# Elements of a Marking and Identification System

The IWG should recommend that the same standards-based approach used for the provision of other fishery data also be used.

# FAD Marking, Identification and Use of Electronic Signatures

FADs can be found in various shapes and sizes ranging from submersed float lines with coconut palm appendages, foam filled steel drums held in place by a concrete anchor, to large flat rafts with structures built on top to house a FAD keeper to ward off poachers.

In 2014 SPC conducted a preliminary analysis of the ROP data on FAD design and activities related to FADs in the WCPFC-CA. The SPC/FFA GEN-5 form is specifically designed for the collection of information related to the nature of the FAD, the main materials and attachments, the dimensions and information that could allow for the individual identification of FADs. However, the analysis found that it was difficult to ascertain the fate of the FAD after a set due to the lack of a unique identifier. The main recommendation from the analysis is the development of a unique identifier system.

Need to introduce a common marking system and standards for marking and identification for cross platform application.

In 2013, the United States proposed a conservation and management measure (CMM) on FAD data collection and analysis that would have tasked the TCC and Commission to develop a FAD identification scheme. This was considered a first step in any rational FAD management scheme. This FAD identification scheme would have at a minimum considered:

1. A unique identification number with a specific numbering system and format to be adopted by the Commission
2. Identification that should be easy to apply to the FAD that should be applied in such a manner that it will permit its identification and should not become unreadable or disassociated from the FAD.

Although the proposal was not adopted at WCPFC10, since that time other tuna RFMOs have adopted similar resolutions with FAD marking and identification provisions and these are described in more detail below.

Generally there is consensus on the need for marking. Marking can be achieved through satellite buoys electronic signatures but there are also areas in the region where non-instrumented FADs are used as such there may be utility in having a physical marking system for non-instrumented FADs.

Compatibility with existing arrangements in Coastal State’s EEZs and for a feasibility study to be done to inform the IWG on the costs and benefits of a physical marking system.

Members raised the point that it is important when developing a marking and identification system to maintain compatibility with existing arrangements in EEZs.

# Data Collection

Generally there seemed to be agreement that members have are comfortable in looking at the raft of information being collected through the GEN-5 forms on FAD monitoring and the fields outlined in the IATTC resolution and where appropriate work on the transfer of the collection of FAD data from observers to vessel operators, with observers having a verification role.

SC9 has already reviewed the data collected on FAD design/construction and agreed that it is adequate and none of the existing fields should be deleted and that the IWG recommend that the vessel operator and the flag state should be responsible for reporting of FAD deployment, use and loss

# Minimum Data Fields for Observer Reporting or FAD Logbook

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| --- | --- |
| **WCPFC FAD Data Fields** | **Standard** |
| Name of Observer | Full name of observer -first name first - last name last |
| Vessel Name | Full name of vessel including numbers |
| Vessel IRCS | Vessel Radio Call-sign (If none WIN identification) |
| Observer Trip Number | Trip number allocated by observer provider |
| Page Number | Number pages used |
| Date FAD Sighted | Record date of FAD sighting |
| Time FAD Sighted | Record ships time FAD sighted |
| Latitude of FAD | Record position of FAD using Latitude |
| Longitude of FAD | Record position of FAD using Longitude |
| How FAD is Detected | Record the primary method using codes to locate the FAD  Codes for how FAD is Detected - 1 Seen from vessel (No other Method), 2 Seen from Helicopter, 3 Marked with Radio Beacon, 4 Bird radar, 6 Information from other vessel, 7 Anchored (GPS), 8 Marked with Satellite/GPS beacon, 9 Navigation Radar, 10 Lights, 11 Flock of Birds sighted from vessel, 12 Other - please specify in comments,13 Being deployed (so not detected), 20 Unknown |
| FAD Anchored or Drifting | Indicate whether the floating object is an anchored Floating object or not. |
| Materials FAD is Made From (Main Materials and Attachments) | Record main components that make up the floating object. |
| Electronics Associated With FAD | Record whether any electronics were associated with the floating object?  Codes for Electronics associated with FAD - 1  Radio buoy (with identification), 2  Radio buoy –unidentified, 3  GPS buoy (with identification), 4 GPS buoy - unidentified, 5 Sounder buoy, 6 Sounder buoy – unidentified, 7 Light buoy, 8 Other (describe), 20 Unknown (describe in comments). |
| Origin of FAD | Observer is to try to find out the origin of the object – how did it get to be in the water, etc.?  Codes for Origin of FAD - 1. Your Vessel deployed this trip, 2. Your vessel deployed previously, 3. Other Vessel’s – with permission, 4. Other vessel’s – without permission, 5. Other vessel consent unknown, 6. Drifting and found by your vessel, 7. Deployed by FAD auxiliary vessel, 8. Origin unknown, 9. Other origin (Specify) |
| FAD Activity | Observer’s best describe the activity that the boat is involved with the FAD.  Codes for FAD Activity - 1. Setting on FAD, 2. Deploying FAD, 3. Servicing FAD, 4. Retrieving FAD, 5. Vessel drifting beside FAD attracting fish away from FAD before carrying, 6. Vessel setting close to FAD specify estimated distance in comments, 7 Vessel using lights of boat or light boat to attract fish from FAD during night, 8 Other (Describe), 9 Investigate floating object using sonar/sounder |
| Estimate Size of FAD | Record the width, breadth, and depth of the main body of the object as found or deployed. |
| Comments | Observer to record in writing any FAD information not covered by the fields. |
| **ICATT Log Book Fields** |  |
| FAD Marking |  |
| Associated Beacon ID |  |
| FAD Type |  |
| Type of the associated beacon and/or electronic devices |  |
| FAD Floating Part (Dimensions/Materials) |  |
| FAD underwater hanging structure (Dimensions/Materials) |  |
| Observation |  |
| FAD Marking |  |
| Beacon ID |  |
| FAD Type |  |
| Type of visit |  |
| Date |  |
| Time |  |
| Latitude |  |
| Longitude |  |
| Estimated Catch |  |
| Bycatch |  |