

UPDATE ON THE IMPLEMENTATION OF THE IOTC REGIONAL OBSERVER SCHEME

PREPARED BY: IOTC SECRETARIAT¹, 12 & 23 OCTOBER 2014

PURPOSE

To inform the Working Party on Ecosystems and Bycatch (WPEB) of the status of implementation and reporting to the IOTC Secretariat of the Regional Observer Scheme (ROS) set out by Resolution 11/04 *on a Regional Observer Scheme* at the 15th Session of IOTC (S15) in 2011.

BACKGROUND

At the 13th Session of the Commission (S13), the Commission adopted Resolution 09/04 *on a Regional Observer Scheme*, which was superseded in 2010 by Resolution 10/04, and again in 2011 by Resolution 11/04. In 2010, the Commission addressed concerns raised by some CPCs with artisanal fleets, on which it is difficult to deploy on-board observers due to the small-size of the artisanal vessels and/or to their large numbers which would require high deployment levels and in 2011, the Commission extended the period for submitting the Observer Trip Report from 90 days to 150 days.

Resolution 11/04 *on a Regional Observer Scheme* makes provision for the development and implementation of national observer programmes among the IOTC CPCs starting in July 2010 and covering “at least 5 % of the number of operations/sets for each gear type by the fleet of each CPC while fishing in the IOTC Area of competence of 24 meters overall length and over, and under 24 meters if they fish outside their EEZs shall be covered by this observer scheme. For vessels under 24 meters if they fish outside their EEZ, the above mentioned coverage should be achieved progressively by January 2013”.

Moreover, the resolution states that “the number of the artisanal fishing vessels landings shall also be monitored at the landing place by field samplers” and that “the indicative level of the coverage of the artisanal fishing vessels should progressively increase towards 5% of the total levels of vessel activity (i.e. total number of vessel trips or total number of vessels active)”.

The resolution goes on to state “CPCs shall provide to the Executive Secretary and the Scientific Committee annually a report of the number of vessels monitored and the coverage achieved by gear type in accordance with the provisions of this Resolution”.

At its 13th Session the IOTC Scientific Committee (SC13) reviewed the report of the technical workshop organised in May 2010, and endorsed the documents produced by the Secretariat; an Observer Manual² and an Observer Trip Report template³ containing the minimum reporting requirements. These were formally adopted at the 15th session of the Commission where it was noted⁴ “Minimum data requirements were adopted as well as an observer report template that will be reviewed and revised as necessary.”

DISCUSSION

Implementation of the observer scheme

As of 10th October 2014, fourteen CPCs (Australia, China, Comoros, EU(France⁵ and Portugal), Indonesia, Japan, Kenya, Korea (Rep. of), Madagascar, Maldives, Mauritius, Mozambique, Seychelles and South Africa) have submitted a list of observers and have been allocated an IOTC observer registration number.

As of 10th October 2014, one hundred and seventy two (172) observer trip reports have been submitted to the IOTC Secretariat by Australia, China, EU(France and Portugal), Japan, Rep. of Korea, Madagascar, Mozambique and South Africa.

[Appendix A](#) provides a summary of the status of implementation of the ROS by all IOTC CPCs. [Appendix B](#) and [Appendix C](#) provide an estimation of the level of effort covered by observers in 2010, 2011, 2012 and 2013 for industrial longline and purse seine vessels (data as of 10 October 2014). Reported coverage for the artisanal fleets is currently zero, but in future a summary will also be provided to give an overview of the level of coverage achieved by these fleets. While CPCs are required to report on the level of coverage by gear type, the methods used to estimate the level of coverage achieved are often not provided.

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² IOTC-2010-SC-11

³ IOTC-2010-SC-12

⁴ IOTC-2011-S15-R[E]

⁵ Including Mayotte due to its status as a French outermost region since January 2014

Given there are some discrepancies between coverage rates estimated by the IOTC Secretariat and the coverage rates reported by CPCs, clarity on the methods used are needed.

Issues arising

Reporting templates

While the observer reporting templates allow for a substantial amount of detailed information on catch and bycatch to be reported, there are a number of issues that have been identified with the current format in which the data are submitted. Bearing in mind the comments at the 15th Session of the Commission where it was noted that the observer report template ‘*will be reviewed and revised as necessary*’, a number of potential areas for revision have been identified.

Resolution of information provided

- While catch and effort information are provided, these are not currently linked at the operational level in the reporting templates and there is inconsistency with the resolution of catch and effort information. Effort is currently reported at a trip level, while catches are provided by month and 1° square. This was acknowledged at the 14th Session of the Scientific Committee where it was recommended that the following are added to the template:

Year	Month	Square (1°x1°)	Effort deployed
			Longline: number of hooks deployed Purse seine on free-schools: number of fishing sets Purse seine on associated schools: number of fishing sets, and number of new FADs deployed Gillnet: number of panels deployed Pole-and-line: number of fishing days Handline: number of fishing days Troll-line: number of fishing days

- There are a number of other details, such as meteorological details, and various other gear specifications which are requested at a trip level. It would be more informative for this to be provided at an operation scale and for more specific information to be provided, such as use of the Beaufort scale.

Sampling

- A key issue with many observer submissions is the lack of information about the level of sampling that is taking place within sets/operations for the recording of total catch and bycatch. Reports often contain very few details on this and there is little guidance on the level and type of sampling required. This creates problems for any potential raising of the information to trip totals. Revision of the template to require total estimates of bycatch and discards (and the estimation procedure) would be highly beneficial in reducing bias associated with extrapolating very low catches.

Redundant questions

- A number of sections within the current template are redundant when completing for a specific gear type and so creating specific templates by main gear type would be more appropriate. There are also other cases of unnecessary duplicate questions, such as requesting the number of sets for which Tobi lines were deployed as well as asking for the percentage of sets deployed.

Format of information and categorisation

- There is a range of information that is currently being reported to the IOTC Secretariat by CPCs for which there is currently no specified format. Providing a recommended format for this information would be beneficial for purposes of standardisation, efficient transferal of data and would enable more use to be made of the data that are already being reported. Re-formatting certain questions could provide more informative outputs while not requiring any additional data inputs.

- There is currently a lack of clarity in what information is being requested through certain questions which is reflected in the range of information provided which can therefore be in a non-standardised, inconsistent and therefore incomparable format. It is proposed that providing a set of standard codes, where possible, would improve the quality of data provided.

Level of detail

- There are a number of comment boxes and questions for which guidelines are provided but for which different information is provided, or where these are left blank. While some open-ended comment boxes are necessary, creating a more structured format for the provision of some of this information could be beneficial.

- There are also a number of questions where a detailed level of information is requested, but is not as useful as it could be due to key pieces of information that are missing, e.g. the detailed requirements about branch line diameter and material, but not the branch line length, interval or the number of floats attached to the line. Again, this information is already being provided in some cases and so revision of the template to incorporate this would be beneficial.

- There are instances where data are not provided but are instead reported on, e.g. the number of individuals for which length measurements is taken is requested, but not the length measurements themselves. As there are no minimum sample requirements in this instance, it may be relevant to review the appropriateness of the current structure of the question.

It is therefore proposed that these issues are discussed by the Working Party on Ecosystems and Bycatch and that the current template is revised for approval by the Scientific Committee to improve the observer data collection process.

RECOMMENDATIONS

That the WPEB **RECOMMEND** that the Scientific Committee:

- 1) **ADOPT** a revised version of the Observer trip reporting template, consistent with Resolution 11/04 “...*the IOTC Scientific Committee will elaborate an observer working manual, a template to be used for reporting (including minimum data fields) and a training program*”.
- 2) **ADOPT**, as minimum data requirements, estimates of total bycatch and discards provided by observer programmes, as well as the procedures used to obtain the estimates. This corresponds to the requirements in Resolution 10/02 regarding the provision of total catch estimates: “*These provisions, applicable to tuna and tuna-like species, shall also be applicable to the most commonly caught shark species and, where possible, to the less common shark species. CPC’s are also encouraged to record and provide data on species other than sharks and tunas taken as bycatch*”.
- 3) **NOTE** the update on the implementation of the Regional Observer Scheme (ROS) and **EXPRESS** its strong concerns regarding the low level of reporting to the IOTC Secretariat of both the observer reporting templates and the list of registered observers since the start of the ROS in July 2010.
- 4) **RECOMMEND** the Commission consider how to address the continued lack of compliance with the implementation of observer programmes by CPCs for their fleets and lack of reporting to the IOTC Secretariat as per the provision of Resolution 11/04 *on a Regional Observer Scheme*.

APPENDICES

- Appendix A:** [Update on the implementation of the IOTC regional observer scheme](#)
- Appendix B:** [Estimated observer coverage for longline vessels](#)
- Appendix C:** [Estimated observer coverage for Purse seine vessels](#)

APPENDIX A

UPDATE ON THE IMPLEMENTATION OF THE IOTC REGIONAL OBSERVER SCHEME

CPCs	Active Vessels LOA≥24m or High Seas vessels ⁶				Progress	List of accredited observers submitted	Number of observer reports provided ⁷					
	LL	PS	GN	BB			2010	2011	2012	2013 ⁸	2014	
MEMBERS												
Australia	4	5			Australia has implemented an observer programme that complies with the IOTC Regional Observer Scheme.	YES: 21	2(O)	1(O)	2(O)	No	2(O)	
Belize	3				Belize is planning to launch an observer programme in 2104.	No	No	No	No	No	No	
China –Taiwan,China	36 272				China has an observer programme and has submitted two trip reports.	YES: 2 YES: 54	1(O) No	No No	1(O) No	No No	No No	
Comoros					Comoros does not have vessels ≥ 24m. Two observers were trained under the IOC Regional Monitoring Project, and 5 by SWIOFP.	YES: 7	N/A	N/A	N/A	N/A	N/A	
Eritrea	No information received				No information received by the Secretariat.	No	No	No	No	No	No	
European Union	48	27			EU has an observer programme on-board its purse seine and longline fleets. To date, no information has been received from EU,Spain and EU,UK.	Partial: EU,France: 52 EU,Portugal: 4 EU,Spain : No EU,UK : No	No	EU, France: 13+9(O) EU, Portugal: 1(O)	EU, France: 13+7(O) EU, Portugal: 1(O)	EU, France: 16+6(O) EU, Portugal: 1(O)	EU, France: 18(O) EU, Portugal: 1(O)	
Guinea					No information received by the Secretariat.	No	No	No	No	No	No	
India					India has not yet developed an observer programme.	No	No	No	No	No	No	
Indonesia	1238				Indonesia has 13 registered IOTC observers	YES:13	No	No	No	No	No	
Iran, Isl. Rep. of		4	1224		No information received by the Secretariat.	No	No	No	No	No	No	
Japan	73				Japan started its observer programme on the 1 st of July 2010, and currently deploys 19 observers in the Indian Ocean.	YES: 19	6(E)	8(E)	14(E)	No	No	
Kenya	2				Kenya is developing an observer programme and 5 observers have been trained by SWIOFP.	YES: 5	No	No	No	No	No	
Korea, Rep. of	9	4			Korea has had an observer programme since 2002 with 3 observers deployed in the Indian Ocean.	YES: 29	2(O)	No	2(O)	3(O)	No	

⁶ The number of active vessels is given for 2013.⁷ Year in which the observed trip has started (E: Electronic; O: Other)⁸ 2014 data covers only the first three quarters. This will be updated for the SC.

CPCs	Active Vessels LOA≥24m or High Seas vessels ⁶				Progress	List of accredited observers submitted	Number of observer reports provided ⁷				
	LL	PS	GN	BB			2010	2011	2012	2013 ⁸	2014
Madagascar	8				Madagascar is developing an observer programme. Five and three observers have been trained through SWIOFP and IOC respectively and reports have been provided for 2012.	YES: 7	No	No	5(O)	No	No
Malaysia	5				Malaysia is developing plans for the implementation of an observer programme.	No	No	No	No	No	No
Maldives	7			311	Maldivian vessel landings are monitored by field samplers at landing sites. Maldives is currently developing an at-sea observer programme .	YES: 4	No	No	No	No	No
Mauritius		2			Mauritius is developing an observer programme. Five observers have been trained through SWIOFP and three through the IOC.	YES: 8	No	No	No	No	No
Mozambique					Mozambique has an observer programme and has submitted one trip report.	YES: 11	No	No	1(O)	No	No
Oman	5				No information received by the Secretariat.	No	No	No	No	No	No
Pakistan					No information received by the Secretariat.	No	No	No	No	No	No
Philippines	9				No information received by the Secretariat.	No	No	No	No	No	No
Seychelles	32	7			Seychelles is developing an observer programme. Four observers have been trained through SWIOFP and three through the IOC.	YES: 7	No	No	No	No	No
Sierra Leone	No information received				No information received by the Secretariat.	No	No	No	No	No	No
Sri Lanka	7	8	2226		Sri Lanka has begun a pilot observer initiative.	No	No	No	No	No	No
Sudan	No information received				No information received by the Secretariat.	No	No	No	No	No	No
Tanzania, United Rep.of	5				Tanzania does not currently have an observer programme in place.	No	No	No	No	No	No
Thailand	5				No information received by the Secretariat.	No	No	No	No	No	No
United Kingdom					The UK does not have any active vessels in the Indian Ocean.	N/A	N/A	N/A	N/A	N/A	N/A
Vanuatu	3				Vanuatu does not currently have an observer programme in place.	No	No	No	No	No	No
Yemen	No information received				No information received by the Secretariat.	No	No	No	No	No	No
COOPERATING NON-CONTRACTING PARTIES											
Senegal					Senegal has not had any active vessels in the Indian Ocean since 2007.	N/A	N/A	N/A	N/A	N/A	N/A

CPCs	Active Vessels LOA≥24m or High Seas vessels ⁶				Progress	List of accredited observers submitted	Number of observer reports provided ⁷				
	LL	PS	GN	BB			2010	2011	2012	2013 ⁸	2014
South Africa	10			5	South Africa currently only operates an observer programme for foreign vessels operating within the EEZ.	YES: 16	No	13(O) ⁹	10(O) ¹⁰	13(O)	No

⁹ Reports from South African observers onboard foreign vessels operating in the EEZ of South Africa.

¹⁰ *Ibid.* 3.

APPENDIX B

ESTIMATED OBSERVER COVERAGE FOR LONGLINE VESSELS

MEMBERS	Total effort (no.hooks)				Observed effort (no. hooks)				Coverage			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
Australia	622,461	359,832	672,398	609,995	15330	6232	7385	7099	2.46%	1.73%	1.10%	1.16%
Belize	724,486	676,998	1,741,534	331,862					0.00%	0.00%	0.00%	0.00%
China	16,993,970	4,136,710	11,295,050	23,439,470	95205		185742		0.56%	0.00%	1.64%	0.00%
–Taiwan,China	214,609,423	182,076,627	156,741,282	178,887,567					0.00%	0.00%	0.00%	0.00%
Comoros												
Eritrea												
EU - France	3,781,554	3,769,250	3,367,941	4,042,077		113269	73206	59865	0.00%	3.01%	2.17%	1.48%
EU - Portugal	949,134	903,600	685,206	1,558,000		140317	73685	127580	0.00%	15.53%	10.75%	8.19%
EU - Spain	3,174,705	3,758,516	4,673,785	6,262,822					0.00%	0.00%	0.00%	0.00%
EU - UK	61,400	92,300	71,400	55,000					0.00%	0.00%	0.00%	0.00%
Guinea	450,948								0.00%			
India	107,922,649	169,781,943	105,730,538	127,556,746					0.00%	0.00%	0.00%	0.00%
Indonesia	126,596,494	135,296,472	173,127,619	146,519,356					0.00%	0.00%	0.00%	0.00%
Iran, Isl. Rep. of												
Japan	37,032,932	28,854,054	31,460,928	29,513,296	1150505	603157	953098		3.11%	2.09%	3.03%	0.00%
Kenya	147,779								0.00%			
Korea, Rep. of	6,013,391	5,862,681	4,690,407	5,937,215	389042		282656	546927	6.47%	0.00%	6.03%	9.21%
Madagascar	638,864	506,290	517,550	640,816			6140		0.00%	0.00%	1.19%	0.00%
Malaysia	18,202,625	13,648,325	5,462,992	4,420,948					0.00%	0.00%	0.00%	0.00%
Maldives			77,856	828,532							0.00%	0.00%
Mauritius	267,063	252,480	182,300	150,560					0.00%	0.00%	0.00%	0.00%
Mozambique	1,104,480	1,008,299	616,633				1100		0.00%	0.00%	0.18%	
Oman, Sultanate of	20,917,761	17,432,950	7,025,701	2,822,285					0.00%	0.00%	0.00%	0.00%
Pakistan												
Philippines	3,851,732	709,680	8,198,773	4,228,476					0.00%	0.00%	0.00%	0.00%
Seychelles	4,448,852	3,094,960	3,443,897	3,912,953					0.00%	0.00%	0.00%	0.00%
Sierra Leone												
Somalia												
Sri Lanka	117,531,924	102,642,439	113,170,171	117,189,595					0.00%	0.00%	0.00%	0.00%
Sudan												
Tanzania, United Rep. of	2,208,959	4,289,613	3,711,379	3,711,379					0.00%	0.00%	0.00%	0.00%
Thailand	1,719,331	1,041,600	1,275,246	964,663					0.00%	0.00%	0.00%	0.00%
United Kingdom												
Vanuatu	887,401		989,831	989,831					0.00%		0.00%	0.00%
Yemen												
COOPERATING NON CONTRACTING PARTIES												
Djibouti												
Senegal												
South Africa	1,053,170	1,219,015	1,176,125	959,285			293685	836759	0.00%	0.00%	0.00%	0.00%

Key: TOTAL EFFORT (#HOOKS): Total number of hooks set by longliners, by fishing fleet and year, including:

- Total effort available (green font)
- Sampled effort available; raised to represent total catch of IOTC species (as in IOTC Nominal Catch database) (brown font)
- Effort not available; total effort estimated using the nominal catches available and catch rates from other fleets or year periods (red font)

*NB: Portuguese effort for 2012 has been taken from the National Report and effort in 2013 is an estimate provided by Portugal

APPENDIX C

ESTIMATED OBSERVER COVERAGE FOR PURSE SEINE VESSELS

MEMBERS	Total effort (no. fishing days)				Observed effort (no. fishing days)				Coverage			
	2010	2011	2012	2013	2010	2011	2012	2013	2010	2011	2012	2013
Australia	216	142	147	123					0.00%	0.00%	0.00%	0.00%
Belize												
China –Taiwan, China												
Comoros												
Eritrea												
EU - France	2801	3114	3052	3390		325	373	280	0.00%	10.44%	12.22%	8.26%
EU - Portugal												
EU - Spain	3531	3555	3684	3899					0.00%	0.00%	0.00%	0.00%
EU - UK												
Guinea												
India												
Indonesia												
Iran, Isl. Rep. of	158	152	167	158					0.00%	0.00%	0.00%	0.00%
Japan	96	104	72	34					0.00%	0.00%	0.00%	0.00%
Kenya												
Korea, Rep. of			110	357				45			0.00%	12.61%
Madagascar												
Malaysia	15								0.00%			
Maldives												
Mauritius				25								0.00%
Mozambique												
Oman, Sultanate of												
Pakistan												
Philippines												
Seychelles	2144	2166	1969	1670					0.00%	0.00%	0.00%	0.00%
Sierra Leone												
Somalia												
Sri Lanka				57								0.00%
Sudan												
Tanzania, United Rep. of												
Thailand	170								0.00%			
United Kingdom												
Vanuatu												
Yemen												
COOPERATING NON CONTRACTING PARTIES												
Djibouti												
Senegal												
South Africa												

Key: TOTAL EFFORT (#FDAYS): Total number of days fished by tuna purse seiners, by fishing fleet and year, including:

- Total effort available (green font)
- Sampled effort available; raised to represent total catch of IOTC species (as in IOTC Nominal Catch database) (brown font)
- Effort not available; total effort estimated using the nominal catches available and catch rates from other fleets or year periods (red font)