ICCAT PSM Inspector Training Manual

ICCAT

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Acronyms

AIS	Automatic Identification System
AREP	Advance Request for Entry into Port
ATF	Authorisation to Fish
ATT	Authorisation To Transhipp
CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CMM	Conservation and Management Measure
CPC	Contracting Parties and Cooperating Non-Contracting Parties, Entities and Fishing Entities
CSD	Commission on Sustainable Development
EEZ	Exclusive Economic zone
FAD	Fish Aggregation Device
FAO	Food and Agriculture Organisation of the United Nations
FMC	Fisheries Monitoring Centre
GGT	Gutted, gilled and tail off
GPS	Global Positioning System
ICCAT	The International Commission for the Conservation of Atlantic Tunas
IGO	Inter-governmental Organisations
IOTC	Indian Ocean Tuna Commission
IMO	International Maritime Organisation
IPOA	International plan of action
IRCS	International Radio Call Sign
IUU	Illegal, unreported and unregulated fishing
LOA	Length Overall
LSPLV	Large scale pelagic longline vessel
MPA	Marine Protected Area
PSM	Port State Measures
PSMA	Port State Measures Agreement
PSMR	Port State Measures Recommendation
RFB	Regional Fisheries Body
RFMO	Regional Fisheries Management Organisation
ROP	Regional Observer Programme
SOP	Standard Operating Procedure
UN	United Nations
UNFSA	UN Agreement on Straddling and Highly Migratory Fish Stocks
VMS	Vessel Monitoring System

Introduction

Illegal, unreported, and unregulated (IUU) fishing is a broad term that covers a wide variety of fishing and fishing related activities. The FAO IPOA-IUU includes reference to those broad categories of activities that constitute IUU fishing, including fishing activities that operate outside the law. Such activities occur with regard to Atlantic tuna and other species under ICCAT's competence and can have serious implications for the conservation and management of Atlantic tuna fisheries. Looking globally, the Eastern Central Atlantic, in particular, has been estimated to have the highest level illegal and unreported catch of fish with respect to all ocean regions (Agnew et. al. (2009))[1].

IUU fishing and fishing related activities manifests itself in a number of ways. Examples include fishing without a licence, misreporting catches, fishing in closed areas, or catching prohibited species (FAO (2019))[2]. In addition, fishing related activities would include transhipping or providing support of any means to a vessel that has been listed as an IUU vessel or has fished withing an area without authorization. ICCAT has adopted a number of instruments over the years aimed at identifying and combatting IUU fishing for the species under its competence. Of these instruments, port State measures (PSM) is a tool recently developed and implemented to help combat IUU fishing. Port State measures can be used to address many IUU fishing issues by preventing vessels suspected of being involved in IUU fishing from landing fish in their ports. It effectively cuts off a crucial section of the supply chain through preventing the product from entering national and international markets and removing the economic incentive for vessels to operate in this way.

In 2012, given the awareness that PSM are both a powerful and cost-effective compliance tool, ICCAT adopted the *Recommendation by ICCAT for an ICCAT Scheme for Minimum Standards for Inspection in Port* [Recommendation 12-07]. It entered into force in June 2013, and has recently been superseded by Recommendation 18-09, which entered into force in June 2019. The competent authorities of ICCAT Contracting Parties and Cooperating non-Contracting Parties, Entities, or Fishing Entities (CPCs) through their fisheries and/or other appropriate administrations, are responsible for the implementation of this binding Recommendation on all foreign fishing vessels or vessels that may support fishing vessels or fishing activities that enter their ports.

This manual is part of a suite of training materials developed focusing on and in support of the ICCAT Inspector Training Curriculum and should be used in conjunction with other supporting training materials and work aids to allow inspectors to conduct inspections of foreign-flagged vessels carrying ICCAT managed species and/or fish products originating from such species that have not been previously landed (referred to as "foreign fishing vessels" in Rec 18-09 and this manual)[3], in accordance with ICCAT Recommendation 18-09 and other applicable ICCAT measures. Notably, Recommendation 18-09 defines "fishing," "fishing vessel," and "fishing related activities" broadly as follows:

[1] Agnew DJ, Pearce J, Pramod G, Peatman T, Watson R, et al. (2009) Estimating the Worldwide Extent of Illegal Fishing. PLoS ONE 4(2): e4570. doi:10.1371/ journal.pone.0004570

[2] FAO 2019. http://www.fao.org/iuu-fishing/en/

[3]Recommendation 18-09, paragraph 3

- "Fishing" means searching for, attracting, locating, catching, taking or harvesting fish or any activity that can be reasonably expected to result in the attracting, locating, catching, taking, or harvesting of fish.
- "Fishing vessel" means any vessel, ship of another type or boat, used for, equipped to be used for, or intended to be used for, fishing or fishing related activities.
- "Fishing related activities" means any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transhipping, or transporting of fish that have not previously been landed at a port, as well as the provisioning or personnel, fuel, gear, or other supplies at sea.

The Training Curriculum as a whole is targeted at trained port inspectors who have already undergone a basic port inspection training programme, but who require additional expertise and a guide to the practical implementation of ICCAT measures. It has been developed from a fisheries inspector perspective and takes into account existing initiatives that discuss best practices for conducting port inspections, for example the IOTC PSM guidelines, and other international instruments such as legal frameworks and capacity needs assessment guides to support the harmonization and standardization of fisheries inspector training globally. It aims to put the items outlined in Recommendation 18-09 and other relevant ICCAT measures into context and can be appended or incorporated into other existing basic port inspection training initiatives. The manual is designed primarily for PSM trainees (a separate manual has been produced for PSM trainers), and elements in it can be used for reference on completion of the course and during inspections.

The manual is written from the inspector's perspective and broadly follows the order the operations of an actual inspection under the ICCAT PSM Recommendation. However, individual inspection circumstances may dictate a different order of events. It includes checklists and guidance on what to look for prior to entry into the port and during an onboard inspection. Standard Operating Procedures (SOPs) and the relevant forms to carry out each part of the procedure are contained in a series of Annexes.

Most reference materials for the manual have been placed as an online resource (password protected) and will be referred to throughout the manual. The online resource also contains the training materials, including self-training and exams and can be found here[3]. A summary of the resources collected is given in Table 1.

[3] http://www.mragcloud.net/moodle/course

Table 1 Online resources available.

Item	Contents
Training Course Forum	Provides a platform for questions and answers during the course.
ICCAT PSM Trainers	Trainers manual, presentations and resources
ICCAT PSM Introduction (5 day course)	Presentations and resources. Final Assessment
Documents and resources	ICCAT Recommendations relevant to PSMR in 3 languages; 98-11; 03-16; 04-10; 06-07; 06-13; 06-14; 09-07; 09-09; 10-06; 10-07; 10-09; 11-08; 11-09; 11-18; 11-20; 13-04; 13-10; 13-13; 14-08; 15-01; 16-05; 16-17; 16-18; 17-02; 17-03; 17-06; 18-09; 18-12; 18-13; 19-01; 19-02; 19-03; 19-04; 19-05; 19-06; 19-07; 19-08. ICCAT Data Code System: ICCAT Codes; ICCAT gear Codes; ICCAT Species Codes; ICCAT T1 Areas Codes URL links: ICCAT Record of vessels; ICCAT record of ports; ICCAT IUU Vessel List and other RFMOs Description of Fisheries: ICCAT descriptions of fisheries in 3 languages. Vessel ID and Document Verification Toolbox: Numerous resources for verification processes. Copies of Authorizations to Fish and Flag state licences and contacts to be added. VMS GUIDE Checklists
ICCAT Species Information and Identification	ICCAT Species descriptions in 3 languages ICCAT Species Codes ICCAT Species ID Cards ICCAT Species product Guides including guide to silky and thresher shark fin product.
Safety and Equipment	Equipment checklists for boarding, risk assessment tools etc. here. Marpol Guide.

1 Elements of the Recommendation 18-09 by ICCAT on Port State Measures that are important to its implementation.

1.1 Inspector appointment and training

Fisheries inspectors receive their authority by virtue of their appointment as an inspector under their domestic fisheries legislation and should be covered by domestic fisheries legislation to enforce their laws. Fisheries inspectors must know and be well-versed in their legal powers. As representatives of their CPC, appointed fisheries inspectors carry out the sovereign rights of their port CPC in the implementation of port State measures on-board foreign fishing vessels entering their designated ports. In carrying out inspections in its ports, the port CPC must ensure that inspections are carried out by properly qualified inspectors authorised for that purpose. Each authorised inspector must be issued with official documents and identification that provide proof of their appointment and powers as an inspector.

1.2 Designation of ports and points of contact

Designation of Ports: The first step in the implementation of ICCAT's PSMR is for each port CPC that allows access to foreign fishing vessels carrying ICCAT-managed species and/or fish products originating from such species that have not been previously landed, to designate those ports into which entry can be requested by such vessels and to notify this information to the ICCAT Secretariat[4]. The ICCAT Secretariat has developed form CP24-AuthPorts_TRI to facilitate submission of this information. The ICCAT Secretariat maintains on its website an up-to-date register of designated ports based on the lists provided by port CPCs[5].

Each port CPC that grants access to its ports to foreign vessels must also ensure that their designated ports have the institutional capacity in terms of trained inspectors to undertake the level of inspection required to meet the ICCAT PSM requirements. Foreign vessels should not be accommodated in any other ports.

Points of Contact: Each CPC that grants access to its ports must designate a point of contact for receiving the AREP from foreign fishing vessels[6]. In addition, all ICCAT CPCs must designate a point of contact for receiving inspection reports. CPCs must notify the ICCAT Secretariat of the name and contact details for their points of contact. The ICCAT Secretariat maintains on its website an up-to-date register of these points of contact based on the lists submitted by the CPCs. When accessing the current list of designated ports, the relevant points of contact are also provided together with information for submitting the AREP. Relevant information for submitting the AREP will include the advanced notification period if it differs from that specified in the PSMR (i.e., at least 72 hours)[7]. Inspectors should access both the list of ports and points of contact if they are looking for any additional information when analysing an AREP.

[4] Recommendation 18-09 paragraph 10
[5] https://www.iccat.int/en/Ports.asp
[6] Recommendation 18-09 paragraph 8
[7] Recommendation 18-09 paragraph 13

2 Implementation of the ICCAT PSM (Recommendation 18-09)

In common with all Port State Measures (PSM) schemes, the ICCAT Port State Measures Recommendation (PSMR) is based on four main elements which will be examined in more detail throughout this manual. Broadly speaking these are:

- the risk assessment on the Advance Request for Entry into the Port (AREP) to select which vessel(s) to inspect;
- preparation for and carrying out an onboard port inspection;
- monitoring of landings or transhipment;
- reporting and follow up of inspection results.

Figure 1 illustrates the PSM process, from the initial submission of the AREP, the decision to allow or deny entry, the decision to inspect or not inspect to the follow up actions as a result of the inspection.

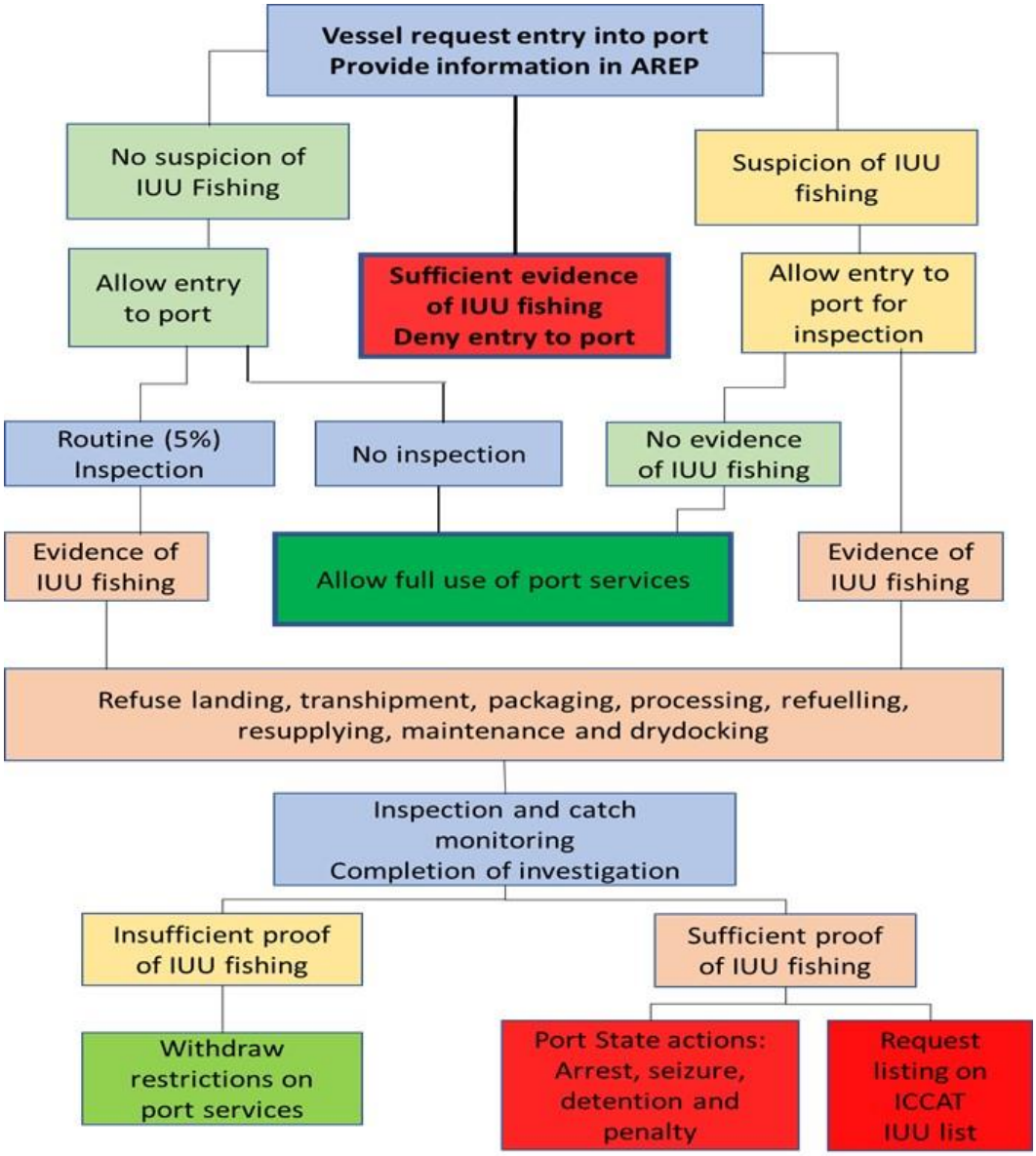


Figure 1 The Port State Measures Process - from the AREP to the port CPC decision and follow up actions.

3 The Advance Request for Entry into Port (AREP)

The AREP is one of the key instruments of PSM, and port inspectors should be familiar with its content and requirements. The main purpose of the AREP is to provide a port CPC with advanced information on a vessel so it can undertake a risk assessment on and make a decision to either deny port entry, for instance, when there is sufficient evidence that the vessel has engaged in IUU activities, or permit entry, such as if the evidence of IUU fishing does not exist or is insufficient. Once allowed entry, the port inspector must then decide whether to conduct an inspection. In cases, where a port CPC has sufficient evidence that a vessel has engaged in or supported IUU fishing and decides to allow the vessel to enter its port, this shall be for the exclusive purpose of inspecting the vessel and taking other appropriate action as provided under international law. For such vessels, the port CPC shall deny the use of its ports for landing, transhipping, packaging, processing, or for other port services including, *inter alia*, refuelling and resupplying, maintenance, and dry docking.

3.1 Elements of the AREP

The AREP is submitted either directly by a foreign vessel or through its agent in advance of the vessel coming to the port. The ICCAT AREP is provided in Annex 1 for reference, the minimum information that must be required by and provided in the AREP is: [8]

- Information to identify the vessel that incudes;
  - Vessel name;
  - Flag State;
  - ICCAT Record Number (if applicable);
  - IMO number (if applicable); and
  - International Radio Call Sign (IRCS)
- Name of designated port where it intends to seek entry, purpose of call and date and time of arrival in port
- Copy of the vessel's fishing authorisation issued by its flag CPC listing the ICCAT species that the vessel is permitted to target
- Copies of any other authorisations to fish that may have been issued to the vessel, for instance, by a coastal State, listing the authorised ICCAT species the vessel may target
- Copies of transhipment declarations listing the ICCAT species taken onboard

Additional information that must also be included in the AREP, which will assist the inspector for planning inspections are:

- List of ICCAT species the vessel has onboard including their associated catch area;
- The estimated quantities in kilograms of each ICCAT species and/or fish products originating from such species held on board, with associated catch areas; and
- The estimated quantities for each ICCAT species and/or fish products originating from such species in kilograms to be landed or transhipped, with associated catch areas.

[8] Recommendation 18-09 Paragraph 13 (a-f)

The template for the ICCAT AREP, containing the information above, is available on the Port Inspection section of the ICCAT website[9].

3.2 Risk Assessment

Analysing and verifying the information provided in the AREP by the port CPC is the first critical step in applying PSM. It is the key to making a decision regarding whether or not to allow a foreign fishing vessel or fishing related vessel to enter its ports as well as to decide on the level of inspection that may be required. It is important to note that the AREP is information submitted either directly by a foreign fishing vessel or through its agent in advance of the vessel coming into port. Port inspectors or other concerned fisheries authorities, in particular the Fisheries Monitoring Centre (FMC), should prepare a standard process to analyse each AREP taking into consideration the ICCAT PSMR requirements and the requirements for declared *force majeure* or distress [10]

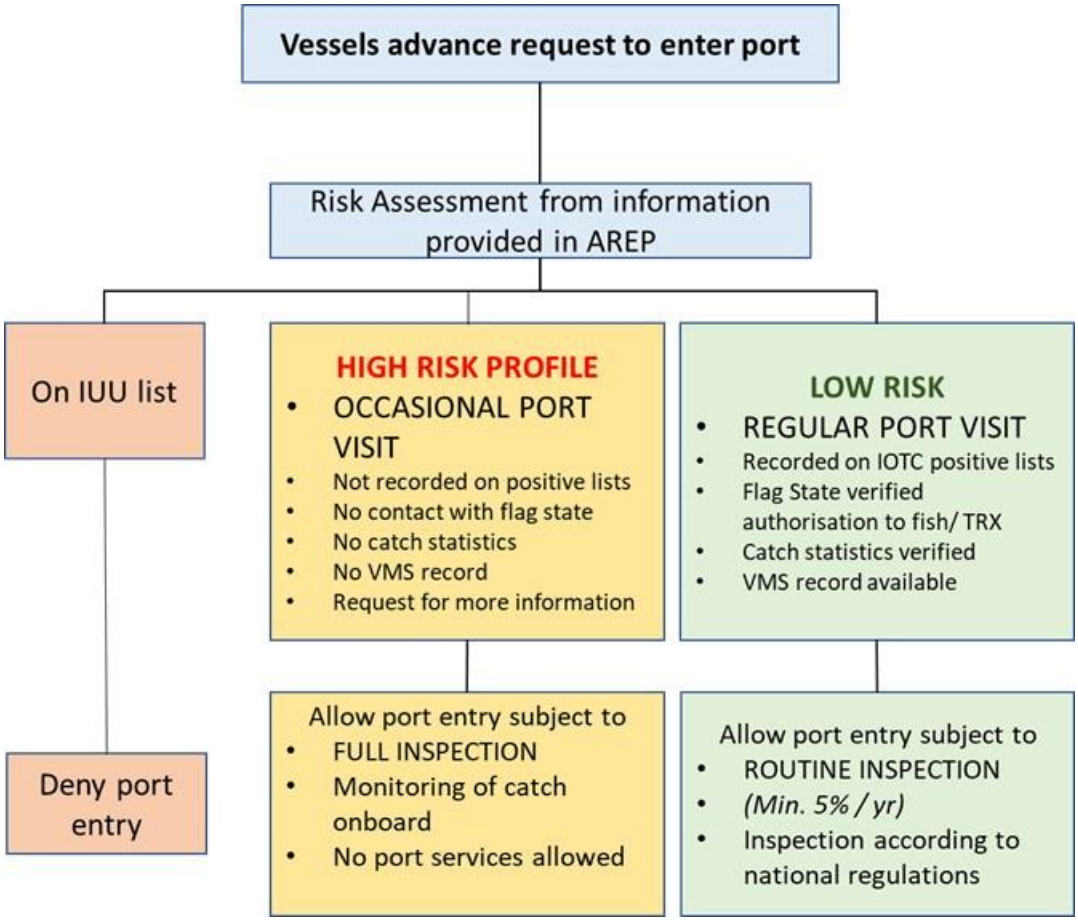


Figure 2 Risk Assessment process following an AREP submitted by a foreign fishing or fishing related vessel.

Risk Assessment process following an advanced request to enter a designated port of a CPC by a foreign fishing or fishing related vessel.

[9] https://www.iccat.int/en/portinspection.html
[10] Recommendation 18-09 paragraph 21

3.3 Required information and best practice procedures to check an AREP.

The SOPs for checking an AREP are given in Annex 4. Receipt of the AREP starts the risk assessment process by verifying the information provided in the AREP to determine the likelihood of the vessel having been engaged in or associated with IUU fishing. The risk analysis entails several processes:

- Cross checking the accuracy of the information provided in the AREP with the information provided on the ICCAT website and, as appropriate, other relevant information sources;
- Researching anomalies; and
- Responding to information provided from other port States/CPCs or RFMOs

In terms of the ICCAT PSMR, the first step in checking the AREP would be to determine if a foreign fishing vessel seeking entry to the port has engaged in IUU fishing or fishing related activities in support of such fishing, in which case, the vessel shall be denied entry into its port unless it is determined that entry should be allowed for the exclusive purpose of inspecting it and taking other appropriate actions in accordance with international law that are at least as effective as denial of port entry in preventing, deterring, and eliminating IUU fishing and fishing related activities. A decision to deny entry must be communicated to the master of the vessel or its representative. [11]

Direct evidence of a vessel's status with regard to IUU fishing can be determined from the ICCAT list of IUU vessels (i.e., "List of Vessels Presumed to Have Carried out IUU Fishing Activities in the ICCAT Convention Area and other areas" and by cross-referencing to see if the vessel appears on the IUU fishing vessel lists of other RFMOs[12]. The list of IUU vessels also needs to be checked for the previous names of vessels that is available from the vessel records [13].

3.4 Researching anomalies in the AREP

Information provided in the AREP should be verified, which includes cross-checking it with information on the ICCAT website and other relevant information sources. When reviewing the AREP, situations that may cause suspicion or require further investigation, include but are not limited to the following:

- vessel not included in the ICCAT list of authorised vessels or any other relevant RFMO authorized vessel lists;
- vessel is on ICCAT list of authorised vessels but has a record of IUU fishing
- recent or frequent name changes;
- recent or frequent flag changes;
- recent or frequent changes of ownership;
- efforts to communicate with the flag State/CPC not successful;
- VMS/AIS records not available on request;
- information on the last port call cannot be verified;
- authorisation(s) to tranship from or to another vessel not available; and
- declaration(s) to tranship from or to another vessel are not available or incomplete.

[11] Recommendation 18-09 paragraph 17
[12] https://www.iccat.int/en/IUUlist.html
[13] https://www.iccat.int/en/VesselsRecord.asp

- non-valid or missing information in the fishing? authorisation(s)

Each of these factors, or any other anomalies, should alert the inspector that the vessel may be higher priority for inspection. Note that incorrect information provided in the AREP or information that is purposely withheld is also fraudulent.

It is the responsibility of the inspector and their competent authorities to further analyse any information that is not clear or readily available.

The ICCAT Secretariat provides a series of resources that the inspector can access to assist in checking the information submitted on the AREP. These can either be accessed through the website or are available on request. They include *inter alia*:

- ICCAT Record of vessels;
- Observer and Inspection Programmes (which will include transhipment declarations and inspection reports);
- Catch / Statistical Document Programs;
- Bluefin tuna and bigeye tuna Monthly Catches;
- chartering reports;
- access agreements; and
- list of infringements and actions taken by port CPCs (password protected).

Inspectors can use the points of contact on the ICCAT website to request additional information about a vessel, such as authorisations to fish from its flag CPC or a coastal CPC. Extended research would also include accessing any available data from the ICCAT Joint Scheme of International Inspection and from previous inspections of the selected vessel. In the case of a transhipment vessel, this would include the history of any of the vessels with which it transhipped. To facilitate this, the inspector can request information from any of the relevant parties associated with the vessel to affirm the validity of the information it has received, such as copies of previous inspection reports and transhipment authorization and declarations. Analysis of the ICCAT records may also indicate that the vessel has previously been denied port entry by another port CPC.

A significant amount of the information on a vessel can also be checked online using publicly available search engines. For example:

IHS Fairplay
The IHS website requires registration but information on a vessel can be obtained using its IMO number,. This is a unique identifier for ships, registered ship owners and management companies. It is made of the three letters "IMO" followed by a seven-digit number. As the number is associated with the hull of the vessels at the time of construction and does not change with the change of ownership or vessel name or modifications it is one of the best ways of identifying a vessel. See http://www.imonumbers.lrfairplay.com or Email: data-audit@lrfairplay.com

Other sources on information include:[14]

Consolidated List of Authorised Vessels (CLAV).

[14] Taken from - Stop Illegal Fishing and Trygg Mat Tracking (2019) Document Verification Manual for Fisheries Enforcement: Vessel Identity Gaborone. Botswana

A global list of authorized tuna fishing vessels. Updated daily it represents a dynamic snapshot of the tuna RFMO authorized vessel lists. Individual RFMO websites should be consulted for their definitive lists as some inconsistencies have been reported. http://clav.iotc.org

The Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record).
A collaborative global initiative to make available certified data from State authorities about vessels and vessel- related activities. While these data are not in real time the do provide a recent history of the vessel up to around 24 hours before. Confirmation of recent position data should be made with the flag State if needed. http://www.fao.org/global-record/tool/%20extended-search/en

International Maritime Organization (IMO) Global Integrated Shipping Information System (GISIS).
Contains information on vessels including company contact details. https://gisis.imo.org

RFMO IUU vessel lists.
Links to the RFMO IUU listed vessels can be accessed from list maintained by the Food and Agriculture Organization (FAO). http://www.fao.org/global-record/%20information-system/rfb-iuu-vessels-lists/en

The Combined IUU list.
Maintained by Trygg Mat Tracking, provides up-to-date information on all vessels that appear on the lists of IUU fishing vessels published by RFMOs and fishing vessels that have been subject to an INTERPOL Purple Notice. Similarly to the CLAV, individual RFMO websites should be consulted for their definitive lists as some inconsistencies have been reported. https://iuu-vessels.org

Inspectors should be vigilant for any possible misrepresentation in the information provided, which includes spelling of the vessel name, and should cross-reference the vessel's name to its reported IRCS and IMO number. In this respect, the IMO number of a vessel (if available) provides a valuable tool to cross-reference previous names of a vessel as well as ownership of the vessel that may have associations with IUU activities.

Where a vessel cannot be positively identified with any IUU listed vessels, it should still be placed in a high risk category and subject to inspection if any discrepancy in the information provided in the AREP is found. A vessel may also be categorised as high risk if it is the first visit to the designated port.

In the event that all the information provided in an AREP is complete and can easily be verified as accurate and the vessel regularly accesses the designated port, it could be given a low risk status.

It is important for port CPCs to establish SOPs and criteria for assessing risk.

3.5 Responding to information provided from other CPCs or RFMOs

Port CPC inspectors should respond to information that has been provided to their competent authorities by other CPCs or an RFMO requesting the inspection of a specific vessel. In such

situations, the inspector may request evidence routinely or if the vessel has or is suspected to have engaged in IUU activities. Such evidence could include photographic evidence, previous inspection reports or reports indicating that the vessel was denied port entry or port services by another port CPC. Where a vessel was allowed port entry but was denied port services, the inspector can request, through their competent authorities, a copy of the inspection report from the port CPC that conducted the inspection.

Another key piece in information is the vessel's vessel monitoring system (VMS) and AIS data where this available and relevant. A number of key procedures should be followed when requesting and analysing these data. AIS data is readily available online from a number of portals, e.g., https://www.marinetraffic.com/, however, it does not have the same level of MCS security as VMS that is secure data that may only available when officially requested from a vessel's flag State, or competent authority of a coastal State, or RFMO managing VMS data.

Data requests should always be made officially to the flag CPC/State of the vessel concerned and any bilateral or multilateral (e.g., RFMO-based) agreements under which the request is being made should be provided. The reasons for the request should be made clear and the request should seek information for the period over which the data are required (e.g., over the last month) and confirmation of the reporting frequency (e.g., every two hours). It is important to stress that data confidentiality will be maintained and it will not be shared with any third party.

Once the data are received, there are a number of checks that should be undertaken by inspectors to ensure coverage and completeness, including:

- are data provided for the entire period requested?
- are the data provided complete (i.e., does it have the necessary number of position reports provided based on the reporting frequency)? As an indicator for this, a data completeness metric can be used (Number of reports received / Number of reports expected) expressed as a percentage.

Following this, the VMS positions can be analysed through producing a simple GIS plot of the data provided, using background layers of land, ports, territorial seas, exclusive economic zones, Marine Protected Areas (MPAs) and any other layers that may be relevant. Onto this mark any port visits and inspections that can be seen or are known.

Identify any potential gaps in data provision over two consecutive expected position reports. Indicators for this will include the duration of the time gap and distance travelled during time gap, noting any potential activity that may have occurred inside any identified areas (e.g., EEZs or MPAs).

Identify the distance travelled and time difference between each set of two adjacent points in the dataset provided and subsequently calculate the speed between each set of points. Any instances where the data has exceeded agreed levels of time or distance between adjacent points should be highlighted. This will depend upon the type of vessel but the agreed range may be anything less than 1 knot or anything greater than 14 knots.

Identify any areas where the vessel may have fished. Again, this will depend on the type of vessel (purse seine or longliner) and its fishing strategy, but activity that has taken place within an EEZ or an MPA should be checked to see if had the correct authorisation.
If suspicious activity has been identified, define the timeframe, area and suspected activity clearly in text and visibly using maps, charts of speed, frequency plots of reporting to present the case for potential IUU fishing and classifying the vessel as high risk.

3.6 Authorization or denial following a risk assessment

The inspection process is time consuming and depending on available staff and the number of AREPs received, it is unlikely that the authorities will be able to inspect all the vessels entering their designated ports. The risk assessment process is therefore essential to identify high risk vessels suspected of having engaged in IUU activities and focus the efforts of available manpower where they are likely to be most effective.

Risks can be assessed according to the likelihood that an infringement (for example, fishing without a valid authorisation) will occur and the potential consequence or damage that this infringement would cause (for example, depending on the biological stock status). This is illustrated by the risk matrix shown in Figure 3 below using five grades of risk and with the levels of risk identified by different colours. A risk thought unlikely to occur (low probability) and with minor impact if it occurs will score as a low (or green) risk. A risk considered as likely to occur and with a potentially major impact will score as an extreme (or red) risk

Ref. ISO 31000	**Consequence**				
Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	Moderate	High	Extreme	Extreme	Extreme
Likely	Moderate	High	High	Extreme	Extreme
Possible	Low	Moderate	High	Extreme	Extreme
Unlikely	Low	Low	Moderate	High	Extreme
Rare	Low	Low	Moderate	Moderate	High

Figure 3 Example of basic risk matrix using traffic light indicators[15].

As a result of the assessment, the potential target vessels that are available for inspection should be allocated a risk level (e.g., high, medium or low) and an informed decision should be taken on which vessel to inspect.

The process for identifying a target for inspection has been outlined in Figure 2 and the decision to inspect a vessel is determined by a number of factors that may be highlighted

[15] (adapted from ISO Standard 31000:2009 Risk management – Principles and guidelines)

during the risk analysis undertaken on the AREP. These are outlined in the ICCAT PSMR and priority for inspections should in particular be given to vessels that fall under the following categories, although other categories may also apply on a case by case basis:

- Vessel requesting access to the port for the first time,
- The vessel has not been controlled by the port competent authority in the last [3] months;
- The vessel is suspected of not implementing applicable ICCAT provisions on VMS;
- Information submitted in the AREP is incomplete or inaccurate;
- Analysis of the ICCAT records[16], password protected, or obtained on request from the Secretariat, indicates that the vessel has been denied port entry by another port State/CPC; and,
- Any other information obtained from any other source or inspection reports that have already been submitted to ICCAT or any other international/regional organisation such as Interpol, and other RFMOs or Regional Fisheries Bodies (RFBs), that clearly indicated a possibility that the vessel has engaged in IUU activities.

The decision to inspect a vessel may also be determined from information or a request received from another port State/CPC or RFMO[17].

In terms of the sovereignty of the port CPC and any of its domestic laws governing vessels entering its port, should none of the above criteria be relevant, the inspectors can still decide to inspect a vessel for any other reason they think necessary, in line with guidance received from their competent authorities.

In the event that a port CPC does not identify any foreign vessels requesting to enter their port that could be categorised as high risk in terms of the ICCAT PSMR there still remains the requirement of at least 5% of landings and transhipment operations within their designated ports to be inspected[18]. This may require randomly selecting some vessels for inspection.

Following the checking of the AREP and depending on evidence that the vessel has or may have engaged in IUU fishing activities, or there is a perceived risk that the vessel may have infringed any of the ICCAT Conservation and Management Measures (CMMs)'s. there is one of three decisions that must be made and communicated to the vessel: (1) Deny port entry, (2) Allow port entry for inspection only and deny port services; (3) Allow port entry and port services following the CPC's risk assessment procedures for prioritizing inspections.

1) High Risk - Denial of port entry

Where the information provided in the AREP, or subsequent research, provides sufficient proof that a vessel has engaged in IUU fishing activities, the port CPC should either a) deny the vessel access to the port[19] or b) the vessel may be allowed entry exclusively for the purpose of inspecting it and taking other appropriate actions in accordance with international

[16] https://www.iccat.int/en/portinspection.html
[17] Recommendation 18-09 Paragraph 30 d)
[18] Recommendation 18-09 paragraph 29
[19] Recommendation 18-09 paragraph 17

law. However, this decision is conditional if there is a request by the vessel for health and safety of the crew or a claim of *force majeur*e that may endanger the vessel and crew[20].

In the event that the port CPC decides to deny the entry of the vessel into its port, it must notify:

- the vessel or its representative;
- the flag State/CPC of the vessel;
- the ICCAT Secretariat for posting on the secure part of the ICCAT website; and as appropriate and to the extent possible;
    - relevant coastal States;
    - other regional fisheries management organizations or arrangements (RFMO/As); and
    - other inter-governmental organizations (IGOs).

2) High Risk - Allow port entry for inspection and deny port services, if appropriate after inspection

This category of decision covers two distinct situations, as follows:
(A) As noted above, when a vessel known to have engaged in IUU fishing is allowed to enter port, it shall be for the exclusive purpose of inspecting it and taking other appropriate actions in accordance with international law. In this case, the port CPC shall deny the use of all port services in a manner consistent with international law.

(B) Where there is not sufficient proof of IUU fishing to deny entry, but there is suspicion that the vessel may have participated in IUU fishing or otherwise infringed one or more ICCAT CMMs.
The vessel should also be denied any further port services following the inspection in the event that the inspection reveals or further evidence is obtained that the vessel

- does not have a valid and applicable authorization to engage in fishing and fishing related activities in the ICCAT Convention area;
- there is clear evidence that the fish on board was taken in contravention of ICCAT CMMs;
- the flag CPC does not confirm within a reasonable period of time, on the request of the port CPC, that the fish on board was taken in accordance with relevant ICCAT CMMs; or
- there are any other reasonable grounds to believe that the vessel may have engaged in IUU fishing, or fishing related activities in support of such fishing, in the ICCAT Convention area, including in support of a vessel included in ICCAT's *List of Vessels Presumed to have carried out IUU Fishing Activities in the ICCAT Convention Area and other areas*, unless the vessel can establish
    - that it was acting in a manner consistent with relevant ICCAT CMMs,
    - in the case of provision of personnel, fuel, gear and other supplies at sea to a vessel on ICCAT's IUU list, that the vessel being so provisioned was not included on the ICCAT IUU list at the time provisioning took place.

(3) Low Risk - Allow port entry and full port services applicable for routine inspection

[20] Recommendation 18-09 paragraph 21

Where the analysis of the AREP provides no evidence or suspicion that the vessel has been engaged in any IUU fishing or practices otherwise contrary to ICCAT CMMs, the vessel can be classified as “Low Risk” and be subjected to routine inspection in accordance with the requirement for a minimum of 5% of vessels to be fully inspected and monitored in the port of a CPC[21].

[21] Recommendation 18-09 paragraph 29

4 Vessel Inspection Process

4.1 Inspection Briefing

An inspection party is normally lead by a senior fisheries control officer and optimally should consist of at least four persons so that teams of a minimum of two inspectors can work together.
As part of the inspectors "Tool Kit" and to assist in preparation for the inspection, a detailed brief should be prepared for the inspection team. This briefing will assist in guiding inspectors to specific areas where there are likely to be discrepancies in the information that was provided in the AREP. Depending on the level of inspection required, i.e., full inspection including documents, gear and catch or routine inspection of documents and monitoring off-loaded catch, the briefing allows the inspection team to prepare their equipment and personal protective clothing (PPE) for the inspection of gear and for entering enclosed or sub-zero temperature compartments during the operation.

Items on pre-briefing meeting agenda

- venue date time;
- vessel name & nationality;
- port and berth;
- vessel type (fishing sector, support, carrier);
- results of the assessment of advance request of entry in port;
    - summary of investigation from the risk assessment;
    - noting specifically any information that should be verified and receive more attention in the inspection process;
    - assessment of transshipment declarations, *where these are available*;
    - assessment of VMS/AIS records, *where these are available*; and
    - list of vessel gear expected to be present on-board;
- inspector's authorisation or credential to undertake inspection
- boarding team roles and responsibilities;
- personal health and safety equipment and procedures;
- health and safety risk assessment according to the ISO 31000:2018 guidelines;
- document checklist;
- gear checklist; and
- reporting requirements

The importance of preparations prior to boarding a vessel in port cannot be over-emphasised. All subsequent activities during the inspection will depend on the thoroughness of these checks.

4.2 Inspection equipment

Inspectors should be equipped with the documents, identification guides and equipment necessary to record details of gear specification and measure gear. A checklist of the inspector's tool-kit for conducting an inspection on-board should include *inter alia*:

- fisheries inspector ID and/or badge;
- AREP documents;
- notebook;
- pens / markers;

- fish / product ID cards;
- calculator;
- digital camera;
- measuring equipment, net gauge, callipers and flexible tape;
- utility tool, “Leatherman” type;
- translation cards;
- mobile phone / radio;
- copies of licences and appropriate regulations;
- inspection forms / enforcement action report;
- torch;
- protective clothing and gloves;
- defensive gear in accordance with national law;
- DNA sampling kit, “Ziplock “type sealable bags and waterproof labels; and
- seizure / evidence preservation materials

Document checklist list to accompany the inspection should include:

- summary of investigation from the risk assessment, noting specifically any information that should be verified in detail;
- the vessel’s details and details of the master and fishing master;
- copy of the port CPC mandate authorising the inspection, referencing the relevant ICCAT Recommendations and the country’s legislation;
- copy of notification to fishing vessel following a request to enter port
- list of gear to be present on-board;
- list of the product codes and weight of the target and by-catch species that the vessel declared on-board;
- translation tables, if available;
- blank copies of the inspection reporting forms;
- notebooks for recording additional information;
- details of observer aboard, if available; and
- tables and formulas for calculating volumetric measurements of fish holds.

4.3 Health and Safety

When boarding vessels alongside the dock or in the vicinity of the port, inspectors must be well prepared and anticipate unexpected occurrences. The primary objective of health and safety training is to ensure that inspectors are equipped with the necessary skills and awareness to safely perform their duties. The training aims to cultivate an attitude and commitment to safe working practices that will lead to a heightened awareness of safety issues and thus reduce the risk of accidents and injury while on-board a vessel and during inspections.

Health and Safety on-board is the responsibility of everyone, not only for personal safety but also for the safety of others and the vessel.

The health and safety aspect is an essential part of a pre-inspection briefing so that everyone in the inspection team is fully aware of their responsibilities. Noting that the inspection should also not pose a risk to the vessel and crew. A recommended checklist for both pre and post boarding is given in Annex 2.

4.4 Communication and agent responsibility

The leader of the inspection team should have a means of communication (mobile phone or radio) to be able to communicate with their office, where possible. During the inspection process this will allow for queries on documentation, vessel track information or to get advice on any aspect that may not have been covered in the pre-briefing or analysis of the AREP. Prior communications with the vessel will, in most cases, be through the vessel's agent. While utilizing an official interpreter is preferred, the agent can assist with translations, noting that the agent most likely has direct links with the vessel operator and / or owners. The arrangements to undertake the inspection in the presence of the agent can facilitate communications and the inspection process. Where there is no one to assist with translation, "translation cards" are recommended to assist in communicating requests for the documentation and communicating the inspection process of gear and catch. This may slow down the process and inspectors need to maintain a strict protocol of being both firm and patient, especially when dealing with a vessel that is undertaking its first port visit.

4.5 Ethics

Inspectors are expected to comply to the standard code of ethics and code of conduct inherent in their role. These include

- integrity
- impartiality
- accountability; and,
- respect.

4.6 Uniforms

Appearance and uniform dress are important aspects when inspecting a vessel. A uniform represents the authority that is necessary for the importance of the inspection process. Inspectors, through the Fisheries Management authority, also represent their State on the vessel. However, the practicalities of moving around on the vessel also must be considered. It is conceivable that an inspection team of several persons could be dressed differently. The lead of the inspection team, in a formal uniform to undertake the introductions and document inspection, with assisting members dressed in apparel that will be more suitable for moving around on the vessel to inspect gear. Inspection of refrigerated holds will also require suitable protective clothing.

In all aspects the dress should consider health and safety standards and the requirement to wear safety boots, hard hats, and reflective jackets. Thin working gloves are usefully to both protect the hands from sharp objects and have the added advantage of keeping your hands clean when inspecting and handling gear on-board.

4.7 Port Inspection Report Form – CP28

The port inspection report form complements the AREP form and will guide the inspector through the inspection procedure, both pre and post boarding. It is available on the Port Inspection Scheme area of the ICCAT site (https://www.iccat.int/en/portinspection.html). Section 4.9 will outline in detail how to complete the various fields in the form and what to do with the form once it has been completed and infringements have or have not been detected.

4.8 Vessel photographs prior to boarding.

A detailed inventory of digital pictures of vessels is a valuable tool to positively identify vessels and mitigate against IUU vessels changing names and registration numbers. They will help with completing the port inspection report form, fields 1 to 6 and 8 to 9. Where a vessel has not been previously inspected pictures of the vessel can often be downloaded from the internet using the vessels IMO number as a search cue. These often assist in identifying the vessel in the harbour.
Regardless, when arriving on the dock, one of the first actions of the inspection team is to take a comprehensive series of photographs of the vessel. These should focus on:

- the physical structure of the vessel;
- vessel markings;
    - superstructure showing IRCS, licence number and IMO number;
    - stern markings, vessel name and port;
    - bow markings;
- relative position of the bridge;
- gangway and vessel rails; and
- aerial arrays above the bridge and any flags hoisted.

Detailed pictures of the hull showing physical damage, such as dents or weld marks are unique features that can be used to positively identify a vessel even after modifications and painting. A photographic record should be set up and maintained of all vessels calling into the port and where necessary these can be shared with other port States/CPCs. For further guidelines on taking photographs and vessel identification please see the accompanying document “Photo Manual for Fisheries Enforcement” available to download[22] or on the on-line resources.

4.9 On board inspection of fishing vessels

Interagency cooperation between the various national institutions is essential for the effective implementation of Port State Measures and no port authority or other agency should be permitted to authorise the vessel port services until after it has been cleared by the Fisheries Authority in writing.

The Fisheries Authority should therefore be part of the first boarding team (with Customs, Immigration, etc.), and should be contacted and present prior to docking of the vessel.

[22] Stop Illegal Fishing and Trygg Mat Tracking (2017) Photo Manual for Fisheries Enforcement https://docs.wixstatic.com/ugd/1ae030_1356b1099c03416fa2eed4e872b29cd9.pdf

In the event that the risk assessment requires a vessel to be inspected prior to it been granted any port services this must be clearly communicated to all other port agencies.

4.9.1 Port CPC Inspection Procedure

Following the receipt of the AREP and the decision to allow a foreign fishing vessel into port the next component in implementing the PSMR is the on-board inspection. The essential components of this section of the PSMR require that:

- inspections shall be carried out by properly qualified inspectors of a competent authority of the port CPC[23]; and,
- port CPCs shall inspect at least 5% of landing and transhipment operations in their designated ports as are made by foreign fishing vessels[24].

These inspections are required to monitor the entire discharge or transhipment and include a cross-check between the quantities by species landed or transhipped with those recorded in the AREP.

This information should also be cross checked with the information from the ICCAT Observer on the carrier vessel whenever possible. When the landing or transhipment is completed, the inspector shall verify and note the quantities by species of fish remaining on board.

The Recommendation requires that the inspection process should conform to minimum standards when being conducted, outlined below:

- inspectors shall carry a document of identity issued by the port CPC and are required to present to the master of the vessel an appropriate document identifying themselves;
- inspections should examine all relevant areas of the vessel, the fish on board, the nets and any other gear, equipment, and any document or record on board that is relevant to verifying compliance with relevant CMMs;
- the master of the vessel, flagged to an ICCAT CPC, is required to give inspectors all necessary assistance and information, and to present relevant material and documents as may be required, or certified copies thereof;
- if appropriate, invite the flag State/CPC of the vessel to participate in the inspection; [25]
- if appropriate invite inspectors of other CPCs to accompany their own inspectors and observe the inspection of landings or transhipment operations of fishery resources caught by fishing vessels flying the flag of another CPC.
- facilitate communication with the master or senior crew members of the vessel, including where possible and where needed that the inspector is accompanied by an interpreter;
- ensure that inspections are conducted in a fair, transparent and non-discriminatory manner and do not constitute harassment of any vessel;
- make allowance for the master to communicate with the authorities of the flag State in conformity with international law.

[23] Recommendation.18-09 paragraph 28
[24] Recommendation 18-09 paragraph 29
[25] Recommendation 18-09 paragraph 41

- inspections shall be carried out in such a way that the fishing vessel suffers the minimum interference and inconvenience, and that degradation of the quality of the catch is avoided, to the extent practicable.

The requirements of the inspection procedures are covered under the PSMR. The SOPs for inspections proposed are provided as a guide in the Annexes and should be developed, utilised, and modified by port CPC inspection teams to suit the situation at the time of inspection or the conditions on-board. The content is divided into three main sections:

- bridge inspection of documentation;
- inspection of vessel, gear, hold and compartments; and
- the monitoring of off-loading and transhipments.

The first introduction to the vessel's personnel and the protocols followed are particularly important in preparing for the full inspection process. They highlight the importance and significance of the inspection to follow. When first boarding, if not met by an officer or the agent on the quay, remain either on the quay side or next to the boarding ramp and wait for a vessel representative to lead you onboard and directly to the bridge. Introductions and presentation of identification documents should follow irrespective of whether the vessel has been boarded before or the personnel are known. This can have implications should a judicial process follow from any infractions discovered and reported after the inspection.

Countries' customs vary with respect to shaking hands and initial address. A cue can be taken from the approach of the vessel personnel and on some oriental vessels a polite bow may be the most appropriate. Providing the names and identity of the inspection team should follow the greeting by presentation of official identification cards. As soon as possible ascertain the rank of the officers or crew meeting the team and address them by their rank.

Request a suitable place to work on-board to analyse documents. Larger carrier vessels have a 'day-room' for the master that serves as an office and is ideal. Considering limited space on fishing vessels a suitable workspace could be the chart table, radio room or a convenient space on the bridge.

4.9.2 On-board Inspection and compiling the Inspection Report.

Fisheries inspectors must always conduct themselves in a courteous, polite, and professional manner with all members of the crew, keeping in mind that while you are a fishery inspector, you are also a representative of the fisheries authority and in the case of a foreign vessel, a representative of your country. It is important to avoid personal involvement in discussions with persons on-board the vessel and to avoid expressing an opinion on fisheries regulations, procedures and policies. These can undermine the authority of the inspection team and, hence, the effectiveness of the inspection process.

It is a common occurrence for the master of foreign vessels to offer some type of gift to officials when boarding their vessels. This often involves the offer of drinks, including alcoholic beverages. Refusal of these can be perceived as an insult in some cases. CPCs should have clear procedures in place on how to deal with these occurrences in accordance with their particular customs and culture.
The procedure for carrying out a port inspection of a fishing vessel comprises several key elements that never change, but the responses of the master to the facts as they are uncovered

on-board can lead to different situations and follow-up procedures. Language cards should be developed that will carry all the main constituents of an inspection and may be used for reference, but the inspector on-board the fishing vessel will have to exercise sound professional judgement in many cases where situations are not catered for and that may require a call for a professional interpreter.

Detailed SOPs for on board inspections are given in Annex 5 and provide a description of the operational steps to be followed in undertaking a vessel inspection. For every step, a link is made to the field of the inspection report (CP28, Annex 3). The actions for each step should be completed in a formal process and undertaken even if familiar with the vessel.

It may also be necessary to inspect support vessels, which include those vessels that set and recover FADs in the purse seine fishery, and they may not have catch or fishing gear on-board. Inspections for these vessels may focus more on licence details, the vessel's navigation and communication logbooks and any other documentation that provides insight to the vessel's activities. Inspectors should also check the vessels it is associated with to establish if they are on the RFMO authorized or IUU lists.

Following the inspection, and where no offence has been detected, the port State/CPC can authorise all other port agencies that the vessel may offload the catch and use port facilities. The chief inspector can inform its national authorities to grant offloading authorisation to the fishing vessel and make the necessary arrangement with the master to monitor the offloading of the catch.

5 Monitoring offloading and transhipments in port

The monitoring of the off-loading or transhipping of the catch is the third step in implementing PSM and forms an essential part of the inspection and verifying information that has been provided in the AREP. The process and means to monitor offloading are also in many respect dependants on the type of vessel being offloaded or from which fish are being transhipped.

SOPs for monitoring offloading and transhipments in port are given in Annex 6, Annex 7 and Annex 8. The monitoring of the off-loading of the catch to containers or a shore-side facility can take time and may require a dedicated team of personnel to work independently and report back to the inspection team. The process includes:

- inspecting fish storage holds; and
- identifying fish, weights, lengths and products to see if they conform to catch and product weights declared.

The checks conducted on the AREP will have determined whether a vessel may enter port. The risk assessment process sets up the process for targeting the inspection and monitoring the catch being offloaded against catch declarations and the species composition reported in the vessel's logbook, transhipment declarations and other catch information provided in the AREP. This may be if the vessel has been identified as high risk or it may be due to the requirement of a port CPC to fully inspect and monitor the landings or transhipments of at least 5% of all foreign fishing vessels and fishing related vessels entering their designated ports each year[26].

Inspections of fish wells on a purse seiner or refrigerated holds on longline and carrier vessels are difficult to undertake for practical reasons, and highly unlikely to provide accurate information on the weight and species of the fish on-board. Therefore, monitoring the whole offloading or transhipment process is an essential component of the inspection team's tasks. After the vessel has offloaded its catch, the holds and storage wells should be inspected to record any remaining fish on-board.

Knowledge of the products and procedures used to offload or tranship the catch from different types of vessels and the methods used to sample and verify the weight and species composition is important and allows inspectors to plan ahead and successfully monitor these operations.

Information from the offloading operation is captured in the inspection report (fields 30 and 31) and compared to the information reported in the AREP. If, at this stage, there is any evidence that the vessel has been misreporting it will be denied further port services.

Essentially, offloading to a shore facility or transhipment to another vessel requires similar monitoring procedures. The main difference is that discharge to a shore facility is likely to provide further opportunity to record species composition and weight of the catch offloaded. Monitoring transhipment provides less opportunity to weigh fish but does provide means to verify the numbers of fish and identify species thereby highlighting any substantial level of misreporting in logbooks or transhipment declarations.

[26] Recommendation 18-09 paragraph 29

Offloading can take several hours or several days. It is, therefore, a process that requires thorough planning to be optimally monitored.

5.1 Sampling forms

Due to the variability and time taken to complete transhipments, detailed data recording forms are required to capture the variety of information collected during the task. The information recorded is then summed up to produce a collective summary of the quantities and species transhipped that can be used to verify the declared information provided in the AREP and transhipment declarations.

The detailed recording form should provide the freedom to record various levels of information allowing for variations in transhipment methods during a single operation. Offloading forms can be divided into four sections:

- generic vessel details;
- detailed observation information;
- statistical information on:
    - observed times;
    - species weights and product codes;
    - hoist information; and
- summary of total catch.

5.2 Preparation and follow up planning.

Similar to the preparation for inspection, advanced planning and preparation of documents and equipment are an essential component for successful monitoring of landing operations.

A detailed check list of equipment (see also 4.2 above) should include:

- Documentation;
    - cargo manifest / hold plan / well plan;
    - catch and product logs;
    - details of species, product and weights to be offloaded;
    - summary of product to be offloaded;
    - destination (factory / cold store / carrier vessel) of product to be offloaded;
    - template of inspection report;
- equipment;
    - clipboard;
    - scales (platform and/or hanging scale);
    - measuring tape for hold or compartment measurements;
    - callipers for fish measurements and Vernier callipers for gear measurements
    - torch;
    - camera;
- protective clothing;
    - eye protection;
    - hard hat;
    - reflective jacket;
    - safety boots;

- gloves; and
- freezer suit.

As outlined in Section 3.1, the AREP requires the vessel to provide information on quantities and species composition of the fish onboard. In addition, after entering port and prior to the vessel commencing with offloading inspectors should be given a copy of the manifest of product to be offloaded. This will also be required by the port authorities and stevedores manning the operation.

To further assist with monitoring, the inspectors should obtain all documentation related to the catch recorded on-board that includes *inter alia*:

- vessel catch and refrigeration logbooks from longline vessels;
- well loading form from purse seine vessels;
- fish carrier-cargo manifest form; and,
- statistical documents for swordfish (SWO), bigeye tuna (BET) and catch documents for bluefin tuna (BFT).

Details on the species, product and quantities in freezer holds and fish wells will assist in planning sampling strategies during the operation.

5.3 General Monitoring of landing operations

Several key positions can be manned to monitor offloading, these are:

- in the fish hold where strings of fish are made up or cargo nets are packed;
- on the deck on a longliner where fish are hoisted out of the hold or where fish are emptied from storage wells on a purse seiner; or
- onshore where the fish are unloaded and packed into a container or cold storage facilities.

Monitoring positions need to provide a clear view of the product being offloaded, facilitate counting the number of units and determine weights and species composition. For both transhipment and offloading to shore, inspectors need to station themselves where they can monitor the fish being hoisted out of the hold and for the maximum period that hoists are visible in the air.

The products being offloaded to a shore facility are often weighed and repacked. Monitoring this area, where the hoist is put down and fish are emptied out of the cargo net provides a controlled environment where the fish can be counted, identified and weighed. A summary of information to be recorded when offloading is given in Table 2.

Table 2 Summary of information collected from monitoring off-loading or transhipment captured on the inspection report

Data to be recorded	Details
Species	The fish offloaded will have to be monitored and where necessary sampled to verify the number and weight of each species. The species should be identified to the lowest scientific level possible and should be recorded using the ASFIS 3-alpha codes (known as FAO species codes). For example: *YFT* for yellowfin tuna (*Thunnus albacares).* See Annex 9 for the full list.
Product form	The product form of each species offloaded should be recorded, either processed or not (e.g., skinless, boneless fillets frozen; head off, split salted; whole refrigerated in seawater). The processing codes for different species are provided in the species identification guide.
Catch Area(s)	Inspectors should obtain from the vessel records of the relevant geographical/statistical area where the catch being offloaded was taken. Reference the statistical codes or geographical coordinated used to report catch in the logbook and verify this against the VMS records.
Quantities declared	The vessel has to declare the quantities of fish (by species) that it has onboard and the quantities that will be offloaded. This information should be provided to the inspector prior to any product being offloaded and should be entered onto the inspection report.
Quantities offloaded	The inspectors should report the quantity (by species) that they record being offloaded.
Difference between quantity declared and quantity offloaded	The inspectors should determine the difference between the declared quantities to be offloaded and the quantities that they record being offloaded. *For example:* *YFT declared to be offloaded: 65 tonnes.* *YFT recorded by the inspectors offloaded: 80 tonnes* *Difference is (80 – 65) equals 15 tonnes more than the declared quantities offloaded.*
Catch retained on-board (quantities)	The fish retained onboard after offloading should be listed by species, weight and product form.

The main vessel types that inspectors are likely to monitor include:

- LSPLVs;
- tuna purse seine vessels; and
- carrier vessels.

Although for most vessels the procedures are similar, there are differences that need to be noted, for example when calculating species composition and quantities. The following sections run through the procedures for each vessel for each of the three vessel types, summary SOPs are given in Annex 6, Annex 7 and Annex 8.

5.4 Offloading from LSPLVs to shore or transhipping to a carrier vessel

LSPLVs and smaller transport vessels with fish or processed products often tranship all or part of their catch in port to larger carrier vessels. The procedures and preparation for monitoring transhipments from one vessel to another is essentially the same as for offloading to a factory or cold store ashore.

LSPLVs target larger tuna and swordfish which are processed immediately after being caught and individually deep frozen. The normal procedure is to blast freeze them first, down to -60°C and then store them refrigerated at around -45°C. They are kept at this low temperature so they keep their quality and commercial value and it is important to bear this in mind when monitoring the offloading. Prior to freezing a short rope loop is threaded through the tail to facilitate slinging frozen fish together for offloading in its frozen state.

The fish holds on longliners are packed as the fish are caught and a single hold is likely to contain a mix of fish species and a range of different sizes. This will be reflected during the offloading or transhipment.

5.4.1 Monitoring positions

Inspectors should request a manifest of the number and species of fish in the hold. Analysis of the number of fish and total weight per species will provide an estimate of the average weight of the fish. Monitoring strings of individual fish provides the opportunity to count the number of fish being offloaded and species or groups of like species and products can be identified.

Depending on the size of the longline vessel and the product, there are three main methods to offload:

1. Direct transfer: when fish in *'strings of individual fish units'* are taken from the holds of the fishing vessel using dockside or carrier crane (Figure 4).

2. Indirect method: using a cargo net which is packed on-board the fishing vessel (Figure 5).

3. Indirect transfer: where *'strings of individual fish units'* are first hoisted from fish hold using the fishing vessels gear and then combined into a larger string on the vessel's deck to be hoisted off the vessel using a crane ashore or on the carrier vessel (Figure 6). They can be identified and counted while of deck. On smaller longliners the fish are passed over a "slide" and packed into containers ashore.

Vessels with large hatch openings are most likely to hoist directly from their hold to the quayside or a carrier vessel. This is a rapid process that does not provide much opportunity to monitor the number and weight or species of the fish being offloaded.

On vessels where hatches are too small for a direct hoist, fish are first hoisted in small batches onto the deck using the vessel's own equipment. This provides a good opportunity to count the number of fish and record species. A number of these batches are then combined onto a larger string for transfer to shore, using the dockside crane, or transhipped to a carrier vessel.

Longline vessels may split their catch for offloading. Larger tuna, processed swordfish and by-catch such as marlin and shark trunks are offloaded ashore or transhipped in strings of individual units to a carrier vessel. Following this, the small tuna and by-catch species are offloaded using a cargo net.

It is more difficult to count and identify fish accurately in the cargo net during a hoist. The inspectors will need to monitor positions either where the net is packed on the fishing vessel, keeping in mind that this may be in the hold of the vessel, or monitor the cargo net being set down ashore, where it can be weighed and unpacked from the net.

Transhipment operations provide fewer opportunities to count and identify species. Inspectors monitoring transhipments should select a position where they can observe the fish being hoisted out of the fishing vessel hold and where the strings of fish are visible in the air for the maximum amount of time. In the time the fish are visible, an accurate estimate of the number of fish as well as the species composition should be determined. Due to the processing method and fish being partially obscured in the hoist, it may not be possible to accurately identify species. In these instances, an aggregation of two or more species may be recorded. (for example; yellow fin and bigeye combined).

The larger LSPLVs with high value sashimi grade fish will prefer a direct transfer of fish from the hold of the fishing vessel to the hold of the carrier vessel. This can be a rapid process with individual strings being visible for less than a minute and often the fish are obscured by a mist that surrounds the hoist.

Figure 4 Direct offloading.

Figure 5 Fish being offloaded using a cargo net

Figure 6 Fish being aggregated on deck.

5.4.2 Sampling procedures to determine average weight of the fish

Three basic methods can be used to estimate the weight of fish being offloaded or transhipped from a vessel:

1. use an independent means of weighing that can include a hook-scale (Figure 7) attached to the crane hook to record the total weight of a hoist or have a platform scale or drive-on scale ashore where the entire catch offloaded or transhipped is weighed. It should be noted that according to the port CPC's national legislation, these scales may have to be certified;

2. randomly select and weigh samples of individual fish from different species and size categories and raise the number of units counted by the average weights; or

3. use the declared weights and numbers provided by the vessels to calculate an average unit weight per species and raise the number of units counted by these average weights.

The independent assessment and level of accuracy when determining offloaded or transhipped weights will be dependent on the method used. Weights recorded independently by the inspector using a hook scale or weighing selected samples of the fish will be preferable

to using only information provided by the vessel. However, there are clear advantages and disadvantages as well as practical implications for using each of these methods.

A hook scale works well in stable condition in port and most carrier vessels use these for their own records. A disadvantage is that if species are mixed then the average weight for a particular species cannot be calculated. However, it is often possible to get accurate weights for like species and, in the event of a single species strings, an average weight for that species will be obtained. With cooperation from the vessel individual fish can also be weighed on a hook scale.

Sampling individual fish randomly on a species level has the advantage of providing an average size for each of the species. Implemented randomly throughout the offloading or transhipment process, it can also be adapted to accommodate variability in different size classes of a species and calculate the estimated weight per species.

The main disadvantage of this method is the difficulty of weighing large fish (over 50kg), which can be hazardous to handle in their frozen condition. Due regard should also be given to the deterioration of a high value product exposed to high temperatures for any prolonged time.

Figure 7 Bluetooth hook scale.

Using the numbers and weights declared by the fishing vessel has practical implications as it requires the least handling of fish but does not provide a totally independent estimate of weights offloaded or transhipped. It will provide a useful guide to inspectors and together with accurate counts of units transhipped it will highlight any significant discrepancies in declared quantities.

5.4.3 Comparison of product weights.

On a longline vessel the total weight of whole unprocessed fish caught and recorded in the vessel's logbook will not necessarily correspond to the processed weight of fish off-loaded or transhipped. It may be necessary to apply a conversion factor to raise the recorded product weight to compare to the whole unprocessed weights recorded in the vessel's logbook data. Conversion factors convert the processed weight of the fish back to the unprocessed, live or green weight. They will vary according to species, processing method and area caught, the following tables provide a generic set of conversion factors for the most common species likely to be encountered in off-loading or transhipments.

Table 3 ICCAT product types and codes[27].

Codes	Product	Product type description
LW	Live weight	The whole weight of an individual fish before it is processed.
NR	Number	Number of fish
GG	Gilled and gutted	Rounded weight (fins may be off, though trunk not dressed/processed at all; whole)
RD	Rounded weight	Fins may be off, though trunk not dressed/processed at all; whole.
FL	Filleted	Fish fillets
DR	Dressed weight	Dressed weight (gilled, gutted, part or all of head off, fins off)
BM	Belly meat	Dressed carcasses with head and fins off, and caudal peduncles present.
OT	Other	Any other product, such as tuna roe, highly processed tuna products.

Table 4 Common Conversion Factors (target species)

Conversion factors and processing code for target species			
Species	Common name	Processing	Conversion Factor
YFT	Yellowfin tuna	GG	1.09
		DW	1.43
BET	Bigeye tuna	GG	1.09
		DW	1.43
ALB	Albacore [longfin tuna]	GG	1.10
SKJ	Skipjack tuna	GG	1.09

Table 5 Common Conversion Factors (shark species)

Conversion factors and processing code for shark species			
Species	Common name	Processing	Conversion Factor
BSH	Blue shark	DR	1.33
		GG	1.13
BTS	Bigeye Thresher shark	GG	1.13
FAL	Silky shark (black shark)	DR	1.33
		GG	1.13
MSK	Mackerel sharks, Porbeagles, White sharks	DR (HDD)*	1.33
		DR (PDD)**	1.55
		GG	1.13
		DR	1.33
SPY	Hammerhead sharks	DR	1.33
THR	Thresher sharks nei	DR	1.33

[27] Taken from the ICCAT data code system - https://www.iccat.int/en/stat_codes.html

TIG	Tiger shark	DR	1.33

* Dressed carcasses with head and fins off, and caudal peduncles present.
** Dressed carcasses with head and fins off, and caudal peduncles removed.

Table 6 Common Conversion Factors (by-catch species)

Conversion factors and processing code for by-catch species			
Species	Common name	Processing	Raising Factor
BIL	Billfish	GG	1.33
BUM	Atlantic Blue Marlin	GG	1.13
SFA	Sailfish	DR	1.33
		GG	1.13
OIL	Oilfish	DR	1.33
		GG	1.13
DOP	Shortnose spurdog	DR	1.33
SSP	Shortbill spearfish	DR	1.43
SWO	Swordfish	DR	1.33
		GG	1.18
WAH	Wahoo	DR	1.33
		GG	1.13

An example of using conversion factors to convert the weighed offloaded weight of product to the live weight is given in Table 7.

Table 7 Example of raising observed weights offloaded to whole round weights.

Common Name	Total weight offloaded	Processing Code	Raising Factor	Calculated live weight
Albacore	13227	GG	1.09	14418
Big eye tuna	60533	GG	1.09	65981
Swordfish	2805	DR	1.33	3731
Blue shark	5250	DR	1.33	6983
Mako sharks	1325	DR	1.43	1895
Totals	***83140***			***93008***

5.5 Offloading from purse seine vessels

Fish caught by purse seine vessels are unlikely to be processed and the main target species and commercial valued by-catch are usually brine frozen in their whole state. At the time of brailing fish may be sorted into size and species classes for brine freezing to meet the market or factory requirements. It is therefore likely that juvenile yellowfin, bigeye and longfin (less than 10kg) will be mixed together with skipjack tuna of the same size. Larger yellowfin tuna and bigeye tuna may be separated and frozen or both species of similar size frozen together (Figure 8 A).

On industrialized purse seiners, the tunas are preserved in wells of 20 to 40 metric tonnes each, (total 800 to 2 000 metric tonnes per vessel) with brine freezing at -20 °C. On smaller artisanal purse seiners, tuna may be unfrozen and kept in iced seawater.

Prior to offloading, inspectors should request a "well loading plan" with the details of the catch in each well (Figure 8 B). This will assist in planning their sampling of the fish as wells are emptied.

The placement of the catch in the storage wells below deck should correspond to specific well numbers. Note each well has a designated number preceded with the letter S or P depending on the location on the starboard or port side. Example "P6" would be well No. 6 on the port side.

The recording of the well loading sequence by the inspectors is important for identifying fish species and sizes while offloading or transhipping. The inspector should consult both the fishing master and the chief engineer to obtain this information before they start the operations.

A) B)

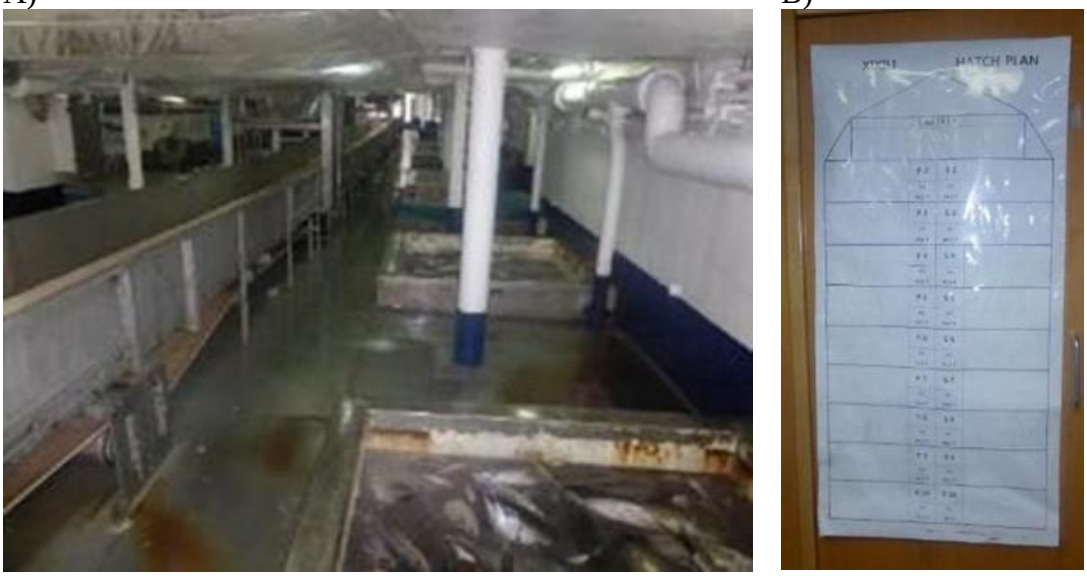


Figure 8 Fish hold and wells on a purse seine vessel (A) and hatch plan (B)

5.5.1 Monitoring positions

The discharge process on a purse seine entails emptying storage wells onto a conveyer that moves the fish to a cargo net to be hoisted ashore or over to a carrier vessel. The fish are often sorted into their species and weight categories again at this stage.
To record the species and weight being discharged inspectors should position themselves in a location where they can observe the fish being discharged directly from the fish wells or being loaded into cargo nets before being hoisted off the vessel.
The monitoring positions should provide a clear view of the fish and allow the following information to be recorded:

- Subsampling fish for lengths
- Subsampling fish to determine an average unit weight.

Figure 9 shows an example of an operating console which controls a winch and boom. As it hoists fish from the hold an electronic hook scale sends readings to a monitor via Bluetooth and can easily be monitored. Figure 10 shows examples of monitoring offloading from a purse seiner.

Figure 9 Operating console.

Figure 10 Monitoring tuna offloading on a purse seiner.

5.5.2 Sampling procedures to determine average weight of the fish

An independent verification of the weigh and species composition of the catch offloaded or transhipped is one of the main objectives of the inspection team. Several processes can be followed to obtain these objectives:

- estimating volume of fish in cubic meters in the fish wells;
- counting the number of fish offloaded and raising this by an average fish weight; or
- recording the weight of each hoist.

On most industrial purse seine vessels, the fish are either accurately weighed with each hoist of fish or if the fish are offloaded to a factory ashore the fish are accurately weighed before entering the factory. Inspectors can monitor the positions form where these weights are recorded.

Where this is not possible or practical the well plan should provide details of the volume of each well and the well loading plan should also give details of the species and size class of fish in each well.

Fish emptied out of a well normally pass on a conveyor belt to where they are packed into a cargo net, for hoisting ashore or over to a receiving vessel. The number of fish can be monitored by counting all the fish as they pass on the belt for the entire offloading period. However, on a large purse seine vessel off-loading may take place simultaneously from fore and aft hatches and two teams of inspectors will be required to monitor this.

Figure 11 Recording of weights of each hoisted cargo net offloaded

To obtain an average weigh of the fish from a well, select every n^{th} fish off the belt, record the individual weights using a spring or platform scale (the length of the fish can also be measured at this stage). This process should be repeated several times, especially if there is a noticeable change in size.

Calculate the total weight of the sample by adding all the weights of the fish sampled from the well. The total weight is then dividing by the number of fish sampled to obtain an average weigh per fish for that specific well.

5.5.3 Determining the species composition on the conveyor

The species composition being offloaded or transhipped needs to be verified to crosscheck with the vessels reported catch. Note: the species and size of fish caught is often determined by each fishing event and this should be recorded in the vessels fishing log. However, it is possible that the fish are placed into different wells according to size and species.
To monitor the species composition the inspector will have to sub-sample continuously throughout the off-loading period. In some situations, the fish are sorted into their different species or more commonly into size categories, before being offloaded. This is to accommodate larger fish destined for one market and smaller fish to another. Often in these

situations, one class is loaded into containers while the other may go to a processing facility ashore.

Sub-sampling these size categories can provide some breakdown of the species composition. Alternatively, sub-samples of all the fish being offloaded can provide an estimated ratio of the different the species. This can be done by recording the species for a predetermined time as the fish pass on the conveyor belt or taking random samples of fixed number of fish at regular intervals. This ratio is then raised to the total recorded weight of fish offloaded.

Otherwise record the species composition for a single hoist and raise the ratio with the number of hoists to empty the well. To improve accuracy the process should be repeated as often as possible.

5.6 Offloading from carrier vessels

The ICCAT PSMR includes monitoring offloading or transhipments of carrier vessels while in port and SOPs for this are summarised in Annex 8. Carrier vessels can range in size from less than 100 tonnes to over 6000 tonnes that can offload more than 2000 tonnes of fish. Larger carrier vessels also have multiple holds with several deck layers in each hold. Smaller carrier vessels are often converted fishing vessels with a single hold that enter port to tranship to a larger carrier vessel for transport to international markets.

The major difference between a carrier and fishing vessel is that all the fish on-board have been received from previous transhipments and in their AREP (field numbers 20 to 21), detailed information for each transhipment should be recorded and the transhipment declaration should also include the weight per species that was received during the transhipment at sea.

The objectives in port inspections are to verify the information provided in the AREP and record these results of the inspection in the port inspection report (fields 28 and 29). Details of the report requirements include:

Relevant transhipment authorisation(s)) that includes;

• Donor vessel identifier, (for example ICCAT No.) • Validity of the transhipment authorisation	• Issuing authority from the vessels flag State

Transhipment information concerning donor vessels) that includes)

• Donor vessel name • ID No. • Produce form for each species • Quantities	• Flag State/CPC • Species transhipped • Catch Area

Essentially discharging fish from a carrier vessel is similar to offloading a fishing vessel with the exception that there are significantly larger quantities of fish. There is also the possibility

of catch being offloaded from more than one hold simultaneously so that several positions will have to be manned at one time to monitor the entire operation. The entire operation will require a team of personnel working shifts.

Several scenarios that may be encountered when offloading or transhipping between carrier vessels:

- large multi-hold carrier vessels, offloading to shore that involve several thousand tonnes of fish;
- small carrier vessel offloading from a single hold, less than 1000 tonnes; or
- carrier vessel transhipping to another carrier vessel.

Smaller carrier vessels transhipping will essentially follow the same monitoring procedure as a longline vessel. Monitoring the offloading of large multi-hold carrier vessels will be a more complex operation and require detailed planning.
Prior to the start of the offloading copies of the following documents should be obtained to keep track of the movement of products:

- transhipment information concerning donor vessels and details of the product. This can be a copy of the transhipment declaration of each donor vessel; and
- detailed cargo manifest that shows position of the product in the holds corresponding to the details for each donor vessels (Figure 12). The fish from different donor vessels are often separated in the carrier vessels hold using cargo nets (Figure 13).

The inspectors should be advised continuously throughout the offloading procedure the details of the product being discharged to cross reference the quantities offloaded back to the declaration of the donor vessel.

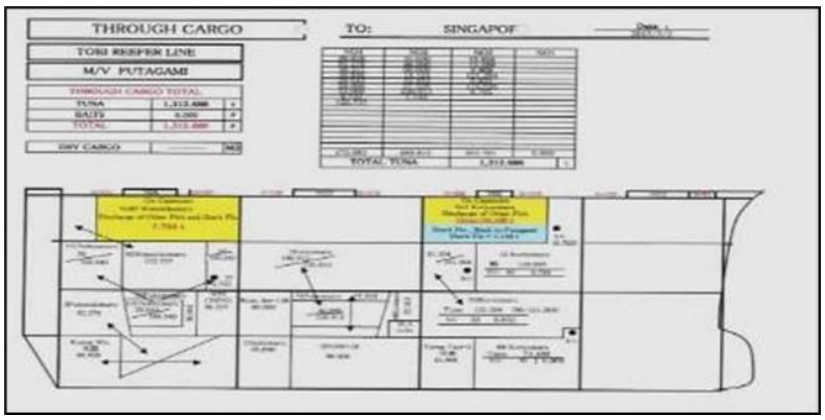


Figure 12 Example of carrier cargo plan.

Figure 13 Fish from different donor vessels separated in the fish hold of a carrier vessel.

5.6.1 Monitoring positions

Fish are taken out of the hold using either cargo nets or as strings of fish. The larger hatch openings on carrier vessels will allow significant larger numbers and weights of fish to be taken up in a single hoist.

The first monitoring position should provide a clear view of the fish being hoisted out of the hold. The larger deck area of a carrier will facilitate setting up a recording position alongside the hatches, where strings of fish can be counted and where the main species can possible be recorded. Allowance should be made to record weights on a hook scale. Good communication with the crane driver will facilitate holding a hoist stationary for a few seconds to allow counts and reading the hook scale, before the fish are taken outboard to shore or the receiving vessel.

Where fish are being offloaded ashore a second monitoring position can be established, where the hoists are set down. This position may also provide opportunity to confirm species composition and take samples of units to get average weights. The bins into which the fish are off-loaded are also sometimes weighed and these can also be captured.

5.6.2 Sampling procedures to determining average weight of the fish

To determine the unit weights for the different species being offloaded, any one or a combination of the methods used for offloading from longline vessels may be appropriate. However, the most practical and accurate will be to use a hook scale attached to the crane hook and record the total weight of a hoist and divide this by the number of fish units in the hoist. Cooperation with the vessels personal to load a string with a single species only will also assist in improving accuracy.

6 Finalising the inspection and monitoring

6.1 Procedure in the event of an apparent infringement

Once the various elements of the inspection have been completed, the chief inspector is to convene a meeting of the inspection team to reconcile the findings of the inspection. The most important aspect of this process is to decide whether any infringement of national fisheries legislation, international obligations, or ICCAT Recommendations has been discovered.

At the completion of the inspection a preliminary copy of the recorded information should be provided to the vessel's master. Should there be any discrepancies or apparent infringements these should be clearly listed and cross referenced to both the relevant national and international legal instruments and ICCAT Recommendations. Comments and reaction by the vessel master/crew members should be noted.

Depending on national legislation, it may be for the chief inspector or the inspector who saw the alleged offence to decide whether a suspected violation has been committed. If so, the master is to be read his rights under national law (where applicable), before any questions are asked. It is essential that the master acknowledges that he understands these rights. Use language cards if necessary. This is to be recorded in the inspection report or in the notebook. The chief inspector is to explain the nature of the violation and request an explanation. Both the questions and the responses should be recorded in the inspection report or the notebook for future use.

At this stage, the port CPC has several options available:

- an offence has been detected, the chief inspector must inform its national authorities of the nature of the offence and may direct the master not to offload the catch or use port facilities until further notice.

- alternatively, if the catch has already been offloaded and monitored and an infringement documented, the catch may have to be seized and the master notified that further port services will be denied pending further investigation.

- The port CPC may take further actions against the vessel, owner and master depending of the nature of the offence (arrest, confiscation of catch, gear, order to leave port, etc.). The reaction and behaviour of the master and the crew to this decision should be noted – e.g., co-operative, aggressive, hostile. The PSMR outlines the procedure that should be followed by port inspectors should a potential non-compliance or infringement be detected.

  "*Where the inspection includes a finding of potential non-compliance, the port CPC shall transmit a copy of the inspection report to the ICCAT Secretariat no later than 14 days following the date of completion of the inspection. If the inspection report cannot be transmitted within 14 days, the port CPC should notify the ICCAT Secretariat within the 14-day time period the reasons for the delay and when the report will be submitted*".

It goes on to outline the procedure for communicating the apparent infringement to the vessel's flag State.

"*If the information collected during the inspection provides evidence that a foreign fishing vessel has committed an infringement of the ICCAT CMMs, the inspector shall:*

a) record the infringement in the inspection report;
b) transmit the inspection report to the port CPC competent authority, which shall promptly forward a copy to the ICCAT Secretariat and to the flag State point of contact and, as appropriate, the relevant coastal State;
c) *to the extent practicable, ensure safekeeping of the evidence pertaining to such infringement, including original documents where appropriate. If the port CPC refers the infringement to the flag State for further action, the port CPC shall promptly provide the evidence collected to the flag State."*

Where action is taken to prevent off-loading or the taking of evidence or confiscation of catch and /or gear these should be recorded in detail.

Signatures of the inspection report
Action to be taken: The chief inspector and the master must sign the inspection report. Ask the master if there are any complaints at the way in which the inspection was carried out. Any complaint should be written out, signed, dated and stamped with the ship's stamp. Should the master refuse to sign, for any reason, a witness to this should be obtained and mentioned in the report. In either case, yes or no, record that the master was asked this question. Thank the master for his co-operation and depart of the vessel.

Submit the inspection report to your chain of command.

6.2 Collection of evidence and follow up actions

Where there are grounds to suspect a vessel belonging to an ICCAT CPC has been engaged in IUU fishing, an important task of the inspection team may be required to collect and record evidence to support these suspicions. However, this will be dependent on inspectors having the legal authority to collect evidence, if not they should work with relevant competent authorities. The evidence must be judicially sound and will have to be submitted to the ICCAT Secretariat and the flag State/CPC of the vessel.

On securing such evidence, the PSMR requires that the port CPC must immediately deny the vessel further port facilities. Furthermore, in terms of ICCAT, rules this evidence must be immediately reported to the vessel's flag State/CPC and, where applicable, to the relevant coastal State if the evidence indicates the activities took place within the jurisdiction of that coastal State[28]. The evidence must also be provided to the ICCAT Secretariat as soon as possible via the inspecting CPC's competent authority and at least 70-days prior to the next annual meeting if the vessel is to be considered for inclusion on the draft ICCAT IUU list.

[28] Recommendation 18-09, para. 35.

The information on the IUU activities must be submitted to the Executive Secretary in the prescribed format[29].

The evidence that a vessel may have been engaged in IUU fishing can vary greatly but this can be presumed when the inspectors of a port CPC can present evidence that the vessel undertook any of the following[30]:

- harvested tuna and tuna-like species in the Convention area and is not registered on the relevant ICCAT list of vessels authorized to fish for tuna and tuna-like species in the ICCAT Convention area;
- harvested tuna and tuna-like species in the Convention area, and the vessel's flag State is without quota, or has exceeded the catch limit or effort allocation under relevant ICCAT CMMs;
- did not record or report their catches made in the ICCAT Convention area, or make false reports;
- took or landed undersized fish in contravention of ICCAT conservation measures;
- fished during closed fishing periods or in closed areas in contravention of ICCAT conservation measures;
- used prohibited fishing gear or fishing methods in contravention of ICCAT conservation measures;
- transhipped or participate in other operations, such as re-supplying or re-fuelling with vessels included in the IUU vessels list;
- harvested tuna or tuna-like species in the waters under the national jurisdiction of a coastal States in the Convention area without authorization or infringe on that State's laws and regulations, without prejudice to the sovereign rights of coastal States to take measures against such vessels;
- is without nationality and harvest tuna or tuna-like species in the ICCAT Convention area, and/or
- engage in fishing or fishing related activities contrary to any other ICCAT CMMs.

Inspectors should have a sound knowledge on how to recognise, collect, preserve and record evidence that will satisfy the legal processes of the vessels flag State and/or the coastal State in which the alleged offence occurred assuming that both or either decide to pursue the case. It is important that the rules of evidence are strictly observed according to the legislation of the port CPC in terms of the way the raw material (film, memory cards, documents, etc.) are handled and stored. The generally accepted steps when collecting and preserving evidence are:

- conduct a visual examination;
- assess the situation;
- secure evidence;
- collect photograph/video evidence;
- collect statements (witness and direct);
- take notes; and

[29] Recommendation 18-08, Addendum 1.
[30] Recommendation 18-08

- package and seal evidence.

Depending on the port CPC's national legislation, inspectors may also be required to present themselves as expert witnesses on request from a flag State or where judicial processes are set up for compensation. It is therefore, of critical important that procedures for collecting and storage of evidence are strictly followed. Inspectors should be confident in these procedures and in their understanding of regulations and ICCAT CMMs to be able to stand up to court proceedings.

Every situation will be different, and evidence will likely vary from case to case. Depending on the port CPC's national legislation, examples of where to look for evidence that inspectors should be aware of include *inter alia*:

- entries in logs such as;
    - navigation logbook;
    - fishing logbook;
    - masters catch records;
    - freezer logbooks;
- marks on charts;
- evidence of VMS tampering;
- computer navigation equipment (on laptops);
- electronic plotters;
- computers used in communication; and,
- personal computers and mobile devices.

Catch sampling and evidence of any possible prohibited species and other catch thought to be caught in contravention of licence conditions or management measures are also valuable evidence but the positive identification of these 100% certainty is essential. Inspectors require a thorough knowledge of species identification and should be able to report with confidence how and what diagnostic features were used to identify a species. Where possible, collecting DNA samples is also very important to further verify both species and possibly provide evidence of where the fish were caught. When taking DNA samples, the correct methods and supporting documentation should be strictly followed.

Other evidence may include VMS data (if any) or any other sightings from national sea or air assets as well as another cooperating party. More and more evidence is becoming accepted and admissible in fisheries cases, in some countries photos of illegal activity taken from aircraft that are endorsed by the plane's pilot as having been taken at the time and place specified are admissible evidence.

In support of evidence of IUU fishing, *as a minimum*, the following should be collected:

- Copies, highlighting incorrect entries of;
    - logbooks; navigation; fishing log, processing, freezer and storage logs;
    - inventories of the catch on-board;
    - transhipment declarations of fish either from or to vessels;
    - vessels registration papers;
    - the vessel's flag State authorisations to fish;
    - licence and any other documents from other CPCs permitting the vessel to fish in their waters;
    - Vessel drawings showing storage and other schematics; and
    - VMS reports.

- Photographic evidence of:
    - navigation plots, navigation logbooks, bridge equipment if required;
    - gear on-board;
    - vessel markings;
    - visible indications of tampering with the VMS unit or antenna;
    - illegal catch; and
    - prohibited species.

6.3 Expert witnesses, interviewing and communication

Any significant events or anomalies recorded during the inspection and monitoring process should be photographed as a basis for later evidence. It is common practice for one of the inspection team to wear a camcorder that is running from the time the inspection team board. The electronic copies of photos, videos and or voice recordings must be labelled and securely stored by the inspector for later use. Tape recorders may be used for recording interviews with the master or other crew-members. However, it is essential that:

- the master or crew-member is informed that the interview is being recorded;
- the master or crew-member is read his/her rights before an interview possibly leading to a prosecution starts;
- there must always be two port inspectors in the interview room;
- the preamble to the interview must contain a clear statement by the interviewing inspector as follows:

"This is …. [NAME OF THE PORT INSPECTOR] *…. on board the fishing vessel ….* [NAME OF VESSEL].
Date is …. [DATE]*, the time is ....* [TIME]*…, I am interviewing the master of the vessel ….* [NAME]*... with regard to…* [NATURE OF THE POSSIBLE VIOLATION] *...*
Mr [NAME OF MASTER] *has been read his legal rights and understands them.*
He is taking part in this interview voluntarily.
Also in the room are ... [NAME OF OTHER PORT INSPECTOR AND ANYONE ELSE IN THE ROOM].

At the end of the interview, the inspector should close the tape with a statement of the time the interview finished. Notes of the main points of the interview are to be recorded in the notebook. Recording should be labelled and held in secure storage on completion. The label should state who is participating, date, time, and location.

Interviews of the vessel master and other crew members can be a vital evidence source (assuming that they are voluntary). Aside from dates, times, names, and signatures, other more important guidelines include:

- was an interpreter requested/provided?
- were they advised of the suspicions and the consequences?
- were they aware of the requirements for port CPC inspections and what their rights are in terms of international agreements?
- were they permitted to have another crew member or their agent present – this is often useful if there is a significant language barrier?

The original copies of all witness statements signed and in the correct form will be needed. All witness statements should be read, and the following checked:

- do they prove the charges that have been/will be laid?
- do they contain inadmissible or unfairly prejudicial statements, (e.g., hearsay)?
- does the witness refer to the exhibits he is producing?
- is an additional statement required from the witness to clarify anything or add anything useful?
- do the statements lay the requisite foundation of fact, (e.g., some fisheries acts provide that if an officer suspects any fish to which the charge relates were taken in a particular area of waters and he gives evidence of the grounds on which he so suspects and the court thinks the suspicion reasonable then, in the absence of proof to the contrary, the fish will be deemed to have been so taken). Any notes that have been collected by the inspectors will therefore also be vital.

Keeping in mind the risk of losing electronic information that constitutes evidence it is important that all the original information is backed up and the original material securely stored. Strict management of any backup material must be maintained to prevent a breach in confidentiality.

6.4 Follow up procedures and information sharing

In the follow-up from a port CPC inspection there are various responsibilities required from:

- the port CPC having undertaken the inspection;
- the flag State of the inspected vessel;
- the ICCAT Secretariat; and
- where relevant the coastal State where the vessel reportedly fished.

6.4.1 Responsibilities of the Inspector

On conclusion of the inspection the inspector should complete the inspection report and in accordance with the PSMR, the following procedures should be followed:

- provide the Master of the foreign fishing vessel with the inspection report containing the findings of the inspection, including possible subsequent measures that could be taken by the port CPC;
- the report should be signed by the inspector and the master and the master is to be advised that his signature is on the report serves only as acknowledgment of the receipt of a copy of the report;
- the Master should be given the opportunity to add any comments or objection to the report, and to contact the competent authority of the flag State, in particular where the master has serious difficulties in understanding the content of the report; and
- a copy of the report should be provided to the Master.

In the event that the inspection yields evidence of a fishing or fishing support vessel having committed an infringement of ICCAT CMMs the inspector the inspector should:

- record the infringement in the inspection report;
- transmit the inspection report to the port CPC competent authority; and
- ensure safekeeping of the evidence pertaining to such infringement, including original documents, where appropriate.

6.4.2 Follow-up port CPC responsibilities

Actions in the evidence of a fishing or fishing support vessel having committed an infringement of ICCAT CMMs

The PSMR requires that where the inspection includes a finding of potential non-compliance:

- the port CPC should transmit a copy of the inspection report to the ICCAT Secretariat no later than 14 days following the date of completion of the inspection; and
- if the inspection report cannot be transmitted within 14 days, the port CPC should notify the ICCAT Secretariat within the 14-day time period the reasons for the delay and when the report will be submitted.

It is the responsibility of the competent authority of the port CPC to promptly forward a copy of the report to:

- the ICCAT Secretariat;
- the flag State/CPC point of contact; and
- as appropriate, the relevant coastal State where the infringement may have occurred.;

If the port CPC refers the infringement to the flag State for further action, the port CPC should promptly provide the evidence collected to the flag State.

A port CPC may also act in conformity with international law in addition to the denial of port facilities. In such a case the port CPC should promptly notify their intention and action taken to:

- the flag State/CPC;
- the relevant coastal State, as applicable; and
- the ICCAT Secretariat, which should promptly publish this information in the secure part of the ICCAT website.

In conformity with international law, under the United Nations Fish Stocks Agreement (UNFSA), "*where following a boarding and inspection of a vessel, there are clear grounds for believing that the vessel has engaged in any activity contrary to the CMMs of an RFMO, the inspecting State shall promptly notify the flag State of the alleged violation".*

In such case, *article 6 section 21 of UNFSA* required the vessels flag State to respond within a period of three working days of the receipt of the notification. If the flag State does not respond within the period of time specified, the port CPC may take additional actions against the vessel and deny use of the port for landing, transhipping, packaging, processing, refuelling, resupplying, maintenance and dry-docking.

The exceptions to the above action would be to allow the use of port services essential to the safety or health of the crew or the safety of the vessel or where appropriate, for the scrapping of the vessel.

Where infringements do not fall within the jurisdiction of the port CPC and no action is taken, this should be reported to:

- the flag State/CPC; and
- as appropriate, the relevant coastal State

Follow-up port CPC responsibilities

If the inspection provides evidence that the vessel has engaged in IUU fishing or supported IUU fishing activities in any way, the port CPC should:

- deny the vessel any further port services;
- report the finding to the vessels flag State/CPC;
- report the finding to any relevant coastal State where IUU activities may have occurred; and
- notify as soon as possible and provide supporting evidence to the ICCAT Secretariat.

6.4.3 Follow-up flag CPC responsibilities

Upon receiving a copy of the inspection report from the port CPC that includes any evidence that implicates its flagged vessel has infringed ICCAT CMM's, and where the port CPC has not taken action, the flag CPC should promptly investigate the infringement and notify the ICCAT Secretariat of the status of the investigation and of any enforcement action that may have been taken within 6 months of receiving the inspection report.
If the flag CPC cannot notify the ICCAT Secretariat this status report within 6 months it should notify the ICCAT Secretariat the reasons for the delay and when the status report will be submitted.
On receipt by a flag State/CPC, a report from a port State/CPC that a vessel flying its flag has been implicated in the infringement of ICCAT CMMs and that the port State/CPC intends to take further action in accordance with the PSMR, the flag State/CPC should provide any requested information to the port CPC to facilitate any further investigation or action taken. Such information can include *inter alia*, certified copies of:

- flag State/CPC ATF;
- flag State/CPC ATT;
- fishing logbook;
- certificate of registry of the fishing vessel;
- ICCAT transhipment declarations (From transhipment operation with donors' vessels);
- VMS record; and,
- any others information/document relevant to the irregularities.

Annex 1 **ICCAT AREP**

PORT ENTRY PRIOR NOTIFICATION FORM Information to be provided in advance by vessels requesting port entry								
1 Intended port of call								
2 Port State								
3 Estimated date and time of arrival	_____/_____/_____ ____H____mm							
4 Purpose(s)								
5 Port and date of last port call	_____/_____/_____							
6 Name of the vessel				7 Flag State				
8 Type of vessel				9 IRCS				
10 Vessel contact information								
11 Vessel owner(s)								
12 Certificate of registry ID				13 IMO ID				
14 External ID				15 ICCAT ID				
16 VMS	□ No □ Yes			Type:				
17 Vessel dimensions	Length			Beam		Draft		
18 Vessel master name and nationality								

19 Relevant fishing authorization(s)					
Identifier	*Issued by*	*Validity*	*Fishing area(s)*	*Species*	*Gear*

20 Relevant transhipment authorization(s)		
Identifier	*Issued by*	*Validity*

21 Transhipment information concerning donor vessels								
Date	*Location*	*Name*	*Flag State*	*ID number*	*Species*	*Product form*	*Catch area*	*Quantity*

22 Total catch onboard				23 Catch to be landed / transhipped
Species	*Product form*	*Catch area*	*Quantity (kg)*	*Quantity (kg)*

Annex 2 **Pre and post boarding safety checklists.**

Pre-boarding Risk Assessment Check List	
Boarding and disembarking the vessel	Check that the means of boarding from the quay to the vessel is safe. There are international safety standards for setting up a gangplank (gangway or brow) to board a vessel. These should be in place and include as a minimum a safety rail and safety net.
Weather	Prior to boarding, take note of the weather conditions and be prepared for any that may prevail. Wet conditions can affect safety when moving around on deck Exceptional hot conditions can affect working both on the upper deck and in compartments and below decks if there is no adequate ventilation or air conditioning.
Check for pets	Before boarding, check if there are any pets onboard and ask the agent to enquire if there are any onboard and request they be confined before attempting to board.
Firearms or other weapons on-board	Ask the agent and vessel master if they have any contracted security personal onboard and/or any firearms. Request these be declared and confirm that any firearms are securely locked away.
Evacuation *Fire or flooding*	Prepare an emergency action plan to evacuate the vessel for any reason. This should include a radio signal or audible whistle or any other means to draw immediate attention of the inspection team. Identify muster points both on the vessel and ashore for such events
Administering first aid	The inspection team should have a first aid kit as part of their equipment. At least one of the inspection team should be certified in administering first aid. *Keeping in mind that hypoxia is a risk in inspecting closed compartments, the emergency kit should include oxygen.*
Calling for assistance	All members of the inspection team should have the contact numbers for emergency personal or institutions ashore. Emergency personal should include at least: • medical assistance • police • fire brigade • immigration services • port authorities
Communications	There should be reliable communication between all members of the inspection team at all times. Such means should include portable radios, mobile phones, and some form of audio equipment such as a whistle or klaxon for emergencies.
Communication with the vessel Master and crew	Note that the vessel Master and crew may include several languages of communication. Have in place translation cards to assist with communication. As the agent for the vessel is most likely to be able to

	communicate fluently with the vessel Master, request that the agent be present and on standby before boarding to assist with the boarding process and introductions to the vessel Master.
Post Boarding Risk Assessment Check List	
Moving around the vessel - *slips, trips and falls*	Check the state of the vessel. Lookout for: • open hatches, activities on the deck that could pose a risk, such as overhead movement of fish or equipment; • operating machinery loose gear and equipment lying around that could cause obstacles to movement; • spills of oil of chemicals on the deck; and • rusty and unsafe ladders leading from the deck to superstructure to access holds and compartments below deck.
Conflict with crew	Observe if there is any hostile attitude shown by the vessel Master or crew. This can take the form of folded arms and hostile stare to waving of their arms and shouting. In such events either do not board or disembark immediately and advise the vessel agent that the inspection will be discontinued and that all further port services should be discontinued with immediate effect until the situation is resolved.
Confined space entry and exit	Request a vessel plan that clearly shows the layout of all compartments. These should also be displayed at some point on the vessel for emergency action and drills. Ask the vessel master to indicate where fish and product are stored and where gear or any other equipment is stored.
Searching activities	Plan the search activities with the inspection team, noting the vessel layout and prepare PPE and SOP for undertaking these.
Deck machinery	Check that no deck machinery is operation and that it is secured so that it cannot be accidentally activated. Should any machinery be in operation, either request that this is stopped or note the safety precautions around such operations
Electricity	Give electrical connection a check to see if there are any exposed wiring or unsafe connections. Check that there is power and lighting to closed compartments as well as ventilation prior to entering any compartment

Annex 3 **CP28_Inspection Report**

ICCAT Port inspection report form

1. Inspection report no		2. Port State			
3. Inspecting authority					
4. Name of principal inspector		ID			
5. Port of inspection					
6. Commencement of inspection	YYYY	MM	DD	HH	
7. Completion of inspection	YYYY	MM	DD	HH	
8. Advanced notification received	Yes	No			
9. Purpose(s)	LAN	TRX	PRO	OTH (specify)	
10. Port and State and date of last port call			YYYY	MM	DD
11. Vessel name					
12. Flag State					
13. Type of vessel					
14. International Radio Call Sign					
15. Certificate of registry ID					
16. IMO ship ID, if available					
17. External ID, if available					
18. Port of registry					
19. Vessel owner(s)					
20. Vessel beneficial owner(s), if known and different from vessel owner					
21. Vessel operator(s), if different from vessel owner					
22. Vessel master name and nationality					
23. Fishing master name and nationality					
24. Vessel agent					
25. VMS	No	Yes	Type:		

26. Status in ICCAT, including any IUU vessel listing

Vessel identifier	RFMO	Flag State status	Vessel on authorized vessel list	Vessel on IUU vessel list

27. Relevant fishing authorization(s)

Identifier	*Issued by*	*Validity*	*Fishing area(s)*	*Species*	*Gear*

28. Relevant transhipment authorization(s)

Identifier		*Issued by*		*Validity*	
Identifier		*Issued by*		*Validity*	

29. Transhipment information concerning donor vessels

Name	*Flag State*	*ID no*	*Species*	*Product form*	*Catch area(s)*	*Quantity*

30. Evaluation of offloaded catch (quantity)

Species	*Product form*	*Catch area(s)*	*Quantity declared*	*Quantity offloaded*	*Difference between quantity declared and quantity determined, if any*

31. Catch retained onboard (quantity)

Species	*Product form*	*Catch area(s)*	*Quantity declared*	*Quantity retained*	*Difference between quantity declared and quantity determined, if any*

32. Examination of logbook(s) and other documentation	*Yes*	*No*	*Comments*
33. Compliance with applicable catch documentation scheme(s)	*Yes*	*No*	*Comments*
34. Compliance with applicable statistical document scheme(s)	*Yes*	*No*	*Comments*

35. Type of gear used			
36. Gear examined	*Yes*	*No*	*Comments*

37. Findings by inspector(s)

38. Apparent infringement(s) noted including reference to relevant legal instrument(s)

39. Comments by the master

40. Action taken

41. Master's signature*

42. Inspector's signature

* The Master's signature serves only as acknowledgment of receipt of a copy of the inspection report.

Annex 4 SOPs for checking the AREP

The following section provides a detailed procedure for analysing the ICCAT AREP form fields to facilitate checking of the data provided be the vessel using Recommended Practical Procedures and information sources. A template for the ICCAT AREP can be found on the PSMR area of the ICCAT website[31].

Name of the fishing vessel

Recommended source of information:
Search ICCAT Online Tools for vessel details [https://www.iccat.int], to obtain access to:

- ICCAT record of authorised vessels [https://www.iccat.int/en/VesselsRecord.asp]
- ICCAT IUU list [https://www.iccat.int/en/IUUlist.html] also provides links to other RFMO IUU Vessel lists

Target information
Verification of following fields in the request form:

- Flag State/CPC
- IRCS
- Certificate of registry ID
- Length
- Authorised species
- Type of vessel
- Vessel owner(s)
- ICCAT number
- Gear specified in the licence
- Quota, where relevant[32]

History of vessel: ICCAT record of authorised vessels will provide details in four categories of information:

- Vessel identification
- Administrative details
- Vessel characteristics
- History of the vessel

A search for a vessel on the positive list of vessels of an organisation may not give a result. This may be due to the spelling of the vessel name or an administrative reason. It is then advisable to contact the organisation directly with the available information from the AREP.

Verification process
If the vessel is not on ICCAT authorized list, verify if it is present on the authorized list(s) of another organisation, or in any of the sites outlined in Section 3.3Check the following information:

- Previous names - in cases where there have been frequent name changes (check all past names against IUU lists)
- Frequent flag change
- Use IMO number (when available) to cross check other lists
- Use the vessel's IRCS to search and cross check

Note that an IUU vessel can appear on more than one list.

[31] See https://www.iccat.int/en/portinspection.html
[32] Currently this only applies to bluefin tuna in the Eastern Atlantic Mediterranean, quotas are allocated to individual CPCs (Recommendation 19-04) and divided among its registered vessels.

Where a vessel was previously on an IUU list and has been re-flagged, it is essential to contact the flag State/CPC for verification of the new registration and to query if they were aware of the vessel's IUU fishing history. It is important to check if there was a change of ownership with the re-flagging or if the previous owners still have shares in the vessel. Record the response received from the organisation. Should the response still be inconclusive, this would indicate a possibility of the vessel having attempted to use a false name. In this instance, the flag State/CPC should be contacted for comment or further verification of the vessel's credentials. In the event of the flag State/CPC not responding, such a vessel may still be considered high-risk. Should any of the other information provided in the AREP be found to be incorrect or unverifiable, this may be sufficient evidence to refuse port access to the vessel or to allow the vessel into port in for the purpose of inspecting it and taking other appropriate actions in accordance with international law that are at least as effective as denial of port entry in preventing, deterring and eliminating IUU fishing and fishing related activities in support of such fishing

IMO number

Recommended source of information:
IHS Fairplay operates a service following receipt of a completed IMO number Request Form. Contact: IHS Fairplay, Lombard House,3 Princess Way Redhill, Surrey RH1 1UP United Kingdom. International fax: +44 1737 379040. Telephone: +44 1737 379043.

- http://www.imonumbers.lrfairplay.com/
- *Email: data-audit@lrfairplay.com*

Target information and verification process
Provide details for verification of following field in the request form:

- Port and date of last port call
- Current flag State
- IRCS
- Vessel owner(s)
- Previous name of the vessel
- Type of vessel
- Vessel contact information
- Certificate of registry ID

Note: AIS may also provide information of a vessel's last port of call and its current location. https://www.marinetraffic.com/ https://www.vesselfinder.com/

Fishing authorisations

Recommended source of information:
Communicate with entities that have provided the vessel with an authorisation to fish (ATF) and / or transhipment (from flag State/CPC) or fishing license issued by a coastal State:

- Flag State
- Coastal State in respect of areas under its national jurisdiction

Target information
Request details on authorisation issued to the vessel with respect to:

- Identifier
- IRCS
- Authorised fishing area;
- Issuing authority
- Authorised period of validity
- Authorised target species

- Gear
- VMS records

If vessel has fished within the fisheries jurisdiction of another country, request details of the authorisation issued by that country and repeat the process.

Verification process

Verify with information provided:

- Authorisation issued by authorised agent
- Authorised fishing area compared with where the vessel has reportedly fished
- Authorised gear
- Validity of permit
- Authorised target species
- VMS records

Any discrepancies noted in an ATF would be a cause for suspicion. Should there be suspicion of the validity of the flag State/CPC ATF provided by the vessel in the AREP, contact the relevant authorities of the flag State/CPC and request details with respect to:

- Identifier
- Authorised period valid
- Authorised fishing area
- Gear
- Issuing authority
- IRCS
- Authorised target species
- VMS records

Relevant transhipment authorisation(s) for receiving vessel
Check for each of the vessels from which fish were received (donor vessels).

Recommended source of information:

Verify information regarding the transhipment authorisation issued by the fishing authority of the flag State/CPC.

ICCAT web site for list of authorised Carrier vessels:

[https://www.iccat.int/en/VesselsRecord.asp] Select list of authorised Carrier vessels, select "CARRIER" from the vessel type menu and select 'all' county flag and then press "Search".

Transhipments on the high seas are managed by ICCAT[33] and are currently banned apart from large scale pelagic longline vessels (LSPLVs) which must carry an observer as part of the Regional Observer Programme (ROP). They must also have prior authorization to tranship (ATT) from their flag state and each transhipment should be accompanied by a Transhipment Declaration (TD) which should have been countersigned by the observer. All other vessels must tranship in port. Transhipment of east or west bluefin tuna is also prohibited[34].

Target information

Verify details for each donor vessel:

- Vessel name
- ICCAT record number
- National Registration number
- Authorisation status
- Flag State;
- IRCS

[33] Recommendation 16-15

[34] Recommendation 18-02, paragraph 77.

Verify each donor vessel characteristics:

- Type
- Length
- Tonnage
- Gear used (note only LSPLVs can tranship on the high seas)

Verify administrative details:

- Owner
- Operator

Verify vessel history.
Note: If the carrier vessel is not listed on the ICCAT list, check other RMFO lists of authorised vessels. Carriers pass through other RFMO waters of competence and may be tempted to use the excuse that they are registered in another RFMO and thought they could carry out operations in the ICCAT area of competence as well.

Verification process
Verify the validity and the detail of the competent authority issuing the transhipment authorisation. Note if the vessel is included on ICCAT list of authorised Carrier vessels.
Cross check:

- reference and verify information with AREP
- cross check with transhipment authorisation to see whether area of transhipment authorisation matches TRX location
- check dates with transhipment validity

Transhipment information concerning donor vessels

Recommended source of information:
Where there is doubt or if the information is not provided by the flag State/CPC or copies are not made available with the AREP, request information from the ICCAT Secretariat and check the identity and information with the ICCAT observer assigned to the vessel if still deployed on the vessel or the ICCAT Secretariat[35] and/or Observer provider [36]if the observer has departed the vessel.

Target information
The original transhipment authorisation provided to the donor vessels and declarations from both donor and the receiving vessel.

Verification process
In case of carrier vessel calling into port, it is recommended that the port State/CPC request the transhipment declarations to:

- Verify that those declarations are on-board the carrier vessel and have been communicated to the ICCAT Secretariat;
- Verify detail of transhipment declaration, area, species, and that it has been signed by the ICCAT observer assigned to the vessel.

Total catch on-board

[35] info@iccat.int
[36] iccatrop@mrag.co.uk; capfish@mweb.co.za

Recommended source of information:
Information provided in:

- AREP
- declarations of transhipment by flag State/CPC
- other sources, e.g., entry/exit systems and radio/internet catch reporting systems if available; VMS/AIS for positions.

Target information
The total quantities of fish on-board broken down by species and product codes.

Verification process
Verify:

- Catch area with ATF
- Verify species match those on the ATF;
- For shark fins note % to total weight of shark trunks;
- Total catch does not exceed allowable catch on authorisation,
- Check by-catch limit to total weight of target species.

Note that initial verification can be made from analysis of the vessels fishing logbook or the transhipment declarations. However, monitoring the offloading or transhipment on port is the final verification process to get this information.

Annex 5 SOPs for onboard inspections

Initial Embarkation

Embarkation on the fishing vessel to be inspected	Report Field Numbers: 1 to 6 and 8 to 9

Action to be taken:

- Check evidence of hostility on-board before embarking on the vessel.
- If the master is not present when you arrive you should ask to be taken to the master.
- You should introduce yourself by your name, institution/administration and title "Fishery Inspector of port State/CPC….".
- You should provide to the master your professional identity card and reference the legal mandate for undertaking the port inspection.
- You should ask for cooperation with the inspection team.
- Request the master to confirm the purpose of the port call and access to the port.
- If not provided previously, request the master to present the authorisation for entry.
- Provide a short brief on the inspection process that will be undertaken and possible consequences if irregularities are found (deny use of ports, port State/CPC enforcement actions, request listing on the ICCAT IUU vessel list).
- Request the master to provide a suitable place to work to analyse documents. Taking consideration of limited space this could be the chart table, radio room or a convenient space on the bridge.
- Record in the form the date and time of your arrival on-board.

Where a fishing vessel carries an observer on-board, it is in the inspector's interest to request the observer report (if available) and discuss relevant vessel operations (at a suitable place and time) with the observer in order to collect as much detail about the vessel as possible.

Document analysis and verification

Visual analysis of documents and basic crosschecking of information is a standard part of the inspection process, the following section runs through the main documents that should be requested and checked.

The inspection and verification of documents onboard vessels identified as high risk during the risk assessment phase should be subject to a full document verification process. This process should entail:

- visual analysis for alterations in text, dates, or anomalous official logos;
- cross checking with issuing authorities; and
- cross checking information such as caches etc. against another logbooks' information.

More information on verifying documents can be found in the 'Document Verification Manual for Fisheries Enforcement:' [37], available online or in the resources section.
On-line modules on documents' verification are also available in the European Fisheries Control Agency (EFCA) e-learning platform (restricted access, on request).

[37] Stop Illegal Fishing and Trygg Mat Tracking (2019) Document Verification Manual for Fisheries Enforcement: Vessel Identity Gaborone. Botswana.
https://static.wixstatic.com/ugd/1ae030_7aa413d757644139a3fa15fdf1f7bcdc.pdf

Name, address, contact of owners, beneficial owner(s) and operators	Report Field Numbers: 19, 20 and 21

Action to be taken:

- Record the details of the owners, beneficial owner(s) and operators of the vessel (e.g., from the registration and safety documents of the vessel);
- Cross reference this information to the details provided in the AREP;
- Verify discrepancies from details recorded in the ICCAT lists of authorised vessels and if available from the IMO number.

Where the name of the owner(s) was not included on the AREP these should be cross referenced with the owner(s) details from RFMOs IUU list, including past IUU list. The owner having a vessel already placed on a RFMOs IUU list would automatically place the inspected vessel on the high-risk level.

Name, address and contact of vessel master, fishing master and agent	Report Field Numbers: 22, 23 and 24

Action to be taken:

- Request the identification document of the master, the fishing master and the agent. This should be their original passport or international marine identification documents. [Note: Copies are not acceptable], make copies or take picture of the passport or national identity card;
- Request a copy of the crew list;
- Cross reference the details of the master and the information that was provided in the AREP.

Authorisation to fish	Report Field Numbers: 26 and 27

Action to be taken

Review the ATFs on-board the vessel, noting specifically their period of validity, area of operation and permitted target and by-catch species. These should include:

- request the master to produce the ATF issued by the vessel's flag State/CPC that includes ATF within RFMOs areas on the high seas;
- request the master to present the fishing licences issued by the coastal States that have provided the vessel with permission to fish within their EEZ;
- verify authenticity, validity and area of operation in the ATF and the fishing licence. If available, verify authenticity and validity of the documents with the specimens;
- verify if there is any modification made on the ATF. Modification on the ATF should be certified by the competent authority of the flag State;
- if the vessel has been fishing in waters under the jurisdiction of the Port CPC, verify if the conditions of the fishing licence are respected: species, fishing gear, catch reports, VMS reports, by-catch / discard restrictions;
- if the master is unable to produce a valid ATF or fishing licence, his reason for not doing so is to be recorded in the notebook;
- ATF issued by the flag State/CPC should be on-board the fishing vessel at the time of the inspection;

- if you find any modification on the ATF not certified by the competent authority of the flag State/CPC, request the master to explain and record the response in the notebook;
- ATF issued by flag State/CPC should have 'ICCAT area' as area of operation. Fishing licence issued by coastal State should have the EEZ/jurisdictional waters, or part thereof, as area of operation;
- for any irregularities detected on the ATF, communicate with the flag State/CPC using the form 'Request for additional information following a port inspection'; and,
- photograph the ATF next to GPS to verify the time and date of the inspection (Figure 14).

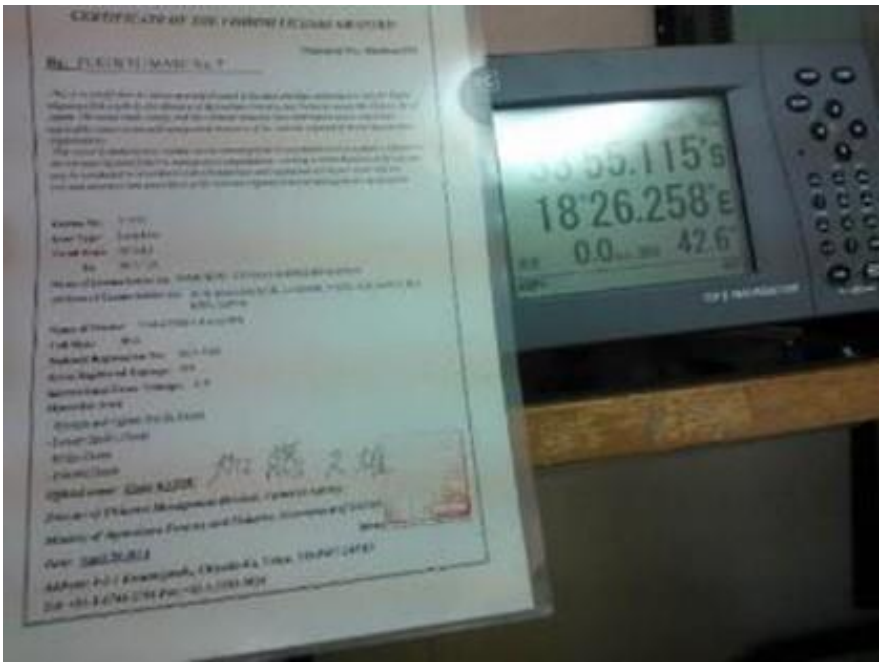


Figure 14 Photo of vessel ATF taken alongside GPS to verify the date, time and position of the inspection.

Logbooks	Report Field Number: 32

Action to be taken:
Request the master to produce the logbooks including fishing, FAD (for purse seiners, support vessels and bait boats), navigation, communication, processing, freezer and the engineering logbooks.

Two members of the inspection team should accompany crewmembers to retrieve the logbooks when possible. This is to have corroborated evidence in case logbooks are thrown overboard or otherwise damaged or destroyed before inspection.

The engineering and the freezer logbooks can provide historical engine usage as well as refrigeration/processing logs, useful if IUU fishing is suspected. Inspectors can cross reference freezing events against catch events to verify the consistency between the two processes. The freezer logbook should contain pressure, temperature and electric consumption records. For every freezing event, find catch event in the logbook and record the information. For suspicious freezing events, request the master to explain. Where there is evidence in the freezer logbooks that the compressors were under load with cooling of

brine in the wells these times should correspond to a fishing event. If no such fishing event is recorded then check if the vessels VMS was working at the time or check the vessels navigational track plot. The Master should also be questioned as to these records and be allowed to offer any explanation.

Format and information to be recorded

The requirement for a logbook and the minimum data requirements for vessels operating in the ICCAT area are defined in the specific Recommendations[38] . Vessels may also carry an informal logbook as well as the more formal flag State/CPC issued one (Figure 15), the formal logbook must be kept up-to-date, by midnight every day. Templates of the formal logbooks issued by the vessel's flag State/CPC are available under your resources and copies should be taken on board to compare. In addition, the following details should be verified during the inspection:

- the fishing logbook is on-board at the time of the inspection;
- an original recording of the fishing logbook is on-board for the last 12 months;
- the logbook has been completed by set and is in date;
- the logbook includes information on the vessel, the fishing trip, the gear configuration, the vessel operation and catch;
- the fishing logbook is bound with consecutively numbered pages;
- the catch is recorded in number & weight / species / set & form of processing;
- discard data for tuna and tuna-like species, and other species taken in ICCAT fisheries, including sharks, sea turtles, seabirds, and marine mammals, is recorded, with an indication of their disposition at the time of release (i.e., dead or alive), according to Recommendation 11-10.

Verify ICCAT fishing logbook measures for longliners:

- the fishing logbook contains the primary target species: ALB, BET, YFT, SKJ, SWO and BFT as well as common by-catch species: BUM, WHM, SAI, MSP, SFP, POR, BSH, SMA. Other by-catch species should also be reported.

Verify ICCAT fishing logbook measures for purse seiners:

- the fishing logbook contains the primary target species: BET, YFT, SKJ, and main bycatch species: ALB, small tunas, billfish, sharks and other taxa.
- the type of association is recorded (Free school or under FAD),
- the deployment of FADs is recorded in a FAD logbook, the information required is outlined in the Recommendation 19-02.

Verify ICCAT fishing logbook measures for gillnet vessels:

- the fishing logbook contains the primary target species: ALB, BET, YFT, SKJ, LOT, FRI, KAW, COM and GUT as well as reporting all other bycatch species.

Verify ICCAT fishing logbook measures for pole & line vessels:

[38] Recommendation 03-13 outlines the requirement for a data recording system, Recommendation 19-02 gives the general data recording requirements for tropical tunas and Recommendation 19-04 gives the requirement for BFT in the Eastern Atlantic and Mediterranean.

- the fishing logbook contains the primary target species: BFT, ALB, BET, YFT, SKJ, FRZ, KAW, COM and LOT as well as reporting all other by-catch species.

A full list of ICCAT species can be found in Annex 9.

Catch area and effort

Review the fishing and navigation logbooks (Figure 15) and cross reference the actual areas of operation detailed in the fishing logbook to information provided in AREP and to the authorised areas for fishing:

- fishing logbook entry with position in coastal State/CPC EEZ/area for fisheries jurisdiction should be supported by a fishing licence issued by the coastal State;
- fishing logbook entry with position in the high seas should be supported by an ATF issued by the flag State/CPC;
- fishing logbook entry with position in the area of another RFMO should have authorization to fish in that RFMO;
- where possible, review and verify information from electronic records that can include: on-board GPS plotter integrated with computer back-up (i.e., Maxsea), VMS records from flag State/CPC and/or RFMOs, AIS, NAVTEX. ICCAT operate a centralized VMS system for all vessels participating in the BFT fishery[39].

Quantity of catch

- Request that the fishing master's catch records of the species and the quantity captured during the fishing trip (live weight) are produced. Verify that the species and quantities declared correspond to what is recorded in the official fishing logbook;
- Compare those quantities with 1) the estimated quantity found in the holds of the vessel or 2) with the quantity offloaded and the catch retained on-board
- Any difference between the record of the fishing logbook and the catch, question the master on the reason of such difference.

The reason for catch difference between the fishing logbook and the catch found on-board could be related to under-reporting of catches in the EEZ/fisheries jurisdiction of a coastal State due to commercial quota limit under a fishing agreement, available from the ICCAT Secretariat, or an illegal transhipment at sea of the catches.

Similarly, where there is a catch limit or ban on one species, that species may be under- or mis-reported in the fishing logbook and other species over reported to compensate for total catch weights. All records should be checked for inconsistencies. The master should be asked open questions as to any inconsistencies in the records and his answers recorded in the inspection report or the notebook. Documents should be photographed or photocopied to serve as evidence.

[39] Recommendation 07-08

A) B)

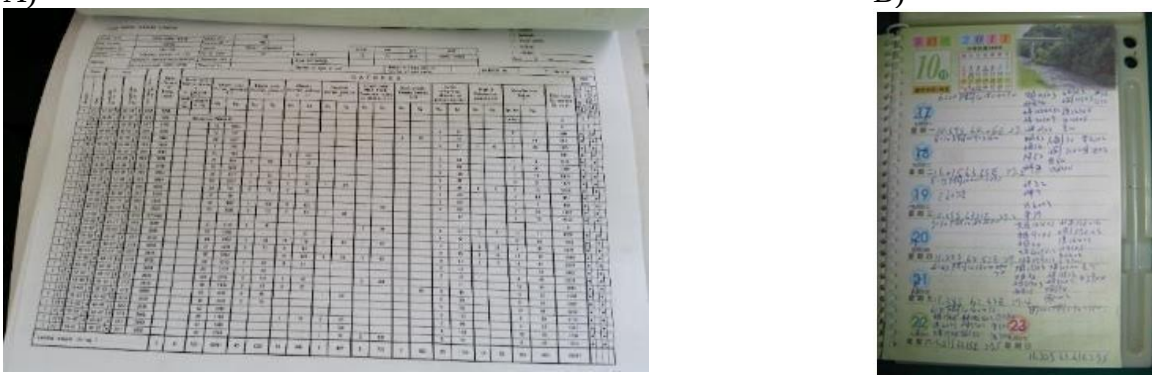


Figure 15 Vessel logbooks, official (A) and unofficial 'calendar' style (B).

Catch Document Schemes and trade information	Report Field Numbers: 33 and 34

Catch Documentation Schemes exist in ICCAT on bluefin tuna[40] (bluefin tuna catch documentation), frozen bigeye tuna,[41] and swordfish[42] (statistical document) and in CCSBT for southern bluefin tuna[43] (catch documentation).

Action to be taken:

- cross check the declared weight and other details of the catch and trade of specific species present on-board and/or off-loaded weights with that recorded in applicable catch documents and statistical documents, e.g., the ICCAT electronic Bluefin Tuna Catch Document or Re-export Certificate;

  - *Note: Bigeye tuna caught by purse seiners and pole and line (bait) vessels and destined principally for the canneries in the ICCAT Area are not subject to this statistical document requirement.*

- verify that the catch documents are properly completed, including observer signatures (for eastern bluefin tuna) and, unless the fish is tagged, validation by a government official or other authorized individual or institution of the exporting State (Check ICCAT database of institutions (and, if provided, persons) authorized to validate ICCAT catch documents;

- verify that ICCAT bigeye tuna and/or swordfish statistical documents are properly completed, including validation by a government official or other authorized individual or institution of the flag State/CPC of the vessel that harvested the tuna (Check ICCAT database of institutions (and, if provided, persons) authorized to validate ICCAT statistical documents.

[40] Recommendation 18-13
[41] Recommendation 01-21
[42] Recommendation 01-22
[43] Resolution on the Implementation of a CCSBT Catch Documentation Scheme

Transhipment authorisations	Report Field Number: 28

Action to be taken:
Review documentation of all transhipments, noting specifically authorisations issued by relevant CPCs and fishing authorities to donor and receiving vessels and cross check quantities reportedly transhipped with declarations submitted by the vessels to their fishing authorities, ICCAT Secretariat and, if available, with ICCAT observer data.

- Onboard LSPLV ask the master whether they engaged in transhipment operation(s) at sea (high seas, EEZ or an area under the fisheries jurisdiction of a coastal State) and the name of vessel(s) involved. Request position, date, time and quantity of fish. If applicable, request the master to produce the ICCAT transhipment declaration[44],
- Request the master to produce the authorisation to tranship (ATT) issued by the vessel's flag CPC that includes ATT at sea. In addition, if the vessel transhipped within waters under the jurisdiction of a coastal CPC, request the master to also produce the transhipment authorization issued by the relevant coastal State(s)
- Verify authenticity, validity and area of operation in the ATT, including that it was/they were issued prior to the transhipment taking place.
- Request the communication logbook to cross reference with the location of transhipment operation(s) and details of the receiving vessel. Check if there is any communication record with other vessels. Request the master to explain the reasons for communications (e.g., supplying, fuelling). Verify the status of the vessels on the ICCAT authorized transhipment list as well as RFMO IUU lists.

Three fundamental rules apply to LSPLVs for transhipment at sea[45]:

- LSPLVs are not authorized to tranship at sea, unless they have obtained prior authorization from their flag CPC and any coastal CPC where transhipment will take place in their waters.
- To receive the prior authorization to tranship, the master and/or owner of the LSPLV must notify the following information to its flag CPC authorities at least 24 hours in advance of an intended transhipment: LSPLV name and ICCAT number, name of the carrier vessel and its ICCAT number, product to be transhipped, tonnage by species or, if known, stock , date and location of transhipment, geographic location of the catches by species or stock;
- The LSPLV concerned should complete and transmit to its flag CPC as well as any concerned coastal CPC, not later than 15 days after the transhipment, the ICCAT transhipment declaration, along with its number in the ICCAT Record of Fishing Vessels.

Since transhipments by LSPLVs in waters under the jurisdiction of a coastal CPC are subject to prior authorization from that CPC regardless of where the catches were made, the concerned coastal CPC should be contacted to confirm that the transhipment was duly authorised.

[44] Recommendation 16-15
[45] Recommendation 16-15

Transhipment information concerning donor vessels	Report Field Number: 29

Action to be taken:
This step applies to the receiving vessel. Review the documentation of all transhipments, noting specifically authorisations issued by relevant CPCs and fishing authorities to donor and receiving vessels and cross check quantities reportedly transhipped to declarations submitted by the vessels to their fishing authorities and ICCAT.

- Ask the master if the vessel has been engaged in transhipment operation(s) at sea (high seas or EEZ/fisheries jurisdiction of a coastal State) and name of vessel(s) involved. Request position, date, time and quantity of fish and, if applicable, request the master to produce the ICCAT transhipment declaration.
- If possible, arrange to meet with the ICCAT Regional Observer Programme (ROP) observer on-board the carrier vessel and request they provide the list of LSPLVs that have transhipped to the carrier vessel along with position, date, time and quantity of fish transhipped and any irregularities recorded by the observer.
- Cross reference the information provided by the master of the carrier vessel and the ROP observer. If there are discrepancies, question the master and record the response in the inspection report and/or the notebook.
- Verify the status of the receiving vessel and the donor vessels on the ICCAT authorized list and the IUU list, or the lists of others RFMOs. If necessary, contact the ICCAT Secretariat to ascertain the status of the concerned vessels.
- Verify the transhipment declaration involving the carrier vessel and the donor vessels and check that it complies with the transhipment declaration template developed for the ROP[46]. Check that they have been submitted following the correct procedure, outlined below, including by contacting the ICCAT Secretariat. Check if the observer has signed the transhipment declarations.

The master of the receiving carrier vessel should complete and transmit the ICCAT transhipment declaration to the ICCAT Secretariat and the flag CPC of the LSPLV, along with its number in the ICCAT Record of Carrier Vessels authorized to receive transhipment in the ICCAT area of competence, within 24 hours of the completion of the transhipment.

If a donor vessel has been fishing and/or transhipping in waters under the jurisdiction of a coastal State, contact the coastal State to confirm that the donor vessel was duly authorised to carry out these activities.

Status in RFMO	Report Field Number: 26

Action to be taken

- Determine and cross check from the fishing authorisations on-board, the status of the vessel in ICCAT (or any other RFMO/regional management area). This information should also correspond to documents issued by the flag State.
- Ask the master if during the current fishing trip if he has been fishing or transhipping in the area of another RFMO and if there are fish on board taken in this area. Note the RFMO area and cross check with fishing positions from the fishing logbook and the navigation logbook.

[46] Recommendation 16-15, Appendix 1.

- If fishing positions are found in the area of competence of a neighbouring RFMO, verify the status of the vessel on the list of authorised vessels and IUU list of the RFMO concerned.
- Should the vessel not be on the authorized, list question the master on the reason to why the vessel is not registered with the concerned RFMO and record the answers. Report the result of the investigation to the concerned RFMO, to the flag State /CPC of the vessel, to the coastal State whose waters the vessel has been operating in, and to the ICCAT Secretariat.

Information on the status of the vessel should have been concluded in the analysis of the AREP with respect to its status on the authorized list or in the IUU list.

Type of gear used	Report Field Numbers: 35 and 36

Action to be taken:

- Review the information on vessel type and authorised fishing gear provided in AREP and conduct a detailed inspection of the fishing gear on-board. Verify that the gear and gear specification conform to the authorisations issued to the vessel (from flag State/CPC and/or coastal State, if applicable).
- List all gear inspected and take detailed note of quantity and gear, specifications, type and materials [e.g., mesh, hook type etc.].
- Inspect gear stowed in compartments and stores, noting:
    - If spare new gear corresponds to authorised gear,
    - Possible recently used illegal gear with evidence of recent use. [Note the smell and any fungal growth that occurs when gear is stowed away wet].
- Verify ICCAT measures on marking of fishing gear for fishing vessels[47]
- While inspecting the gear on-board a longliner, verify if the fishing gear is marked at day with flag and radar reflector, the fishing gear is marked at night with light buoys, and the buoys are marked with letter/number of vessel identification.
- Verify ICCAT measures on marking of FADs for purse seiners[48].
- If the vessel carries FADs, request the master to inspect them and verify if they are marked with letter/number of vessel identification.
- Verify if the gear is stowed in a manner that cannot be readily used for fishing;

[47] Recommendation 03-12
[48] Recommendation 19-02

VMS and navigational equipment	Report Field Number: 25

All vessels will carry at least some basic navigational equipment for safe operation and passage at sea. They also have the requirement to report catch and fishing effort, in each area fished within the ICCAT Convention area. As a minimum, vessels should have; a GPS, echo sounder, VHF and HF radios, GPS plotter and a radar unit. Many vessels will have more detailed communication equipment and sonar systems to enable them to fish more efficiently. Records from GPS plotters or computerised navigational equipment can normally be downloaded retrospectively if necessary.

Action to be taken:

VMS fitted on-board and functionality

- Check if the VMS is obligatory or, if authorised to fish in the fisheries jurisdiction of a coastal State, check fishing licence or fishing agreement for VMS conditions where applicable.
- Request for the master to accompany you to verify the on-board VMS installation (junction boxes, antenna, and cables).
- Verify that the system is fitted on-board and check to see if there is one or more VMS unit. Note the make and model.
- Check the VMS unit(s) noting: the installation, whether device is located in a sealed unit and protected by official seals, tamper proof seals, power supply connections and back-up power, indicator lights to indicate power supply, any input cables for integrated positioning (Figure 16).
- Check the antenna above the bridge, and any paint residue on the antenna,
- Check cable connection and, if possible, that it conforms to the aerial cable into the unit.
- Make a note of the type of VMS unit. A guide to the most commonly seen units is provided in the PSMR online resources and in Annex 10.
- In the event that a port CPC has information to suspect that on-board vessel monitoring device(s) have been tampered with, it should immediately notify the ICCAT Secretariat and the vessel's flag State/CPC.

Figure 16 Argos MARGE unit with power light on and corresponding antenna

Vessels may attempt to tamper with the VMS unit in order to falsify the transmitted information, and so avoid detection of potential infractions. Tampering methods may include:

- blocking or interrupting data transmissions;
- transmission of false data;
- disruption of power supply;
- physical removal of transponder, and
- transponder cloning.

The vessel's notification to enter port requires listing the type of VMS unit installed and the FMC to which it reports. Where possible the inspection teams should obtain the VMS records from the FMC prior to the inspection taking place. Effectively only the land-based national Fisheries Monitoring Centre receiving the VMS information can confirm if the system is operating correctly. However, depending on the preliminary assessment of the VMS information, the inspection team will have to make a decision on whether to undertake a routine inspection or, where falsified VMS information is suspected, a more detailed investigation should be initiated that could also include inviting specialists in the field to accompany the inspection team.

A summary of requirements to be met according to ICCAT Recommendation 18-10 is below:

- VMS must be installed on vessels above 15m LOA
- VMS must be tamper-proof/ tamper evident
- VMs must be switched on, with a reliable power source and/or internal auxiliary power supply
- Acceptable state of cables leading to/from the unit
- Cable routing can be followed to other units
- Antenna must be in an acceptable condition

.

Protected and endangered species	Report Field Numbers: 35 and 36

Action to be taken:

Marine turtles

Review relevant ICCAT Recommendation regarding turtles[49] which currently requires that vessels use a dip net to bring any entangled turtles aboard and also have a de-hooker and line cutter on board (Figure 17, Figure 18 and Figure 19). In addition, there is also a requirement for vessels utilising FADs to use non-entangling material[50] to reduce the impact on non-target species such as turtles.

- Ask to the master if he has captured marine turtles and check to see if there are any instances of marine turtle catch recorded in the fishing logbook. Request the master to produce the line cutters, de-hookers and dip-nets used to release marine turtles.

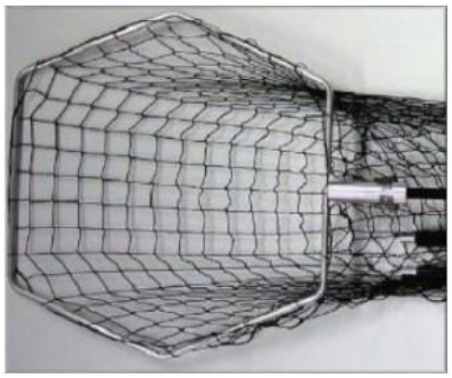


Figure 17 Example of dip-net used to hoist a turtle on board (Source NOAA).

Figure 18 Hoisting of a turtle in a dip net on-board a tuna longliner (Source NOAA).

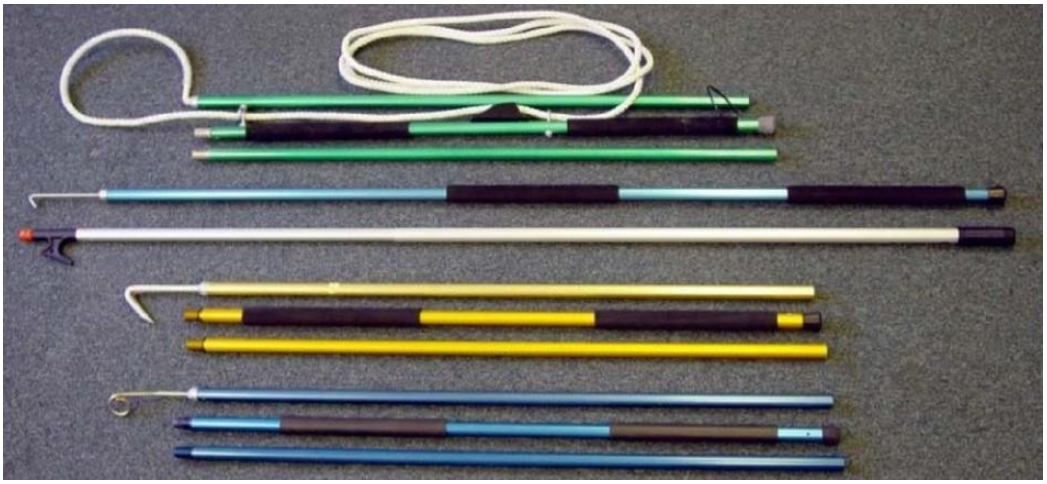


Figure 19 Long handled device (from top): turtle tether, J-Style de-hooker, line cutter and de-hooker for ingested hooks (Source NOAA).

Long handled de-hookers and line cutters will normally be found on board large-scale tuna vessels with short handled are most commonly found on-board smaller vessels.

[49] Recommendation 13-11

[50] Recommendation 19-02.

Seabirds

- Ask the master if they have caught any seabirds and what are the two mitigation measures they were using if they were fishing south of 25°S, specifically night setting with minimum deck lighting, bird-scaring lines (tori lines), or weighted branch lines[51].
- Verify if the vessel has on-board a bird scaring line (Figure 20).
- Note construction, streamer length, material and spacing and total length and compare to the ICCAT requirements. Check to see if a towed object is used. Note if the vessel has fished south of 20°S and if the line has been recently used. Cross check with logbook the setting times to note if the vessel was setting during the day or night.
- Verify if weights are attached to the branch lines and if so the distance from the hook and approximate weight.

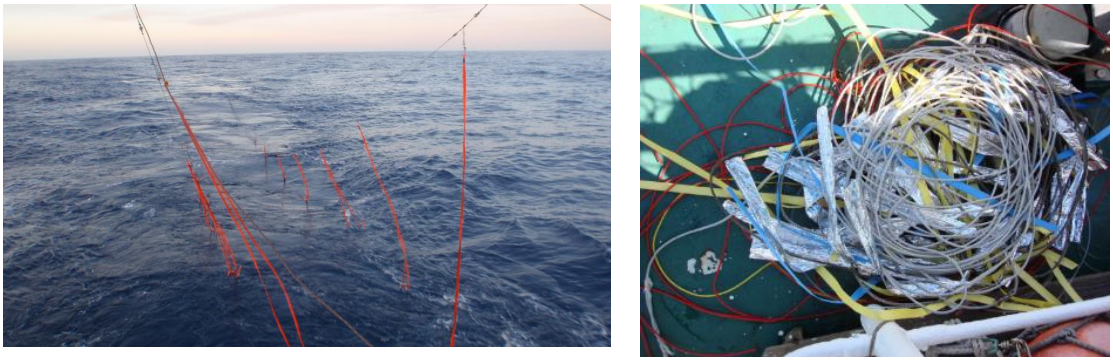


Figure 20 Tori lines, deployed and on deck

Sharks

- Verify ICCAT measures for sharks:
- Check for evidence of prohibited shark species onboard
- Request the master to produce the total weight of sharks and weight of fins. Cross reference with the quantities recorded in the fishing logbook. Search for shark fins and, if so, determine total weight and compare to offloaded weight of shark trunks to see if the fins' weight does not exceed 5% of the total trunk weight.
- It is good practice but not a requirement to leave the fins attached to the shark (Figure 21 A and B), but it is more common for them to be placed in sacks or bails (Figure 21 C and D).
- Shark fins can be hidden in any compartments of the vessel: fish holds, crew cabins, engine room, etc. Shark fins can be stored in sacks in the hold and/or dried on deck and then dry stored. Search in areas of the vessel where the environment is dry and hot. This is where shark fins are generally dried (engine room and chimney of the vessel).

[51] Recommendation 11-09.

A)

B)

C)

D)

Figure 21 Shark fins A) attached to the carcass fresh (mako and blue shark), B) attached frozen, C) stored in bags, D) 'hidden' in a bail in gear locker.

Thresher and silky sharks

Verify ICCAT measures for thresher and silky sharks[52]:

- Ask the master if he has caught thresher sharks (sharks of the family *Alopiidae)* or silky sharks (*Carcharhinus falciformis*) and if they have been retained on-board. While inspecting the fish holds, search for thresher sharks or silky sharks, trunk or fins, weight and record the quantity found on board. Take photographs using reference measurements.

Check-list for SOP for port inspections

Prior to boarding	Take photographs • The vessel name • The home port • The call-sign • National registration number • IMO number • Arial array • Any visible fishing gear

[52] Recommendations 09-07 and 11-08

Embarkation on the fishing vessel	Introduce yourself to the master Present professional ID and legal mandate Provide a short brief on the inspection process Request • cooperation • copy of AREP • authorisation of entry
Place to work	Request master to provide a place to work to analyse documents.
Vessel details and flag State registration	Verify • authenticity/validity of vessel's documents against the specimens / AREP. • cross reference vessel's marks / characteristics with information in the vessel's documents and ICCAT.
Name, address of owners, beneficial owner, operators	Cross reference to the details provided in the AREP. Verify discrepancies against the ICCAT lists of authorised vessels and if available from the IMO number.
Name, address of master, fishing master and agent	Request ID of the master, the fishing master, and the agent. Cross reference with the information that was provided in the AREP.
VMS unit, power and transponder inspection	Check if VMS installed on-board for vessel above 15 meters, tamper proof seals, power supply connections and back-up power, LED lights ON, input cables, antenna.
Status in RFMO	Verify status on RFMO's authorized list and on its IUU list.
Authorisation to fish (ATF)	Check ATF from flag State/CPC and fishing licence from Coastal State: authenticity, validity, area of operation, gear, and against specimens. Verify if there is any modification made on ATF.
Transhipment authorisations	Verify authenticity, validity, and area of operation of the ATT.
Transhipment information concerning donors' vessels	Review documentation of all transhipments. Verify the status of the donor's vessels on the ICCAT authorized list and the IUU list.

Evaluation of offloaded catch	Record reported weights to be off-loaded prior to the commencement of the off-loading operation. Cross reference to the estimated weights determined from the estimates made while monitoring the off-loading.
Catch retained on-board - hold inspection	Request the master to produce the quantity by species retained on-board the vessel. Estimate the catch in the holds.
Examination of logbooks	Master to produce the fishing, processing, freezer, engineering logs. Cross reference areas of operation detailed in fishing logs to information in AREP and to the authorised areas for fishing.
Catch Document Schemes and trade information	Cross check declared weight of species on-board with applicable catch document schemes. Weights specified on the catch documents should correlate with the off-loaded weights.
Fishing gear	Review the information on vessel type and authorised fishing gear provided in AREP and conduct a detailed inspection of the fishing gear on-board. Verify that the gear and gear specification conform to the authorisations issued to the vessel. Search illegal fishing gear.
Protected and endangered species	Inspect line cutters, de-hookers and dip-nets used to release marine turtles. Check if the vessel has on-board a "tori" bird scaring line. Check for shark fins and determine % of fins relative to shark carcasses on board. Check for prohibited shark species, including trunks or fins, on board and verify no exception exists.
Report completion	Inspection team to reconcile the findings of the inspection. Copy of inspection report provided to the master.
Signatures of the inspection report	Fisheries inspector and master sign the inspection report. Ask the master if there are any complaints.

Annex 6 SOP for inspection and monitoring offloading from a LSPLV

Arrival on the vessel		Introduction and briefing with Master / Fishing Master / Bosun by the inspection team leader and presentation of inspectors' identifications and mandate.
Request for documentation		Inspectors monitoring offloading must request: • Confirmation of quantities to be offloaded or transhipped as reported in the AREP, • Fish hold plan showing dimension, • Loading plan showing product location, quantities and species in hold.
Request details of offloading plan and procedure		Request details of method and procedures that will be followed when offloading out of the hold to shore or during transhipment. • Note if fish will be discharged in strings or using a cargo net, • Note if selected products and species will be discharged in different sequences. *Example; large tuna in strings, transhipped to a carrier vessel. By-catch offloaded to shore in cargo nets,* • Discuss option of like-species being offloaded together in single hoists to facilitate recording species composition of the catch.
Discuss planned sampling of catch for verifying weight and species composition		Discuss need to record sample weights and identify species. Determine where inspection points will be set up and where sampling can be undertaken to cause least disruption to offloading operations. Ask if a hook scale will be used and request its use if available
Inspection of hold before offloading operation		Undertake an advanced inspection of hold and compartments where fish are stored to record to what capacity they are filled and take photographs. At this stage note and record processing state and species that can be identified.

Setup monitoring position(s)		Select a position where the fish being hoisted out of the hold can be observed; counted and species identified. Consideration should be given to manning more than one position to observe offloading process. When selecting positions note health & safety requirements with respect to fish falling from hoists or collapse of the crane. (These often occur) Possible positions; • On the deck of the fishing vessel below the shelter deck with full view of the hatch; • On the deck of the carrier vessel where fish can be observed coming out of the longline vessels hold and being lowered into the carrier's vessels hold; • On the quayside where the deck is visible and where hoists can be observed in the air and where they will be set down, • In the factory ashore where hoists are set down. Note: positions should allow opportunity to read hook scale if attached.
Sampling for average weight		<u>Hook Scale attached:</u> record the weight of each hoist. <u>No hook scale attached:</u> at random intervals request a single or number of fish from a hoist to weigh. • Random number tables can be computer generated to facilitate these selections; • Weight using a hanging or platform scale depending on what's available and the size of the fish, • Request use of the hook scale for large fish.
Sampling for species composition		Larger tuna that have been processed in a similar manner may be difficult to identify when together in a hoist. These can be recorded as an aggregation for the different species. *Example. YFT and BET mixed.* To determine the ratio of the two species, request randomly selected hoist to be lowered to the deck and sample for the different species from closer examination of the stomach cavity. The ratio of the species mix can be raised to the total unit counts; however, this will only provide a rough indication.

Annex 7 **SOP for inspection and monitoring offloading from tuna purse seiner**

Arrival on the vessel	Introduction and briefing with Master / Fishing Master / Bosun by the Inspection team leader and presentation of inspectors' identifications and mandate.
Request for documentation	Inspectors monitoring offloading to request: • Confirm quantities to be offloaded as reported in the AREP; • Request a "*well loading plan*"; • Note dimensions and well volumes from the well plan; • Note species size and corresponding set numbers loaded in specific wells, • Note condition of fish in wells; brine frozen, chilled sea water.
Request details of offloading plan and procedure	Request details of method and procedures that will be followed when offloading: • Note sequence that wells will be offloaded; • Discuss option of "like-species" being offloaded together.
Discuss planned sampling of catch for verifying weight and species composition	Discuss need for recording sample weights and species: • Determine where these can be undertaken to cause least disruption to offloading operations; • Location where platform scales can be set up and space to measure fish, • Ask if a hook scale will be used and request one if available.
Inspection of hold before offloading operation	Undertake an advanced inspection of fish wells and record: • Estimated volume of fish in each well; • Fish size in each well, for example less than 10kg or more than 40kg, • If possible, note the species mix in a well and take photographs of each well before it is offloaded.
Setup monitoring position(s)	Setup monitoring position(s) from where the offloading or transhipment will be observed and where sampling will take place. Preferably more than one position should be manned. Select a position where the fish coming out of the well can be monitored.

	• This may be alongside the well as fish are raised from the well to a conveyor; • A position next to the conveyor from wells to loading point for hoisting ashore; • On the quayside where the deck is visible and where hoists can be observed in the air and are set down, • In the factory where hoists are set down. Consideration should be given to manning more than one position to observer offloading process. Position to sample fish and another to estimate total weight being offloaded. When selecting position note health & safety requirements with respect to fish falling from hoists or collapse of the crane (these often occur).
Sampling for average weight	Depending on the sampling position set up, select fish at random intervals: • Random number tables can be computer generated to facilitate these selections; • Weight using a hanging or platform scale depending on what's available and the size of the fish, • Request use of the hook scale for large fish. The number of fish sampled will be determined by the variability in size (size range) and total estimated number of fish onboard. Smaller fish are often more uniform in size and a smaller subsample can be selected to provide an accurate average weight. For example; selecting 1 fish for every 100.
Sampling for species composition	This can be done by recording the species for a predetermined time as the fish move past or taking random samples of fixed numbers at regular intervals. Optimally if fish are passing on a conveyor belt, request they stop the belt for a short period and sample a length of the belt. Use this ratio raised to the total time that the belt is in operation to empty a well. (see example). Alternatively record the species composition for a single hoist and raise the ratio with the number of hoists to empty the well. To improve accuracy the process should be repeated as often as possible.

Monitoring Hoists	• Record the date / time of first hoist; • Record for each hoist; the number of fish, species and product; • Record hook scale weight (if attached); • Number each hoist consecutively from the first to the last; • Record start and end time of interruptions in the offloading due to meal breaks or technical difficulties, • Record the date / time of the last hoist.
End of offloading and transhipment operations	Summarise quantities recorded offloaded for: • Specie; • Processing code (should be 1 for purse seine vessels offloading whole fish); • Apply the raising factor for the processing code; Request copy of the offloading declaration-form. Compare the recorded quantities to that declared by the vessel and note difference.
Well inspection	Request a vessel officer to accompany inspector for an inspection of the wells after offloading operations. Note well number and estimate quantities of any fish left in the well. Record how estimates of remaining fish are determined: • Visual count; • Fish weighed, • Volume of wells calculated and compared to volume of remaining fish. Photograph empty wells or remaining fish in hold. Request a declaration from the vessel of the quantity of fish remaining in the hold. Record difference between recorded and declared quantities.
Reconciliation	Complete inspection report fields 30 and 31
Debriefing with master / fishing master	Debrief responsible persons on-board and provide copies of recorded quantities monitored, allowing their comments and signatures to be appended.

Annex 8 **SOP for monitoring offloading from carrier vessel**

Arrival on the carrier vessel	Introduction and briefing with master by the inspection team leader and presentation of inspectors' identifications and mandate.
Request for documentation	Inspectors monitoring offloading should request: • Confirm quantities to be offloaded as reported in the AREP; • Cargo manifest and hold plan and dimension, Loading plan showing product location, quantities and species relative to each donor vessel.
Request details of offloading plan and procedure	Request details of method and procedures that will be followed when offloading. Note sequence of holds to be offloaded, quantities and product origins.
Discuss planned sampling of catch for verifying weight and species composition	Discuss need for recording sample weights and species: • Determine where these can be undertaken to cause least disruption to offloading operations and effect on product quality, • Confirm that a hook scale will be used.
Inspection of hold before offloading operation	Undertake an advanced inspection of hold, compartments and all relevant areas where fish are stored to record to what capacity they are filled and take photographs.
Setup monitoring position(s)	Select a position where the fish being hoisted out of the hold can be observed; counted and species identified and the hook scale can be read. Consideration should be given to manning more than one position to observer offloading process. When selecting a position note health & safety requirements with respect to fish falling from hoists or collapse of the crane. (these often occur). Possible positions: • On the deck of the carrier being offloaded or transhipping, with full view of the hatch opening; • Note: position should allow opportunity to read hook scale,

	• Where one carrier is transhipping to another, a position on the receiving vessel can be set up with view of fish from the hold of the donor vessel to the receiving vessel.
Sampling for average weight	At random intervals request a single or number of fish from a hoist to weigh. • Random number tables can be computer generated to facilitate these selections; • Weight using a hanging or platform scale depending on what's available and the size of the fish may be practical in some circumstances, • Request use of the hook scale for weighing samples of large fish.
Sampling for species composition	The products of several tuna species are processed in the same manner and it may be difficult to identify between the species when together in a single hoist. These can be recorded as an aggregation for the different species. *For example. YFT and BET mixed* To determine the ratio of the two species selected hoist can be lowered to the deck and inspectors can sample for the different species from closer examination of the trunks.
Monitoring Hoists	• Record the date / time of first hoist; • Record for each hoist; the number of fish, species and product; • Record hook scale weight (if attached); • Number each hoist consecutively from the first to the last; • Take photographs of hoists where species are not clearly identified; • Record start and end time of interruptions in offloading or transhipment operations due to meal breaks or technical difficulties. Record the date / time of the last hoist.
End of offloading and transhipment operations	Summarise quantities recorded offloaded. • For each donor vessel, note: o Weight per species, o Processing code. Request copy of the total offloading or transhipment declaration-forms.

	Compare the monitored quantities to that declared by the vessel and note difference.
Hold inspection	Request a vessel officer to accompany inspector for an inspection of the carriers hold after transhipment or landing operations. Note: • hold divisions; • Record number, species and weight of fish remaining in the hold; • Record how estimates of remaining fish are determined; o Visual count, o Fish weighed, • Volume of hold calculated and compared to volume of remaining fish. Photograph empty hold or remaining fish in hold. Request a declaration from the vessel of the quantity of fish remaining in the hold. Record difference between recorded and declared quantities.
Reconciliation	Complete inspection report fields 30 and 31.
Debriefing with vessel master / fishing master	Debrief responsible persons on-board and provide copies of recorded quantities monitored, allowing their comments and signatures to be appended.

Annex 9 Species commonly caught in the Atlantic, codes and scientific names

FAO Species Code	Common name (English)	Scientific Name
Target species covered by the ICCAT Convention		
YFT	Yellowfin tuna	*Thunnus albacares*
BET	Bigeye tuna	*Thunnus obesus*
SKJ	Skipjack tuna	*Katsuwonus pelamis*
ALB	Albacore or longfin tuna	*Thunnus alalunga*
BFT	Atlantic bluefin tuna	*Thunnus thynnus*
SBF	Southern bluefin tuna	*Thunnus maccoyii*
BON	Atlantic bonito	*Sarda*
BLT	Bullet tuna	*Auxis rochei*
FRI	Frigate tuna	*Auxis thazard*
KGM	King mackerel	*Scomberomorus cavalla*
LTA	Atlantic black skipjack	*Euthynnus alletteratu*
SSM	Atlantic Spanish mackerel	*Scomberomorus maculatus*
BLF	Blackfin tuna	*Thunnus atlanticus*
SWO	Swordfish	*Xiphias gladius*
BUM	Blue marlin	*Makaira mazara*
MLS	Striped marlin	*Tetrapturus audax*
WHM	White marlin	*Tetrapturus albidus*
SAI	Sailfish	*Istiophorus platypterus*
MSP	Mediterranean spearfish	*Tetrapturus belone*
SPF	Longbill spearfish	*Tetrapturus pluegeri*
RSP	Roundscale spearfish	*Tetrapturus georgii*
Common by-catch species of special importance		
BSH	Blue shark	*Prionace glauca*
SMA	Shortfin mako shark	*Isurus oxyrinchus*
POR	Porbeagle	*Lamna nasus*
ALV	Thresher shark	*Alopias vulpinus*
BTS	Big eye thresher shark	*Alopias superciliosus*
OCS	Oceanic white tip shark	*Carcharhinus longimanus*
SPL	Scalloped hammerhead	*Sphyrna lewini*
SPZ	Smooth hammerhead shark	*Sphyrna zygaena*
SPK	Great hammerhead	*Sphyrna mokarran*
Other common by-catch species		
FAL	Silky shark	*Carcharhinus falciformis*
TIG	Tiger shark	*Galeocerdo cuvier*
DOL	Dorado/dolphinfish	*Coryphaena hippurus*
LEC	Black escolar/smooth skin oilfish	*Lepidocybium flavobrunneum*
OIL	Escolar/ rough skin oilfish	*Ruvettus prestiosus*

Annex 10 VMS guide for use by ICCAT PSM Inspectors

The following guide briefly describes some of the main units available and will assist in identifying the majority of systems fitted to vessels during inspections, note that other combinations may be available. VMS units usually consist of a unit or junction box, often situated on or near the bridge, connected to an antenna fitted above the bridge. Particularly note the shape of these antennae as they can be difficult to distinguish amongst some of the other antennae.

Argos

The electronic components of this unit are entirely enclosed within the dome shaped "aerial" of the unit. This is mounted externally with a good view of the sky – usually above the bridge. The dome is white, measures 300mm in diameter and 160mm in height and is mounted on top of a pole. The dome is connected to an indoor junction box that is mounted.

Numerous Argos VMS transmitters that are generally sold under a generic name MAR GE (MAR GE RB, MAR GE, MARGE V2, etc.). Most common model found on vessels is currently the MAR GE V2.

Thrane and Thrane 3022D "family"

Thrane and Thrane 3022D VMS units are one of the more commonly installed units. Some vessels have Sailor 3022D units installed, which are identical except for colour

The approximate dimensions of the electronics units are 50mm x 180mm x 165mm (H x W x D).

Capsat

These compact units have a row of small LED lights along the front of the unit to indicate whether the unit is powered or not. The approximate dimensions of the electronic units are 43mm x 205mm x 200mm (H x W x D).

Trimble Galaxy

Trimble Galaxy units are particularly found on vessels flagged to Chinese Taipei. The approximate dimensions are 80 mm x 55 mm x 217 mm.

Thorium CLS-TST 100

The electronic components of this unit are entirely enclosed within the dome shaped "aerial" of the unit. This is mounted externally with a good view of the sky – usually above the bridge.

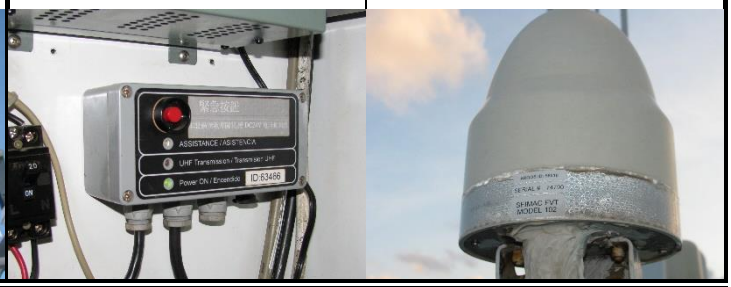
A junction box is mounted in the cabin so as to allow two-way communications and remote diagnostics thanks to small LED lights.

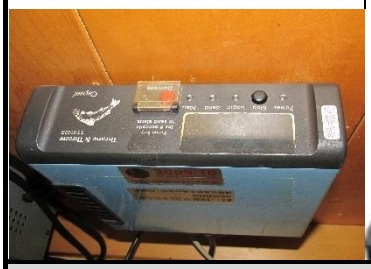
Thorium CLS-TST 100 units utilise the Iridium satellite network and are operated by CLS, whose marking are more prominent on bridge units and antennae than those of Thorium. The VMS itself is entirely enclosed within an externally mounted dome, usually found on top of

the bridge. A junction box is mounted in the cabin to allow two-way communications, as well as to enable remote diagnostics using LED lights.

VMS power supply

On occasion, inspectors may be shown a power supply instead of a VMS bridge unit or junction box. It is important to recognise this and insist that the actual VMS unit is shown, although in the case of the Argos Marg 2 model the VMS unit is integrated into the antennae.

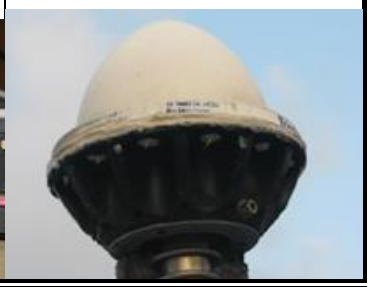
1. Argos MAR GE	2(a). Argos MAR GE V2
	
2(b). Argos MAR GE V2 (without junction box	**3. Argos (Seimac) FVT**
	
4. Argos (CLS) LEO	**5. Furuno Felcom 16 / 19**
	
6. Japan Radio Company (JRC) JUE-95VM	**7. CLS Thorium TST-100**
	
8. Thrane & Thrane (Sailor) Capsat TT-3022D	**9. Thrane & Thrane (Sailor) Capsat TT-3026S Mini**



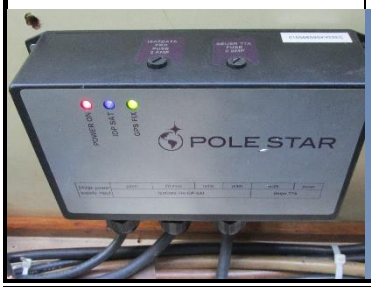

10. Thrane & Thrane (Sailor) Capsat

11. Trimble Galaxy


12. Pole Star MAT – IDP690



13. Glocom GX-9



14. CLS triton (iridium)

15. CLS VELA

16. BEAM Oceana 800

17. Cobham/SAILOR 250 FLEETBROADBAND



Note all antennae are displayed on the right and the units installed indoors are displayed on the left.