ANNEX I

**ICCAT Minimum standards for fishing vessels scientific observer programs**

**General Provisions**

1. These are the minimum standards for fishing vessels scientific observer programmes laid down in ICCAT Recommendation 16-14.

**Qualifications of Observers**

2. Without prejudice to any training or technical qualifications recommended by the SCRS, CPCs shall ensure that their observers have the following minimum qualifications to accomplish their tasks:

a) Sufficient knowledge and experience to identify ICCAT species and fishing gear configurations;

b) The ability to observe and record accurately the information to be collected under the Program;

c) The capability of performing the tasks set forth in paragraph 7 below;

d) The ability to collect biological samples; and

e) Minimum and adequate training in safety and sea survival.

3. In addition, in order to ensure the integrity of their domestic observer program, CPCs shall ensure the observers:

a) Are not crew members of the vessel being observed;

b) Are not employees of the owner or beneficial owner of the fishing vessel being observed ; and

c) Do not have current financial or beneficial interests in the fisheries being observed.

**Observer Coverage**

4. Each CPC shall ensure the following with respect to its domestic observer programs:

a) A minimum of 5% observer coverage of fishing effort in each of the pelagic longline and as defined in the ICCAT glossary, baitboat, traps, gillnet and trawl fisheries. The percentage coverage will be measured:

i. For pelagic longline fisheries, in fishing days, number of sets, or trips;

ii. For baitboat and trap fisheries, in fishing days;

iii. For gillnet fisheries, in fishing hours or days; and

iv. For trawl fisheries, in fishing hauls or days.

b) Notwithstanding paragraph a), for vessels less than 15 meters, where an extraordinary safety concern may exist that precludes deployment of an onboard observer, a CPC may employ an alternative scientific monitoring approach that will collect data equivalent to that specified in this recommendation in a manner that ensures comparable coverage. In any such cases, the CPC wishing to avail itself of an alternative approach must present the details of the approach to the SCRS for evaluation. The SCRS will advise the ICCAT Commission on the suitability of the alternative approach for carrying out the data collection obligations set forth in this Recommendation. Alternative approaches implemented pursuant to this provision shall be subject to the approval of the ICCAT Commission at the annual meeting prior to implementation.

c) Representative temporal and spatial coverage of the operation of the fleet to ensure the collection of adequate and appropriate data as required under this Recommendation and any additional domestic CPC observer program requirements, taking into account characteristics of the fleets and fisheries;

d) Data collection on pertinent aspects of the fishing operation, including catch, as detailed in paragraph 7.

5. CPCs may conclude bilateral arrangements whereby one CPC places its domestic observers on vessels flying the flag of another CPC, as long as all provisions of this Recommendation are complied with.

6. CPCs shall endeavour to ensure that observers alternate vessels between their assignments.

**Tasks of the Observer**

7. CPCs shall require, *inter alia*, observers to:

a) Record and report upon the fishing activity of the observed vessel, which shall include at least the following:

i. Data collection, that includes quantifying total target catch, discards and by-catch (including sharks, sea turtles, marine mammals, and seabirds), estimating or measuring size composition as practicable, disposition status (i.e., retained, discarded dead, released alive), the collection of biological samples for life history studies (e.g., gonads, otoliths, spines, scales);

ii. Collect and report on all tags found;

iii. Fishing operation information, including:

- Location of catch by latitude and longitude;

- Fishing effort information (e.g., number of sets, number of hooks, etc.);

- Date of each fishing operation, including, as appropriate, the start and stop times of the fishing activity;

- Use of fish aggregating objects, including FADs; and

- General condition of released animals related to survival rates (i.e. dead/alive, wounded, etc.).

b) Observe and record the use of by-catch mitigation measures and other relevant information;

c) To the extent possible, observe and report environmental conditions (e.g., sea state, climate and hydrologic parameters, etc.).

d) Observe and report on FADs, in accordance with the ICCAT Observer program adopted under the multi-annual conservation and management programme for tropical tuna; and

e) Perform any other scientific tasks as recommended by SCRS and agreed by the ICCAT Commission.

**Obligations of the Observer**

8. CPCs shall ensure that the observer:

a) Does not interfere with the electronic equipment of the vessel;

b) Is familiar with the emergency procedures aboard the vessel, including the location of life rafts, fire extinguishers and first aid kits;

c) Communicates as needed with the Master on relevant observer issues and tasks;

d) Does not hinder or interfere with the fishing activities and the normal operations of the vessel;

e) Participates in a debriefing session(s) with appropriate representatives of the scientific institute or the domestic authority responsible for implementing the observer program.

**Obligations of the Master**

9. CPCs shall ensure that the Master of the vessel to which the observer is assigned:

a) Permits appropriate access to the vessel and its operations;

b) Allows the observer to carry out his/her responsibilities in an effective way, including by:

i. Providing appropriate access to the vessel's gear, documentation (including electronic and paper logbooks), and catch;

ii. Communicating at any time with appropriate representatives of the scientific institute or domestic authority;

iii. Ensuring appropriate access to electronics and other equipment pertinent to fishing, including but not limited to:

- Satellite navigation equipment;

- Electronic means of communication.

iv. Ensuring that no one on board the observed vessel tampers with or destroys observer equipment or documentation; obstructs, interferes with, or otherwise acts in a manner that could unnecessarily prevent the observer from performing his/her duties; intimidates, harasses, or harms the observer in any way; or bribes or attempts to bribe the observer.

c) Provides accommodation to observers, including lodging, food and adequate sanitary and medical facilities, equal to those of officers;

d) Provides the observer adequate space on the bridge or pilot house to perform his/her tasks, as well as space on deck adequate for carrying out observer tasks.

**Duties of the CPCs**

10. Each CPC shall:

a) Require its vessels, when fishing for ICCAT species, to carry a scientific observer in accordance with the provisions of this recommendation;

b) Oversee the safety of its observers;

c) Encourage, where feasible and appropriate, their scientific institute or domestic authority to enter into agreements with the scientific institutes or domestic authorities of other CPCs for the exchange of observer reports and observer data between them;

d) Provide in its Annual Report for use by the ICCAT Commission and the SCRS, specific information on the implementation of this recommendation, which shall include:

i. Details on the structure and design of their scientific observer programs, including, *inter alia*:

- The target level of observer coverage by fishery and gear type as well as how measured;

- Data required to be collected;

- Data collection and handling protocols in place;

- Information on how vessels are selected for coverage to achieve the CPC’s target level of observer coverage;

- Observer training requirements; and

- Observer qualification requirements.

ii. The number of vessels monitored, the coverage level achieved by fishery and gear type; and

iii. Details on how those coverage levels were calculated.

e) Following the initial submission of the information required under paragraph 10(d)(i), report changes to the structure and/or design of its observer programs in its Annual Reports only when such changes occur. CPCs shall continue to report the information required pursuant to paragraph 10(d)(ii) to the ICCAT Commission annually;

f) Each year, using the designated electronic formats that are developed by the SCRS , report to the SCRS information collected through domestic observer programs for use by the ICCAT Commission, in particular for stock assessment and other scientific purposes, in line with procedures in place for other data reporting requirements and consistent with domestic confidentiality requirements;

g) Ensure implementation of robust data collection protocols by its observers, when carrying out their tasks referred to in paragraph 7, including, as necessary and appropriate, the use of photography.

**Duties of the Executive Secretary**

11. The Executive Secretary facilitates access by SCRS and the ICCAT Commission to relevant data and information submitted pursuant to this recommendation.

**Duties of the SCRS**

12. The SCRS shall:

a) Develop, as needed and appropriate, an observer working manual for voluntary use by CPCs in their domestic observer programs, that includes model data collection forms and standardized data collection procedures, taking into account observer manuals and related materials that may already exist through other sources, including CPCs, regional and sub-regional bodies, and other organizations;

b) Develop fisheries specific guidelines for electronic monitoring systems;

c) Provide the ICCAT Commission with a summary of the scientific data and information collected and reported pursuant to this recommendation and any relevant associated findings;

d) Make recommendations, as necessary and appropriate, on how to improve the effectiveness of scientific observer programs in order to meet the data needs of the ICCAT Commission, including possible revisions to this Recommendation and/or with respect to implementation of these minimum standards and protocols by CPCs.

**Electronic Monitoring Systems**

13. Where they have been determined by SCRS to be effective in a particular fishery, electronic monitoring systems may be installed on board fishing vessels to complement or, pending SCRS advice and an ICCAT Commission decision, to replace the human observer on board.

14. CPCs should consider any applicable guidelines that are endorsed by SCRS on the use of electronic monitoring systems.

15. CPCs are encouraged to report to the SCRS their experiences in the use of electronic monitoring systems in their ICCAT fisheries to complement human observer programs. CPCs who have not yet implemented such systems are encouraged to explore their use and report their findings to the SCRS.