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Commission des Thons de l'Océan Indien

# Training course presentation

## *IOTC ROS SFO*

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## TRAINING OBJECTIVES

1. Train 10 Scientific Field Observers (SFO)
  1. Collect scientific data vital to fisheries management
  2. Monitor compliance with national fisheries regulations
  3. Check compliance with IOTC CMMs
  4. Conduct observer work at sea in a safe manner
2. Meet, as a minimum, the IOTC ROS Basic Observer Training curriculum .



IOTC Regional Observer Scheme (ROS) Scientific Field Observer (SFO) training course has per objective to train 10 national Scientific Field Observers in the collection of scientific data, the monitoring of compliance with national fisheries regulations and with IOTC CMMs and the conducting of observer work at sea in a safe manner.

The course has been designed to meet, as a minimum, the IOTC ROS Basic Observer Training curriculum and adapted to ensure consistency with the current (2021) decisions of the Commission.



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## TRAINING IMPLEMENTATION

Generic observer training program will be conducted in several phases:

Phase 1 : Basic Sea Survival Training

Phase 2: Technical scientific training

Phase 3: Data collection, verification, input and reporting training



Scientific Field Observer training is divided into three phases:

Phase 1 : Basic Sea Survival Training

Phase 2: Technical scientific training

Phase 3: Data collection, verification, input and reporting training

Training will include one or more of the following gear types, to enable Observers to collect scientific data with national flagged fleets that operate in their country EEZ and within the IOTC Convention Area as requested in IOTC Resolution 11/04.

- pelagic longline;
- pelagic drift gillnet;
- pole and line; and
- tuna purse-seine;



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## Phase 1 : Basic Sea Survival training

- STCW 2010 certified training (or equivalent);
- Outsourced to an in-country IMO certified institution (or equivalent);
- To include, at a minimum:
  - Personal Survival Techniques VI/I-1;
  - Personal Safety and Social Responsibility VI/I-4.
- Training will entail:
  - theoretical component in a classroom environment;
  - practical courses taught in a controlled environment.



### Phase 1 : Basic Sea Survival training

To comply with “international safety standards for merchant seaman and fishermen” to embark onboard any commercial fishing vessel, Observers are to undergo STCW 2010 certified training (or equivalent). This training is to be outsourced to an in-country IMO certified institution (or equivalent) and should include, at a minimum, the following modules:

- Personal Survival Techniques VI/I-1;
- Personal Safety and Social Responsibility VI/I-4.

Training will entail a theoretical component in a classroom environment using blended training (Power Point presentations, videos and simulated practical exercises). Knowledge acquired during theoretical lectures will be applied during practical courses during which the trainee will have to practically demonstrate the survival skills taught in a controlled environment, for an individual and in a group.



## Phase 2 : Technical scientific training

- Theoretical scientific training
  - Include general basic theoretical background and specific theoretical training on fishing operations, gear and species
  - conducted from distance
  - via e-Learning Management System (TalentsLMS) software
  - blended training (Power Point presentations, videos, simulated practical exercises, quizzes, role playing, visual aids and self-training tools)
- Practical technical scientific training
  - Include specific theoretical and practical training on fishing operations, gear and species
  - conducted in situs
  - exercises, “hands on” experience, training onboard a commercial vessels



### Phase 2 : Technical scientific training

Theoretical scientific training is to be conducted from distance via the use of a e-Learning Management System (LMS) software. Practical technical scientific training is to be conducted in situs using suitable training facilities with appropriate equipment. Access to fishing harbours, fishing vessels or fish landing sites would enhance the training.

Training will be conducted informally using blended training methods (combination of Power Point presentations, videos, simulated practical exercises, quizzes, and role playing coupled with visual aids and self-training tools).

Practical training onboard a commercial vessel will be arranged should the opportunity arise, to provide trainees with a practical “hands on” experience and an opportunity to visually comprehend vessel layout and electronic equipment used for navigation and locating fish.

Technical scientific training will include general basic theoretical background to support observers at sea on deployment in any fishing sector; and specific theoretical and practical training on fishing operations, gear and species caught by the fishery sectors operating regionally within the IOTC Convention Area.



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## Phase 3 : Data collection, verification, input and reporting training

- Theoretical training
  - Include the filling of IOTC ROS data recording forms
  - conducted from distance via TalentsLMS software
  - on-the-job exercises and role playing on form filling and reporting
- Practical training
  - Include form filling, verification, data punching and reporting
  - conducted in situs
  - “hands on” experience, training onboard a commercial vessels



### Phase 3 : Data collection, verification, input and reporting training

Theoretical training is to be conducted from distance via the use of a e-Learning Management System (LMS) software. Practical training is to be conducted in situs using suitable training facilities with appropriate equipment. Access to fishing harbours, fishing vessels or fish landing sites would enhance the training.

Training will be conducted informally using blended training methods (combination of Power Point presentations, videos, simulated practical exercises, quizzes, and role playing coupled with visual aids and self-training tools).

Practical training onboard a commercial vessel will be arranged should the opportunity arise, to provide trainees with a practical “hands on” experience and an opportunity to visually comprehend how to fill in IOTC ROS data recording forms when onboard a vessel.

Training will be conducted informally, using blended training methods (combination of on-the-job exercises and role playing on form filling, verification, data punching and reporting).

Training will include the filling of IOTC ROS data recording forms, data punching using IOTC ROS e-collection and reporting system, data verification and reporting.



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## TRAINING MATERIALS

- IOTC ROS Scientific Observer Manual;
- IOTC ROS data recording forms (gear specific);
- IOTC ROS Observer Guidelines (gear specific);
- IOTC ROS e-collection and reporting system;
- PowerPoint projections;
- Video presentations;
- Various Species Identification Guides;
- Assessment materials (written, problem based, practical exercise/exam and performance sheets)
- Other (pre-evaluation forms, self-learning tools)



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### Training materials to be used during the course

- IOTC ROS Scientific Observer Manual;
- IOTC ROS data recording forms (gear specific);
- IOTC ROS Observer Guidelines (gear specific);
- IOTC ROS e-collection and reporting system;
- PowerPoint projections;
- Video presentations;
- Various Species Identification Guides;
- Assessment materials (written, problem based, practical exercise/exam and performance sheets)
- Other (pre-evaluation forms, feedback questionnaires, self-learning tools)



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## COMPETENCY-BASED ASSESSMENT

**Candidates shall be evaluated against specific set of behavioural indicators and measurement criteria based on IOTC ROS observer minimum competency standards that describe the different competencies candidates are required to meet to be registered by the IOTC.**



**DETAILED IN IOTC ROS TRAINING PROGRAMME**

### COMPETENCY-BASED ASSESSMENT

To successfully complete the IOTC ROS Basic Observer Training Course candidates will be subject to a competency-based assessment and should meet, or exceed IOTC ROS minimum competency standards to ensure that they have acquired the required skills by the end of the training course.

IOTC ROS minimum competency standards are identical throughout the IOTC ROS, independent of the country or of the organisation(s) in charge of training and managing observers. Observers that meet IOTC ROS minimum competency standards will be certified as fully trained in the gear types they've been trained for and issued an individual training certificate inclusive of candidate assessment results per training module.

Following the submission of a request for observer registration by the National Observer Programme, the IOTC Secretariat will allocate successful candidates with an individual registration code that must be included on observer data submitted to the Secretariat.





# TRAINING CURRICULUM

- Basic Sea Survival Training
  - 2 key topics to be covered
- Technical scientific training
  - GENERIC TRAINING COMPULSORY FOR ALL GEARS
    - 11 key topics to be covered
  - GEAR SPECIFIC TRAINING
    - 3 key topics per gear to be covered
- Data collection, verification, input and reporting training
  - 1 key topics per gear to be covered



## Technical scientific training (17 key topics to be covered)

### GENERIC TRAINING COMPULSORY FOR ALL GEARS (11 key topics to be covered)

1. Fisheries management
2. Role of Observers / Observer appointment, powers, ethics
3. Safety, health, accident and injury
4. Reporting
5. Basic navigation and navigational aids
6. Basics of radio and satellite communication
7. Meteorology and oceanography
8. Ship Layout and Terminology
9. Identification: target and non-target fish species (including juvenile YFT & BET)
10. Identification of sea turtles, seabirds and cetacean's species
11. Sampling procedures

### GEAR SPECIFIC TRAINING (3 key topics per gear to be covered)

12. IOTC fishery: Tuna Purse-Seine Fishery
13. IOTC fishery: Pelagic longline fishery
14. IOTC fishery: Pole and line fishery (bait and tuna)
15. IOTC fisheries: Pelagic gillnet fishery
16. Sampling strategies as a function of the IOTC fishery
17. IOTC fisheries impacts on the ecosystems, interactions with species of special interest and mitigation

## Data collection, verification, input and reporting training (5 key topics per gear to be covered)

18. Purse-seine onboard data collection and recording
19. Longline onboard data collection and recording
20. Pole-and-line onboard data collection and recording
21. Gillnet onboard data collection and recording
22. Electronic data recording



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## TRAINING REQUIREMENTS

<b>IOTC SFO TR [ ]</b> <i>[Training requirement number]</i>	<b>[ ]</b> <i>[Training course name]</i>
<b>Descriptor</b> <i>[Training course descriptor]</i>	
<b>Learning outcome</b> <i>[Outcomes expected following training]</i>	<b>Key training topics</b> <i>[List of key training topics for the specific course]</i>
<b>EVIDENCE AND ASSESSMENT GUIDE</b>	
<b>Context and Methods of Training and Assessment</b> <i>[How training and assessments are to be conducted and training / assessment methods to be used]</i>	
<b>Critical aspects of evidence</b> <i>[How trainee performance is to be evaluated against particular IOTC ROS competency standards and what capacity the trainee will need to show to demonstrate to have achieved specified competency standard/s]</i>	



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### TRAINING REQUIREMENTS

The training curriculum includes individual training requirements (key topics to be covered), respective expected learning outcomes, assessment criteria, evidence and assessment guide. Information is also provided on the training methodology to be followed and on the training materials to be use during the SFO training course.

Training requirements are detailed under the IOTC Regional Observer Scheme, Scientific Field Observer Training Course Objectives, Structure and Programme, that can be consulted and downloaded from Talents LMS, TR0 support documents.



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## COMPETENCY-BASED ASSESSMENT

*Competency-based assessment methodologies will include the written, problem based, practical, performance methods:*

1. Following candidate training evolution using Talents LMS
2. Conducting simulation exercises
3. Problem sheets
4. Mini-practical
5. “Doing it” exam / exercises
6. Open book exam with multiple choice questions
7. Assessing observer capacity to keep a journal / diary



### COMPETENCY-BASED ASSESSMENT

To successfully complete the Basic Observer Training Course candidates will be subject to a competency-based assessment, based on a framework that describes the different competencies the candidate is required to meet, its specific set of behavioural indicators and measurement criteria.

IOTC ROS minimum competency standards approved by the Commission will be used as the competency framework against which candidates are to be evaluated.

Assessment methodologies to be used will include the following written, problem based, practical, performance methods:

1. Following candidate training evolution using Talents LMS
2. Conducting simulation exercises
3. Problem sheets
4. Mini-practical
5. “Doing it” exam / exercises
6. Open book exam with multiple choice questions



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# ANY QUESTIONS?



*send us a message via Talents LMS*



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