Revised Publication Guidelines: Executive Summaries

Effective communication of the work of the SCRS is of great importance to the Commission. The following guidelines seek to provide guidance to SCRS officers on the reports they prepare for the Commission. These guidelines seek to help in the development of comprehensive and concise Executive Summaries. The guidelines also seek to improve communication with the Commission by preparing Executive Summaries that highlight the most relevant science for the Commission.

1. Deadlines

The Rapporteurs of Species Groups are responsible for the preparation of the draft Executive Summary. Note that final adoption of the Executive Summary takes place at the end of the SCRS plenary session.

_	Submitted to	Deadlin			
Document type	Secretariat by	Document for distribution	Final corrections	Notes	
Executive Summary*	Rapporteur	Initial draft provided to the Secretariat at least one week prior to the September Species Group meetings. After adoption by the Species Group, provided to the Secretariat at least 48 h before the SCRS Plenary	On the same day as SCRS review	Draft reviewed and adopted by the SCRS Plenary	

* Published in the Biennial Report series and in the ICCAT website (https://www.iccat.int/en/assess.html).

2. Executive Summary of the Species Group (translated for SCRS Plenary and Biennial Report)

The Executive Summary of Species Group is the report for the sections on species stock evaluation in the SCRS Report. It contains the stock status advice for the ICCAT stocks. The Executive Summary for the SCRS Report should be as concise as possible and follow the *Resolution by ICCAT to standardize the presentation of scientific information in the SCRS Annual Report and in Working Group Detailed Reports* (Res. 11-14) and the *Resolution by ICCAT to complete the standardization of the presentation of scientific information in the SCRS Annual Report and in the presentation of scientific information in the SCRS Annual Report (Res. 13-15), namely by:*

- Characterizing the robustness of methods applied to assess stock status and to develop the scientific advice;
- Providing a Kobe plot chart showing management reference points expressed as F_{CURRENT} on F_{MSY} (or a proxy) and as B_{CURRENT} on B_{MSY} (or a proxy), the estimated uncertainty around current stock status estimates and the stock status trajectory;
- Providing a Kobe II strategy matrices indicating the probability of B>B_{MSY} and F<F_{MSY} for different levels of catch across multiple years;
- Providing climate conditioned Kobe II results when appropriate;
- Including a scoring table addressing data completeness and quality in an Annex;
- Including information on the bycatches of the different fleet segments and fisheries, as well as other ecosystems considerations;
- Clearly identifying the sources of variability and uncertainty and clearly explain how this variability and uncertainty affect the stock assessment results and the interpretation of the Kobe II Strategy Matrices.

Additionally, the report should summarize important fishery changes and new facts or findings that the Commission should be made aware of. Substantial changes to methodologies used for previous assessments should be noted. The term "the Committee" is used in Executive Summaries to refer to the SCRS Plenary and should be reserved for strong recommendations.

2.1 Format for Executive Summaries

A template/format was established in 1995, which was revised in 2018 by the SCRS, partially at the SCRS Meeting on Process and Protocol in 2020 and, more recently, at the 2024 SCRS Workshop. Rapporteurs are requested to follow the appropriate format and guidelines given below. However, some flexibility may be accepted as regards those species that have more than one stock and species/stocks for which it may not be possible to provide some of the information listed below (e.g., stocks for which data poor models are used for the provision of advice).

Executive Summary Outline	Maximum # pages* (2 pages)
Introduction	1/4
Summary table	1/2
Total catch table by gear, for the last 25 years Landings, discards (L, D)	1/4
Stock status	1/4 (Kobe plot including a pie chart representing the probabilities of stock in the different colour quadrants.)
Outlook	1/4
Management recommendations	1/2 including HCR table or Exceptional Circumstances. Include Kobe II tables (climate conditioned when appropriate)
Additional supporting information	Maximum # pages* (2 pages)
Additional supporting information Summary table on biology aspects	Maximum # pages* (2 pages)1/2
Additional supporting information Summary table on biology aspects Summary table on fisheries indicators	Maximum # pages* (2 pages) 1/2 1/2 + 3 figures [Geographic distribution cumulative catch (t) by gear and year + Total annual catch by gear and flag + CPUE indices + 1 table (Total annual catch by gear and flag)]
Additional supporting information Summary table on biology aspects Summary table on fisheries indicators Status of the stock (additional info)	Maximum # pages* (2 pages)1/21/2 + 3 figures [Geographic distribution cumulative catch (t) by gear and year + Total annual catch by gear and flag + CPUE indices + 1 table (Total annual catch by gear and flag)]1/2 + 2 figures (Estimates of relative abundance and fishing mortality per year from base case/combines models)
Additional supporting information Summary table on biology aspects Summary table on fisheries indicators Status of the stock (additional info) Outlook (additional info)	Maximum # pages* (2 pages)1/21/2 + 3 figures [Geographic distribution cumulative catch (t) by gear and year + Total annual catch by gear and flag + CPUE indices + 1 table (Total annual catch by gear and flag)]1/2 + 2 figures (Estimates of relative abundance and fishing mortality per year from base case/combines models)1/2 + 2 figures (projections of relative abundance and fishing mortality from base case/combined models)

* Where multiple stocks are presented in one Executive Summary, the length of the report may be expanded proportionally at the discretion of the SCRS Chair.

2.2 Tables and figures for Executive Summaries

There will be **three tables** only in the Executive Summary: a Summary table placed at the beginning of the Executive Summary, the reported catches by year and gear and, when applicable, a third (triple) Kobe II strategy matrices table with the estimated probabilities (%) that: a) $F < F_{MSY}$; b) $B > B_{MSY}$; and c) both the fishing mortality is below F_{MSY} and stock biomass is above B_{MSY} ($F < F_{MSY}$ and $B > B_{MSY}$), derived from projections of the base case/combined model(s) and placed at the end of the Executive Summary. The Summary table will summarize the status of the resource and state what the management objective is and where the stock is in relation to that benchmark, including the Kobe plot colouring codes. There should be flexibility in the choice of the benchmark(s) used and this is best determined by the Species Group. Please see below the **headings** for the **Executive Summary SPECIES SUMMARY table**:

SPECIES SUMMARY									
Indicator		Year (stock status)							
Maximum Sustainable Yield ¹	xxxx t (xxxx-xxxx) ³								
Current (year) TAC	xxxx t								
Current (year) Yield ²	xxxx t								
Relative Biomass (Byear/Bmsy)									
(if applicable, from last stock assessment)	x.xx (x.x-x.xx)								
Relative Fishing Mortality (F _{YEAR} /F _{MSY} ¹)	x.xx (x.x-x.xx)	2018							
Stock Status	Overfished: YES or NO (xx% probability) ⁴ Overfishing: YES or NO (xx% probability) ⁴	(cell to be filled with the corresponding colour quadrant key; grey if stock not assessed or							
Management Measures in Effect	(as appropriate)	status uncertain)							
Recommended TAC for the period XX-YY as estimated following the adopted MP	xxxx t								

¹ Base case/combined model: model results based on catch data from year-year.

² Provisional and subject to revision as of mm-dd-yy.

³ Point estimate, 80% bias corrected confidence intervals are shown.

⁴ As of dd mm yyyy.

Colour key	Stock overfished (B _{YEAR} /B _{MSY} <1)	Stock not overfished (B _{YEAR} /B _{MSY} ≥1)
Stock subject to overfishing (F _{YEAR} /F _{MSY} >1)		
Stock not subject to overfishing ($F_{YEAR}/F_{MSY} \le 1$)		
Not assessed/Uncertain		

A single standardized figure will be included, showing the stock status trajectory (Kobe plot) from the base case/combined model(s), including a pie chart representing the probabilities of stock in the different colour quadrants (see example below).

A second table will include the estimated catches and discards of the related species by gear, for the period 19xx-20xx. The third table contains the Kobe II matrices giving the joint probability that: a) $F < F_{MSY}$; b) $B > B_{MSY}$; and c) both $F < F_{MSY}$, $B > B_{MSY}$ and the joint probability of $F < F_{MSY}$ and $B > B_{MSY}$, for given years, for various constant catch levels based on model results.



Figure 1. Kobe plot for the xxx stock status in 20xx, estimated during the 20xx stock assessment. The line indicates the stock status trajectory starting in 19xx. The inserted pie indicates the probability of the stock being within each Kobe colour quadrant.

2.3 New relevant information

This section would appear when there has been no new stock assessment carried out in the current year, nor other work to provide new management advice, leading to a substantial revision of the Executive Summaries. In such cases, changes to the Executive Summary would be limited. This section would allow the SCRS to alert the Commission to new information which it considers important for Commissioners to be aware of.

2.4 Additional supporting information

Additional supporting information can be added to the Executive Summaries, such as relevant biological parameters and fisheries indicators summarized in tables. Additionally, a brief description of the Stock Status (1/4 of a page), Effects of Current Regulation (1/4 of a page) and Ecosystem and Climate Change Considerations (1/4 of a page), can be added, together with relevant figures and a table. Same of the following figures can also be included: Geographic distribution of species cumulative catch (t) by gear, in the Convention area, shown on a decadal scale; Graph of the reported catches (and TAC when applicable). Additionally the following figures could be included whenever felt necessary: Yearly abundance indices (CPUE indices) used in the assessment; Trends in relative biomass and fishing mortality rate to F_{MSY} from the base case; Projections of the relative biomass (B/B_{MSY}) and fishing mortality (F/F_{MSY}) for the projected stock based on the base case/combined model(s) under different catch scenarios; as well as any additional information that the SCRS may consider relevant for the provision of advice. A table with the estimated catches by gear and flag can also be included. All figures and the tables must have a clear caption, which shall be standardized to the extent possible.

2.5 Executive summary template

A template has been developed to facilitate drafting the Executive summaries (Appendix 1).

Appendix 1

Executive Summary template

FAO species 3-digit code - Species common name (Species scientific name)

Introduction (1/4 of a page)

(*Example of text*) A stock assessment was conducted for yellowfin tuna in 2024, using data through 2022, applying ... model. Management advice was developed using a.... A summary of the stock status is provided below (**Table 1**). **Table 2** provides estimated catches and discards by gear, for the period 1999-2023. The Kobe Phase Plot and uncertainty of current status estimates is summarized in **Figure 1**. **Table 3** provides estimated probabilities (%) that both the fishing mortality will below F_{MSY} and spawning stock biomass will be above SSB_{MSY} in future years under different constant catch scenarios.

Table 1. Species summary table. (1/2 of a page)

Indicator		Stock Status in Year (last year of data in the stock assessment)
Maximum Sustainable Yield ¹	xxxx t (xxxx-xxxx) ³	
Current (year) TAC	xxxx t	
Current (year) Yield ²	xxxx t	
Relative Biomass (Byear/Bmsy) if applicable	x.xx (x.x-x.xx)	
Relative Fishing Mortality (FYEAR/FMSY ¹)	x.xx (x.x-x.xx)	
Stock Status	Overfished: YES or NO (xx% probability) ⁴ Overfishing: YES or NO (xx% probability) ⁴	2024 (cell to be filled with the corresponding colour quadrant key; grey if stock not assessed or status uncertain)
Management Measures in Effect	(as appropriate)	
If managed according to a Management Procedure:		
Recommended TAC for the period XX-YY	xxxx t	

¹ Base case/combined model: model results based on catch data from year-year.

² Provisional and subject to revision as of mm-dd-yy.

³ Point estimate, 80% bias corrected confidence intervals are shown.

⁴ As estimated from the Kobe plot probability in each quadrant.

Table 2. Estimated catches and discards of Atlantic yellowfin tuna by gear, for the period 1999-2023.

-			1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
TOTAL			134817	132453	153101	136461	123192	119573	105075	105892	102843	111874	117915	118280	113918	113686	106333	115024	130699	151385	137519	136530	136866	154592	119499	146256
	ATE		103601	96825	112772	106797	98205	88267	75559	77614	78667	93744	99135	97251	94678	91176	82445	89880	102473	114124	98841	102632	107943	124460	92305	112678
	ATW		31217	35628	40329	29665	24987	31305	29516	28278	24176	18130	18780	21029	19239	22510	23888	25144	28226	37262	38678	33898	28922	30131	27194	33577
Landings	ATE	Bait boat	16444	9830	13950	11398	9956	14511	9540	12492	12795	9457	8750	9305	12219	9029	6748	9352	9173	9862	7785	7274	6814	6354	5435	6499
0		Longline	13063	11588	7576	5864	9183	11537	7206	7234	13437	8562	7443	5161	6298	5337	5657	4742	4343	4860	4583	5025	6132	4519	4022	5320
		Other surf.	1581	2437	2021	1714	2467	2886	2350	2988	2129	1595	1844	1752	1264	2040	3032	1702	1774	2651	2550	1803	3469	5886	3491	4530
		Purse seine	70730	70920	88838	87499	75294	57798	55409	54153	49471	73122	79675	79164	71875	72897	65676	72682	85146	94245	82477	86950	89910	105951	78526	96135
	ATW	Bait boat	5364	6753	5572	6009	3764	4868	3867	2695	2304	886	1331	1436	2311	1299	1602	520	810	1238	925	742	862	826	1028	2067
		Longline	14259	16168	15699	11926	10167	18166	18171	15469	16106	13780	14654	14888	11977	13005	10067	9059	10027	13129	11710	11236	11512	11591	9898	10357
		Other surf.	4900	4838	5107	3763	6445	5004	4826	5667	3418	1392	1417	1975	2686	4432	8181	12431	14293	16881	20493	17550	13288	14615	15238	19655
		Purse seine	6527	7870	13951	7966	4611	3266	2652	4442	2341	2067	1370	2722	2256	3768	4035	3131	3037	5948	5499	4331	3224	3053	1011	1479
Landings(FP)	ATE	Purse seine	1781	2051	387	321	1305	1534	1054	747	836	1008	1423	1869	3021	1872	1332	1401	1901	2506	1384	1533	1596	1725	803	163
	ATW	Purse seine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	63	49	35	32	28	0	
Discards	ATE	Bait boat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Longline	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6	5	7	10	7
		Other surf.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Purse seine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	137	0	63	40	17	20	19	25
	ATW	Longline	167	0	0	0	0	0	0	5	6	5	9	8	9	7	3	3	3	3	3	5	4	18	18	20
		Other surf.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Purse seine	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



Figure 1. Kobe plot for the Atlantic yellowfin tuna stock status in 2022, estimated during the 2024 stock assessment. The line indicates the stock status trajectory starting in 19xx. The inserted pie indicates the probability of the stock being within each Kobe colour quadrant.

Outlook (1/4 of a page)

(*Example of text*) In summary, 2024 stock biomass was estimated to be about 5% below B_{MSY} (overfished) and fishing mortality rates were about 23% below F_{MSY} (no overfishing). Projections conducted in 2024 considered a number of constant catch scenarios. In most cases, catches less than 120,000 t led to, or maintained, a healthy stock status through 2024.

Management recommendation (1/4 of a page + 1/2 of a page for Kobe matrices)

(*Example of text*) The results from xxxx models were summarized to produce estimated probabilities of achieving the Convention objectives (B>B_{MSY}, F<F_{MSY}) for a given level of constant catch, for each year up to (insert last year of projections) (**Table 3**). Maintaining catch levels at the current total allowable catch (TAC) of 110,000 t is expected to maintain healthy stock status (B>B_{MSY}, F<F_{MSY}) through 2024 with at least 68% probability, increasing to 97% by 2024. This result is similar to the previous assessment result (2011) which indicated that catch levels of 110,000 t were expected to lead to or maintain healthy stock status through 2017 with a probability of at least 64% probability, and 77% by 2024. The Commission should also be aware that increased harvests on FADs could have negative consequences for yellowfin and bigeye tuna, as well as other bycatch species¹. Should the Commission wish to increase long-term sustainable yield, the Committee continues to recommend that effective measures be found to reduce fish aggregating device (FAD)related and other fishing mortality of small yellowfin tuna.

Table 3. Kobe II matrices giving the joint probability that: a) $F < F_{MSY}$; b) $B > B_{MSY}$; and c) both $F < F_{MSY}$, $B > B_{MSY}$ and the joint probability of $F < F_{MSY}$ and $B > B_{MSY}$, for given years, for various constant catch levels based on model results.

			- 1.10	•				
TAC	2017	2018	2019	2020	2021	2022	2023	2024
60,000	99%	100%	100%	100%	100%	100%	100%	100%
70,000	99%	99%	100%	100%	100%	100%	100%	100%
80,000	98%	99%	99%	99%	99%	100%	100%	100%
90,000	95%	98%	99%	99%	99%	99%	99%	99%
100,000	91%	96%	98%	98%	99%	99%	99%	99%
110,000	84%	89%	93%	96%	97%	98%	98%	98%
120,000	74%	79%	83%	80%	81%	82%	83%	84%
130,000	60%	61%	62%	62%	58%	54%	51%	48%
140,000	46%	44%	39%	33%	31%	31%	31%	30%
150.000	32%	25%	21%	20%	19%	20%	20%	20%

a) Probability that F<F_{MSY}

b) Probability that B>B_{MSY}

TAC	2017	2018	2019	2020	2021	2022	2023	2024
60,000	75%	91%	99%	99%	99%	99%	100%	100%
70,000	74%	87%	97%	99%	99%	99%	99%	99%
80,000	73%	86%	96%	99%	99%	99%	99%	99%
90,000	71%	82%	91%	97%	99%	99%	99%	99%
100,000	70%	80%	89%	92%	96%	97%	99%	99%
110,000	68%	78%	85%	90%	93%	95%	96%	97%
120,000	67%	75%	80%	80%	81%	82%	84%	84%
130,000	64%	68%	72%	70%	69%	67%	65%	62%
140,000	63%	64%	63%	59%	53%	46%	40%	38%
150,000	61%	59%	55%	47%	34%	30%	28%	27%

c) Probability that F<F_{MSY} and B>B_{MSY}

TAC	2017	2018	2019	2020	2021	2022	2023	2024
60,000	75%	91%	99%	99%	99%	99%	100%	100%
70,000	74%	87%	97%	99%	99%	99%	99%	99%
80,000	73%	86%	96%	99%	99%	99%	99%	99%
90,000	71%	82%	91%	97%	99%	99%	99%	99%
100,000	70%	80%	89%	92%	96%	97%	99%	99%
110,000	68%	78%	85%	90%	92%	95%	96%	97%
120,000	65%	73%	79%	78%	79%	80%	82%	82%
130,000	57%	59%	61%	61%	57%	54%	50%	48%
140,000	45%	44%	38%	33%	31%	31%	31%	30%
150,000	31%	24%	21%	20%	19%	20%	20%	20%

¹ Second Meeting of the Ad Hoc Working Group on FADs (Bilbao, Spain, 14-16 March 2016).

Additional supporting information (Optional, maximum of 2 pages)

Additional supporting information can be added to the Executive Summaries, such as: relevant biological parameters and fisheries indicators summarized in tables; brief description of the Stock Status (1/4 of a page), Effects of Current Regulation (1/4 of a page) and Ecosystem and Climate Change Considerations (1/4 of a page), can be added, together with relevant figures and a table; Yearly abundance indices (CPUE indices) used in the assessment; Trends in relative biomass and fishing mortality from the base case/combined model(s); Projections of the relative biomass (B/B_{MSY}) and fishing mortality (F/F_{MSY}) for the projected stock based on the base case/combined model(s) under different catch scenarios; as well as any additional information that the SCRS may consider relevant for the provision of advice. All figures and the tables must have a clear caption, which shall be standardized to the extent possible.