

Provides critical support to the SCRS in all the aspects of the SCRS work, from supporting research programs, managing the basic fishery data, coordinating publication of SCRS reports and documents, supporting capacity building initiatives, organizing meetings... (see section 6 of SCRS Report) .

**HIGHLIGHTS:**

- Following the SCRS recommendation, a web application prototype was deployed online on April 2018 for testing by ICCAT Statistical correspondents during 2018. (Online Reporting Group report)
- The SCRS has a protocol to use the Data Fund and other ICCAT funds which the secretariat uses as a guide. The SCRS proposes to review this protocol with a view to continue to enhance the participation of developing country scientists as SCRS officers. (Refer to STACFAD)

**Report of intersessional SCRS meetings**

2018

Nine Intersessional meetings, plus the two weeks annual plenary

	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN
January		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
February			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28							
March			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
April	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
May			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
June			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
July	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
August			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
September			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
October			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
November			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
December	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						

- Assessment of Blue Marlin
- Assessment of Bigeye tuna
- MSE for SWO and BFT

**ICCAT CICTA CICA Executive Summaries**

- Executive Summaries are in Section 9 of the Report. Details will be presented at the panel meetings.

**No overfishing and not overfished**

Stock	Overfishing	Overfished	Year	Projections	TAC
SKJ E	Not likely	Not likely	2013	No	No
SKJ W	No	No	2013	No	No
ALB N	No	No	2014	Yes	Yes
ALB S	No	No	2014	Yes	Yes
ALB Med	Not likely	Not likely	2015	No	No
SAI W	Not likely	Not likely	2014	No	No
SWO N	No	No	2015	Yes	Yes
BSH N	Not likely	Not likely	2013	No	Yes



### Overfishing, overfished or both 2018 assessments

Stock	Overfishing	Overfished	Year	Projections	TAC
YFT	No	Yes	2014	yes	yes
BET	Yes	Yes	2017	yes	yes
BUM	Yes	Yes	2016	yes	yes
WHM	Not likely	Yes	2010	yes	yes
SAI E	Possibly	Yes	2014	no	yes
SWO S	No	Yes	2015	yes	yes
SWO Med	Yes	Yes	2015	yes	yes
SMA N	Yes	Yes	2015	yes	no
SMA S	Possibly	Possibly	2015	no	no
POR NW	No	Yes	2008	no	yes
POR SW	Undetermined	Yes	2008	no	no
POR NE	No	Yes	2008	no	no

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- Executive Summaries are in Section 9 of the Report. Details will be presented at the panel meetings.

### Insufficient information to know

Stock	Overfishing	Overfished	Year	Projections	TAC
BFT E	No	Unknown	2015	Short term	Yes
BFT W	No	Unknown	2015	Short term	Yes
All SMT	Unknown	Unknown	n/a	No	No
BSH S	Undetermined	Undetermined	2013	No	No
All other SHK	Unknown	Unknown	n/a	No	n/a

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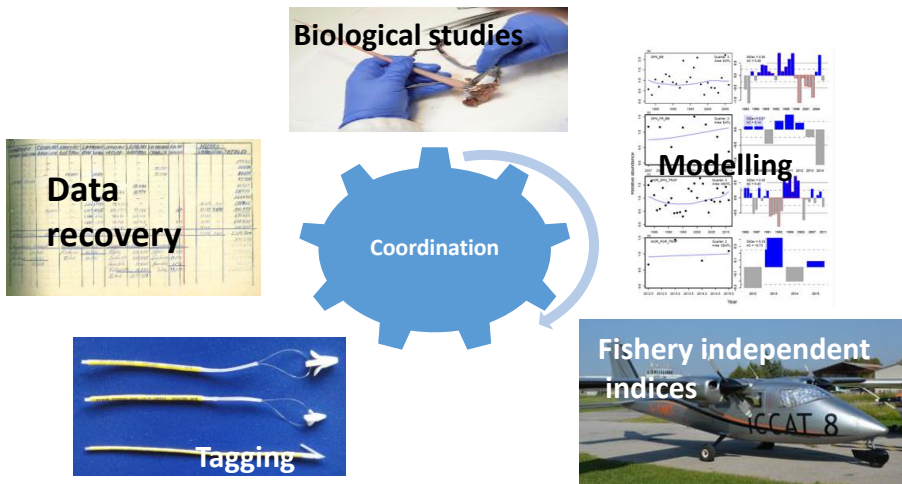
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ICCAT CICTA CICAA **Executive Summaries**

- SCRS has been discussing changes to the format of these summaries to provide more effective communication. In order to make progress, feedback from Commissioners is needed.
- Provide the Commission with the examples of new Executive Summary formats but requesting the Commission to support or reject the following modifications:
  - distinguishing the colour of the two yellow quadrants of the current Kobe plot. For consistency with other tRFMOs, the upper right quadrant should be orange.
  - Always include the three Kobe matrices (probability in the green quadrant, probability of not overfishing and probability of not overfished).

ICCAT CICTA CICAA **Research Programs: GBYP**

❖ It is structured in six main lines of activity:





- ❖ Up to now, GBYP has produced a total of 148 contracts to 102 entities located in 24 countries; 289 scientific and technical reports and 244 scientific papers
- ❖ Info from all GBYP activities have contributed to BFT stock assessment advice, sensitivity models and the implementation of BFT Management Strategies

#### Evaluation

USE OF GBYP DATA FOR IMPROVING BFT STOCKS MANAGEMENT		
ACTIVITY	BFT STOCK ASSESSMENT ADVICE AND SENSITIVITY MODELS	BFT MSE OPERATING MODELS DEVELOPMENT
Data recovery	Size data, historical trap catch data, bait boat data, historical maturity data, non GBYP e-tags data	Size data, long line CPUEs, bait boat data, historical genetic data, non GBYP e-tags data
Aerial surveys	Time series 6 years available, but not used yet	Time series 5 years already used
Tagging	Conventional tag data, growth data from tagging, GBYP e-tags data	Conventional tag data, info on movements across statistical areas from GBYP e-tags data
Biological studies	Genetic and microchemical data determining mixing, Age/Length keys, reproductive parameters, Length/weight correlation	Genetic and microchemical data determining mixing, Age/Length keys, reproductive parameters, Length/weight correlation
Modelling	Space Assessment Model (SAM) application, VPA training course, SS3	BFT MSE OM development

<https://www.iccat.int/GBYP/en/>



## AOTTP - Evidence based approach for sustainable management of tuna resources in the Atlantic Ocean

- **THREE EXPECTED RESULTS**
  - Tag-recapture data for tropical tuna species in ICCAT database
  - Key parameters (e.g. growth, mortality and migration) for stock assessment estimated from AOTTP tag-recapture data
  - Scientists from developing Contracting Parties of ICCAT trained in tagging data collection and scientific analyses

### AOTTP – release and recovery (spaghetti)

Species	Releases	Recoveries	Rate %
Bigeye	19,198	4,077	21%
Little tunny	4,556	393	9%
Skipjack	39,448	2,670	7%
Wahoo	131	1	1%
Yellowfin	28,833	5,837	21%
<b>Total</b>	<b>92,418</b>	<b>13,065</b>	<b>14%</b>

### Capacity building activities



awareness-raising activities



Tagging and recovery



- ***Small Tunas Research Programme (SMTYP)***
- ***Shark Research and Data Collection Programme (SRDCP)***
- ***Enhanced Programme for Billfish Research (EPBR)***
- ***Other research program requests: Albacore, Swordfish, Ecosystems***

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- The roadmap for MSE ... reflects a desire to match the delivery of MSE products to the needs for advice on MSE. Trying to implement this roadmap has been very challenging, for both the SCRS and the Commission.
- Highlights for 2018:
  - Second joint tRFMO MSE Working Group meeting,
  - Fruitful discussions on exceptional circumstances at the SWGSM
  - Completion of peer-review of the North albacore MSE computer code
  - Improved integration of the Bluefin tuna Species Group in the development of the GBYP-MSE framework
  - First meeting of the Swordfish Species Group focused on MSE,
  - Beginning of the development of the MSE framework for tropical tunas
  - Three MSE training courses for scientists and managers.

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Many challenges remain ahead including:

- finding mechanisms to gather input on operational objectives from the Commission,
- improving the ability of the Tropical tuna Working Group to engage in their MSE process
- obtaining sufficient funding to properly support the process.
- Simultaneously running so many MSEs for different stocks

Recommendations:

- tRFMO MSE and SWGSM: either to reduce the number of stocks under concurrent MSE development or to slow down the pace of development of the MSEs. SCRS recommends the later.
- The SCRS recommends that the MSE processes adopt a standard set of principles that should guide and facilitate the coordination process



### Abbreviated list of principles

- Transparency
- Continuous and thorough review
- Creation of a technical MSE Group for each species
- Maintenance of a living document with specifications of the Modelling Framework;
- Use of standardized communication tools for MSE results
- An annual SCRS intersessional meeting on MSE
- Updates of progress to each SWGSM;
- Having regular agenda items on MSE at meetings of Commission panels
- Development of a detailed roadmap for each stock specific MSE
- If progress on MSE does not comply with the roadmap to adjust the schedule of stock assessments.





	ALB	BFT	SWO	TrPMO
2015	Committee established management structure in Dec. 15-16			
2016	SCRS conducted stock assessment SCRS evaluated a range of candidate HCRs through MSE FAO identified performance indicators			Committee identified performance indicators (Jan. 16-17)
2017	SCRS evaluated the performance of candidate HCRs through MSE using the performance indicators identified in 2016 SCRS selected the candidate HCRs and referred to Commission Commission selected and adopted an HCR with associated TIC at the Annual Meeting (Dec. 17-18)	SCRS conducted stock assessment Core working group completed development of working framework	SCRS conducted stock assessment	SCRS reviewed performance indicators for VFT, SWO and BFT SCRS recommended a multi-species approach for development of HCR framework
2018	Call for Fisheries based for peer review SCRS to develop criteria for the identification of exceptional circumstances SCRS to continue testing candidate HCRs as supported by 2018 independent expert completed peer review of code	SCRS conducted joint meeting re BFT/SCRS SCRS continued reference set of operating models SCRS to continue testing candidate management procedures SCRS to consider qualitative management objectives SCRS to review progress and develop detailed roadmap	SCRS conducted joint meeting re BFT/SCRS SCRS continued reference set of operating models SCRS to continue testing candidate management procedures SCRS to consider qualitative management objectives SCRS to review progress and develop detailed roadmap	SCRS to conduct stock assessment for HCR framework SCRS to conduct stock assessment for HCR framework SCRS (Panel 2) to consider candidate management objectives SCRS to review progress and develop detailed roadmap
2019	Committee may refine the criteria Committee through SWO/NM Panel 2 to develop guidance on a range of appropriate management objectives Management objectives derived	BFT/SCRS Technical Group meeting BFT/SCRS to continue testing candidate management procedures SWO/NM Panel 2 meeting to agree operational management objectives and performance indicators for adaptation to the Commission	SWO/NM Technical Group meeting with BFT/SCRS BFT/SCRS to continue testing candidate management procedures SWO/NM Panel 2 meeting to agree operational management objectives and performance indicators for adaptation to the Commission	Stock assessment of candidate HCRs Common development of HCR framework and development of candidate management objectives BFT/SCRS to review progress and develop detailed roadmap
2020	BFT/SCRS Technical Group meeting SCRS to continue testing candidate management procedures SWO/NM Panel 2 meeting to agree operational management objectives and performance indicators for adaptation to the Commission	BFT/SCRS Technical Group meeting with SWO/NM BFT/SCRS to continue testing candidate management procedures SWO/NM Panel 2 meeting to agree operational management objectives and performance indicators for adaptation to the Commission	Stock assessment for HCR framework BFT/SCRS to review progress and develop detailed roadmap	Stock assessment for HCR framework BFT/SCRS to review progress and develop detailed roadmap
2021	Stock assessment for northern bluefish	SCRS to continue testing candidate management procedures SWO/NM Panel 2 meeting to agree operational management objectives and performance indicators for adaptation to the Commission	Stock assessment for HCR framework BFT/SCRS to review progress and develop detailed roadmap	Stock assessment for HCR framework BFT/SCRS to review progress and develop detailed roadmap
2022	Stock assessment of BFT	Stock assessment of BFT	Stock assessment of BFT	Stock assessment of BFT
2023				

Following the MSE principles proposed, the input from SWGSM and the trFMO MSE WG, the SCRS agreed to a new MSE roadmap:

MSE Roadmap Appendix 16 of SCRS report

Main modifications

- Extends the roadmap until 2023
- Earliest long term MP for NALB in 2020
- Earliest interim HCR for BFT 2020
- Earliest interim HCR for SWO N 2021
- Earliest interim HCR for TRO 2022



Calendar for 2019

	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI	SAT	SUN
January																														
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October																														
November																														
December																														

Meeting of technical nature



Many recommendations with financial implications: those coming from species working groups will be presented in each panel.

*Stock assessment methods*

- An age and growth workshop.
- Modifications of the MSE process to adopt a more formal approach to MSE development

*Sub-committee on Ecosystems and By-catch*

- Financial assistance to support for collaborative workshops to evaluate the impact of ICCAT fisheries on seabirds and sea turtles.

*The Sub-committee on Statistics*

- Support for the developing of the ICCAT Integrated Online Management System and the work of the Online Reporting Technical Working Group.



### For Panel 1

- 19.1 Ghana's comprehensive and detailed capacity management plan on the level of catches. Rec. 16- 01, paragraph 12c
- 19.2 Evaluate the efficacy of the area/time closure referred to in paragraph 13 for the reduction of catches of tropical tuna juveniles. Rec. 16-01, paragraph 15
- 19.3 Recommendations made by the FAD Working Group (Annex 8) and develop a work plan. Rec. 16-01, paragraph 49 (a)
- 19.4 Develop a table that quantifies the expected impact on MSY, BMSY, and relative stock status for both bigeye and yellowfin resulting from reductions of the individual proportional contributions of major fisheries to the total catch. Rec. 16-01, paragraph 49 (c)



### For Panel 2

- 19.7 The SCRS is requested to develop in 2018 criteria for the identification of exceptional circumstances. Rec. 17-04 paragraph 12 (N-ALB)
- 19.8 The SCRS is requested to initiate a peer-review, in time for the 2018 Commission meeting. Rec. 17-04 paragraph 15 (N-ALB)
- 19.9 Review on specific spawning times and areas of bluefin tuna in the western Atlantic. Rec. 17-06 paragraph 23 (W-BFT)
- 19.10 Provide guidance on a range of fish size management measures and their impact on yield per recruit and spawner per recruit considerations. Rec. 17-06 paragraph 27 (W-BFT)

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### For Panel 4

- 19.6 The SCRS should continue to monitor and analyze the effects of the minimum size/weight measure on the mortality of immature swordfish. Rec. 17-02 paragraph 10 (N-SWO) and Rec. 17-03 paragraph 7 (S-SWO)
- 19.11 Review the data on dead and live discards submitted by CPCs to determine the feasibility of estimating fishing mortality by commercial fisheries, recreational, and artisanal fisheries. Rec. 15-05 paragraph 10 (BIL)
- 19.12 Develop a new data collection initiative as part of the ICCAT Enhanced Program for Billfish Research to overcome gaps in fisheries catching billfish, particularly in artisanal fisheries. Rec. 15-05 paragraph 10 and Rec. 16-11 paragraph 3 (BIL)

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*19.5 Summary of the scientific data and information collected and reported pursuant to Rec. 16-14 and any relevant associated findings, [Rec. 16-14], paragraph 12(c) and (d)*

*12(c).*

Summarizing observer data information reported by CPCs using the ST-09 form is a complex task given the changes in format that this form had undergone. A summary of the information reported for 2017 can be found in the Secretariat's document SCI-08, Section 1.4 and Tables 8 to 11.

*12(d).* The SCRS has not received enough information on national observer programmes to assess the effectiveness of these programmes to meet the data needs of the Commission. It is expected that through the use of the ST-09 observer data form enough information will be collected in the future to assess these programmes.



- Performance review – item 7 of plenary agenda
- Collaboration with other International Organizations – item 9 of plenary agenda
- Convention amendment – item 6 of plenary agenda
- Progress on updating format of Executive Summaries already discussed

- ***Financial assistance for Rapporteurs from developing CPCs***

The Committee agreed to recommend the Commission that SCRS officers from developing CPCs should be funded to attend the meetings that they Chair. This funding will not count towards the limit of one scientist per CPC to be funded from ICCAT funds that support attendance of developing country scientists to SCRS meetings.



**Update of the ICCAT glossary:**

- joint t-RFMO FAD Technical Group, is conducting a revision of current definitions used in the different tRFMOs and other sources; and, ii) provide proposals to harmonized definitions related to science and management of FAD.
- t-RFMO MSE Technical Working Group on MSE that has been working on definitions related to the MSE process, shall soon make the results of such work available.
- It was also agreed how to standardize the referencing of assessment models in the Executive Summaries

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- **Considerations on current workload of the SCRS Chair**

The proposal that was agreed was to elect a candidate, and that the individual would then be asked if they would propose a Vice-Chair or not. If a Vice-Chair is proposed, he/she would be named by the Chair candidate. The linguistic competencies of both the Chair and the Vice-Chair would be considered. The Committee recommends the Commission to ensure the necessary funds to provide financial support for the SCRS Vice-Chair to attend the annual meetings of the SCRS and Commission. In addition, the Commission should also provide for financial support for the SCRS Vice-Chair to attend intersessional meetings not attended by the Chair.

- **Election of Chair**

Dr. Gary Melvin (Canada) was nominated for the position of Chair. and proposed that the Vice-Chair be the current Swordfish Species Group Coordinator, Dr. Rui Coelho (Portugal).

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