Remarks on issues identified with the current data reporting requirements

PREPARED BY: IOTC SECRETARIAT[1], 31ST MARCH 2017

Abstract

IOTC Resolution 15/08 – "*Procedures on a Fish Aggregating Devices (FADs) management plan, including a limitation on the number of FADs, more detailed specifications of catch reporting from FAD sets, and the development of improved FAD designs to reduce the incidence of entanglement of non-target species*" entered in force on September 10th 2015 and among its objectives it provided details about FAD data collection and reporting requirements (in combination with IOTC Resolution 15/02 – "*Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating non-Contracting Parties (CPCs)"*).

Data reporting requirements were eventually captured by IOTC Form 3FA_01[2] whose purpose is to provide a convenient data reporting template for all core FAD information as per the Resolutions above. Its current structure represents a good trade-off between the complexity inherent in the nature of the information set and the need for a data reporting template that is simple and flexible enough to be efficiently adopted by CPCs.

FAD data received so far by the IOTC Secretariat have been consistently provided through copies of Form 3FA_01, yet – as a consequence of the lack of formal and clear specifications about the type and nature of information to be provided through this form – the data verification and collation processes in place at the Secretariat have highlighted a number of issues common to many data providers.

This document provides a first overview of the identified data reporting issues, further clarifications about the classifications adopted for FAD types and FAD visit types and suggestions for CPCs about how these classifications and the overall rationale underlying Form 3FA_01 should be adopted to ensure that the reported information is comprehensive, consistent and as accurate as possible for statistical purposes.

Current FAD data collection requirements

IOTC Resolution 15/08 provides a detailed list of all the data *collection* requirements related to Fish Aggregating Devices (both anchored and drifting). According to this Resolution (and to complementing Resolution 15/02) CPCs are expected to routinely collect the required information - as specified - and eventually report an aggregation of this to the IOTC Secretariat as part of the regular statistical data submission schedule.

In terms of the data collection requirements that CPCs have to fulfil as part of their FAD management plans, the following are listed which are particularly relevant to the mandatory statistical information submission processes (data *reporting*):

Drifting FADs (Resolution 15/08 Annex I – items no. 4 and 8)

- DFAD design characteristics;
- Any visit on a DFAD;
- For each visit on a DFAD, whether followed or not by a set, the
    - position,
    - date,
    - DFAD type,
    - DFAD design characteristics,
    - type of the visit (deployment, hauling, retrieving, loss, intervention on electronic equipment);
- If the visit is followed by a set, the results of the set in terms of catch and bycatch.

[1] Fabio Fiorellato (fabio.fiorellato@iotc.org) , Sarah Martin (sarah.martin@iotc.org), James Geehan (james.geehan@iotc.org) and Lucia Pierre (lucia.pierre@iotc.org)

[2] http://www.iotc.org/sites/default/files/documents/2016/12/Form_3FA.zip

Anchored FADs (Resolution 15/08 Annex II – item no. 6)

- Any visit in a AFAD;
- For each visit on an AFAD, whether followed or not by a set or other fishing activities, the
  - position,
  - date,
  - type of the visit (deployment, towing, loss);
- If the visit is followed by a set or other fishing activities, the results of the set in terms of catch and bycatch.

The above data collection requirements, which are a subset of the full requirements expressed by Resolution 15/08, are also captured to different degrees of detail by the data reporting requirements in place at the Secretariat and materializing as Form 3FA_1.

It is important to highlight that – for both Anchored and Drifting FADs – these requirements expect catch and bycatch to be reported only for those visits that are followed by a set, whereas for all visits (regardless of their being followed by a set) information about the position, date, FAD type and design characteristics (where applicable) should be provided together with specifications about the visit type.

Reference data classifications and constraints

In order to properly account for the different types of FADs (by Anchored / Drifting classification) and the types of visit expected for each type, the IOTC Secretariat has defined – following the entry in force of Resolution 15/02 and 15/08 – the following two classifications:

FAD types

Code	Description	FAD category	Has nets	Has tracking equipment
ANF	Anchored FAD	ANCHORED	N/A	N/A
FAD	Drifting raft or FAD without a net NOT located using a tracking system (radio or satellite transmission)	DRIFTING (ARTIFICIAL)	No	No
FDT	Drifting raft or FAD without a net located using a tracking system (radio or satellite transmission)	DRIFTING (ARTIFICIAL)	No	Yes
NFD	Drifting raft or FAD with a net NOT located using a tracking system (radio or satellite transmission)	DRIFTING (ARTIFICIAL)	Yes	No
NFT	Drifting raft or FAD with a net located using a tracking system (radio or satellite transmission)	DRIFTING (ARTIFICIAL)	Yes	Yes
LOG	Drifting log or debris NOT located using a tracking system (radio or satellite transmission)	DRIFTING (LOG)	No	No
LGT	Drifting log or debris located using a tracking system (radio or satellite transmission)	DRIFTING (LOG)	No	Yes
DFR	Other drifting objects NOT located using a tracking system (radio or satellite transmission) (e.g. dead animal, etc.)	DRIFTING (OTHER)	No	No
DRT	Other drifting objects located using a tracking system (radio or satellite transmission) (e.g. dead animal, etc.)	DRIFTING (OTHER)	No	Yes

Table 1. Current FAD types classification for IOTC reporting purposes (colours assigned to FAD types by category)

FAD visit types

Code	Description	FAD category	Sets expected
AD	Deployment of anchored FAD	ANCHORED	No
AH	Revisiting and towing of anchored FAD	ANCHORED	Yes
AL	Loss of anchored FAD (detached from anchorage point or damaged heavily)	ANCHORED	No
AR	Revisiting anchored FAD	ANCHORED	Yes
DD	Deployment of drifting FAD	DRIFTING (ARTIFICIAL)	No
DH	Retrieval/encounter and hauling of drifting FAD	DRIFTING (ALL)	Yes
DI	Retrieval/encounter, hauling, and intervention on electronic equipment of drifting FAD	DRIFTING (TRACKED)	Yes
DL	Loss of drifting FAD (tracking signal lost)	DRIFTING (TRACKED)	No
DR	Retrieval of drifting FAD	DRIFTING (ARTIFICIAL)	Yes

Table 2. Current FAD visit types classification for IOTC reporting purposes (colours assigned by FAD category)

A first set of implicit constraints for data reporting purposes emerges from the FAD types and visit types classifications listed in Tables 1 and 2 (in relation to drifting FADs only).

- No deployment event (FAD visit type "DD") is expected to be reported for FAD of "*DRIFTING LOG*" or "*DRIFTING (OTHER)*" categories;
- No loss of drifting FAD due to tracking signal lost event (FAD visit type "DL") is expected to be reported for FAD types *FAD*, *NFD*, *LOG*, *DFR*;
- No retrieval/encounter, hauling and intervention on electronic equipment event (FAD visit type "DI") is expected to be reported for FAD types known as not having any tracking equipment, i.e. FAD types *FAD*, *NFD*, *LOG* and *DFR*;
- No sets (and catch / bycatch) are expected for deployment and loss events (FAD visit types "DD" and "DL").

Some of these implicit constraints might introduce additional challenges to data providers due to the nature of the FAD data collection and processing workflows in place at each CPC: for this reason, the assumption that no sets and catch / bycatch should be expected for drifting FADs deployment ("DD") and loss events ("DL") has been temporarily relaxed to accommodate for the information provided so far.

Current FAD data reporting requirements

As anticipated, the FAD data collection requirements expressed by Resolution 15/08 and 15/02 (in combination with the FAD types and FAD visit types categorizations) have materialized – for data reporting requirements – as IOTC Form 3FA_1 which is an extension of IOTC Form 3CE (*Catch-and-Effort for Surface and Longline fisheries*) including details about FAD types and FAD visit types.

As opposed to Form 3CE, the FAD data reporting template adopts an event-based approach through which multiple events (FAD visit types) for a given FAD type can be reported for the same strata.

MONTH	GRID				AREA	ESTIMATION	Type of FAD	Type of Visit	NO. FAD SET	EFFORT	YFT	SKJ	BET	ALB	AG00
	SIZE	QUADRANT	LATITUDE	LONGITUDE							*Thunnus albacares*	*Katsuwonus pelamis*	*Thunnus obesus*	*Thunnus alalunga*	#N/A
											MT	MT	MT	MT	MT
1	5	1	0	60	5100060	AV	FDT	DH	1	1	8	32	0	0	0
1	5	1	0	61	5100061	AV	FDT	DH	0	1	33	0	1	0	0
1	5	1	0	61	5100061	AV	FDT	DI	0	1	0	0	0	0	0
1	5	2	0	58	5200058	AV	FDT	DH	0	1	8	9	0	0	0
1	5	2	0	61	5200061	AV	FDT	DH	0	1	14	0	3	0	0
1	5	2	1	56	5201056	AV	FDT	DH	1	1	21	69	0	0	0
1	5	2	1	62	5201062	AV	FDT	DI	1	1	10	0	0	0	0
1	5	2	1	63	5201063	AV	FDT	DH	1	1	4	11	0	0	0
1	5	2	1	64	5201064	AV	FDT	DI	1	1	0	0	0	0	0
1	5	2	1	67	5201067	AV	FDT	DH	0	1	0	0	0	0	0
1	5	2	1	67	5201067	AV	FDT	DH	1	1	37	65	0	0	0
1	5	2	1	67	5201067	AV	FDT	DI	0	1	155	0	0	0	0.2
1	5	2	1	68	5201068	AV	FDT	DI	0	1	16	0	0	0	0
1	5	2	1	68	5201068	AV	FDT	DI	1	1	0	20	0	0	0
1	5	2	2	66	5202066	AV	FDT	DI	0	1	36	0	0	0	0
1	5	2	3	58	5203058	AV	FDT	DI	0	1	90	0	15	1	0
1	5	2	3	58	5203058	AV	FDT	DI	1	1	0	0	0	0	0
1	5	2	3	66	5203066	AV	FDT	DI	0	1	33	0	0	0	0
1	5	2	3	67	5203067	AV	FDT	DH	0	0	117	0	1	1	0
1	5	2	3	67	5203067	AV	FDT	DI	0	1	54	0	0	0	0
1	5	2	3	68	5203068	AV	FDT	DH	0	0	127	0	108	0	0
1	5	2	4	58	5204058	AV	FDT	DI	1	1	0	2	0	0	0
1	5	2	4	64	5204064	AV	FDT	DH	1	1	0	0	0	0	0
1	5	2	4	68	5204068	AV	FDT	DH	0	0	0	0	0	0	0
1	5	2	4	68	5204068	AV	FDT	DH	1	1	3	4	0	0	0
1	5	2	0	61	5200061	AV	FDT	DH	0	0	0	0	0	0	0
2	5	2	0	45	5200045	AV	FDT	DH	0	0	13	0	12	0	0
2	5	2	0	60	5200060	AV	FDT	DD	1	1	0	0	0	0	0
2	5	2	0	63	5200063	AV	FDT	DH	1	1	20	25	15	0	0
2	5	2	1	53	5201053	AV	FDT	DI	1	1	0	0	0	0	0
2	5	2	2	45	5202045	AV	FDT	DD	0	1	0	0	0	0	0
2	5	2	2	45	5202045	AV	FDT	DH	0	0	116	0	2	0	0
2	5	2	2	45	5202045	AV	FDT	DI	0	1	0	0	0	0	0
2	5	2	2	45	5202045	AV	FDT	DI	1	1	0	0	0	0	0
2	5	2	2	46	5202046	AV	FDT	DD	0	1	0	0	0	0	0
2	5	2	2	46	5202046	AV	FDT	DD	1	1	0	0	0	0	0
2	5	2	2	46	5202046	AV	FDT	DH	0	0	23	0	22	0	0
2	5	2	2	46	5202046	AV	FDT	DI	1	1	0	0	0	0	0
2	5	2	2	48	5202048	AV	FDT	DD	0	1	0	0	0	0	0

Figure 1. A sample of FAD information reported through Form 3FA_1

The form can accommodate – for each stratum identified by fleet, year, month and grid – multiple events for the same type of FAD (and possibly by the same type of visit). For each event – which basically is a row in the data section of the form – data providers are expected to record the number of FADs involved ("Effort") and the number of positive sets ("No. FAD set") that had any interaction in terms of catch / bycatch for a given set of species.

For this reason, it is perfectly acceptable that a specific event does not involve any set (as long as no catch / bycatch is reported) whereas a positive number of FADs should always be reported in the "Effort" column of the event.

Although no specific data validation procedure is in place within Form 3FA_1, reported data geospatial information is expected to have a level of resolution of 1x1 degrees grid, in accordance with the recommendations set forth by Resolution 15/02 for the reporting of Catch-and-Effort data for Surface fisheries.

By the time this document has been finalized, all CPCs that have provided FAD information to the IOTC Secretariat have been successfully doing so by either adopting Form 3FA_1 or a comparable format.

Data reporting business rules

A number of data reporting business rules for the verification and collation of the provided information have been adopted by the IOTC Secretariat in order to assess the quality of the submitted data and ensure that the information incorporated within the Secretariat statistical systems is manageable, as accurate as possible and ensures no unnecessary data *aliasing* or redundancy is further introduced.

Strata additivity

First and foremost, with the assumptions already detailed in the previous paragraphs, multiple events for the same FAD type and FAD visit type have been considered as *additive* when related to the same strata.

This means that reported quantities (number of FADs, number of sets and catches by species and units) have been merged (i.e. summed) whenever two or more records for the same strata were encountered for a given submitted data set.

Although this approach might partially *hide* information for a given strata for which multiple events of the same type are reported, its adoption was deemed necessary to ensure that the reported data could be effectively managed by the Secretariat.

While it's true that two (or multiple) records for the same strata reporting data for the same FAD type and FAD visit type provide detailed information at the level of a single, specific event, keeping those multiple records as separate within the Secretariat statistical systems does not really provide additional benefits and – on the contrary – tends to increase the complexity of the data collation and management processes.

For this reason, whenever multiple records are encountered that report information for the same strata and FAD types / visit types, the approach adopted is as in the following example:

Reported data (as provided by a given CPC)									
Year	Month	Grid	FAD	Visit	No. FADs	No. sets	Species 1	…	Species N
2013	1	5200061	FDT	DH	1	3	100 MT	…	69 MT
2013	1	5200061	FDT	DH	5	4	215 MT	…	0 MT
2013	1	5200061	FDT	DH	4	0	0 MT	…	0 MT
Resulting data (as incorporated within the IOTC Statistical Systems)									
2013	1	5200061	FDT	DH	10	7	315 MT	…	69 MT
Strata			FAD type / visit		Effort		Catch quantities		

Table 3. Example of data processing for multiple strata for the same FAD type and visit type

Number of FADs and number of Sets should always be reported

As the purpose of providing FAD data through Form 3FA_1 is to report effective effort (FAD numbers) and interactions (number of positive sets following any visit), these two quantities should never be left blank when a dataset is submitted to the IOTC Secretariat.

Notwithstanding the importance of this assumption, some CPCs were not always fulfilling these requirements (for different reasons) and the Secretariat had to temporarily (until further clarification) estimate these quantities whenever missing. In particular:

- Seychelles (2013-2015) has not been reporting FAD numbers (effort) in its PSLS FAD data;
- Japan (2013) has not been reporting the number of positive FAD sets for events resulting in catches / bycatches;

On a more positive note, at least one of the two quantities was always provided for each strata, therefore estimating the missing one was simply a matter of applying a correction factor based on the average (no. FADs by set or no. sets by FAD) of the provided information by CPC and year, using proxy fleets or years when required.

This estimation process, although sub-optimal, ensures that all provided data could be conveniently incorporated within the Secretariat statistical systems until data providers can successfully revise their data and provide any missing information.

Determination of the number of active FADs by strata

As described, the event-based approach adopted for the reporting of FAD data through Form 3FA_1 expects multiple events to be potentially reported for the same strata.

Among these events, a number of separate visits of type DH ("*Retrieval/encounter and hauling of drifting FAD*") and DI ("*Retrieval/encounter, hauling, and intervention on electronic equipment of drifting FAD*") could refer to the same FADs being visited multiple times during the month (or while stationing in different grids). Therefore, the overall number of FADs reported by these events can possibly exceed the total number of FADs active during a given timeframe.

For this reason, the most accurate indicator of the number of active FADs should be – for a given month – the difference between the number of deployed FADs (visit type "DD") and the number of retrieved FADs (visit type "DR").

Not all CPCs have been consistently reporting deployment events, though, therefore any analysis based on the available data should necessarily be considered as partial.

At the same time, as data has been provided starting from 2013 onwards (by the time we write) it lacks the historical information in terms of FADs being deployed and retrieved prior to that date. Therefore, active FADs calculated as above should be considered as a *delta* with respect to the unknown baseline quantities.

Reference data and implicit constraints

In very few circumstances, some submitted records were reported using wrong (or missing) codes for the determination of the geospatial information (i.e. the CWP grid code).

Given the small number of these wrong records (less than 50 in total), for the time being they have not been incorporated within the Secretariat statistical systems and the original data providers are expected to be contacted to clarify (and possibly correct) these issues.

No problem whatsoever was identified for any other coding system referenced throughout Form 3FA_1 (FAD and FAD visit types, Species codes etc.).

In terms of fulfilling the implicit constraints detailed in the previous paragraphs (expected FAD visit types by FAD type), the situation of the data currently reported to the Secretariat (25009 records in total) is as follows:

Unsatisfied constraint	Severity	No. records	%
Deployment events (DD) should refer to artificial drifting FADs only (FAD, FDT, NFD, NFT)	HIGH	48	0.192%
Loss of drifting FAD (tracking signal lost) events (DL) should refer to FAD types located using a tracking system only (FDT, NFT, LGT, DRT)	HIGH	136	0.544%
Retrieval/encounter, hauling, and intervention on electronic equipment of drifting FAD events (DI) should refer to FAD types located using a tracking system only (FDT, NFT, LGT, DRT)	MEDIUM	816	3.263%
No FAD sets expected for deployment events (DD)	LOW	1314	5.254%
No FAD sets expected for loss events (DL)	MEDIUM	98	0.392%
Number of sets should be positive whenever catches are reported	HIGH	541	2.163%
Number of FADs should be positive	HIGH	28	0.112%

Table 4. Implicit constraints and report of not-fulfilling records (number and percentage over total records)

Current status of all information reported to the Secretariat

Overall data reporting status

FAD data received in the past years by the Secretariat by means of form 3FA_1, covers a time frame that ranges from 2013 to 2015 (included) and involves six different CPCs as reported in the following table:

Year	**2013**		**2014**		**2015**	
Gear / CPC	**PSLS**	**PSSP**	**PSLS**	**PSSP**	**PSLS**	**PSSP**
ESP					Q1-4	
FRA			Q1-4		Q1-4	
JPN	Q4		Q1,3,4		Q1,4	
KOR			Q1-4		Q1-4	
MUS	Q4		Q1-4		Q1-4	
SYC	Q1-4	Q1-4	Q1-4	Q1-4	Q1-4	

Table 5. Current status of FAD data submissions by CPC and year / gear

As can be seen in Table 5, two CPCs (Japan and Mauritius) have been providing partial information (only for a fraction of the calendar year) whereas for all other combinations of year and CPCs for which information is available, this is covering the entire year on a month-by-month resolution.

Additionally, Seychelles was the only CPC providing FAD data for both industrial Purse Seiners (PSLS) and Supply Vessels (PSSP) with data for the latter accounting for almost the entirety of the reported deployments.

Possible violation of business rules and implicit constraints by type

Table 6 lists the number of violations of the established logical constraints for data submissions (by CPC and year) related to the reporting of a deployment event (DD) for a drifting FAD type that is not expected to be explicitly deployed (LOG, LGT, DFR, DRT). Only Japan (from 2013 to 2015) has been reporting these kind of potentially incompatible FAD types / FAD visit type combinations.

Year	**2013**		**2014**		**2015**	
No. DD events	**Total**	**Violations**	**Total**	**Violations**	**Total**	**Violations**
ESP					4127	0
FRA			44	0	88	0
JPN	51	**8**	78	**19**	116	**21**
KOR			291	0	357	0
MUS	0	0	121	0	101	0
SYC	354	0	919	0	2	0
Total	405	**8**	1453	**19**	4791	**21**

Table 6. Deployment events for potentially wrong FAD types

Table 7 lists the number of violations (by CPC and year) related to the reporting of a loss event due to a lost tracking signal (DL) for a drifting FAD type that is not expected to be remotely tracked (FAD, NFD, LOG, DFR). Only Korea in 2015 has been reporting these kind of potentially incompatible FAD types / FAD visit types.

Year	**2013**		**2014**		**2015**	
No. DL events	**Total**	**Violations**	**Total**	**Violations**	**Total**	**Violations**
ESP					0	0
FRA			0	0	0	0
JPN	1	0	0	0	0	0
KOR			76	0	136	**136**
MUS	0	0	0	0	0	0
SYC	0	0	0	0	0	0
Total	1	0	76	0	136	**136**

Table 7. Loss events for potentially wrong FAD types

Table 8 lists the number of violations (by CPC and year) related to the reporting of an intervention event on electronic equipment (DI) for a drifting FAD type that is not expected to have any electronic tracking system (FAD, NFD, LOG, DFR). Only Seychelles (from 2013 to 2015) and Spain (in 2015) have been reporting these kind of potentially incompatible FAD types / FAD visit type combinations.

Year	**2013**		**2014**		**2015**	
No. DI events	**Total**	**Violations**	**Total**	**Violations**	**Total**	**Violations**
ESP					5864	**699**
FRA			118	0	186	0
JPN	0	0	1	0	0	0
KOR			0	0	0	0
MUS	0	0	147	0	187	0
SYC	82	**82**	31	**31**	4	**4**
Total	82	**82**	297	**31**	6241	**703**

Table 8. Intervention events for potentially wrong FAD types

Table 9 lists the number of violations (by CPC and year) related to the reporting of positive sets following events that are not expected to produce any interaction (DD, DL). Only Korea, Mauritius and Seychelles (2014) and Japan, Korea, Mauritius and Seychelles (2015) have been reporting non-zero positive sets for such events.

Year	**2013**		**2014**		**2015**	
No. DD, DL events	**Total**	**Violations**	**Total**	**Violations**	**Total**	**Violations**
ESP					4127	0
FRA			44	0	88	0
JPN	52	0	78	0	116	**4**
KOR			367	**52**	493	**284**
MUS	0	0	121	**75**	101	**76**
SYC	354	0	919	**919**	2	**2**
Total	406	0	1529	**1046**	4927	**366**

Table 9. Unexpected positive sets

Table 10 lists the number of violations (by CPC and year) related to the reporting of zero number of FADs for any given FAD visit type. Only Mauritius in 2015 has been reporting this kind of potentially wrong effort values (as number of FADs).

Year	2013		2014		2015	
No. events	**Total**	**Violations**	**Total**	**Violations**	**Total**	**Violations**
ESP					16114	0
FRA			736	0	757	0
JPN	107	0	213	0	337	0
KOR			1001	0	701	0
MUS	28	0	468	0	500	**28**
SYC	1354	0	1737	0	956	0
Total	28	0	4155	0	19365	**28**

Table 10. Zero FADs reported

Table 11 lists the number of violations (by CPC and year) related to the reporting of zero number of positive sets in combination with non-zero catches and bycatches. Only Japan (2013-2015), Mauritius (2013) and Spain (2015) have been reporting this kind of potentially wrong effort values (as number of sets).

Year	2013		2014		2015	
No. events	**Total**	**Violations**	**Total**	**Violations**	**Total**	**Violations**
ESP					6374	**480**
FRA			529	0	454	0
JPN	23	**1**	38	**1**	114	**53**
KOR			135	0	413	0
MUS	27	**6**	203	0	238	0
SYC	670	0	676	0	920	0
Total	720	**7**	1581	**1**	8513	**533**

Table 11. Zero sets reported when catches / bycatches are available

Conclusions

Mandatory data reporting of FAD information to the IOTC Secretariat is a relatively new process that has been introduced following the entry in force of Resolutions 15/08 and 15/02. Therefore, it still is at an early stage and the identified issues are somewhat expected and understandable.

For the same reason, the adopted FAD type and FAD visit type classifications might need to be further assessed and possibly revised, in order to identify whether they're expressive enough to both convey meaningful information effectively and concisely (without introducing too much information *hiding* or *aliasing* for statistical purposes) and ensure that data providers can submit the required information in a timely and convenient manner.

The implicit constraints detailed in this document represent a first attempt to formalize the expected business rules to be followed when producing information to be submitted to the IOTC Secretariat: the overall status of the data submitted

so far is encouraging in terms of quality and accuracy, yet further efforts should be put in ensuring that there's a common understanding of the rationale driving the design and purposes of Form 3FA_1 in the context of the standing FAD-related Resolutions.

Should any outstanding need for a revision of both the FAD classifications and Form 3FA_1 structure be envisaged at the conclusion of this Working Group, the IOTC Secretariat – in collaboration with all the involved CPCs – shall ensure that the data provided so far could be revised accordingly and re-arranged following the emerging changes in specifications and requirements.