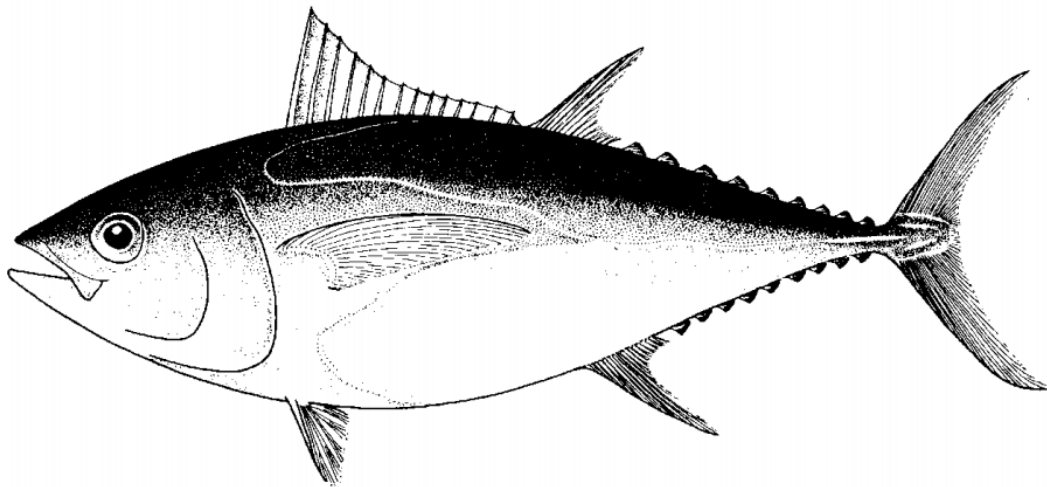ELEVENTH MEETING OF THE TUNA FISHERY DATA COLLECTION COMMITTEE

20-24 AUGUST 2018, BRISBANE AUSTRALIA

WORKING PAPER DCC11-WP04 – agenda item 6.2

NOTE ON PNAO PROPOSAL FOR CHANGES TO FAD DATA PROVIDED BY VESSEL OPERATORS TO PNA FIMS

Prepared by the Parties to the Nauru Agreement Office (PNAO)

Pacific Community   Forum Fisheries Agency

A. Background

1. This note sets out a set of proposed changes to the provision of FAD data by vessel operators. The changes proposed are specifically designed for provision of FAD data to PNA FIMS, but they may also contribute to the development of requirements for additional FAD data to be provided to the WCPFC.

2. The changes to FAD data provided by vessel operators proposed in this note respond to 2 initiatives:
   a) A proposal by participants at a recent PNA workshop session on FAD management that strongly supported development of PNA requirements relating to provision of additional FAD data by vessel operators through e-reporting, including data on buoys on board, deployed and retrieved linked to the PNA FAD Registry, and on FAD design and construction
   b) Agreement at WCPFC12 that:
      "….vessel operators should provide data on FADs covering the following two major areas:
      a. FAD design and construction of FAD to be deployed or encountered (materials, electronics, size etc)
      b. FAD activity (deploying, retrieving, setting, visiting, loss etc).

      In addition: *The Commission noted the FADMgmtOptions-IWG recommendations that:*
      (i) the FAD data fields to be reported by vessel operators should be based on the WCPFC ROP Minimum Standard Data Fields and the data fields collected by other RFMOs;
      (ii) data collected by observers on FADs can be used for verification of FAD activities of vessels;
      (iii) the FAD data should be provided to the Commission via flag State electronically using appropriate systems such as FAD e-logbooks or information systems such as PNA iFIMS etc.

B. Proposed e-Log Changes

3. Three sets of changes to e-logs are proposed:
   a) Add a buoy inventory
   b) Add Buoy ID to set Data
   c) Add a FAD/Payao and Floating Objects Record

4. The proposals follow pretty closely the proposals by the FAD-IWG Chair in WCPFC-SC12-ST-WP-08 that were developed through joint work by SPC, WCPFC Secretariat and FAD IWG Chair. Those in turn are largely based on the Regional Observer GEN-5 form (FAD/Payao and Floating Objects Information Record) with some reference to the PS-2 form, PNA needs related to FAD/Buoy Tracking, and forms from other RFMOs and Spain, noting that the PNA Industry iFIMS is already set up to meet IATTC FAD reporting requirements.

5. There would generally be a drop-down menu for each field.

6. Areas of uncertainty related to the proposals include:

a) Marking of FAD elements other than the buoy; and

b) Emerging PNA needs related to FAD/Buoy Tracking i.e. a vessel operator may be required to report on how FADs will be retrieved and on any retrievals other than by the vessel but this information might be reported through the PNA Buoy Registry rather than e-logs.

7. If applied by WCPFC, there would be consequential changes to some observer/ROP fields, mainly deleting the FAD design and construction details except to the extent that those might be required to monitor compliance with any WCPFC requirements relating to bio-degradable and non-entangling FADs.

A. Buoy Inventory

Action: Add Buoy Inventory to Trip Information

Add
- At trip start
- At trip end

Comment: as initially framed by the FAD IWG Chair, this was an inventory of FADs, not buoys. That doesn't seem very useful, since some vessels sometimes start trips with some FADs made up but otherwise vessels carry materials and make up FADs as needed. Note: the FAD inventory requirement that used to be in the IATTC measure has been dropped.

Suggested Fields
a) **Buoy ID:** Manufacturers Serial No.
b) **Make/Model**: Manufacturers Name and Model No.   *Comment: Consideration was given to dropping Make/Model and Type on the ground that that information could be derived from the serial no. However, SPC advise that they have not been able to identify all makes/models/types from serial nos.*
c) **Type:** currently (GPS/echo sounding/other) *Comment: same as b) above.*
d) **Operator:** Buoy operator registered with PNA Buoy Register (might be Unknown if a buoy has been picked up that is not associated with the vessel

B. Set Buoy ID

Action: Add Buoy ID to set Data

Suggested Fields:
a) **Buoy Attached [Y/N]** to all Floating Object School Association Codes (Y = Buoy attached when found)
b) **Buoy ID**, with an alert if Buoy ID not entered *Comment: is this needed if the FAD/Payao and Floating Objects Record is linked to the Set record?*
c) **FAD / Payao No. and or markings** *Comment: probably not useful until the Commission adopts FAD marking, and then may need reframing, noting that most vessels don't currently mark the*

rafts and attachments but some do; but probably worth keeping in the way it is currently used in GEN-5

C. FAD/Payao and Floating Objects Record

Action: Add FAD/Payao and Floating Objects Record (linked where appropriate to Set record and PNA Buoy Register)

Suggested Fields:
a) **Date**
b) **Time**
c) **Position**
d) **Buoy ID**
e) **Make/Model**: Manufacturers Name and Model No.   *Comment: as above.*
f) **Type:** currently (GPS/echo sounding/other) *Comment: same as e) above.*
g) **FAD Activity** (something like set/deploy/retrieve/service/modify/swap/loss/investigate, including electronically?) *Comments:*
   - *this field is not in GEN-5; it is included among a wider range of vessel activities in the PS-2 Daily Log. It was included by the FAD IWG Chair in the list of fields proposed to be reported by vessel operators.*
   - *SPC have noted "It would also be useful to know if a FAD deployment means that it is a new FAD or a FAD previously picked up and re-deployed. … can be ambiguous, for instance if a FAD is recovered, then some work/repair is done on it, is it new deployment or not… suggestion to have an activity "redeploy" Or maybe in the origin of FAD, in case of deployment, then it could be origin: own new FAD or own redeployment? This could be important info, to estimate how many new FADs are deployed every year*
   - *"deploy" is intended to mean a new deployment, "service" to repair without major change, and "modify" to involve significant change, "swap" just swapping the buoy.*
   - *SPC have suggested separate FAD and Buoy Activities*
   - *Operations like modifying a FAD after setting on it would involve multiple entries for activities*
h) **Origin of FAD** (own PS/other PS vessel/other vessel/unknown etc) *Comment: include "other" vessel name or company name*
i) **Deployment Position and Date** (if known)
j) **FAD as found** (with Floating Object Type codes)
k) **FAD lifted** (Y/N)
l) **FAD as left** (with Floating Object Type codes)
m) **FAD Materials**
   - Main Materials + mesh size
   - Attachments + mesh size
n) **Max est. depth**
o) **FAD length & FAD width** (main body)

p) **FAD design**: in GEN-5 now covered by diagram drawn by observers under "Comments / Change details". *Comments:*

- *Advice was requested from SPC on whether should this be:*
  - i) *A photo*
  - ii) *A plan*
  - iii) *A classification by type*
  - iv) *More elaborate fields in k-m above: Comment: maybe like IATTC or the Spanish logbook detail below:*

Floating part					Underwater hanging structure				
Material / Structure	Floating devices	Superficial covering material	Superficial covering net mesh	Dimensions aaxbbxcc	Material / Structure	Supplements	Ballast	Net mesh NOT 'in a sausage'	Depth (m)
Bamboo	Corks	Net	< 3 cm	2x3x0,5	Sausage form	Man-made	Ring/Eyebolt	NO mesh	20.5

- v) *Some other form of reporting design*
- *SPC have indicated a preference for elaborating fields k-m above, noting also the need for multiple material*
- *The materials fields menus will allow for multiple materials and probably should include also natural/synthetic character*

q) **FAD / Payao No. and or markings** *Comment: probably not useful until the Commission adopts FAD marking, and then may need reframing, but probably best retained from GEN-5 – noting that most vessels don't currently mark the rafts and attachments but some do*

r) **SSI seen** (Y/N/U) SSI Trapped (Y/N/U)

s) **How FAD IS Found/Detected:** *Comments*

- *this field is not in GEN-5; it is in PS-2 Daily Log where it applies to schools and objects. It was included by the FAD IWG Chair in the list of fields proposed to be reported by vessel operators.*
- *Questions arise, in particular for SPC:*
  - *What is the purpose and value of this data*
  - *Is the current PS-2 data very useful at the school/object level*
  - *Is it worthwhile to put in e-logs – and if so, at the school/object level or just for FADs*
- *SPC suggests this may not be useful, and might be best left at the school/object level, which goes to the issue of whether to include this in reporting by the vessel in e-logs in the same way that it is now recorded by observers*

t) **Loss of Any FAD:** (Last reported position; Date of the last reported position) *Comments:*

- *loss of signal (other than by deactivation);*
- *used by ICCAT,*
- *useful for PNA,*
- *question is whether to put this here or in a separate FAD loss report in FIMS Buoy Registry*