



## PROGRESS MADE ON THE RECOMMENDATIONS OF WPDCS16

PREPARED BY: IOTC SECRETARIAT, LAST UPDATED: 19<sup>TH</sup> NOVEMBER 2021

### Purpose

To provide participants at the 17<sup>th</sup> Working Party on Data Collection and Statistics (WPDCS17) with an update on the progress made in implementing the recommendations from the previous WPDCS, which were endorsed by the Scientific Committee (SC), and to provide alternative recommendations for the consideration and potential endorsement by participants.

### Background

At the 16<sup>th</sup> Session of the WPDCS, participants agreed on a series of actions to be taken by participants, CPCs, and the IOTC Secretariat on a range of issues. The subsequent table developed and agreed to by the WPDCS was provided to the SC for its endorsement at its 2020 meeting.

### Discussion

The Rules of Procedure of the Scientific Committee include the following seven core tasks, which are to be supported by the various Working Parties.

- a) recommend policies and procedures for the collection, processing, dissemination, and analysis of fishery data;
- b) facilitate the exchange and critical review among scientists of information on research and operation of fisheries of relevance to the Commission;
- c) develop and coordinate cooperative research programmes involving Members of the Commission in support of fisheries management;
- d) assess and report to the Commission on the status of stocks of relevance to the Commission and the likely effects of further fishing and of different fishing patterns and intensities;
- e) formulate and report to the sub-commission, as appropriate, on recommendations concerning conservation, fisheries management, and research, including consensus, majority and minority views;
- f) consider any matter referred to by the Commission;
- g) to carry out other technical activities of relevance to the Commission.

Noting the core tasks of the SC, and hence the WPDCS, participants are reminded that any recommendations developed during a Session, must be carefully constructed so that each contains the following elements:

- 1) a specific action to be undertaken (deliverable);
- 2) clear responsibility for the action to be undertaken (i.e. a specific CPC of the IOTC, the Secretariat, another subsidiary body of the Commission or the Commission itself);
- 3) a desired time from for delivery of the action (i.e. by the next working party meeting, or other date).

Recalling that the SC, at its 16<sup>th</sup> Session adopted a set of reporting terminology SC16.07 (para. 23), which was subsequently endorsed by the Commission at its 18<sup>th</sup> Session in 2014 (S18, para 10), to further improve the clarity of information sharing from, and among the science bodies, the following two term levels should be noted when interpreting the Reports and Appendix A to this paper:

**Level 1:** From a subsidiary body of the Commission to the next level in the structure of the Commission:

**RECOMMENDED, RECOMMENDATION:** Any conclusion or request for an action to be undertaken, from a subsidiary body of the Commission (Committee or Working Party), which is to be formally provided to the next level in the

structure of the Commission for its consideration/endorsement (e.g. from a Working Party to the Scientific Committee; from a Committee to the Commission). The intention is that the higher body will consider the recommended action for endorsement under its own mandate if the subsidiary body does not already have the required mandate. Ideally this should be task specific and contain a timeframe for completion.

**Level 2:** From a subsidiary body of the Commission to a CPC, the IOTC Secretariat, or other body (not the Commission) to carry out a specified task:

**REQUESTED:** This term should only be used by a subsidiary body of the Commission if it does not wish to have the request formally adopted/endorsed by the next level in the structure of the Commission. For example, if a Committee wishes to seek additional input from a CPC on a particular topic, but does not wish to formalise the request beyond the mandate of the Committee, it may request that a set action be undertaken. Ideally this should be task specific and contain a timeframe for the completion.

In addition to the Recommendations endorsed by the SC at its 23<sup>rd</sup> Session, the SC also made several requests which, although are not passed to the Commission for its endorsement, are considered actions which the Scientific Committee has the mandate to issue. The revised recommendations are contained in [Appendix A](#) for the consideration and potential endorsement by the WPDCS17.

## Recommendation

That the WPDCS:

- 1) **NOTE** paper IOTC-2021-WPDCS17-06 which detailed the progress made in implementing the recommendations of the WPDCS16, taking into consideration the recommendations from the SC and decisions of the Commission
- 2) **AGREE** to consider and revise as necessary, the recommendations, and for these to be combined with any new recommendations arising from the WPDCS17, noting that these will be provided to the SC for their endorsement

## Appendices

**Appendix A:** Progress made on the recommendations of WPDCS16

## Appendix A

### Progress made on the recommendations of WPDCS16

WPDCS16 Rec. no.		SC23 Rec. no.	Recommendation adopted / agreed by the SC22	Endorsed at S25	Commission response / suggestions for consideration at WPDCS17
<b>WPDCS16.01</b> <b>(para. 117)</b>	<p><b><i>Further analysis of length frequency data and likely impacts on the assessments</i></b></p> <p><b>RECALLING</b> that, in agreement with Resolution 15/02, the provision of documents covering sampling and raising procedures by species and type of fishery is a mandatory requirement for all IOTC members, the WPDCS <b>RECOMMENDED</b> that the Secretariat develops in cooperation with CPCs templates to drive the documentation of sampling procedures for all gears and fleets, focusing on time-area catches as well as size data, for review and discussion at the 2021 session of WPDCS</p>	<b>Para. 104</b>	[ (...) the SC <b>REQUESTED</b> the IOTC Secretariat develops, in close collaboration with CPCs, electronic templates to drive the documentation of such sampling procedures for all gears and fleets, focusing on time-area catches and size data, to be revised and discussed at the next session of the WPDCS ]		<b>Update:</b> None
<b>WPDCS16.02</b> <b>(para. 131)</b>	<p><b><i>Resolution 19/02 Procedures on a fish aggregating devices (FADs) management plan</i></b></p> <p>The WPDCS <b>NOTED</b> that paragraph 24 of Res. 19/02 makes explicit reference to business confidentiality aspects, indicating that daily buoy positions data be used mostly to monitor compliance with the limit set on the maximum number of operational buoys per vessel, and <b>RECOMMENDED</b> that the SC assess</p>	<b>SC23.12</b> <b>(para. 107)</b>	Furthermore, the SC <b>RECOMMENDED</b> the Commission to consider how to best take into account the confidentiality aspects inherent to such a dataset (e.g., through updates to Res. 12/02) while at the same time ensuring proper attribution of its ownership (Refer to paras. 104 and 106 for qualifying details on this Recommendation)		<b>Update:</b> None

WPDCS16 Rec. no.		SC23 Rec. no.	Recommendation adopted / agreed by the SC22	Endorsed at S25	Commission response / suggestions for consideration at WPDCS17
	the interest in using these same buoy data for scientific purposes, deferring consideration of confidentiality aspects to the Commission, possibly through the update of Res. 12/02..				
<b>WPDCS16.03</b> <b>(para. 139)</b>	The WPDCS <b>ACKNOWLEDGED</b> that the current definition of “ <i>For reporting (Optional)</i> ” used in the context of the ROS minimum data fields might be subject to interpretation, and therefore <b>RECOMMENDED</b> that the SC requests CPCs to report to the IOTC Secretariat all ROS data fields marked as “ <i>For reporting (Optional)</i> ”, when available	<b>SC23.13</b> <b>(para. 109)</b>	<b>ACKNOWLEDGING</b> a potential lack of clarity in the current definition of “ <i>For reporting (Optional)</i> ” data elements in the context of the ROS minimum standard data fields, the SC <b>RECOMMENDED</b> that the Commission require CPCs to report such fields to the IOTC Secretariat (as part of their regular ROS data submissions) when these are available to the national observer programmes.		<b>Update:</b> None
<b>WPDCS16.04</b> <b>(para. 141)</b>	<b>ACKNOWLEDGING</b> that the proposed EM Programme Standards represent a basis for subsequent applications but still require additional contributions for their successful implementation on a regional scale, the WPDCS <b>AGREED</b> with the recommendation from document IOTC-2020-WPDCS16-18 to create an ad-hoc intersessional Working Group on the development of EM Programme Standards, and therefore <b>RECOMMENDED</b> that the Working Group be constituted and dedicated workshops (physical or virtual, depending on the circumstances) be	<b>SC23.14</b> <b>(para. 111)</b>	For this reason, the SC <b>RECOMMENDED</b> that an ad-hoc, intersessional Working Group on the development of EM Programme Standard be constituted and physical or virtual workshops (depending on the circumstances) be held to further progress with the definition of EMS minimum standards		<b>Update:</b> None

WPDCS16 Rec. no.		SC23 Rec. no.	Recommendation adopted / agreed by the SC22	Endorsed at S25	Commission response / suggestions for consideration at WPDCS17
	held, to further progress on the definition of the standards				
<b>WPDCS16.05 (para. 169)</b>	The WPDCS <b>RECOMMENDED</b> that the Scientific Committee consider and endorse the WPDCS Program of Work (2020–2024), as provided at Appendix V	<b>Pages 198-199</b>	The SC <b>ADOPTED</b> the WPDCS PoW in Appendix 35F of its report		

WPDCS16 Report	WPDCS16 REQUESTS	Update / Progress
<b><i>The IOTC Process: outcomes, updates, and progress</i></b>		
Para. 20-21	<p>The WPDCS <b>REQUESTED</b> that, for the purposes of transparency, the IOTC Secretariat liaises with Indonesia to address concerns regarding the current estimation methodology and the rationale for adjusting the official catches of Indonesia. Furthermore, that the estimation methodology for Indonesia – implemented since 2012 onwards – should be subject to periodic review, taking into account on-going uncertainties in the quality of Indonesia’s official statistics, but equally improvements in the data submitted as a result of the <i>One Data</i> initiative.</p> <p>In particular, the WPDCS <b>CONSIDERED</b> that a thorough revision of Indonesia’s historical catch estimates should properly take into account the need for harmonizing the information available <i>before</i> and <i>after</i> the implementation of the <i>One Data</i> initiative.</p>	<p><b>[ Ongoing ]</b></p> <p>Two technical workshops were held remotely from 25-28 May and from 20-21 September 2021 to discuss the current state-of-the-art in terms of re-estimation procedures applied by the Secretariat in agreement with the IOTC Scientific Committee, including the historical reasons for the re-estimation, details on the re-estimation procedures and analysis of the comparisons between the re-estimations and the official data submitted by Indonesia.</p> <p>Participants to the meetings included representatives from the Ministry of Marine Affairs and Fisheries of Indonesia, as well as other national research institutions, the International Pole and Line Foundation, and representatives from the IOTC Secretariat, Scientific Committee and WPDCS.</p> <p>See also: <b>IOTC-2021-WPDCS17-20 - Re-estimation Methodology of Indonesia's Annual Tuna Catch Data in IOTC for 2017-2019</b> [ not yet available as of Nov. 19<sup>th</sup>, 2021 ]</p>
Para. 22- 23	<p>More generally and <b>ACKNOWLEDGING</b> that the original data submissions from all CPCs subject to catch revisions are kept by the IOTC Secretariat but not publicly disseminated, the WPDCS <b>CONSIDERED</b> the possibility of regularly sharing the original data submissions as an additional data set in order to increase the transparency of the process.</p> <p>For this reason, the WPDCS <b>REQUESTED</b> the IOTC Secretariat to evaluate the efforts required to disseminate this new data set in the future, and report back on the findings to the WPDCS at its next meeting.</p>	<p><b>[ Ongoing ]</b></p> <p>The Secretariat is in the process of upgrading its data management workflow and is evaluating the efforts required to recover all historical data received from IOTC CPCs prior to the implementation of the re-estimation procedures requested by the IOTC Scientific Committee.</p>
<b><i>Progress on the recommendations of WPDCS15</i></b>		
Para. 32	<p>The WPDCS <b>ACKNOWLEDGED</b> that revised nominal catches for the gillnet fishery of Pakistan are now incorporated in the IOTC databases and <b>ENCOURAGED</b> Pakistan to also submit reconstructed time-area catches officially for the fisheries concerned.</p>	<p><b>[ No updates ]</b></p> <p>Geo-referenced catch and effort data covering the period of revision were not reported by Pakistan to the Secretariat following the WPDCS16. The Secretariat recalled the willingness to provide support for this work and suggested that a</p>

		technical support mission to Pakistan is envisaged for 2022 as soon as the pandemic situation improves.
Para. 33	<b>NOTING</b> that concerns still exist as to whether catches from gillnet vessels known to be registered to both I.R. Iran and Pakistan are double-counted, and that no practical action to resolve this issue has been taken so far by involved CPCs, the WPDCS <b>ENCOURAGED</b> I.R. Iran and Pakistan to liaise with the IOTC Secretariat and determine the extent at which their historical catches should be revised, and effort required to completely remove (or reduce) any potential double counting.	<p>[ No updates ]</p> <p>Requests in this sense came also from other Working Parties and Working Groups, such as the WPTT and WPEB. The technical support mission to Pakistan proposed to address the issue identified in para. 32 could also provide the opportunity to interact with national administrations to confirm the issue with double counting of catches and determine its extent.</p>
Para. 34	The WPDCS <b>CONFIRMED</b> the importance of IOTC developing a biological data repository as requested by other Working Parties and <b>NOTED</b> that a great part of these data is expected to come from observer data, which are subject to confidentiality rules as they include detailed operational information.	<p>[ Ongoing ]</p> <p>The Secretariat continued liaising with national institutions to get access to morphometric data not previously shared with the IOTC and has developed a proposal for a standardized database to be presented at the WPDCS.</p> <p>See also: <b>IOTC-2021-WPDCS17-26 - Harnessing the information available on morphometric traits to build robust relationships and conversion factors for the IOTC</b> [ not yet available as of Nov. 19<sup>th</sup>, 2021 ]</p>
<b><i>IOTC Secretariat Report</i></b>		
Para. 43	The WPDCS <b>NOTED</b> that the definition of <i>artisanal fisheries</i> is not used consistently throughout the CMMs and IOTC Working Parties and <b>REQUESTED</b> the SC to develop a standard definition of the term <i>artisanal</i> which is to be used across all IOTC scientific bodies and <b>ACKNOWLEDGED</b> that the term <i>artisanal</i> may have a different meaning according to the CPCs and the national administrations or institutions.	<p>[ Ongoing ]</p> <p>See also: <b>IOTC-2021-WPDCS17-23 – Towards a statistical definition of Small-Scale fisheries</b></p>
Para. 46	<b>NOTING</b> that this assessment matrix is currently being tested in several countries around the world, the WPDCS <b>REQUESTED</b> CPCs to take part in the survey, in order to gain better insight into the diversity of small-scale fisheries currently operating in the Indian Ocean and contribute to a better definition of all fisheries-specific aspects of IOTC CMMs.	<p>[ Ongoing ]</p> <p>The Secretariat will identify through the WPDCS one or more CPCs that could be suitable candidates for the study.</p> <p>See also: <b>IOTC-2021-WPDCS17-23 – Towards a statistical definition of Small-Scale fisheries</b></p>
<b><i>Proposals for draft CPCs data fact sheets</i></b>		

Para. 55 - 56	For this reason, the WPDCS <b>AGREED</b> that the data factsheets can provide a holistic and broader view on the status of fisheries information available to all IOTC CPCs. Furthermore, the WPDCS <b>RECOGNIZED</b> that data factsheets could be an extremely useful tool to identify issues common to several flag states and fisheries, and contribute to the definition of the priorities that will drive the work of the scientific bodies of IOTC.	<b>[ Ongoing ]</b>  The Secretariat is in the process of upgrading its data management workflow and will include the data factsheets as a regular output of the statistical data submission processes.
Para. 58	The WPDCS <b>AGREED</b> that several CPCs might still require support from the IOTC Secretariat in terms of capacity building and technical assistance for the compilation of mandatory statistical data according to the requirements of all currently standing resolutions.	<b>[ Ongoing ]</b>  The Compliance Committee forwarded to the WPDCS the request from CPCs that the Secretariat delivers workshops focusing on the compilation of statistical data submissions (either in person or remotely, depending on the circumstances).  These activities are currently being considered for inclusion in the WPDCS program of work.
Para. 60	Also, the WPDCS <b>CONFIRMED</b> that the IOTC is in the process of adopting the e-MARIS platform for the provision of statistical and compliance-related data and information, that trials are likely to start in 2021, and that this platform is not a solution to data collection issues but rather a tool for improved data reporting.	<b>[ Ongoing ]</b>  A first training on the adoption of the e-MARIS has been delivered to the Secretariat's staff in November 2021 and will be followed by a set of CPC-specific trainings to be delivered in Q4 2021.
<b><i>A new protocol to collect verified scientific data on catch including bycatch information using crew-based observers on small size longline tuna fishing vessels (&lt;24m) in Sri Lanka</i></b>		
Para. 70	As part of the evaluation of these alternative data collection methods the WPDCS <b>ENCOURAGED</b> Sri Lanka, as well as other CPCs such as Pakistan, to share the data collection protocols of crew-based data collection schemes, as well as to facilitate the exchange of knowledge and expertise with other CPCs considering developing similar programs.	<b>[ No updates ]</b>
Para. 74	In light of the above, the WPDCS <b>ACKNOWLEDGED</b> that a combination of the two approaches (well structured, crew-based data collection protocols supplemented by EMS) could be considered as a viable alternative to the deployment of independent observers onboard in the context of the IOTC Regional Observer Scheme, and <b>SUGGESTED</b> that further evidence (e.g., assessment of the feasibility of recording all minimum ROS data fields) be	<b>[ Ongoing ]</b>  Discussions on this matter continued during the 1 <sup>st</sup> ad-hoc Working Group on Electronic Monitoring Standards in November 2021.



	collected to validate these findings and support a potential revision of the underlying IOTC resolutions.	
Para. 76	Finally, the WPDCS <b>RECALLED</b> that the SC in 2018 already <b>requested</b> the WPDCS to continue evaluating the validity of alternative data collection tools to onboard human observers, and that this activity should be prioritized accordingly in the WPDCS Program of Work.	<p>[ Ongoing ]</p> <p>Discussions on this matter continued during the 1<sup>st</sup> ad-hoc Working Group on Electronic Monitoring Standards in November 2021.</p>
<b>Statistics of the French purse seine fishing fleet targeting tropical tunas in the Indian Ocean (1981-2019)</b>		
Para. 87	The WPDCS <b>NOTED</b> that, similar to the difficulties reported for the Spanish purse seine fleet, no sampling data was collected onboard French purse seiners between April and November 2020 due to the COVID-19 pandemic and <b>ENCOURAGED</b> EU-France to ensure that estimates of catches-by-species for 2020 are not adversely impacted by the lack of onboard samples during the reference year.	<p>[ Ongoing ]</p> <p>See also: <b>IOTC-2021-WPDCS17-21</b> - <i>Statistics of the French purse seine fishing fleet targeting tropical tuna in the Indian Ocean (1981-2020)</i></p>
Para. 88	The WPDCS <b>NOTED</b> that EU,France has submitted raw size-frequency data for its purse seine fishery for 2019, instead of raised data (i.e. catch-at-size, as done in previous years), and that this was a response to a general <b>request</b> made by the Secretariat, as raw data are needed for integrated stock assessment models and compliance purposes.	<p>[ Ongoing ]</p> <p>As of November 2021, size-frequency data from purse seiners flagged by EU,France for the years 2019 and 2020 is still only available as <i>raw</i> data. No other CPC among those that used to report catch-at-size data in the past has yet started to regularly provide raw size-frequency data as requested.</p>
Para. 96	The WPDCS <b>REQUESTED</b> that the Secretariat start to report to WPDCS on the level of sampling coverage by CPCs to see how many are meeting the requirement of sampling one fish per tonne and <b>NOTED</b> that this same information is covered, to a certain extent, in the Compliance reports generated by the Secretariat.	<p>[ Ongoing ]</p> <p>This information is generally reported through the Compliance reports, with additional information provided by the Secretariat through the statistical data paper presented at the IOTC Working Party on Tropical Tunas. The Secretariat is considering the possibility of including these indicators as part of the IOTC data paper prepared for the WPDCS.</p>
<b>First results of the FLOPPED project : satellite tagging and biological sampling of billfish around the Indian Ocean</b>		
Para. 101	The WPDCS <b>NOTED</b> that the project is continuing to look for partners to assist in the deployment of tags, particularly in the northern and eastern Indian Ocean basins, and <b>ENCOURAGED</b> WPDCS participants interested in participating in the tagging and biological sampling to contact the Project coordinators	<p><b>Updates:</b> [ none ]</p>

**Fisheries data collection working group: significant progress for Somalia's fisheries**

Para. 109	The WPDCS <b>CONGRATULATED</b> Somalia for their successful initiative and <b>ENCOURAGED</b> the continuation of the efforts, <b>ACKNOWLEDGING</b> that, based on the results of this data collection programme, Somalia will be soon (2021) in the position of providing validated data to the IOTC Secretariat for the first time	<p><b>[ Ongoing ]</b></p> <p>A compliance and support mission led by the Compliance Section of the Secretariat (with participation from the Data Section) was remotely delivered to Somalia in September 2021.</p> <p>Somali stakeholders have confirmed their intention to engage with the Secretariat to address some of the long-standing issues in terms of data reporting.</p>
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**Review of detected anomalies in S-F data sent to the Secretariat**

Para. 117 - 118	<p><b>RECALLING</b> that, in agreement with Resolution 15/02, the provision of documents covering sampling and raising procedures by species and type of fishery is a mandatory requirement for all IOTC members, the WPDCS <b>RECOMMENDED</b> that the Secretariat develops in cooperation with CPCs templates to drive the documentation of sampling procedures for all gears and fleets, focusing on time-area catches as well as size data, for review and discussion at the 2021 session of WPDCS.</p> <p>In the meantime, the WPDCS <b>REQUESTED</b> that current documentation be sent to the IOTC Secretariat during the intersessional period, so that thorough analyses could be performed, and their results presented at the next session of the WPDCS</p>	<p><b>[ Ongoing ]</b></p> <p>No documentation on currently applied / adopted sampling schemes was submitted to the Secretariat by CPCs.</p> <p>A first draft of template has been developed by the Secretariat and will be presented and discussed at the WPDCS17.</p> <p>See also: <b>IOTC-2021-WPDCS17-27</b> - <i>A proposal of guidelines for describing sampling design, sampling performance, and statistical inference for IOTC fisheries data sets</i> [ not yet available as of Nov. 19<sup>th</sup>, 2021 ]</p>
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**Resolution 15/02 On mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)**

Para. 121	Notwithstanding the availability of a scoring system for data quality already implemented by the IOTC Secretariat, the WPDCS <b>CONSIDERED</b> that detailed information on sampling schemes developed by CPCs would allow the Scientific Committee to better assess the representativeness of the data submitted to the IOTC.	<p><b>[ Ongoing ]</b></p> <p>No documentation on currently applied / adopted sampling schemes was submitted to the Secretariat by CPCs.</p> <p>A first draft of template has been developed by the Secretariat and will be presented and discussed at the WPDCS17.</p>
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		See also: <b>IOTC-2021-WPDCS17-27</b> - <i>A proposal of guidelines for describing sampling design, sampling performance, and statistical inference for IOTC fisheries data sets</i> [ not yet available as of Nov. 19 <sup>th</sup> , 2021 ]
<b>Resolution 17/05 On the conservation of sharks caught in association with fisheries managed by IOTC</b>		
Para. 123 - 124	<p>The WPDCS <b>ACKNOWLEDGED</b> that for some CPCs and fleets where national regulations prevent the measurement of discarded live individuals due to safety reasons (e.g., sharks), it might be impractical to fulfil the requirement of measuring 1 fish / metric ton of live discards (as per Res. 15/02 and 17/05), and that therefore exemptions to the assessment of this criteria to determine compliance levels with IOTC data reporting requirements should be considered.</p> <p>Therefore, the WPDCS <b>REQUESTED</b> the issue is brought to the attention of the concerned scientific bodies of the IOTC (e.g., SC and WPEB) for their further consideration.</p>	<p><b>[ Ongoing ]</b></p> <p>See also: <b>IOTC-2021-WPEB17(AS)-R[E]</b> – <i>Report of the 17th Session of the IOTC Working Party on Ecosystems and Bycatch</i>, in particular</p> <p>Para. 23 “<i>The WPEB NOTED that some of the CPCs indicated by the last Compliance Committee as partially-compliant or non-compliant with respect to size data reporting requirements for shark species (at least one fish measured by ton caught, as per paragraph 5 of Resolution 15/02) are not in a position to fulfil this requirement when individuals are discarded, either because of safety concerns, or because of retention bans at national level requiring immediate release of all caught individuals for the species</i>”, and</p> <p>Para. 24 “<i>For this reason, the WPEB REQUESTED that the matter be further discussed at the next WPDCS, and that these constraints are properly taken into account when assessing the level of compliance of such CPCs with respect to size data reporting requirements.</i>”</p>

**Summary overview of current buoy data submissions**

Para. 126 - 127	<p><b>CONGRATULATING</b> the IOTC Secretariat and the data providers for the successful submission of this information, and the results achieved in analysing its content, the WPDCS <b>ACKNOWLEDGED</b> that what presented is a region-wide, comprehensive view on the distribution of FADs in the Indian Ocean and <b>RECOGNIZED</b> that this dataset might be the first of its kind available to any tRFMO.</p> <p><b>NOTING</b> that six purse-seiners appear as currently flagged by Kenya in the IOTC Record of Authorised Vessels, the WPDCS <b>REQUESTED</b> the flag state to provide information on the activity of this segment of its fleet, in particular on whether these vessels were actively fishing in the Indian Ocean during early 2020, and in case, if they were fishing using FADs and instrumented buoys.</p>	<p><b>[ Ongoing ]</b></p> <p>An aggregated version of this dataset was presented at the 2<sup>nd</sup> ad-hoc Working Group on FADs in October 2021, and discussions are ongoing on the way forward to guarantee the information can be regularly disseminated for scientific purposes.</p> <p>For what concerns the status of the six Kenyan purse seine vessels, no updates were received by the Secretariat.</p>
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**Use of electronic monitoring systems to optimize observer sampling protocols onboard French purse seiners of the Indian Ocean**

Para. 142	Overall, the WPDCS strongly <b>SUPPORTED</b> the interest of EMS as an additional source of observations to improve the monitoring of different fishery activities and <b>ENCOURAGED</b> scientists to further investigate the possible ways of defining sound and comprehensive EM Programme Standards.	<p><b>[ Ongoing ]</b></p> <p>Discussions on this matter continued during the 1<sup>st</sup> ad-hoc Working Group on Electronic Monitoring Standards in November 2021.</p>
Para. 145	The WPDCS <b>SUGGESTED</b> the Spanish and French scientists to share experiences on their preliminary EMS pilot studies to define common approaches already done with human observer programmes (e.g., ObServe database) and <b>RECALLED</b> the existence of an EU-funded pilot project implementing EM on small longliners in Réunion island (RECOLAPE - Strengthening Regional cooperation in the area of large pelagic fisheries data collection).	<p><b>[ Ongoing ]</b></p> <p>Discussions on this matter continued during the 1<sup>st</sup> ad-hoc Working Group on Electronic Monitoring Standards in November 2021.</p>

**The FIRMS Tuna Atlas: towards a scalable data portal for global tuna fisheries**

Para. 162	<b>RECALLING</b> the global nature of the FIRMS GTA, the WPDCS <b>CONSIDERED</b> that IOTC (as well as any other participating partner) could further contribute to the identification of new datasets (e.g. regional FAD densities, cannery sales data and trading routes) and assign priorities for their development in order to drive the future work of the Fisheries Atlas demonstrator in the	<p><b>[ Ongoing ]</b></p> <p>The FIRMS Global Tuna Atlas is in the process of being officially released to the public, with DOIs assigned to all managed catch datasets.</p>
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	context of BlueCloud project (ending in September 2022) and of the <i>INTERREG</i> project (ending in October 2023), with the latter expected to further support work streams focusing on <i>Datacite</i> metadata elements and DOIs assignment for IOTC Digital Objects (datasets, reports, working papers, etc.).	The 12 <sup>th</sup> Session of the FIRMS steering committee has drafted a work plan that references future activities focusing on the inclusion of other datasets in the domain of the current Global Tuna Atlas, whose extent and spatio-temporal resolutions are still under discussion.
Para. 164 -165	<p>Furthermore, the WPDCS <b>NOTED</b> that the existing GTA dataset contains high-resolution data (regular grids of 1x1 degrees) from three tRFMOs, as that same type of information is not in the public domain for the other two, and that dissemination of data through the GTA portal will require approval from all the RFMO that have shared information.</p> <p>Considering these shortcomings, the WPDCS <b>AGREED</b> on the need to promote cooperation from all tRFMOs with this initiative and <b>AGREED</b> to defer this matter for the consideration of the IOTC Scientific Committee.</p>	<p><b>[ Ongoing ]</b></p> <p>Discussions were held in this regard during the Technical Working Group on the FIRMS Global Tuna Atlas in April 2021 and during the 12<sup>th</sup> Session of the FIRMS Steering Committee in October 2021.</p> <p>The Secretariat regularly participates to meetings of the FIRMS Global Tuna Atlas and has the role of coordinator for the activities of the group.</p>
<b><i>Date and place of the 16<sup>th</sup> and 17<sup>th</sup> sessions of the WPDCS: 2020 &amp; 2021</i></b>		
Para. 185	The WPDCS <b>REQUESTED</b> that the IOTC Secretariat liaise with CPCs to determine the host country for the 17 <sup>th</sup> and 18 <sup>th</sup> sessions of the WPDCS respectively.	<p><b>[ No updates ]</b></p> <p>Due to the insurgence of the CoViD-19 pandemic and the subsequent introduction of travel restrictions at global level, the 17<sup>th</sup> session of the WPDCS (2021) is going to be held remotely.</p> <p>Considering that the 18<sup>th</sup> session of the WPDCS is scheduled for late November 2022 and that travel restrictions and health measures might be lifted by that date, the WPDCS is attempting to preliminarily identify possible hosts for the 18<sup>th</sup> session of the Working Party.</p>