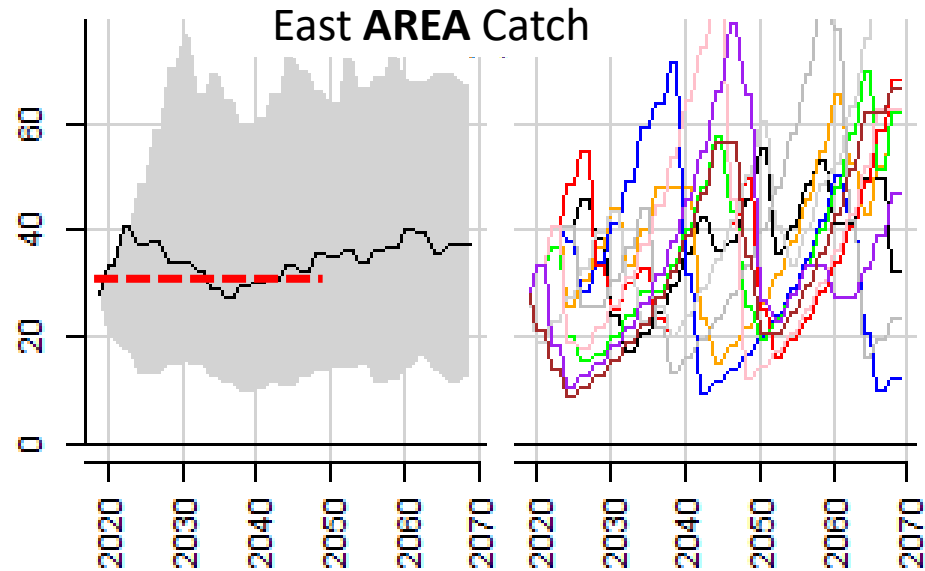
number	statistic	Description	What it applies to
1	AvC30	Average catch over years 1-30 (per area – west or east)	Area (East and West)
2	C3	Average catch over years 1-3	Area (East and West)
3	C6	Average catch over year 1-6	Area (East and West)
4	C10	Average catch over years 1-10	Area (East and West)
5	C20	Average catch over year 10-20	Area (East and West)
6	C30	Average catch over year 20-30	Area (East and West)
7	D10	Depletion relative to dynamic $B_0$ at 10 years (per stock – western or eastern origin)	Biological Stock (East and West)
8	D20	Depletion at 20 years	Biological Stock (East and West)
9	D30	Depletion at 30 years	Biological Stock (East and West)
10	LD	Lowest depletion over 30 years	Biological Stock (East and West)
11	DNC	Depletion at year 30 relative to no catch (i.e. “dynamic”), this differs from D30 because dynamic $B_0$ may not be reached at year 30	Biological Stock (East and West)
12	LDNC	Lowest depletion relative to no catch	Biological Stock (East and West)
13	POF	Probability of Over-Fishing ( $F > F_{MSY}$ ) over 30 years	Biological Stock (East and West)
14	POS	Probability of Over-Fished status ( $B < B_{MSY}$ ) over 30 years	Biological Stock (East and West)
15	POF10	Probability of Over-Fishing ( $F > F_{MSY}$ ) over years 1-10	Biological Stock (East and West)
16	POS10	Probability of Over-Fished status ( $B < B_{MSY}$ ) over years 1-10	Biological Stock (East and West)
17	POF20	Probability of Over-Fishing ( $F > F_{MSY}$ ) over years 11-20	Biological Stock (East and West)
18	POS20	Probability of Over-Fished status ( $B < B_{MSY}$ ) over years 11-20	Biological Stock (East and West)
19	POF30	Probability of Over-Fishing ( $F > F_{MSY}$ ) over years 21-30	Biological Stock (East and West)
20	POS30	Probability of Over-Fished status ( $B < B_{MSY}$ ) years 21-30	Biological Stock (East and West)
21	PGK	Probability of Green Kobe region ( $F < F_{MSY}$ AND $B > B_{MSY}$ ) over 30 years	Biological Stock (East and West)
22	AAVC	Average variation in catch between TAC changes over 30 year time period	Area (East and West)
23	NegC	Maximum negative change in catch (per area) over 30 year time period	Area (East and West)
24	PosC	Maximum positive change in catch (per area) over 30 year time period	Area (East and West)
25	Br30	Depletion (B relative to dynamic $B_{MSY}$ ) after projection year 30	Stock (East and West)
26	BR10	Depletion (B relative to dynamic $B_{MSY}$ ) after projection year 10	Biological Stock (East and West)
27	BR20	Depletion (B relative to dynamic $B_{MSY}$ ) after projection year 20	Biological Stock (East and West)
28	PBlim	Probability of $B < B_{lim}$ over 30 years	Biological Stock (East and West)



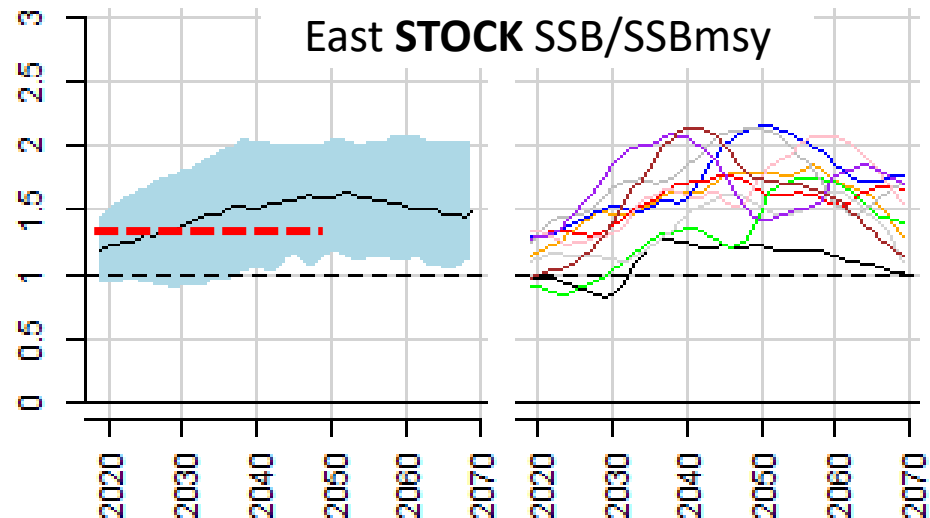
A generic MP and OM1

# 'Worm' plots of catch and SSB/SSB<sub>msy</sub>

AvC30 Average catch over years 1-30 (per area – west or east)



POS Probability of Over-Fished status ( $B < B_{MSY}$ ) over 30 years



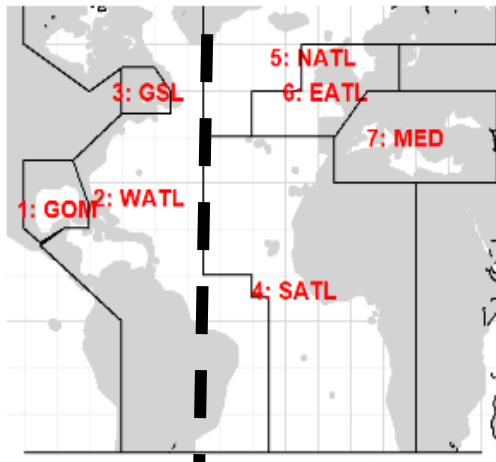
Br30 Depletion (B relative to dynamic  $B_{MSY}$ ) after projection year 30

# Further details about how a Management Procedure would *likely* work

e.g. apply “**Good enough MP**” procedure

Rule for West  
area TAC

Rule for East  
area TAC



Statistics will apply to  
“Biological” Stock

These relate to  
**Status** and **Safety**

Statistics will apply to  
Area

These relate to **Yield**  
and **Stability**

West area catch

West Stock B/Bmsy

East area catch

East Stock B/Bmsy

