

REPORT OF THE FIRST INTERSESSIONAL MEETING OF PANEL 1
(Online, 1 and 2 July 2021)

1. Opening of the meeting

Mr. Shep Helguilè (Côte d'Ivoire), the Chair of Panel 1, opened the meeting. He welcomed the delegates. The Chair, in his address, called for a minute of silence to honour the memory of Dr Fábio Hazin. After the Chair, the ICCAT Executive Secretary, Mr. Camille Jean Pierre Manel, in turn, welcomed the participants and observers to this intersessional meeting. He informed that the Secretariat would offer its support to facilitate the discussions during the meeting.

2. Appointment of rapporteur and meeting arrangements

Ms. Ester Aláez Pons (European Union) was appointed rapporteur.

3. Meeting objectives, adoption of the agenda and meeting arrangements

The agenda was adopted without change and is attached as **Appendix 1**.

This intersessional meeting of Panel 1 was held over two days, from 1 to 2 July 2021. During the meeting, the Chair recalled the objectives of this panel meeting and reminded that a second meeting will be held from 1 to 3 September 2021.

The Executive Secretary indicated the meeting arrangements and noted that the following Contracting Parties were in attendance: Angola, Belize, Brazil, Canada, China (P.R.), Côte d'Ivoire, Curaçao, El Salvador, the European Union, Gabon, Ghana, Guatemala, Guinea (Rep.), Japan, Korea, Liberia, Mauritania, Mexico, Morocco, Nicaragua, Nigeria, Panama, Senegal, South Africa, Trinidad and Tobago, the United Kingdom, and the United States. He also noted the attendance of three Cooperating Non-Contracting Parties, Entities or Fishing Entities (Bolivia, Chinese Taipei and Suriname), and one Non-Contracting Party (Jamaica). Seven non-governmental organisations (Associação de Ciências Marinhas e Cooperação – SCIAENA; Brazilian Association of Fish Industries – ABIPESCA; International Seafood Sustainability Foundation – ISSF; Pew Charitable Trusts – PEW; Sharkproject International; The International Pole & Line Foundation – IPNLF and World Wide Fund for Nature – WWF) were also in attendance.

The list of participants is attached as **Appendix 2**.

4. Review of fishery management, capacity and FAD plans submitted by CPCs, including any request for clarification

The Chair reviewed all the fishery management plans submitted by the CPCs concerned and noted that a number of issues were raised by CPCs on these plans during the correspondence process. Additional exchanges took place on each management plan during the virtual meeting, with CPCs requesting additional information or formulating amendments. Questions on the plans, as well as the responses received in advance of the meeting were compiled together with the additional questions and responses received during the meeting and are included in **Appendix 3** and **Appendix 4**.

It was noted that four CPCs that fall under paragraph 4(c) of Recommendation 19-02 did not submit management plans as required by the measure: Cape Verde, Guinea, Panama, and the Philippines. Panel 1 requested the Secretariat to reach out to those CPCs to request submission of plans as soon as possible, preferably before the next intersessional meeting of Panel 1.

In light of discussions of the plan, a few general issues were identified that will have bearing on the future development of a revised tropical tunas management measure and/or review of its implementation.

The current capacity table used by the CPCs in their management plan, which is based on the template for eastern Atlantic and Mediterranean bluefin tuna, raised several questions. This made completing it difficult and caused some CPCs to consider that it was inadequate for the tropical tuna fisheries. The Panel requested that a revised table be developed that includes clear guidelines for its completion to avoid differences in interpretation. Panel 1 requested that an assessment of best catch rates be provided by the SCRS for tropical tunas as soon as possible.

Several CPCs expressed the view that the calculation of carryovers of unused quota to subsequent years lacks transparency, and requested that the calculations be clearly detailed in the management plans for this purpose.

Moreover, certain CPCs expressed concerns that the capacity management rules lacked clarity, including with regard to the number and use of supply vessels by purse seiners. The need for clearer text on this point in a revised recommendation was stressed.

In that regard, the Panel confirmed the entry into force in June 2020 of Rec. 19-02, including the limitations on catch and capacity, while noting that paragraph 23 prohibits CPCs from increasing the number of support vessels from the numbers recorded when the Rec. 19-02 was adopted. It was also pointed out that there is a potential inconsistency between paragraph 21 of Rec. 19-02 concerning the possibility for developing CPCs to increase their capacity and paragraph 4, which sets out the obligation to limit catch for 2020, as well as potentially paragraph 22a, which requires those CPCs with a catch limit to report on how they will ensure their capacity is commensurate with their catch limit.

Based on the Panel discussion of the fishery management plans, some CPCs concerned submitted their revised plans, following amendment. The Panel took due note of these amendments.

Overall, the CPCs welcomed the exercise to review and discuss the management plans, indicating the utility of this in-depth review. Some CPCs also expressed their wish to undertake the exercise again in the future and that, before then, management plans not revised during this meeting should be updated in line with the input provided and submitted to Panel 1 before its next meeting.

5. Review of measures / additional limits on FADs (if information is available)

The Chair recalled that some management measures in Rec. 19-02 and Rec. 20-01 concerning FADs expire in 2021 and that actions need to be taken by ICCAT for 2022 and beyond. For this purpose, the Chair requested that Dr Gary Melvin, the SCRS Chair, provide clarification on the request from the Commission regarding the maximum number of FAD sets and available historical FAD data.

Dr Melvin presented the SCRS's latest progress as regards tropical tunas. He noted that the efficacy of the FAD closure period in reducing catches of skipjack and juvenile yellowfin and bigeye tunas could not yet be fully reviewed. Dr Melvin also informed the Panel that the study of the impact on effort of a certain number of FAD sets for purse seiners has not been commenced due to the COVID-19 pandemic. Dr Melvin also informed Panel 1 about the limited availability of FAD set data, which are restricted to recent years, given that most CPCs have not submitted historical data. Dr Melvin indicated that it was difficult for the SCRS to include 2020 data in the 2021 analysis as these will not be available until 31 July 2021. Dr Melvin confirmed that even with the continued improvement in reporting for 2020, the analysis would take between two and three years to provide scientific advice on limiting FAD sets.

The Secretariat then presented a document on the available FAD data: Summary and review of the FOB/FADs deployed based on ST08-FADsDEP reports (ICCAT database) between 2011-2019. During its presentation, the Secretariat explained that not all CPCs had complied with the FAD data reporting requirements, and of those that had done so, very few CPCs had provided historical FAD data. The information available relates mainly to 2018-2019 and its quality varies, particularly in relation to FAD sets. Therefore, the information is not uniform from year to year. A revised version of the Secretariat document has been attached to this report as **Appendix 5**.

The Chair confirmed that the Secretariat will send reminder letters to CPCs that have not complied with the data reporting requirement reminding them of their obligations and the consequences of not reporting under Recommendation 19-02, paragraph 31. These letters will be drafted in coordination with the SCRS and Compliance Committee Chair so that reporting needs and obligations are taken into account.

The European Union pointed out that the current Recommendation was initially intended as a temporary measure, at the insistence of certain CPCs to move towards management through the area/time closure. This made it necessary to extend certain measures last year, but the measure continued to be of a temporary nature. To this end, the European Union therefore suggested that this be addressed by the Chair's proposal this year.

The Chair signalled the need for a clear definition of "FAD set" in order to avoid the issues of interpretation that arose in the past. Some CPCs requested that the reminder letters include the type of information to be reported as well as the years concerned and that the format of the data be specified so that the request is well understood.

The Chair then addressed the proposals and other FAD related documents submitted by the United States (**Appendix 6**), the European Union (**Appendix 7**) and Japan (**Appendix 8**). The main issues in these documents relate to activation of buoys, onboard vessels before deployment, biodegradable FADs, consideration of limits on FAD sets as a management tool and the possible establishment of a FAD registry.

Several CPCs supported the proposal to work on FAD set management and request SCRS guidance on requirements regarding biodegradable FADs, as well as the proposal to restore the requirement on activation of buoys on board vessels, and to explore a FAD registry as a means to improve traceability and recovery of lost FADs, including exploring budgetary implications of such a registry. Some CPCs highlighted the limitation on the number of FAD sets should be introduced for more effective FADs management in addition to the current measures of the FAD closure period and the limit on possession and deployment. Other CPCs highlighted that the SCRS advice on the maximum number of FAD sets is not available due to lack of historical FAD set data, thus the Secretariat will provide the notification to CPCs to submit it. Some CPCs cited the precautionary approach and pushed for gradual advancement even without clear advice. One CPC highlighted the socio-economic impact of current FAD measures and the need for sustainable measures. Another CPC recalled the conditions of adoption of Recommendation 19-02 and the need to ensure that there is no longer an extension clause for these measures.

There was general agreement among CPCs not to increase the current FAD limit of 300 per vessel and to at least maintain a three-month closure period, for 2022. Two CPCs noted that the three-month period should be reconsidered pending additional information from the SCRS.

The Panel requested that the SCRS provide advice within the framework of the 2021 Bigeye stock assessment on the issues of number of FADs per vessel and closure period.

The Chair noted that the reflections on these additional management measures should continue and should enable the consensus adoption of supplementary measures at the 2021 annual meeting.

6. Review of current requirements related to MCS, issue of reports and review of all necessary additional measures, in particular: Appendix 9 and Appendix 10

Issues related to electronic recording of catches, observer coverage, catch and effort reporting requirements and other MCS-related matters (e.g., control of supply vessels, transshipments, port sampling, landing declarations) were discussed. Several CPCs noted that some of these matters had been discussed previously at the IMM meeting in June.

The United States introduced its statement regarding potential MCS measures for consideration during July 2021 Panel 1 Intersessional Meeting (**Appendix 9**), expressing its view that additional MCS measures are necessary, particularly with regard to capacity limits on the number of purse seiners, limitation of the number of support vessels associated with purse seiners, observer coverage on support vessels, and electronic monitoring (EM).

The European Union introduced its proposal to amend recommendation 19-02 by ICCAT to replace Recommendation 16-01 by ICCAT on a multi-annual conservation and management programme for tropical tunas (**Appendix 10**), proposing ways forward for observer coverage on supply vessels and the minimum percentage of in-port transshipments. The European Union also provided the rationale for re-establishing a regional observer programme (ROP TROP), as adopted by ICCAT in the past, and the need for advancement with EM. The European Union indicated that these were provisional proposals to foster discussion and will not prejudice the European Union's final position.

The CPCs supported the inclusion of additional MCS measures to strengthen the Recommendation. However, even though TROP generally received a favourable opinion in the IMM Group meeting and despite extensive support for some measures such as capacity limitation, observer coverage on supply vessels and EM, no consensus was reached on these measures. For the observer coverage, one CPC recalled that it had been agreed to increase observer coverage from 5% to 10% in 2019, through the presence of a human observer on board and/or an Electronic Monitoring system, but some CPCs would not be able to comply with the minimum coverage given delays in EM pilot projects caused by COVID-19; thus, the CPC would propose delaying implementation of the increased coverage for one year. Regarding capacity limitation, one CPC expressed reservations, because their implementation was considered to be technically difficult due to the absence of catch limits and that they hinder fisheries development by developing countries. Issues were also raised regarding the baseline used for capacity limitation for longliners and purse seiners. One CPC noted that the minimum percentage of in-port transshipments would pose more risk of IUU fishing than on board transshipment, which is subject to 100% ROP whereas in-port transshipment could be subject to only 5% inspection. Some CPCs expressed their preference to continue discussions on observer coverage, EM and transshipment in IMM meetings rather than in Panel meetings.

The Chair explained that changes to the current tropical tunas recommendation are necessary as some provisions expire this year. However, the Chair also indicated that information was needed on the effect of the current measures, and that the Panel could capitalise on the discussions of additional measures within the IMM Group.

Several CPCs expressed their wish to have a balanced package of measures and a revised tropical tunas recommendation in the autumn.

7. Other matters

Nicaragua reminded the Panel that, during the 2019 Annual Meeting in Mallorca, the Commission had encouraged CPCs to express their interest, by January 2020, in commencing operations in this fishery. Nicaragua informed the Panel that it had sent a letter in January 2020 requesting authorisation as a coastal State to commence its operations for a one-year period. Due to the pandemic, Nicaragua was not in a position to commence its activity. Consequently, Nicaragua requested that the Panel consider this authorisation for an additional year. Some CPCs indicated that it was not the role of Panel 1 to specifically authorize fisheries, but that any fishing activity would be expected to conform to the provisions of relevant ICCAT Recommendations.

Clarifications were requested by one CPC on whether or not paragraphs 27 and 28 of Recommendation 19-02 apply to all FAD-related operations, and in particular, to replacement of FAD buoys and the Panel concluded that indeed these paragraphs apply to all FAD-related operations. Several CPCs suggested that paragraphs 27 and 28 would preclude all activity on FADs including replacement of buoys. This conclusion was affirmed by the Chair. Panel 1 acknowledged that this detail was not clear in the Recommendation and suggested that these provisions be revisited at the annual meeting.

The Chair gave the floor to observers that wished to speak. Observers advocated for adoption of measures to prevent continued overharvest and rebuild the bigeye tuna stock with at least 60% probability. Observers also emphasized the need to make progress in the management strategy evaluation (MSE) processes to help the Commission regulate these valuable tuna stocks.

The Chair encouraged CPCs to engage in bilateral exchanges aimed at making progress on Panel 1 issues. In addition, the Chair recalled that a second meeting will be held in September, during which discussions will focus on TACs, allocation, and carry-over provisions.

One CPC informed the Panel that it had submitted to the Secretariat a request for the September meeting to be postponed until after the SCRS meeting. The Chair confirmed that he would consult the Secretariat to explore the possibility of postponement and revert back to the Panel.

8. Adoption of the report / adjournment

The meeting was adjourned. The report was adopted by correspondence.

Agenda

1. Opening of the meeting
2. Appointment of rapporteur and meeting arrangements
3. Review of fishery management, capacity and FAD plans submitted by CPCs, including any request for clarification
4. Review of measures / additional limits on FADs (if information is available)
5. Review of current requirements related to monitoring, control and surveillance (MCS), issue of reports and review of all necessary additional measures, in particular:
 - Electronic catch recording
 - Observer coverage
 - Catch and effort reporting requirements
 - Other MCS related issues (for example, transhipments, in port sampling, landing declarations)
6. Other matters
7. Adoption of report / adjournment

List of participants*

CONTRACTING PARTIES

ANGOLA

Tungo, Manuel Bengui
Ministry Agriculture and Fisheries, Luanda
Tel: +244 923 805 835, E-Mail: manueltungo@yahoo.com.br

BELIZE

Lanza, Valerie
Director of High Seas Fisheries, Belize High Seas Fisheries Unit, Ministry of Finance, Government of Belize, Keystone Building, Suite 501, 304, Newtown Barracks
Tel: +501 223 4918, Fax: +501 223 5026, E-Mail: valerie.lanza@bhsfu.gov.bz; director@bhsfu.gov.bz

Pinkard, Delice

Senior Fisheries Officer, Belize High Seas Fisheries Unit, Ministry of Finance, Government of Belize, Keystone Building, Suite 501, 304 Newtown Barracks
Tel: +1 501 223 4918, Fax: +1 501 223 5087, E-Mail: delice.pinkard@bhsfu.gov.bz; sr.fishofficer@bhsfu.gov.bz

Robinson, Robert

Deputy Director for High Seas Fisheries, Belize High Seas Fisheries Unit, Ministry of Finance, Government of Belize, Keystone Building, Suite 501, 304 Newtown Barracks
Tel: +501 223 4918, Fax: +501 223 5087, E-Mail: robert.robinson@bhsfu.gov.bz; deputydirector@bhsfu.gov.bz

BRAZIL

Gund, Jairo

Secretaria da Aquicultura e Pesca do MAPA, Edifício Siderbrás - Setor de Autarquias Sul Q. 2, 70297-400 Brasília, DF
Tel: +55 479 969 31270, E-Mail: jairo.gund@agricultura.gov.br

Leite Mourato, Bruno

Professor Adjunto, Laboratório de Ciências da Pesca - LabPesca Instituto do Mar - IMar, Universidade Federal de São Paulo - UNIFESP, Rua Carvalho de Mendonça, 144, Encruzilhada, 11070-100 Santos, SP
Tel: +55 1196 765 2711, Fax: +55 11 3714 6273, E-Mail: bruno.mourato@unifesp.br; bruno.pesca@gmail.com; mourato.br@gmail.com

Lemainski, Diogenes

Espanada dos Ministerios, Bloco D, 4o andar., 70804130 Brasilia Distrito Federal
Tel: +55 613 276 4670, E-Mail: diogenes.lemainski@agricultura.gov.br

Olynto de Arruda Villaca, Carlos Eduardo

Coletivo Nacional de Pesca e Aquicultura - CONEPE - SRTVS, Setor de autarquias sul, quadra 2, bloco E Ed. Siderbras, CEP: 71020184 Brasilia DF Asa Sul
Tel: +55 61 9910 20668, E-Mail: carlos.villaca@agricultura.gov.br

Pierin Piccolo, Natali Isabela

Aquaculture and Fisheries Secretary - Department of Register and Monitoring Setor de Autarquias Sul Q. 2 1 andar - DRM/SAP, 70297-400 Brasilia, DF
Tel: +55 21 79484591; +55 61 3276 4419, E-Mail: natali.piccolo@agricultura.gov.br

Sant'Ana, Rodrigo

Researcher, Laboratório de Estudos Marinhos Aplicados - LEMA Ecola do Mar, Ciência e Tecnologia - EMCT, Universidade do Vale do Itajaí - UNIVALI, Rua Uruquai, 458 - Bloco E2, Sala 108 - Centro, Itajaí, CEP 88302-901 Santa Catarina Itajaí
Tel: +55 (47) 99627 1868, E-Mail: rsantana@univali.br

* Some delegate contact details have not been included following their request for data protection.

Travassos, Paulo Eurico

Professor, Universidade Federal Rural de Pernambuco - UFRPE, Laboratorio de Ecologia Marinha - LEMAR, Departamento de Pesca e Aquicultura - DEPAq, Avenida Dom Manuel de Medeiros s/n - Dois Irmãos, CEP 52171-900 Recife Pernambuco
Tel: +55 81 998 344 271, E-Mail: pautrax@hotmail.com; paulo.travassos@ufrpe.br

CANADA

Kay, Lise

Policy Advisor, International Fisheries Policy, Fisheries and Oceans Canada, 200 Kent Street, Ottawa Ontario K1A 0E6
Tel: +1 343 542 1301, E-Mail: Lise.Kay@dfo-mpo.gc.ca

MacDonald, Carl

Senior Advisor, Resource and Aboriginal Fisheries Management, Fisheries and Oceans Canada, 1 Challenger Drive, PO Box 1006, Bedford Institute of Oceanography, Dartmouth, NS B2Y 4A2
Tel: +1 902 293 8257, Fax: +1 902 426 7967, E-Mail: carl.macdonald@dfo-mpo.gc.ca

CHINA, (P. R.)

Fang, Lianyong

Assistant Director, China Overseas Fisheries Association, 100125 Beijing
Tel: +86 10 65853488, Fax: +86 10 65850551, E-Mail: admin1@tuna.org.cn

Li, Bin

No 31, Mingfeng Hutong, Xicheng District, 100032 Beijing
Tel: +86 152 019 12381, Fax: +86 108 806 7491, E-Mail: libin@cofc.com.cn

Li, Tinglin

Room 1216, Jingchao Massion, Nongzhanguannan Road, Chaoyang District, 100125 Beijing
Tel: +86 1 065 850 683, Fax: +86 1 065 850 551, E-Mail: 962146246@QQ.COM

Shen, Li

No 31, Mingfeng Hutong, Xicheng District, 100032 Beijing
Tel: +86 183 102 00109, Fax: +86 108 806 7491, E-Mail: willie001_shen@163.com

CÔTE D'IVOIRE

Shep, Helguilè

Directeur de l'Aquaculture et des Pêches, Ministère des Ressources Animales et Halieutiques de Côte d'Ivoire, Rue des Pêcheurs; B.P. V-19, Abidjan
Tel: +225 21 35 61 69; Mob: +225 07 61 92 21, E-Mail: shelguile@yahoo.fr; h.shep@ressourcesanimales.gouv.ci

Amandè, Monin Justin

Directeur, African Marine Expertises (AMEXPRT)
E-Mail: m.amande@africanmarineexpertises.com

Djou, Kouadio Julien

Statisticien de la Direction de l'Aquaculture et des Pêches, Chef de Service Etudes, Statistiques et Documentation, Direction de l'Aquaculture et des Pêches (DAP), Ministère des Ressources Animales et halieutiques (MIRAH), 27 Rue des pêcheurs, BP V19, Abidjan 01
Tel: +225 79 15 96 22, Fax: +225 21 25 67 27, E-Mail: djoujulien225@gmail.com

Fofana, Bina

Sous-directeur des Pêches Maritime et Lagunaire, Ministère des Ressources Animales et Halieutiques de la République de Côte d'Ivoire, 29 Rue des Pêcheurs, BP V19, Abidjan 01 Treichville
Tel: +225 07 655 102; +225 21 356 315, Fax: +225 21 356315, E-Mail: binafof3@gmail.com; binafof@yahoo.fr

Gago, Chelom Niho

Conseiller Juridique du Comité d'Administration du Régime Franc de Côte d'Ivoire, 29 Rue des Pêcheurs, BP V19 Abidjan 01
Tel: +225 0621 3021; +225 07 78 30 68, Fax: +225 21 35 63 15, E-Mail: gagoniho@yahoo.fr

Hema, Catherine

Coordonnatrice Adjointe de Projet de Développement Durable des Ressources Halieutiques
Tel: +225 49 924 593, E-Mail: hemacathy@yahoo.fr

N'da, Atché Hugues Pacôme

Ingénieur Agronome, Assistant, Comité d'Administration du Régime Franc, Ministère des Ressources Animales et Halieutiques, BP V 19, Abidjan 01
Tel: +225 08 16 89 56, E-Mail: ndapacome@gmail.com

CURAÇAO

Alonso Olano, Borja

Overseas Tuna Company N.V., Poligono Industrial Landabaso, s/n - Edificio Albacora, 48370 Bermeo Bizkaia, ESPAÑA
Tel: +34 946 187 000, Fax: +34 946 186 147, E-Mail: borja.alonso@albacora.es

Gijsbertha, Gersley

Policy Officer, Ministry of Economic Development of Curacao, AmisDos Building, Pletterijweg # 43, Willemstad
Tel: +599 946 21444, E-Mail: gersley.gijsbertha@gobiernu.cw

Mambi, Stephen A.

Policy Adviser/Secretary of the Fishery Commission, Ministry of Economic Development of Curaçao, Directorate of Economic Affairs, Amidos Building, 4th floor Pletterijweg 43 A, Willemstad
Tel: +5999 4621444 ext 173; +5999 5606038, Fax: +5999 462 7590, E-Mail: stephenmambi@yahoo.com; stephen.mambi@gobiernu.cw

EL SALVADOR

Aceña Matarranz, Sara

CALVO, C/ Príncipe de Vergara 110, 4ª Planta, 28002 Madrid, España
Tel: +34 686 061 921, E-Mail: sara.acena@calvo.es

Arranz Vázquez, Cristina

CALVO, C/ Príncipe de Vergara, 110 4ª Planta, 28002 Madrid, España
Tel: +34 682 589 986; +34 917 823 300, E-Mail: cristina.arranz@calvo.es

Chavarría Valverde, Bernal Alberto

Asesor en Gestión y Política pesquera Internacional, Centro para el Desarrollo de la Pesca y Acuicultura (CENDEPESCA), Final 1ª Avenida Norte, 13 Calle Oriente y Av. Manuel Gallardo, 1000 Santa Tecla, La Libertad
Tel: +506 882 24709, Fax: +506 2232 4651, E-Mail: bchavarría@lsg-cr.com

Galdámez de Arévalo, Ana Marlene

Jefa de División de Investigación Pesquera y Acuícola, Ministerio de Agricultura y Ganadería, Final 1a. Avenida Norte, 13 Calle Oriente y Av. Manuel Gallardo. Santa Tecla, La Libertad
Tel: +503 2210 1913; +503 619 84257, E-Mail: ana.galdamez@mag.gob.sv; ana.galdamez@yahoo.com

Sanisidro Araujo, Jorge

C/ Príncipe de Vergara 110 4ª Planta, 28033 Madrid
Tel: +34 91 782 3300, E-Mail: jorge.sanisidro@calvo.es

Ubis Lupion, Macarena

Calvopesca El Salvador, S.A., C/ Príncipe de Vergara, 110 4ª Planta, 28002 Madrid, España
Tel: +34 617 068 486; +34 91 782 33 00, E-Mail: macarena.ubis@calvo.es

EUROPEAN UNION

Aláez Pons, Ester

International Relations Officer, European Commission - DG MARE - Unit B2 - RFMOs, Rue Joseph II - 99 03/057, 1049 Bruxelles, Belgium
Tel: +32 2 296 48 14; +32 470 633 657, E-Mail: ester.alaez-pons@ec.europa.eu

Biagi, Franco

Senior Expert Marine & Fishery Sciences, Directorate General for Maritime Affairs and Fisheries (DG-Mare) - European Commission, Unit C3: Scientific Advice and data collection, Rue Joseph II, 99, 1049 Brussels, Belgium
Tel: +322 299 4104, E-Mail: franco.biagi@ec.europa.eu

Malczewska, Agata

European Commission DG MARE, J-99 4/073, 1000 Belgium
Tel: +32 229 6761, E-Mail: agata.malczewska@ec.europa.eu

Peyronnet, Arnaud

Directorate-General for Maritime Affairs and Fisheries Unit B2, International Relations Officer – ICCAT/NASCO
European Commission, Regional Fisheries Management Organisations, Rue Joseph II - 99 03/61, B-1049 Brussels,
Belgium
Tel: +32 2 2991 342; +32 498 28780, E-Mail: arnaud.peyronnet@ec.europa.eu

Vázquez Álvarez, Francisco Javier

European Commission DG Maritime B2 Affairs and Fisheries, Rue Joseph II - 99 Room 3/77, 1049 Brussels, Belgium
Tel: +32 2 295 83 64; +32 485 152 844, E-Mail: francisco-javier.vazquez-alvarez@ec.europa.eu

Alzorritz, Nekane

ANABAC, Txibitxiaga 24 entreplanta, 48370 Bermeo, Bizkaia, España
Tel: +34 94 688 2806, E-Mail: nekane@anabac.org

Ansell, Neil

European Fisheries Control Agency, Avenida García Barbón 4, 36201 Vigo, España
Tel: +34 986 120 658; +34 698 122 046, E-Mail: neil.ansell@efca.europa.eu

Carré, Pierre-Alain

Compagnie Française du Thon Océanique (CFTO), 11 Rue des sardiniers, 29900 Concarneau, Cedex, France
Tel: +33 682 234 171, Fax: +33 298 60 52 59, E-Mail: pierrealain.carre@cfto.fr

Del Cerro Martín, Gloria

Secretaría General de Pesca, C/ Velázquez, 144 2ª Planta, 28006 Madrid, España
Tel: +34 91 347 5940, Fax: +34 91 347 6042, E-Mail: gcerro@mapa.es

Gaertner, Daniel

Institut de Recherche pour le Développement (IRD) UMR MARBEC (IRD/Ifremer/CNRS/UMII), CRH, CS 30171, Av. Jean
Monnet, 34203 Sète Cedex, France
Tel: +33 4 99 57 32 31, Fax: +33 4 99 57 32 95, E-Mail: daniel.gaertner@ird.fr

Guerin, Benoît

1407 Chemin des Maures, 83400 Hyeres, France
Tel: +33 632 02 68 15, E-Mail: bgseaconsulting@gmail.com

Goujon, Michel

ORTHONGEL, 5 Rue des Sardiniers, 29900 Concarneau, France
Tel: +33 2 9897 1957; +33 610 627 722, Fax: +33 2 9850 8032, E-Mail: mgoujon@orthongel.fr

Herrera Armas, Miguel Angel

Deputy manager (Science), OPAGAC, C/ Ayala 54, 2º A, 28001 Madrid, España
Tel: +34 91 431 48 57; +34 664 234 886, Fax: +34 91 576 12 22, E-Mail: miguel.herrera@opagac.org

Le Couls, Sarah

Compagnie Française du Thon Océanique (CFTO), 11 bis rue des Sardiniers, 29900 Concarneau, France
Tel: +0 607 662 143, E-Mail: sarah.lecouls@cfto.fr

Maufroy, Alexandra

ORTHONGEL, 5 rue des sardiniers, 29900 Concarneau, France
Tel: +33 2 98 97 19 57; +33 649 711 587, Fax: +33 2 98 50 80 32, E-Mail: amaufroy@orthongel.fr

Mélard, Anaïs

Ministère de l'Agriculture et de l'Alimentation, Direction des Pêches Maritimes et de l'Aquaculture, Bureau des Affaires
Européennes et Internationales, Tour Sequoia 1 Place Carpeaux, 92055 La Défense, Cedex, Paris, France
Tel: +33 140 819 038, E-Mail: anais.melard@agriculture.gouv.fr

Moniz, Isadora

OPAGAC, C/ Ayala, nº 54, 2º A, 28001 Madrid, España
Tel: +34 91 431 48 57; +34 608 927 478, E-Mail: fip@opagac.org

Monteiro de Barros, Vanessa

DGRM, Avenida de Brasília, 1449-030 Lisboa, Portugal
Tel: +351 914 692 038, E-Mail: vbarros@dgrm.mm.gov.pt

Morón Ayala, Julio

Director Gerente, Organización de Productores Asociados de Grandes Atuneros Congeladores - OPAGAC, C/ Ayala, 54 - 2ªA, 28001 Madrid, España
Tel: +34 91 575 89 59; +34 616 484 596, Fax: +34 91 576 1222, E-Mail: julio.moron@opagac.org

Muniategi Bilbao, Anertz

ANABAC-OPTUC, Txibitxiaga, 24 - Entreplanta Apartado 49, 48370 Bermeo - Bizkaia, España
Tel: +34 94 688 28 06, Fax: +34 94 688 50 17, E-Mail: anertz@anabac.org; anabac@anabac.org

Palud, Pierre

6 rue des chalutiers, 29186 Finitère Concarneau, France
Tel: +33 608 765 806, Fax: +33 298 971 658, E-Mail: ppalud@boltonfood.com

Reyes, Nastassia

Institut de Recherche pour le Developpement (IRD) UMR MARBEC (IRD/Ifremer/CNRS/UMII, Av. Jean Monnet CS 30171, 34203 Sète, France
Tel: +33 499 573 231, E-Mail: nastassia.reyes@ird.fr

Santiago Burrutxaga, Josu

Head of Tuna Research Area, AZTI-Tecnalia, Txatxarramendi z/g, 48395 Sukarrieta (Bizkaia) País Vasco, España
Tel: +34 94 6574000 (Ext. 497); +34 664 303 631, Fax: +34 94 6572555, E-Mail: jsantiago@azti.es; flarrauri@azti.es

Sarricolea Balufo, Lucía

Secretaría General de Pesca, Ministerio de Agricultura, Pesca y Alimentación, Calle Velázquez, número 144, 28006 Madrid, España
Tel: +34 913 476 170, E-Mail: lsarricolea@mapa.es

Teixeira, Isabel

Chefe de Divisão de Recursos Externos da Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos, DGRM, Avenida Brasília, 1449-030 Lisboa, Portugal
Tel: +351 919 499 229; +351 213 035 825, E-Mail: iteixeira@dgrm.mm.gov.pt

GABON

Angueko, Davy

Chargé d'Etudes du Directeur Général des Pêches, Direction Générale des Pêche et de l'Aquaculture, BP 9498, Libreville Estuaire
Tel: +241 6653 4886, E-Mail: davyangueko83@gmail.com; davyangueko@yahoo.fr

Bibang Bi Nguema, Jean Noël

Chef de service des Evaluations et de l'Aménagement des Ressources Marines, Direction Générale des pêches et de l'Aquaculture (DGPA), BP. 9498, Libreville Estuaire
Tel: +241 047 37881, E-Mail: mamienejnb@gmail.com

GHANA

Arthur-Dadzie, Michael

Director of Fisheries, Fisheries Commission, Ministry of Fisheries & Aquaculture Development, P.O. Box GP 630, Accra
Tel: +233 244 735 506; +233 266 094 245, E-Mail: michyad2000@yahoo.com

Ayivi, Sylvia Sefakor Awo

Senior Manager, Ministry of Fisheries and Aquaculture Development, Fisheries Scientific Survey Division, P.O. Box BT 62, Tema
Tel: + 233 2441 76300, Fax: +233 3032 008048, E-Mail: asmasus@yahoo.com

Kwame Dovlo, Emmanuel

Ag. Deputy Director, Fisheries Scientific Survey Division, P.O. Box GP 630, Accra Tema
Tel: +233 243 368 091, E-Mail: emkwadovlo@yahoo.co.uk

GUATEMALA

Lemus Godoy, Julio César

Director de Pesca, Ministerio de Agricultura, Ganadería y Alimentación - MAGA, Viceministerio de Sanidad Agropecuaria y Regulaciones - VISAR, Dirección de Normatividad de la Pesca y Acuicultura, 7ma avenida 12-90 zona 13, edificio Monja Blanca
E-Mail: juliolemusdipesca@gmail.com; dipescaguatemala@gmail.com

López Bran, Rubén

Km 22 Carretera al pacifico, edificio la Ceiba 3er, nivel, 01064 Villa nueva Bárcenas
Tel: +502 409 18336, E-Mail: rubenlopezbran@yahoo.com

Martínez Valladares, Carlos Eduardo

Km 22 Carretera al pacifico, edificio la Ceiba 3er, nivel, 01064 Villa nueva Bárcenas
Tel: +502 452 50059, E-Mail: carlosmartinez41331@gmail.com

GUINEA REP.

Kaba, Amara Camara

Directeur National de la Pêche Maritime, BP 307, Conakry
Tel: +224 621 042 758, E-Mail: amaragbe1@yahoo.fr; dnpanguinee2000@gmail.com

Barry, Alhassane

Kaporo Rail Conakry
Tel: +224 666 067 651, E-Mail: alassb13@gmail.com

Conde, Laye Fatoumata

Chargé d'Etudes à la Direction Nationale des Pêches Maritimes, Ministère des Pêches, de l'Aquaculture et de l'Economie Maritime, 6ème Avenue de la République, 307 Conakry
Tel: +224 622 30 94 06, E-Mail: condelaye832@gmail.com

JAPAN

Ota, Shingo

Japan's Commissioner to ICCAT, Advisor to the Minister of Agriculture, Forestry and Fisheries, 1-2-1 Kasumigaseki, Chiyoda-Ku, Tokyo, 100-8907
Tel: +81 3 3502 8460, Fax: +81 3 3504 2649, E-Mail: shingo_ota810@maff.go.jp

Miura, Nozomu

Assistant Director, International Division, Japan Tuna Fisheries Co-operative Association, 2-31-1 Eitai Koto-ku, Tokyo, 135-0034
Tel: +81 3 5646 2382, Fax: +81 3 5646 2652, E-Mail: miura@japantuna.or.jp; gyojyo@japantuna.or.jp

Nagai, Daisaku

Manager, Japan Tuna Fisheries Co-Operative Association, 31-1, EITAI 2-CHOME, Koto-ku, Tokyo, 135-0034
Tel: +81 356 462 382, Fax: +81 356 462 652, E-Mail: nagai@japantuna.or.jp

Uozumi, Yuji

Adviser, Japan Tuna Fisheries Co-operation Association, Japan Fisheries Research and Education Agency, 31-1 Eitai Chiyodaku, Tokyo Koutou ku Eitai 135-0034
Tel: +81 3 5646 2380, Fax: +81 3 5646 2652, E-Mail: uozumi@japantuna.or.jp

KOREA REP.

Na, IlKang

Policy Analyst, International Cooperation Division, Ministry of Oceans and Fisheries, Government Complex Sejong, 94 Dasom 2-ro, Sejong Special Self-governing City, 30110 Sejong city
Tel: +82 44 200 5377, Fax: +82 44 200 5349, E-Mail: ikna@korea.kr

Baek, Sangjin

Korea Overseas Fisheries Association, 6th fl. Samho Center Bldg. "A" 83, Nonhyeon-ro, 06775 Seoul Seocho-gu
Tel: +82 258 91614, Fax: +82 258 91630, E-Mail: sjbaek@kosfa.org

Kim, Taerin

638, Gijanghaean-ro, Gijang-gun, 46079 Busan
Tel: +82 10 7254 0401, Fax: +82 51 410 1409, E-Mail: shararak@korea.kr

Yang, Jae-geol

Policy Analyst, Korea Overseas Fisheries Cooperation Center, 6th FL, S Building, 253, Hannuri-daero, 30127 Sejong
Tel: +82 44 868 7364, Fax: +82 44 868 7840, E-Mail: jg718@kofci.org

LIBERIA

Wehye, Austin Saye

Director-Research & Statistics, National Fisheries and Aquaculture Authority (NaFFA), Fisheries Researchers, P.O. Box 1384, 1000 Monrovia, Montserrado Bushord Island

Tel: +231 886 809 420; +231 775 717 273, E-Mail: awehye@nafaa.gov.lr; austinwehye@yahoo.com

MAURITANIA

Taleb Moussa, Ahmed

Directeur Adjoint de l'Aménagement, des Ressources et des Études, Ministère des Pêches et de l'Économie, Direction de l'Aménagement des Ressources, BP 137, Nouakchott

Tel: +222 452 952 141, E-Mail: talebmoussaa@yahoo.fr

MEXICO

Ramírez López, Karina

Instituto Nacional de Pesca y Acuicultura, Centro Regional de Investigación Acuícola y Pesquera - Veracruz, Av. Ejército Mexicano No.106 - Colonia Exhacienda, Ylang Ylang, C.P. 94298 Boca de Río, Veracruz

Tel: +52 5538719500, Ext. 55756, E-Mail: kramirez_inp@yahoo.com

Reyes Robles, Isabel Cristina

Directora de Asuntos Internacionales, Dirección General de planeación, Programación y Evaluación, Comisión Nacional de Acuicultura y Pesca (CONAPESCA), Av. Camarón Sábala s/n esq. Tiburón, Fracc. Sábalo Country Club, CP 82100 Mazatlán Sin.

Tel: +52 669 915 6900 Ext. 58408, E-Mail: isabel.reyes@conapesca.gob.mx

Soler Benitez, Bertha Alicia

Comisión Nacional de Acuicultura y pesca (CONAPESCA)

Tel: +52 669 915 6900 Ext. 58462, E-Mail: berthaa.soler@gmail.com

MOROCCO

Aichane, Bouchta

Directeur des Pêches Maritimes, Département de la Pêche Maritime, Nouveau Quartier Administratif; BP 476, Haut Agdal Rabat

Tel: +212 5 37 68 8244-46, Fax: +212 5 37 68 8245, E-Mail: aichane@mpm.gov.ma

Abid, Noureddine

Chercheur et ingénieur halieute au Centre Régional de recherche Halieutique de Tanger, Responsable du programme de suivi et d'étude des ressources des grands pélagiques, Centre régional de l'INRH à Tanger/M'dig, B.P. 5268, 90000 Drabed, Tanger

Tel: +212 53932 5134; +212 663 708 819, Fax: +212 53932 5139, E-Mail: noureddine.abid65@gmail.com

Ben Bari, Mohamed

Directeur du Contrôle des Activités de la Pêche Maritime (DCAPM), Ministère de l'Agriculture, de la pêche Maritime, du Développement Rural et des eaux et forêts Département, Nouveau Quartier Administratif; BP 476, Haut Agdal Rabat

Tel: +212 537 688 196, Fax: +212 537 688 382, E-Mail: benbari@mpm.gov.ma

Bensbai, Jilali

Chercheur, Institut National de Recherche Halieutique à Casablanca - INRH/Laboratoires Centraux, AIN DIAB PRES DU CLUB EQUESTRE OULAD JMEL, Rue Sidi Abderrhman / Ain Diab, 20100 Casablanca

Tel: +212 661 59 8386, Fax: +212 522 397 388, E-Mail: bensbaijilali@gmail.com

Fakri, Mohamed

Cadre à la Direction de Contrôle des Activités de la Pêche Maritime (DCAPM), Ministère de l'Agriculture, de la Pêche Maritime, du développement rural et des eaux et Forêts, Département de la Pêche Maritime, Quartier Administratif, BP 476 Agdal, Rabat

Tel: +212 537 688 518, Fax: +212 537 688 382, E-Mail: mohamed.fakri@mpm.gov.ma

Fatih, Rania

Direction des Pêches Maritimes au Département de la Pêche Maritime, 11000 Rabat

Tel: +212 659 366 729, E-Mail: r.fatih@mpm.gov.ma

Grichat, Hicham

Chef de Service des espèces marines migratrices et des espaces protégés à la DDARH/DPM, Ministère de l'Agriculture et de la Pêche Maritime, Département de la Pêche Maritime, Direction des Pêches Maritimes, B.P 476 Nouveau Quartier Administratif, Haut Agdal, Rabat

Tel: +212 537 68 81 15, Fax: +212 537 68 8089, E-Mail: grichat@mpm.gov.ma

Haoujar, Bouchra

Cadre à la Division de Durabilité et d'Aménagement des Ressources Halieutiques, Département de la Pêche Maritime, Administrative, Nouveau Quartier Administratif, BP 476, 10150 Haut Agdal, Rabat
Tel: +212 253 768 8121, Fax: +212 537 688 089, E-Mail: haoujar@mpm.gov.ma

Hassouni, Fatima Zohra

Chef de la Division de Durabilité et d'Aménagement des Ressources Halieutiques, Département de la Pêche maritime, Nouveau Quartier Administratif, Haut Agdal, B.P.: 476 Rabat
Tel: +212 537 688 122/21, Fax: +212 537 688 089, E-Mail: hassouni@mpm.gov.ma

Hmidane, Abdellatif

Chef de Service à la Direction de Contrôle des Activités de la Pêche Maritime, Ministère de l'Agriculture, de la Pêche Maritime, du Développement Rural et des Eaux et Forêts / Département de la Pêche Maritime, Nouveau Quartier Administratif, 10100 Haut Agdal Rabat
Tel: +212 537 688 195, Fax: +212 537 688 382, E-Mail: hmidane@mpm.gov.ma

Sabbane, Kamal

Cadre à la Direction de Contrôle des Activités de la Pêche Maritime, Ministère de l'Agriculture de la Pêche Maritime, du Développement Rural et des Eaux et Forêts, Département de la Pêche Maritime, Quartier Administratif BP 476, 10090 Agdal, Rabat
Tel: +212 537 688 000, Fax: +212 537 688 134, E-Mail: sabbane@mpm.gov.ma

NICARAGUA

Barnuty Navarro, Renaldy Antonio

Hidrobiólogo, Director - Dirección de Investigaciones Pesqueras - Instituto Nicaragüense de la Pesca y Acuicultura (INPESCA), Km 3.5 carretera Norte, frente a donde fue BANPRO, Managua
Tel: +505 22 4424 01 Ext. 140, E-Mail: rbarnutti@inpesca.gob.ni

Chacón Rivas, Roberto Danilo

Asesor Legal, Instituto Nicaragüense de la Pesca y Acuicultura (INPESCA), Km. 3 1/2 Carretera Norte, Managua
Tel: +505 842 04521, Fax: +505 224 42460, E-Mail: rchacon@inpesca.gob.ni; rchaconr5@gmail.com

Guevara Quintana, Julio Cesar

Comisionado CIAT - Biólogo, INPESCA, Altos de Cerro Viento, calle Circunvalación B. Casa 187, Managua
Tel: +505 2278 0319; +507 699 75100, E-Mail: juliocgq@hotmail.com; jguevara@inpesca.gob.ni

NIGERIA

Abubakar, Ibrahim

Federal Ministry of Agriculture and Rural Development, Department of Fisheries & Aquaculture, Area II, Garki, 900001 Abuja
Tel: +234 803 617 9683, E-Mail: ibrahimgorafish@yahoo.com; ibrahimgorafish@gmail.com

Akanbi Bankole, Williams

Tel: +234 802 344 1039, E-Mail: abwilliams2@yahoo.com

Garba, Usman

Federal Ministry of Agriculture and Rural Development, Department of Fisheries and Aquaculture, 1 Wilmont Point Road, Off Ahmadu Bello Way, 101241 Victoria Island, Lagos
Tel: +234 802 086 3461; +234 706 819 6006, E-Mail: garbashafa@gmail.com

Pwaspo Istifanus, Emmanuel

Tel: +234 703 397 9540, E-Mail: isti_pwaspo@yahoo.com

PANAMA

Delgado Quezada, Raúl Alberto

Director General de Cooperación y Asuntos Pesqueros Internacionales de Alta Mar, Autoridad de los Recursos Acuáticos de Panamá, Edificio La Riviera - Avenida Justo Arosemena y Calle 45, Bella Vista (Antigua Estación El Arbol), 0819-05850 Panamá
Tel: +507 511 6000; + 507 667 95200, Fax: +507 511 6031, E-Mail: rdelgado@arap.gob.pa; hsf@arap.gob.pa; vms@arap.gob.pa

SENEGAL

Faye, Diène

Directeur des Pêches maritimes, Ministère de la Pêche et de l'Économie Maritime, Direction des Pêches Maritimes, 1, rue Joris, Place du Tirailleur,, B.P. 289 Dakar
Tel: +221 33 849 9882; +221 77 740 9569, E-Mail: kounoune502@gmail.com

Faye, Adama

Directeur adjoint de la Direction de la Protection et de la Surveillance des pêches, Direction, Protection et Surveillance des Pêches, Cité Fenêtre Mermoz, BP 3656 Dakar
Tel: +221 775 656 958, Fax: +221 338 602 465, E-Mail: adafaye2000@yahoo.fr; adafaye@yahoo.fr

Kebe, Papa

Consultant, Villa numero 288 Sipres-II Dakar, B.P. 45.828, Dakar Fann
Tel: +221 33 867 92 82; Tel. Cellular: +221 77 565 02 87, E-Mail: papa.amary@gmail.com

Kwabena, Adams Blegnan

Chef d'équipe pêche, CAPSEN, Nouveau quai de pêche - Môle 10, BP: 782 Dakar, 10200
Tel: +221 783 732 541, E-Mail: kbadams@dongwon.com

Ndaw, Sidi

Conseiller, Ex Responsable des statistiques Direction des Pêches maritimes, Ministère de la Pêche et de l'Economie Maritime, Direction des Pêches Maritimes, 1, rue Joris, Place du Tirailleur, B.P. 289, Dakar
Tel: +221 775 594 914, Fax: +221 33 821 4758, E-Mail: sidindaw@hotmail.com; dopm@orange.sn

Sèye, Mamadou

Ingénieur des Pêches, Chef de la Division Gestion et Aménagement des Pêcheries de la Direction des Pêches maritimes, Sphère ministérielle de Diamniadio Bâtiment D., 1, Rue Joris, Place du Tirailleur, 289 Dakar
Tel: +221 77 841 83 94, Fax: +221 821 47 58, E-Mail: mdseye@gmail.com; mdseye1@gmail.com; mdouseye@yahoo.fr

Sow, Fambaye Ngom

Chercheur Biologiste des Pêches, Centre de Recherches Océanographiques de Dakar Thiaroye, CRODT/ISRA, LNERV - Route du Front de Terre - BP 2241, Dakar
Tel: +221 3 0108 1104; +221 77 502 67 79, Fax: +221 33 832 8262, E-Mail: ngomfambaye2015@gmail.com; famngom@yahoo.com

SOUTH AFRICA

Qayiso Kenneth, Mketsu

Deputy Director, Department of Forestry, Fisheries and the Environment, 3 Martin Hammerschlag Way, Private Bag X2, Foretrust Building, Foreshore, 8018 Cape Town
Tel: +27 21 402 3048, Fax: +27 21 402 3618, E-Mail: QMketsu@environment.gov.za

McDonald, Alice

802 Clothiers Creek Rd, 2484 NSW, Clothiers Creek, Australia
Tel: +614 104 76034, E-Mail: alice@nrepeople.com.au

TRINIDAD & TOBAGO

Mohammed, Elizabeth

Acting Director of Fisheries, Ministry of Agriculture, Land and Fisheries, Fisheries Division, #35 Cipriani Boulevard Port of Spain
Tel: +868 625 9358, Fax: +868 623 8542, E-Mail: emohammed.2fdtt@gmail.com

Daniel, Janelle

#35 Cipriani Boulevard, Port of Spain
Tel: +1 868 623 8525, Fax: +1 868 623 8542, E-Mail: janelledaniel@gmail.com

Dass-Nobbee, Shana

Milshirv Administrative Complex Cor. Shirvan and Milford Road Tobago
Tel: +1 868 484 8694, E-Mail: shanadass1@gmail.com

Edghill, Jaime-Leigh

Ministry of Agriculture, Land & Fisheries, Fisheries Division - Marine Fisheries Analysis Unit, Western Main Road, Chaguaramas
Tel: +1 868 634 4504; +1 868 634 4505, Fax: +1 868 634 4488, E-Mail: Jaime-Leigh.Edghill@gov.tt

Martin, Louanna

Fisheries Officer, Ministry of Agriculture, Land & Fisheries, Fisheries Division, 35 Cipriani Boulevard, Port of Spain
Tel: +868 634 4504; 868 634 4505, Fax: +868 634 4488, E-Mail: lmartin@fp.gov.tt; louannamartin@gmail.com

Tobias-Clarke, Esther

Division of Food Production, Forestry and Fisheries MilShirv Administrative, Complex Shirvan Road
Tel: +1 868 639 4446, E-Mail: marinepark08@gmail.com

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

Owen, Marc

Department for Environment, Food and Rural Affairs, DEFRA, First Floor, Seacole Wing, 2 Marsham Street, London, SW1P 4DF
Tel: +44 755 732 5524, E-Mail: marc.owen@defra.gov.uk

Benjamin, Gerald Carl

Senior Fisheries Officer, Environment, Natural Resources and Planning Directorate, Government of Sta. Helena, STHL 1ZZ Scotland Jamestown, St. Helena
Tel: +290 24724, Fax: +290 24603, E-Mail: gerald.benjamin@sainthelena.gov.sh

Reeves, Stuart

Principal fisheries scientist & advisor, Centre for Environment, Fisheries and Aquaculture Science (Cefas), Pakefield Road, Lowestoft Suffolk NR33 0HT
Tel: +44 150 252 4251, E-Mail: stuart.reeves@cefas.co.uk

Sampson, Harry

Senior International Fisheries Policy Officer, Department for Environment, Food and Rural Affairs (Defra), Marine & Fisheries Directorate, 1st Floor Seacole Building NW, 2 Marsham Street, London, SW1P 3JR
Tel: +44 208 026 4403; +44 755 742 8543, E-Mail: harry.sampson@defra.gov.uk; trfmo@defra.gov.uk

Townley, Luke

International Fisheries Policy Officer, Department for Environment, Food and Rural Affairs (Defra), Marine & Fisheries Directorate, Deanery Road, Bristol, BS1 5AH
Tel: +44 208 720 4111, E-Mail: luke.townley@defra.gov.uk

Warren, Tammy M.

Senior Marine Resources Officer, Department of Environment and Natural Resources, Government of Bermuda, #3 Coney Island Road, St. George's, CR04, Bermuda
Tel: +1 441 705 2716, E-Mail: twarren@gov.bm

Wright, Serena

Fisheries Scientist, Centre for Environment, Fisheries and Aquaculture Science (Cefas), ICCAT Tagging programme St. Helena, Pakefield Road, Lowestoft, NR33 0HT
Tel: +44 1502 52 1338; +44 797 593 0487, E-Mail: serena.wright@cefas.co.uk

UNITED STATES

Cole, Alexa

Director, Office of International Affairs and Seafood Inspection, NOAA, National Marine Fisheries Service, 1315 East West Highway, Silver Spring, Maryland, 20910
Tel: +1 301 427 3087, E-Mail: alexa.cole@noaa.gov

Blankenbeker, Kimberly

Foreign Affairs Specialist, Office of International Affairs and Seafood Inspection, NOAA, National Marine Fisheries Service, 1315 East West Highway, Silver Spring Maryland 20910
Tel: +1 301 704 0009, Fax: +1 301 713 1081, E-Mail: kimberly.blankenbeker@noaa.gov

Bogan, Raymond D.

Sinn, Fitzsimmons, Cantoli, Bogan & West, 501 Trenton Avenue, P.O. Box 1347, Point Pleasant Beach, Sea Girt New Jersey 08742
Tel: +1 732 892 1000; +1 732 233 6442, Fax: +1 732 892 1075, E-Mail: rbogan@lawyernjshore.com

Brown, Craig A.

Chief, Highly Migratory Species Branch, Sustainable Fisheries Division, NOAA Fisheries Southeast Fisheries Science Center, 75 Virginia Beach Drive, Miami, Florida 33149
Tel: +1 305 586 6589, Fax: +1 305 361 4562, E-Mail: craig.brown@noaa.gov

Delaney, Glenn Roger

Blue Water Fishermen's Association, 601 Pennsylvania Avenue NW Suite 900 South Building, Washington, D.C. 20004
Tel: +1 202 434 8220, Fax: +1 202 639 8817, E-Mail: grdelaney@aol.com

Donaldson, Tim

NOAA Office of Law Enforcement, 1315 East West Hwy, Silver Spring, Maryland 20910
Tel: +1 301 427 8265, E-Mail: tim.donaldson@noaa.gov

King, Melanie Diamond

Foreign Affairs Specialist, Office of International Affairs and Seafood Inspection, NOAA - National Marine Fisheries Service, 1315 East West Highway, Silver Spring Maryland 20910
Tel: +1 301 427 3087, E-Mail: melanie.king@noaa.gov

Park, Caroline

NOAA Office of the General Counsel for Fisheries, 1315 East-West Highway, SSMC3 - Rm 15141, Silver Spring Maryland 22201
Tel: +1 301 713 9675; +1 301 628 1608, Fax: +1 301 713 0658, E-Mail: caroline.park@noaa.gov

Redd Jr, Larry

Fishery Management Specialist, Office of Sustainable Fisheries, Highly Migratory Species Management Division, NOAA – National Marine Fisheries Service, 1315 East-West Highway, Building SSMC3, Silver Spring, Maryland, 20910
Tel: +1 301 427 854, Fax: +1 301 713 1917, E-Mail: larry.redd@noaa.gov

Schalit, David

President, American Bluefin Tuna Association, 176 Mulberry Street - 4th floor, New York, 10013
Tel: +1 917 573 7922, E-Mail: dschalit@gmail.com

Warner-Kramer, Deirdre

Acting Deputy Director, Office of Marine Conservation (OES/OMC), U.S. Department of State, Rm 2758, 2201 C Street, NW, Washington, D.C. 20520-7878
Tel: +1 202 647 2883, Fax: +1 202 736 7350, E-Mail: warner-kramerdm@fan.gov

OBSERVERS FROM COOPERATING NON-CONTRACTING PARTIES, ENTITIES, FISHING ENTITIES

BOLIVIA

Cortez Franco, Limbert Ismael

Jefe de la Unidad Boliviana de Pesca Marítima (UBPM), Calle 20 de Octubre 2502, esq. Pedro Salazar, La Paz
Tel: +591 6 700 9787, Fax: +591 2 291 4069, E-Mail: limbert.cortez@protonmail.ch; limbert.cortez@mindef.gob.bo; licor779704@gmail.com

Alsina Lagos, Hugo Andrés

Director Jurídico, Campomarino Group, Calle Yanacocho No. 441 Efi. Arcoiris, piso 15, oficina 10, La Paz
Tel: +1 321 200 0069, Fax: +507 830 1708, E-Mail: hugo@alsina-et-al.org

CHINESE TAIPEI

Chan, Chiao-Lin

Assistant Secretary, Taiwan Tuna Association, 3F-2, NO.2, YU KANG MIDDLE 1ST RD, KAOHSIUNG, 806
Tel: +886 7 841 9606 ext. 21, Fax: +886 7 831 3304, E-Mail: connie@tuna.org.tw

Chou, Shih-Chin

Section Chief, Deep Sea Fisheries Division, Fisheries Agency, 8F, No. 100, Sec. 2, Heping W. Rd., Zhongzheng District, 10070 Taipei
Tel: +886 2 2383 5915, Fax: +886 2 2332 7395, E-Mail: shihcin@ms1.fa.gov.tw

Kao, Shih-Ming

Associate Professor, Graduate Institute of Marine Affairs, National Sun Yat-sen University, 70 Lien-Hai Road, 80424 Kaohsiung City
Tel: +886 7 525 2000 Ext. 5305, Fax: +886 7 525 6205, E-Mail: kaosm@mail.nsysu.edu.tw

Lee, Kuan-Ting

Director General, Taiwan Tuna Association, 3F-2, No2 Yugang Middle 1st Road, Chien Chen district, 80672 Kaohsiung
Tel: +886 7 841 9606#21, Fax: +886 7 831 3304, E-Mail: simon@tuna.org.tw

Lin, Wei-Ren

Assistant, Department of Environmental Biology and Fisheries Science, National Taiwan Ocean University, No. 2 Pei-Ning Rd. Keelung, 202301
Tel: +886 2 24622192 ext. 5046, Fax: +886 2 24622192, E-Mail: willy20535@gmail.com

Su, Nan-Jay

Assistant Professor, Department of Environmental Biology and Fisheries Science, National Taiwan Ocean University, No. 2 Pei-Ning Rd. Keelung, Zhongzheng Dist., 202301
Tel: +886 2 2462 2192 #5046, Fax: +886-2-24622192, E-Mail: nanjay@ntou.edu.tw

Yang, Shan-Wen

Secretary, Overseas Fisheries Development Council, 3F., No. 14, Wenzhou Street, Da'an Dist., 10648
Tel: +886 2 2368 0889 #151, Fax: +886 2 2368 6418, E-Mail: shenwen@ofdc.org.tw

SURINAME, REP.

Rampersad, Tania Tong Sang

Policy Officer - Fisheries Department, Ministry of Agriculture, Animal Husbandry and Fisheries, Cornelis Jongbawstraat # 50, Paramaribo, Republica de Suriname
Tel: +597 472 233, Fax: +597 424441, E-Mail: tareva@hotmail.com

OBSERVERS FROM NON-CONTRACTING PARTIES

JAMAICA

Murray, Anginette

Marine Researcher / Analyst National Fisheires Authority, 2 C Newport East Kingston 11, PO Box 470, Kingston
Tel: +1 876 577 2405, E-Mail: anginette.murray@moa.gov.jm

OBSERVERS FROM NON-GOVERNMENTAL ORGANIZATIONS

ASSOCIAÇÃO DE CIÊNCIAS MARINHAS E COOPERAÇÃO - SCIAENA

Blanc, Nicolas

Incubadora de Empresas da Universidade do Algarve, Campus de Gambelas, Pavilhão B1, 8005-226 Faro, Portugal
Tel: +351 917 018 720, E-Mail: nblanc@sciaena.org

Carvalho, Gonçalo

SCIAENA, Incubadora de Empresas da Universidade do Algarve, Campus de Gambelas, Pavilhão B1, 8005-226 Faro, Portugal
Tel: +351 936 257 281, E-Mail: gcarvalho@sciaena.org; sciaena@sciaena.org

BRAZILIAN ASSOCIATION OF FISH INDUSTRIES - ABIPESCA

Mello, Carlos

Technical Director, Associação Brasileira das indústrias de pescados - ABIPESCA, Áreas Norte, Quadra 601 Boco H, Edifício ION, Sala 1920, 70830-018 Brasília, DF, Brazil
Tel: +55 619 950 85491, E-Mail: carlos@abipesca.com.br

INTERNATIONAL SEAFOOD SUSTAINABILITY FOUNDATION – ISSF

Restrepo, Víctor

Chair of the ISSF Scientific Advisory Committee, ISS-Foundation, 1440 G Street NW, Washington DC 20005, United States
Tel: + 1 305 450 2575; +1 703 226 8101, Fax: +1 215 220 2698, E-Mail: vrestrepo@iss-foundation.org; vrestrepo@mail.com

PEW CHARITABLE TRUSTS - PEW

Galland, Grantly

Officer, Pew Charitable Trusts, 901 E Street, NW, Washington, DC 20004, United States
Tel: +1 202 540 6953; +1 202 494 7741, Fax: +1 202 552 2299, E-Mail: ggalland@pewtrusts.org

Laborda Mora, Cristian Eugenio

Pew Charitable Trusts, La Concepción 81, Oficina 1507, 8320000 Providencia - Santiago de Chile, Chile
Tel: +562 223 52973; +569 957 85269, E-Mail: cristian.laborda@celaborda.com; mblanco@celaborda.com

Wilson, Ashley

Pew Charitable Trusts, The Grove, 248A Marylebone Road, London, NW1 6JZ, United Kingdom
Tel: +44 794 016 1154, E-Mail: awilson@pewtrusts.org

SHARKPROJECT INTERNATIONAL

Ziegler, Iris

SHARKPROJECT International, Rebhaldenstrasse 2, 8910 8910 Affoltern am Albis, Switzerland
Tel: +49 174 3795 190, E-Mail: i.ziegler@sharkproject.org; int.cooperation@sharkproject.org; dririsziegler@web.de

THE INTERNATIONAL POLE & LINE FOUNDATION - IPNLF

Bealey, Roy

IPNLF, 7-14 Great Dover Street, London, SE1 4YR, United Kingdom
Tel: +44 755 537 3675, E-Mail: roy.bealey@ipnlf.org

Dronkers Londoño, Yaiza

International Pole & Line Foundation, Meeuwenlaan 100 (Pand Noord), 1021 JL Amsterdam, The Netherlands
Tel: +31 638 146 111, E-Mail: yaiza.dronkers@ipnlf.org

WORLD WIDE FUND FOR NATURE – WWF

Buzzi, Alessandro

WWF Mediterranean, Via Po, 25/c, 00198 Roma, Italy
Tel: +39 346 235 7481, Fax: +39 068 413 866, E-Mail: abuzzi@wwfmedpo.org

SCRS CHAIRMAN

Melvin, Gary

SCRS Chairman, St. Andrews Biological Station - Fisheries and Oceans Canada, Department of Fisheries and Oceans, 285 Water Street, St. Andrews, New Brunswick, E5B 1B8 Canada
Tel: +1 506 652 95783, E-Mail: gary.d.melvin@gmail.com; gary.melvin@dfo-mpo.gc.ca

ICCAT Secretariat

C/ Corazón de María 8 – 6th floor, 28002 Madrid – Spain
Tel: +34 91 416 56 00; Fax: +34 91 415 26 12; E-mail: info@iccat.int

Manel, Camille Jean Pierre

Neves dos Santos, Miguel

Ortiz, Mauricio

Palma, Carlos

Kimoto, Ai

Cheatle, Jenny

Idrissi, M'Hamed

Parrilla Moruno, Alberto Thais

Campoy, Rebecca

De Andrés, Marisa

Donovan, Karen

García-Orad, María José

Peyre, Christine

Pinet, Dorothée

Peña, Esther

ICCAT INTERPRETERS

Baena Jiménez, Eva J.

Cypher-Dournes, Emma

Hof, Michelle Renée

Liberas, Christine

Linaae, Cristina

Pinzon, Aurélie

Summaries of FAD management plans and annual fishing / capacity management plans for tropical tunas**Table 1.** Summary of FAD management plan submissions.

<i>DOCUMENT SUBMITTED</i>	<i>MANAGEMENT MEASURE</i>	<i>SUMMARY OF THE PROPOSAL</i>	<i>NOTES</i>
PA1_02A_ENG_BZE (Belize)	FAD CLOSURE	All Belize flagged purse seine fishing vessels operating in the high seas and any other jurisdictions utilizing FAD in the ICCAT Convention area will be required to observe the Area/Time closure in relation with the protection of juveniles as contained in the relevant Recommendation 19-02 from January 1 to 28 February 2020 and 1 January to March 31, 2021.	
	FAD LIMITS	The total number of FADs that may be deployed shall not exceed 300 FADs per vessel at any one time for the period from 1 January 2021 to 31 December 2021.	
PA1_03_ENG_BRA (Brazil)	FAD LIMITS	Prohibition of the use of FADs for tuna fishing	
PA1_04A_ENG_CHI (China)		There is no FAD management plan as there is no purse seine fishery.	
PA1_05_ENG_CUR (Curaçao)	FAD CLOSURE	FAD closures are monitored by observers	
	FAD LIMITS	Curaçao shall ensure that for purse seine vessels flying a Curaçao flag, the following limits will apply to number of FADs with instrumental buoys: a) 2020: 350 FADs per vessel b) 2021: 300 FADs per vessel.	
PA1_06A_ENG_SVL (El Salvador)		FAD management plan was adopted and it contains the elements described in Rec. 19-02.	
PA1_07A_ENG_EU (EU)	FAD CLOSURE	Regarding FADs closures, the EU is implementing a three-month closure in January, February and March 2021 in the ICCAT Convention area.	

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DOCUMENT SUBMITTED	MANAGEMENT MEASURE	SUMMARY OF THE PROPOSAL	NOTES
	FAD LIMITS	In 2021, the EU is implementing the FAD limits adopted under Rec. 19-02 (maximum 300 FADs per vessel). Verifications of the number of FADs per vessel will be conducted by the competent authorities.	
PA1_08A_ENG_GHA (Ghana)	FAD CLOSURE	Adhere to area/time closure of the fishery to FADs prescribed by ICCAT from 2020.	
	FAD LIMITS	Ghana limits the number of FADs to 250 per vessel	Less than 300 in compliance with Rec. 19-02
PA1_09A_ENG_GTM (Guatemala)	FAD CLOSURE	Implementation of the closure as recommended by the Commission.	
	FAD LIMITS		
PA1_12A_ENG_MAR (Morocco)	FAD CLOSURE	Fishing on FADs is prohibited for three months (January, February and March). This closure is included in the fishing license.	
	FAD LIMITS	Maximum included in the fishing license, 300 for 2020.	
PA1_13A_ENG_SEN (Senegal)	FAD CLOSURE	As regards Rec. 19-02, FAD fishing for bigeye, yellowfin and skipjack tuna is formally prohibited throughout the Atlantic from 1 January 2020 to 28 February 2020 and from 1 January 2021 to 31 March 2021 throughout the Convention Area.	
	FAD LIMITS	Senegal has voluntarily limited FAD number per vessel to 200.	Less than 300 in compliance with Rec. 19-02
PA1_14_ENG_TTO (Trinidad and Tobago)		N/A: Trinidad and Tobago does not have purse seiners and/or baitboats for tropical tuna fishing.	
PA1_15_ENG_TAI (Chinese Taipei)		N/A: All Chinese Taipei fishing vessels operating in the ICCAT Convention area are tuna longliners.	

Table 2. Summary of submissions of annual fishing / capacity management plans for tropical tunas.

<i>DOCUMENT SUBMITTED</i>	<i>SUMMARY OF THE PROPOSAL</i>	<i>NOTES</i>
PA1_02A / i 2021 (Belize)	<p>Belize currently has 19 vessels engaged in the fishery. This includes: 10 longliners, 6 purse seiners and 3 support vessels.</p> <p>Belize is implementing a system for the allocation and management of quotas which primarily focuses on the adherence to the limits established by the relevant ICCAT Recommendations.</p>	This plan does not indicate total limits or quotas.
PA1_03 / i 2021 (Brazil)	<p>Limits its catches to 6,043 t, i.e. reduced by 17% of the average (7,281 t) from 2014 through 2017.</p> <p>Vessel fleet targeting tropical tunas: Longliners between 20 and 40m = 37 Longliners less than 20m = 18 Baitboats = 30 LL SURF = 48 Handlines = 250</p>	<p>Brazil has the firm intention to develop its tropical tuna fishery, mainly by expanding its artisanal fishery with handline, in a progressive and gradual manner.</p> <p>Brazil intends to gradually expand its bigeye fishery to a level close to 10,000 t, in a way compatible with quota redistribution, outside developed countries.</p>
PA1_04A_ENG_CHI (China)	<p>China has 34 longliners over 40m.</p> <p>The “total adjusted quota” for bigeye catch in 2021 is 5,731.39 t (including 600 t from Japan and the 2019 underage).</p>	Percentage of carry-over not consistent with Rec. 19-02.
PA1_05_ENG_CUR (Curaçao)	<p>Curaçao has 4 purse seiners over 40m in 2021.</p> <p>A 2,558.87 t catch “quota” is established.</p>	
PA1_06A_ENG_SVL (El Salvador)	<p>El Salvador has 4 purse seiners over 40m actively fishing tropical tunas in the ICCAT Convention Area and one support vessel.</p> <p>El Salvador undertakes to maintain reduced its average catch of 1,725.30 t, by foregoing, 10% of its potential, so that the catch limit applied in 2021 is 1,553 t.</p>	<p>El Salvador does renounce its right to participate equally in fishing.</p> <p>Requested to confirm that no increase of capacity will take place because of the transfer of a support vessel from Panama.</p>

DOCUMENT SUBMITTED	SUMMARY OF THE PROPOSAL	NOTES
PA1_07A_ENG_EU (EU)	<p>The EU accepted to implement in 2020 a 21% reduction of its TAC for BET.</p> <p>EU applies a 13,968 t catch limit (including a transfer of 300 t from Japan) and distributes quotas among three EU member States as follows: EU-France: 3,230 t, EU Portugal 3,133.93 t, EU-Spain: 7,604.35 t,</p> <p>In 2021, EU has 146 longline and artisanal vessels, 4 supply vessels, 22 purse seiners and 507 baitboats.</p>	
PA1_08A_ENG_GHA (Ghana)	<p>Ghana has 17 purse seiners over 40m and 18 baitboats over 20m.</p> <p>Ghana is implementing a national bigeye catch limit in the amount of 3,631.23 t.</p>	
PA1_09A_ENG_GTM (Guatemala)	<p>Guatemala has 2 purse seine vessels over 40m.</p> <p>Each year, Guatemala has fully complied with the figures allocated by ICCAT, catching bigeye in amounts below 3,500 t which correspond to Guatemala as a long-term right. However, Guatemala will reduce its fishing effort for 2021 to 1,827.42 t per year, which will be used for the two vessels registered with ICCAT.</p>	
PA1_10_ENG_JPN (Japan)	<p>The annual bigeye catch limit for Japan for the 2021 fishing season (from 1 August 2021 to 31 July 2022) amounts to 14,849.44 t (after transferring 600 t to China and 300 t to EU). It corresponds to a 21% reduction of its quota. Japan has 163 longliners over 40m and 18 longliners between 20 and 40m.</p>	
PA1_11_ENG_KOR (Korea)	<p>In respect of 2020 and 2021, Korea has voluntarily set out a catch limit of 1,000 t ensuring effectiveness of the tropical tuna measure, without prejudice of future discussions on bigeye tuna catch limits.</p> <p>Considering the carry over of underage and a transfer of 223 t towards Chinese Taipei, the adjusted quota is 925.6 t.</p> <p>Korea has 9 longliners over 40m.</p>	
PA1_12A_MAR_ENG (Morocco)	<p>Morocco has 44 vessels (5 purse seiners over 40m, 2 longliners over 40m, 16 longliners between 20 and 40m, 11 longliners less than 20m and 10 baitboats) in 2020 and around 500 to 700 artisanal boats whose LOA less than 7m and have an adjusted quota of 5,131 t.</p>	Morocco presented their intention to develop their tropical tuna fishery.

DOCUMENT SUBMITTED	SUMMARY OF THE PROPOSAL	NOTES
PA1_13A_ENG_SEN (Senegal)	Senegal limits its tropical tuna catches to 1,322 t and has currently authorised fourteen (14) vessels to fish for tropical tunas. These are as follows: 1 Longliner between 20 and 40m; 6 baitboats and; 7 purse seiners over 40m One (1) support vessel has also been authorised.	
PA1_14_ENG_TTO (Trinidad and Tobago)	Trinidad and Tobago has 24 longliners over 20m LOA and 13 longliners between 15 and 20m LOA. The fleet's average catch of yellowfin tuna over the five-year period, from 2015 to 2019 was 1,064 t. The recent average catch for bigeye for Trinidad and Tobago, as defined by Rec. 19-02 is 49.47 t.	The longline fleet capacity of Trinidad and Tobago has increased in 2021 due to the expansion in size of one longliner, the estimated inclusion of two new longliners and the transfer of an estimated two vessels that currently engage in demersal trawling.
PA1_15_ENG_TAI (Chinese Taipei)	The annual 2021-catch limit for bigeye for Chinese Taipei is 10,617.31 t, including 9,226.41 t of initial catch limit, 1,167.9 t carryover of underage from 2019 and transfer of 223 t from Korea. The vessel fleet for Chinese Taipei includes 49 longliners over 40m and 5 longliners between 20 and 40m.	
PA1_17_JUL_ENG_COL (Colombia)	Currently Colombia does not have any vessels engaged in tropical tuna fishing activities.	Colombia considers capacity building which in the future will allow to achieve the conditions that will ensure that Colombia can account for a quota in this area.
PA1_18_JUL_ENG_19-02 (EU)	The EU only proposes amendments to Rec. 19-02, in particular for certain MCS measures. The main changes proposed are as follows: CPCs should limit the number of large-scale PS and LL to those authorised in 2015 or 2019; At least 20% of transshipments should be conducted at port. Supply vessels will have a 100% observer coverage. Introduction of a regional observer programme.	It is not a full proposal for a revised Rec. 19-02 (as it does not include any information on catch limits or FAD closures as from 2021 for example).

Compilation of questions made by Japan and the United States on original tropical tunas fishing plans for 2021 and responses received from CPCs

Questions/Comments		CPC	Responses/ Comments
Japan	<p>Please specify the bigeye tuna catch limit for 2021 in the capacity table.</p> <p>In accordance with paragraphs 27 and 28 of Rec. 19-02, the FADs closure applies to the whole Convention area rather than the specified area in its plan [Section 5.6, p.5].</p> <p>The difference in fishing effort on FADs between 2018 and 2020 should be provided in the capacity table. The latest format provided by Secretariat shall be used.</p>	Belize	See PA1-2A.
Japan	<p>Please add an explanation on the implementation of the observer program for long line.</p> <p>The initial quota in the capacity table (6.25t) seems to be an error and needs correction.</p>	Brazil	No comments received to date.
Japan	It is not clear how the total adjusted quota in the capacity table was calculated since it is more than the initial quota plus the transferred quota. Please add a footnote to the capacity table to explain this.	China (P. R.)	Revised version of the Fishing plan submitted. There's no change in the text, but minor figure changes in the capacity table.
Japan	It is not clear what the figure of “estimated best catch rate per unit (t)” (i.e. 10,000t) means. More explanation on this is appreciated.	Curaçao	No comments received to date.

<p>Japan</p>	<p>In the capacity table, if the estimated best catch rate per unit is 700 t, the total capacity should be 2,800 t (700 x 4 vessels). The total estimated capacity for 2018 to 2021 should be 2,800. This means that there is no difference between 2018 and 2020.</p> <p>The total fishing capacity of 4 purse seine vessels (2,800) is far larger than the catch limit of bigeye tuna (1,553). More information will be appreciated on how those 4 vessels are managed so that the total bigeye catch does not exceed the limit.</p>	<p>El Salvador</p>	<p>See PA1-06A</p> <ol style="list-style-type: none"> 1. We have reviewed the general comments and checked these against the content of the FAD Fishing and Management plan that was submitted by El Salvador (PA1_06_SPA_SVL.doc). As a result, we have not identified that the deficiencies indicated for some CPCs apply to El Salvador, which is why the document referred to has not been revised or amended. In the event of a specific request for clarification, my Delegation will provide a response, as appropriate. 2. Effectively, in subparagraph h) of Section II of El Salvador's plan, it is indicated that a Salvadorian-flagged support vessel has recently become operative, while in the past, the Salvadorian fleet used 3 support vessels flagged to Panama. In light of the request of the United States of America, it is appropriate to clarify that the Salvadorian support vessel which was authorised at the end of 2020 does not represent an increase in the number of support vessels active in 2019, since that vessel was already registered with ICCAT before 2019. It is a change of flag of one of the 3 Panama-flagged vessels that served the Salvadorian fleet, as can be checked against ICCAT records. The change of flag is a strategic convenience to ensure control by El Salvador of the fishing fleet and the associated support fleet, and therefore is not a barrier to compliance with Rec. 19-02.
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			<p>El Salvador indicated in its plan - in the table contained in the second point regarding the details of the fishing plan for CPCs with an average catch above 1000 t - that it “undertakes to comply with the provisions of Rec. 19-02 in 2020 on an exceptional basis. However, it does not renounce its right to participate equally in the fishing of tropical tunas on the high seas of the Atlantic ...”.</p> <p>In light of the commitments undertaken with the Commission, El Salvador has imposed on the vessels of its fleet the sacrifice of a catch reduction, allocating a quota per vessel, with the possibility of transfer of underage within the calendar year between the vessels of the Salvadorian fleet. In addition, adequate periodic obligations have been established to report and monitor catches so as to prevent total catch from exceeding the limit corresponding to my country. To demonstrate the effectiveness of the national control measure, despite the sacrifice, in 2020 the catches did not exceed the provision limit referred to and agreed in 2019 and we expect the same result in 2021.</p>
<p>United States</p>	<p>El Salvador's plan (PA1-06) indicates that a new support vessel was authorized in late 2020, but Rec. 19-02 paragraph 23 prohibits any increase in support vessels above the number active in 2019. Can El Salvador explain its rationale for authorizing this new vessel in light of the requirements of Rec. 19-02?</p>	<p>El Salvador</p>	

<p>Japan</p>	<p>Para 31 of Rec.19-02 states that CPCs shall report the difference between the 2018 level and the 2020 level to the 2021 Commission meeting, while EU compares the number of purse seine vessels in 2021 to that in 2019 in the capacity table.</p> <p>The figures of the initial quota for 2019 and 2021 in the capacity table (1698t and 1366t, respectively) seem to be errors thus need correction.</p> <p>The figure “300” in the capacity table must be in “Quota transfer received from XXX” rather than “Quota transfer made to XXX.”</p>	<p>European Union</p>	<p>Paragraph 31 refers to fishing effort of FADs, not fishing capacity. It also request these figures to be provided ahead of the annual meeting. The EU is currently looking at these figures and will try to make them available for the intersessional meeting of Panel 1.</p> <p>This is due to a problem of formatting of the word document. The table should be expanded to reveal that the figures are in fact the initial quotas, not the capacity in terms of the number of vessels. This initial quotas were 16989t in 2019, and 13668t in 2021.</p> <p>The European Union thanks Japan for highlighting this error, and this has been corrected in the updated version of our fishing plan.</p>
<p>Japan</p>	<p>It is not clear how “total fishing capacity” and “total estimated capacity” are calculated. More explanation would be helpful.</p> <p>It is also unclear why total estimated capacity has increased from 13796 in 2019 to 14604 in 2020 whereas the number of vessels has been maintained at 17.</p>	<p>Ghana</p>	<p>Total fishing capacity included Baitboats. That is GRT of PS + BB.</p> <p>Estimated capacity is GRT of only PS.</p> <p>Estimated capacity of indicated years is the total GRT of the PS only. The difference is the replacement of a purse seiner with another purse seiner with a different GRT.</p> <p>However, total fishing capacity decreased by 190 GRT.</p>

<p>United States</p>	<p>In Guatemala's plan (PA1-09), we noted with concern the footnote indicating that "a complaint has been filed with ICCAT" over its 2020 and 2021 catch limit of 911.93 t. However, this level is consistent with our understanding of Guatemala's reported recent average catch and was reflected in the Compliance Tables endorsed during the ICCAT 2020 correspondence decision making process. We would like to request more information from Guatemala on this matter. In particular, we would like to understand what catch limit Guatemala is implementing in 2021.</p>	<p>Guatemala</p>	<p>See PA1_09A.</p>
<p>Japan</p>	<p>The 2021 figures of number of vessels in the capacity table are blank.</p>	<p>Morocco</p>	<p>See PA1_12A.</p>
<p>United States</p>	<p>The United States notes Morocco's position with regard to expanding its participation in tropical tuna fisheries. We are concerned about the scope of this expansion, in particular the deployment of 5 large-scale purse seine vessels in 2020. The severely overfished status of bigeye, the decreasing trend of yellowfin populations, and the already excessive harvest of juvenile tropical tunas in purse seine fisheries, makes this expansion particularly concerning. The United States requests additional details on how Morocco will manage and control its overall longline and purse seine capacity. In addition, regarding the potential authorization of support vessels, the United States notes that such action would not be consistent with Rec. 19-02, paragraph 23.</p>	<p>Morocco</p>	<p>Below are the responses to the two control related questions:</p> <ol style="list-style-type: none"> 1. The way in which these new fisheries will be monitored and controlled; <p>The control measures implemented by Morocco are described in point 2.4 (Control measures, including planned trials of electronic observers (Part V)) of the fishing plan:</p> <p>Fishing for tropical tuna species is covered by the control infrastructure in place, in particular:</p> <ul style="list-style-type: none"> - Control at landing ports, fishing sites and fish markets; - Vessel control by satellite (positioning and tracking device "VMS"); - At sea vessel control is carried out by the control authorities; - A system of reporting catches on landing and monitoring trade flow through the catch certification procedure.

		<p>2. Implementation of the existing VMS requirements.</p> <p>The VMS requirements are implemented by Morocco.</p> <p>As stated in point 2.4 referred to above (Control measures, including planned trials of electronic observers (Part V)) of the fishing plan:</p> <ul style="list-style-type: none"> - Vessel control by satellite (positioning and tracking device “VMS”); <p>This control is carried out by the National Centre for Surveillance of Fishing Vessels.</p> <p>3. Implementation of reporting requirements (for example, logbooks) and reporting deadlines in order to control catches and the measures that would be taken once the catch limits have been reached, such as the obligation for vessels to return to port:</p> <ul style="list-style-type: none"> - Vessels fishing for tropical tunas have a bound logbook; - Tropical tuna catches are reported regularly to the ICCAT Secretariat (monthly and quarterly) as well as the fishery closure dates of these species, in accordance with the relevant ICCAT provisions in force. <p>In accordance with paragraph 58 of Rec. 19-02: There is 100% coverage by national observers of Moroccan purse seiners.</p>
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			<p>Nevertheless, monthly boardings will be carried out by the INRH to collect data on size, biological parameters and other types of data relating to exploitation by statistical grid (1°x1°).</p> <p>Morocco has set aside a quota (20 t) for bycatch, including potential dead discards and has provided the details in the fishing plan (revised version).</p>
Japan	<p>Japan notes several CPCs with recent average catches of more than 1,000t for tropical tuna have not submitted their annual capacity/fishing plans in accordance with paragraph 22 a) of Rec.19-02¹. Those plans are essential for Panel 1 to check whether CPCs take necessary measure to comply with their catch limit. Those CPCs shall submit their capacity/fishing plans as soon as possible.</p> <p>It is not clear how the figures of “total estimated capacity” in the capacity table are calculated. More information/explanation would be appreciated.</p> <p>¹ Those CPCs include Republic of Cabo Verde, Republic of Guinea, Republic of Panama, Republic of the Philippines.</p>	Senegal	<p>See PA1-13A. Senegal is not one of the countries mentioned since a capacity management plan containing the required information has been submitted (refer to the revised capacity plan attached).</p> <p>See PA1-13A. Explanations have been provided (refer to revised capacity management plan attached).</p>
United States	<p>In accordance with the Panel 1 workplan (PA1-01) and questions previously asked by the United States in ICCAT Circular 2734-20, the United States would like to submit the following comments and questions regarding the tropical tuna fishing and capacity management plans under paragraph 20 of Recommendation 19-02, FAD management plans under paragraph 34, and statements of development intentions under paragraph 21.</p>	Senegal	<p>Senegal has submitted a capacity management plan and a FAD management plan within the established deadlines, containing all the elements required (refer to the revised capacity management plan attached).</p>

	<p>The United States notes that several CPCs that potentially fall under paragraph 4(c) of Rec. 19-02 did not submit management plans, including Cape Verde, Côte d'Ivoire, and Republic of Guinea. The United States requests these CPCs and any others required to reduce catch under paragraph 4 who have not yet done so to submit its report on how its fleet will be managed in accordance with the requirements of Rec. 19-02 as soon as possible; this information will be critical to support discussions at the 2021 Panel 1 intersessional meetings.</p> <p>For those CPCs that indicated an intent to develop a fishery either in 2020 or this year, the United States would like to request more details be provided in advance of the upcoming Panel 1 meeting on how those new fisheries will be monitored and controlled and how catch levels will be managed. In particular, a number of CPCs did not specify if or how they had implemented existing VMS and observer coverage requirements. In addition, several CPCs did not specify how they are implementing reporting requirements (e.g., logbooks) and reporting timeframes to track catch and the steps they would take once catch limits were exhausted, such as requiring vessels to return to port. Finally, it would be helpful for CPCs to report if they allocate a reserve quota to account for any BET bycatch taken outside their tropical tuna fisheries and what that the level of that reserve quota is.</p>		
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	<p>All CPCs with FAD fisheries should have submitted updated FAD management plans by the January 31 deadline, but it appears that some CPCs did not. We ask that these CPCs provide their plans as soon as possible and before the coming Panel 1 meeting. Of the FAD management plans that were provided, several were not specific about how the FAD limitations in Rec. 19-02 are being implemented, monitored, and enforced. Such information is essential to evaluate the effectiveness of FAD management actions. Toward that end, we ask CPCs to revise their FAD management plans in advance of the coming Panel 1 meeting to provide more specific information on their FAD management.</p>		
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FAD data: Summary and review of the FOB/FADs deployed based on ST08-FADsDEP reports (ICCAT database) between 2011-2019

The ICCAT FADs database contains the information submitted annually by CPCs in the ST08-FADsDep since 2014. However, due to the changes in the FOB/FADs data requirements and the degree of spatial-temporal resolution of the information to be reported adopted by each of the recommendations on tropical tunas since 2016, the Secretariat had to modify the ST08-FADsDep e-form in 2017. These changes preclude the use of a unique database structure, and currently, the database contains data submitted before 2018 and after 2018 in separate tables. Nonetheless, the summary provided includes all data submitted until 2019 by CPCs.

As intended, the FAD Management Plan of the Commission aims primarily to monitor fishing activities of tropical tunas, **Table 1** presents a summary of the reported catches of SKJ, BET, and YFT by the purse seine and baitboat fisheries that are likely associated with FOB/FADs fisheries in the 2010-2019 period. **Table 2** presents the reporting CPCs that have submitted FOB/FAD information by year using the ST08 forms. However, it is noted that some of the ST08 data submitted indicated no FOB/FADs deployment, nor fishing activity using FADs by their national fisheries, these are indicated in **Table 3** by the zero red values in each case.

The annual number of deployed FOB/FADs is presented in **Table 4**. Since 2016 it was requested that information be provided on a monthly basis, **Table 5** shows the number of FOB/FADs deployed by month and year. Based on the type of material and source of the FOB/FADs, **Table 6** presents a summary of the available information on the type of FOB deployed by year and flag. Currently, most FOB/FADs deployed have a beacon associated that allows vessels to monitor or find it, **Table 7** shows the type of beacons reported by year and flag, most of this information is only available since 2015. In 2017 it was approved a major modification of the ST08 e-form, to accommodate new requirements for better implementation of the FAD Management Plan of the Commission. Since 2018 CPCs have provided information on the vessels associated with the deployment, service, and use of FOB/FADs by each fleet, **Table 8** shows the number of different vessels reported by each flag. The requirements also provide the spatial and monthly deployment of FOB/FADs, data on location is available since 2016. **Figure 1** shows the 1x1 lat-lon grids where at least one FOB/FAD was deployed by each flag in the years 2018/19. **Figures 2** and **3** present the density of deployments for the last four years (2016/19). From the 2016/17 data also available is the number of beacons followed by the flag/fleet vessels by month and lat-lon grid (**Figure 4**). Finally, **Figure 5** shows the log-based (*e*) of the total number of lost FOB/FADs by 1x1 lat-lon grid for 2018/19 as reported by the CPCs.

Following the PA1 request during the intersessional meeting, the following new tables are provided regarding tropical tunas FAD fisheries: **Table 9** presents a summary by year (2010-2019) and Flag of the reported FAD catches tropical tunas (SKJ, BET, YFT) based on Task 2 catch and effort data and the corresponding number of FOB/FADs deployed by year and flag through ST08-FADsDep form. **Table 10** shows the summary of catch and fishing effort for tropical tunas FAD fisheries by year and flag, disclosing the type of unit of fishing effort reported in each case. Highlighted cells show those reports with unit of effort as number of sets on FADs available, noting that some CPCs only report the number of positive sets (e.g. catch > 0).

Table 1. Nominal catches reported by flag for catches of tropical tunas (SKJ, YFT, BET) by the purse seine and baitboat fisheries that can be associated with FOB fisheries in the 2010-2019 period.

Species	BET YFT SKJ	YearC									
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Sum of Qty_t											
Flag	SpcGearGrp										
Angola	Purse seine	137	7	18							
Argentina	Purse seine	12									
Belize	Purse seine	5,176	11,654	22,866	13,423	19,512	21,377	14,804	17,115	30,651	28,190
Brazil	Bait boat	23,351	30,740	31,480	33,290	25,064	17,992	16,864	14,944	15,363	16,029
	Purse seine		559	10							
Cape Verde	Bait boat			77	77	77	77				
	Purse seine	11,433	14,612	9,883	23,936	22,259	26,743	16,036	8,573	12,220	8,164
Côte d'Ivoire	Purse seine		2,482	8,317	4,524	2,870					
Curaçao	Purse seine	17,738	20,369	23,180	24,123	26,025	28,501	33,890	30,289	35,841	27,955
El Salvador	Purse seine						10,828	27,067	22,856	25,280	23,169
EU-España	Bait boat	12,785	19,190	23,331	13,167	14,457	11,845	16,222	16,787	16,772	15,280
	Purse seine	66,277	73,111	73,568	75,779	63,066	64,246	66,617	64,236	54,887	56,628
EU-France	Bait boat	1,420	1,778	1,815	736	1,146	1,330	1,837	1,686	1,274	1,695
	Purse seine	37,969	39,003	35,750	39,665	41,492	42,023	48,164	44,956	50,718	41,838
EU-Italy	Purse seine									0	2
EU-Portugal	Bait boat	15,757	10,580	8,763	9,461	5,476	4,313	2,381	4,458	10,890	5,477
	Purse seine	14	14	11	1		1	1	8	1	43
Ghana	Bait boat	20,916	23,294	22,867	16,250	16,962	19,341	20,518	15,424	17,489	13,130
	Purse seine	51,094	42,916	52,335	48,764	56,298	68,349	59,777	66,719	79,873	79,704
Guatemala	Purse seine	7,273	5,979	6,966	9,183	10,684	12,619	11,220	15,207	12,727	12,250
Guinea Ecuatorial	Purse seine	2,116	1,267								
Guinée Rep	Purse seine	2,908	4,458	14,560	12,678	10,024					
Korea Rep	Purse seine	1									
Maroc	Purse seine	892	1,070	1,084	1,142	600	103	55	177	1,111	447
Mixed flags (EU tropical)	Purse seine	4,608	4,230				13,804	15,662	13,323	14,263	1,069
Namibia	Bait boat	50	310	181	100	54	95	123	92	95	38
Panama	Purse seine	18,131	21,109	18,004	22,435	21,552	13,234	17,929	15,465	14,825	19,373
S Tomé e Príncipe	Purse seine	480	520	534	548	562	1,294	1,103	1,004	19	18
Senegal	Bait boat	4,556	7,037	6,685	6,141	3,942	2,979	3,763	3,268	1,534	2,420
	Purse seine						4,364	21,005	28,223	34,145	37,914
South Africa	Bait boat	168	586	180	513	1,405	836	611	257	258	471
Syria	Purse seine			7	8						
UK-Sta Helena	Bait boat	101	724	230	79	188	228	386	300	251	342
Venezuela	Bait boat	990	1,228	914	739	440	467	1,177	583	386	300
	Purse seine	4,702	3,785	4,951	4,613	3,784	3,982	4,391	5,793	2,899	1,648
Grand Total		311,055	342,613	368,567	361,376	347,939	370,969	401,600	391,744	433,772	397,239

Table 2. Table of the reporting Flags that submitted ST08 form "Fishing Aggregating Devices (FADs) Deployed in the Year" 2011-2019 ICCAT dBase.

FlagName	Year									
	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Belize						1		1		7
Bolivia									1	1
Cape Verde										1
Curaçao			1	1	1	1	1	1	1	2
El Salvador						1	1	1	1	1
EU.España					1			1	1	1
EU.France	1	1	1	1		1	1	1	1	1
FR.St Pierre et Miquelon										1
Ghana				1		1	1			1
Guatemala								1		
Mexico										1
Panama			1	1	1			1		
Sta. Lucia			1							
UK.Bermuda										1
UK.British Virgin Islands										1
UK.Sta Helena							1			1
UK.Turks and Caicos										1
Grand Total	1	1	4	4	3	5	6	7	7	21

Table 3. Table of the number of records reported by Flags in the ST08 form 2011-2019 ICCAT dBase. Zero values indicate NO report of FAD deployments or non-fishing activity on FOB/FADs.

Sum of NumRecords	Column Labels								
Row Labels	2011	2012	2013	2014	2015	2016	2017	2018	2019
Belize						508	36000		1116
Bolivia								0	0
Cape Verde									111
Curaçao			4	4	8	34528	29915	20119	38161
El Salvador						16031	14043	15568	16851
EU.España					25			23796	25161
EU.France	6	53	15634	16		19188	18987	4138	16856
FR.St Pierre et Miquelon									0
Ghana				4		11445	12		12
Guatemala								13915	
Mexico									0
Panama			4	4	8			13923	
Sta. Lucia			13774						
UK.Bermuda									0
UK.British Virgin Islands									0
UK.Sta Helena							8		0
UK.Turks and Caicos									0
Grand Total	6	53	29416	28	41	81700	98965	91459	98268

Table 4. Number of FOBs deployed by year and Flag for submitted ST08 FAD e-forms ICCAT dBase 2011-2019.

FlagCode	2011	2012	2013	2014	2015	2016	2017	2018	2019
BLZ				1,013	466	1,291	141		4,539
CPV									110
CUW			1,696	1,693	1,379	22	25	1,958	2,485
EU.ESP			19,933	19,584	18,627			7,622	7,782
EU.FRA	2,869	3,320	3,293	1,273	1,287	668	5,672	2,486	2,139
GHA				9,100		17,600	24,825		
GTM							25	2,658	
LCA			6	10					
PAN			314	288	1,525	27		2,287	
SLV						22	22	868	980
UK.SHN					-		8		
Grand Total	2,869	3,320	25,242	32,961	23,284	19,630	30,718	17,879	18,035

Table 5. Number of FOBs deployed by year and month for submitted ST08 FAD e-form ICCAT dBase 2016-2019. The monthly reporting requirement starts in 2016.

Month	2016	2017	2018	2019
Jan	139	441	1,348	1,072
Feb	127	897	783	528
Mar	141	2,171	2,016	1,548
Apr	170	3,382	1,615	1,960
May	1,724	2,336	1,483	1,720
Jun	3,662	4,259	1,252	1,380
Jul	2,130	2,535	1,343	1,731
Aug	3,163	3,651	1,713	2,436
Sep	2,283	2,909	1,631	1,388
Oct	2,150	2,972	1,769	1,494
Nov	2,206	2,888	1,455	1,844
Dec	1,734	2,270	1,471	934
Total	19,630	30,710	17,879	18,035

Table 6. Number of deployed FOB/FADs by type of aggregating device and year.

Year	Anchored FAD	Drifting Artificial FAD	Artificial log Human Fishing Activity	Artificial log Human Other Activity	Natural log Animal	Natural log Plant	Mixed	Unknown
	AFAD	DFAD	FALOG	HALOG	ANLOG	VNLOG	VNLOG-DFAD	UNK
2011								2,869
2012								3,320
2013	6	21,943						3,293
2014	10	30,747				26		2,178
2015	-	20,605				52		2,627
2016		19,626				4		
2017	8	30,710						
2018		17,864	1	1		13		
2019		17,938	20	1		76		
Total	24	159,432	21	2	-	171	9,482	4,805

Table 7. Number of deployed FOB/FADs by type of beacon instrumentation used by year.

Year	Radio direction finder	Radio direction finder and GPS	GPS	Sonar	Sonar with echo-sounder	Satellite and echo-sounder	Satellite without echo-sounder	FAD without Bouy signal	Unknown
	RDF	RDFGPS	GPS	SON	SONES	SATES	SAT	NoBouy	UNK
2011									2,869
2012									3,320
2013									25,242
2014									32,961
2015						22,428	772		84
2016		17,600				1,991	39		
2017		24,825	12			4,327	9		1,545
2018						17,857	3	-	19
2019					876	17,131	-	6	22
Total	-	42,425	12	-	876	63,733	823	6	66,062

Table 8. Number of different vessel IDs reported by Flag for 2018-2019.

Flag	2018	2019
BLZ	-	10
CPV	-	1
CUW	6	6
EU_ESP	11	14
EU_FRA	11	10
GTM	5	-
PAN	4	-
SLV	4	4
Total	41	45

Table 9. Summary of the total catch (t) by flag and year from purse seine (PS) fisheries on FOB/FADs (Task 2 CE) and the corresponding total number of FOB/FADs deployed as reported in ST08-FADsDep form (yellow background lines).

Task 2 CE Trop Tunas											
GearCode	PS										
Catch t per year/flag of PS on FAD											
Number of FOBs deployed by year and Flag											
FishMode	Flag	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
FAD	Belize	2,310	2,117	-	3,067	6,114	4,565	7,071	7,266	-	-
						1,013	466	1,291	141	-	4,539
	Cape Verde	7,140	10,202	6,333	9,866	22,122	21,946	13,255	7,392	7,680	5,728
											110
	Côte d'Ivoire	-	-	-	-	2,705	-	-	-	-	-
	Curaçao	14,830	17,574	17,564	19,292	22,340	24,332	29,154	25,648	25,889	20,218
					1,696	1,693	1,379	22	25	1,958	2,485
	El Salvador						7,865	23,556	17,451	20,065	20,771
								22	22	868	980
	EU-España	42,893	56,905	56,534	63,033	52,545	48,642	52,831	59,572	41,980	43,963
					19,933	19,584	18,627	-	-	7,622	7,782
	EU-France	15,932	13,305	16,677	16,989	20,998	23,222	21,905	21,702	24,307	23,391
			2,869	3,320	3,293	1,273	1,287	2,849	5,672	2,486	2,139
	Ghana	29,553	24,608	47,896	44,900	52,044	66,641	58,760	66,529	79,709	79,316
						9,100	-	17,600	24,825	-	-
	Guatemala	3,911	3,198	4,871	5,447	6,296	10,463	8,393	11,417	10,580	9,341
									25	2,658	-
	Guinée Rep	-	-	12,883	9,415	6,680	-	-	-	-	-
	NEI (ETRO)	348	-	-	-	-	-	-	-	-	-
	Panama	13,927	19,212	13,215	18,051	18,783	11,257	16,258	11,854	9,541	-
					314	288	1,525	27	-	2,287	-
	Senegal	-	-	-	-	-	4,568	19,830	27,616	30,131	36,899
TOTAL Catch t		130,844	147,121	175,973	190,061	210,628	223,500	251,012	256,449	249,880	239,628
Total Number FOBs deployed		-	2,869	3,320	25,236	32,951	23,284	21,811	30,710	17,879	18,035

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Table 10. Summary of catch and fishing effort for tropical tunas FAD fisheries by year and flag, disclosing the type of unit of fishing effort reported in each case (Task 2 CE), values represent total catch (kg). Highlighted cells show those reports for number of sets on FADs, noting that some CPCs only report number of positive sets (e.g. catch > 0).

Time Period	2000 - 2020																				
GearCode	Purse Seine																				
Total catch (kg)																					
Flag	FleetCode	Eff1Type	Eff2Type	Eff3Type	Eff4Type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Belize	BLZ-BZ-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD					1,928,770	4,215,960	3,604,730		8,312,790	9,364,920	7,512,270	9,138,790	11,538,830			
Cape Verde	CPV-CV-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD	13,180,960	14,555,310	9,703,990		7,890,840	10,347,550	13,201,590	8,578,180	13,626,300	24,976,250	27,109,820	16,491,280	8,783,800	12,437,740	8,337,980	
Côte d'Ivoire	CIV-CI-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD										2,707,040						
		NO.SETS	D.AT SEA											3,742,500							
Curaçao	CUW-CW-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD		5,547,150	2,957,690	15,992,930	18,169,490	18,112,950	20,031,570	22,723,860	23,964,580	27,435,300	29,652,820	35,028,060	31,874,590	37,267,910	28,707,910	
El Salvador	SLV-SV-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD											8,384,030	26,098,520	23,750,920	26,482,770	24,240,130	26,166,580
EU-España	EU-ESP-ES-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD	32,143,460	28,334,560	33,250,540	55,889,850	68,801,840	65,339,250	74,052,170	74,053,620	75,770,230	62,211,240	66,296,460	69,545,820	66,073,570	56,056,710	57,834,940	
EU-France	EU-FRA-FR-ETRO	FISH.HOUR	NO.SETS			37,117,219	26,534,292	18,537,040	20,629,172	27,273,967	37,364,976	36,989,736	33,999,168	39,345,401	43,053,513	43,027,248	48,678,471	45,730,078	51,214,293	42,477,208	
Ghana	GHA-GH-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD					2,623,030											
	GHA-GH-ETRO-A	FISH.HOUR	HOURS.SEA																		
		NO.SETS	SUC.SETS	D.FISH	HOURS.SEA	1,309,000	13,345,500	4,042,000	17,215,000	31,882,000	32,332,500	25,147,500	26,069,500	17,817,000	16,537,000	20,653,500	19,658,000	17,533,500	27,650,000	37,366,400	38,489,000
	GHA-GH-ETRO-P	FISH.HOUR	HOURS.SEA			26,257,548		10,431,569													
		NO.SETS	SUC.SETS	D.FISH	HOURS.SEA		659,000		505,000	5,444,000	935,000	1,761,000	26,265,500	30,947,000	39,761,000	47,695,500	40,118,500	49,185,500	52,223,000	42,338,000	38,452,500
Guatemala	GTM-GT-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD	10,293,490	11,212,770	9,941,060	11,127,670	7,632,380	6,716,030	5,574,090	7,642,460	8,706,560	9,961,000	12,164,690	11,414,440	15,286,380	13,083,680	12,587,100	
Guinée Rep	GIN-GN-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD								12,882,500	9,415,240	7,444,400						
Maroc	MAR-MA-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD	4,969,490	421,890														
NEI (ETRO)	NEI.001	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD						387,980										
	NEI.001-SC	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD																
Panama	PAN-PA-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD		25,410,320	32,473,160	17,102,750	17,174,710	17,358,970	20,668,190	18,099,690	21,737,680	22,641,240	13,634,370	19,286,420	17,049,690	15,533,240		
						20,962,130															
Senegal	SEN-SN-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD										5,465,010	21,888,390	28,701,750	34,569,130	39,692,000	32,974,830	
St Vincent and Grenadines	VCT-VC-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD																
Venezuela	VEN-VE-ETRO	FISH.HOUR	HOURS.SEA	Hours.STD	Hours.FAD																

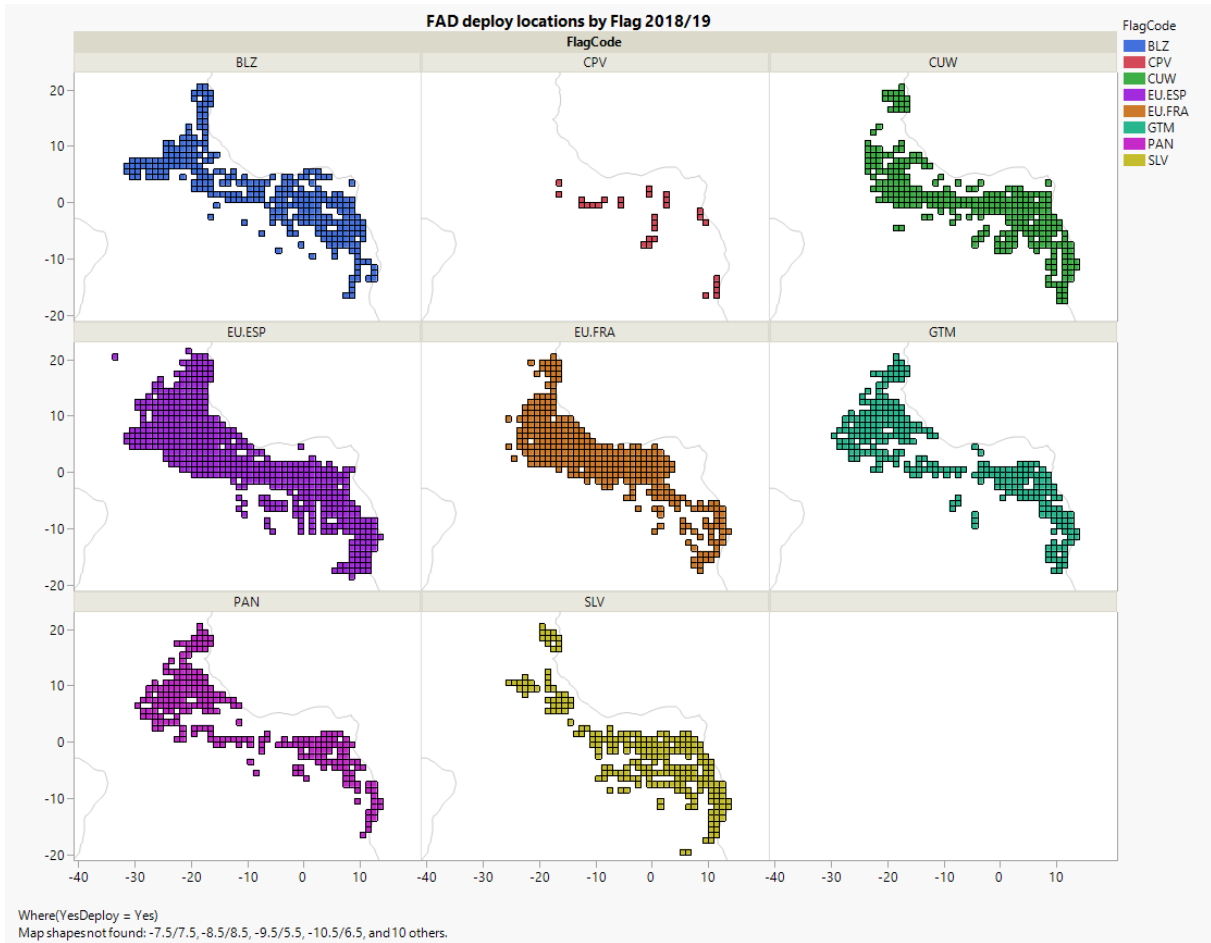


Figure 1. Summary 1x1 lat-lon for the deployment of FOB/FADs as reported by Flag during 2018-19. Grid cells show the location where at least one FOB/FAD was deployed.

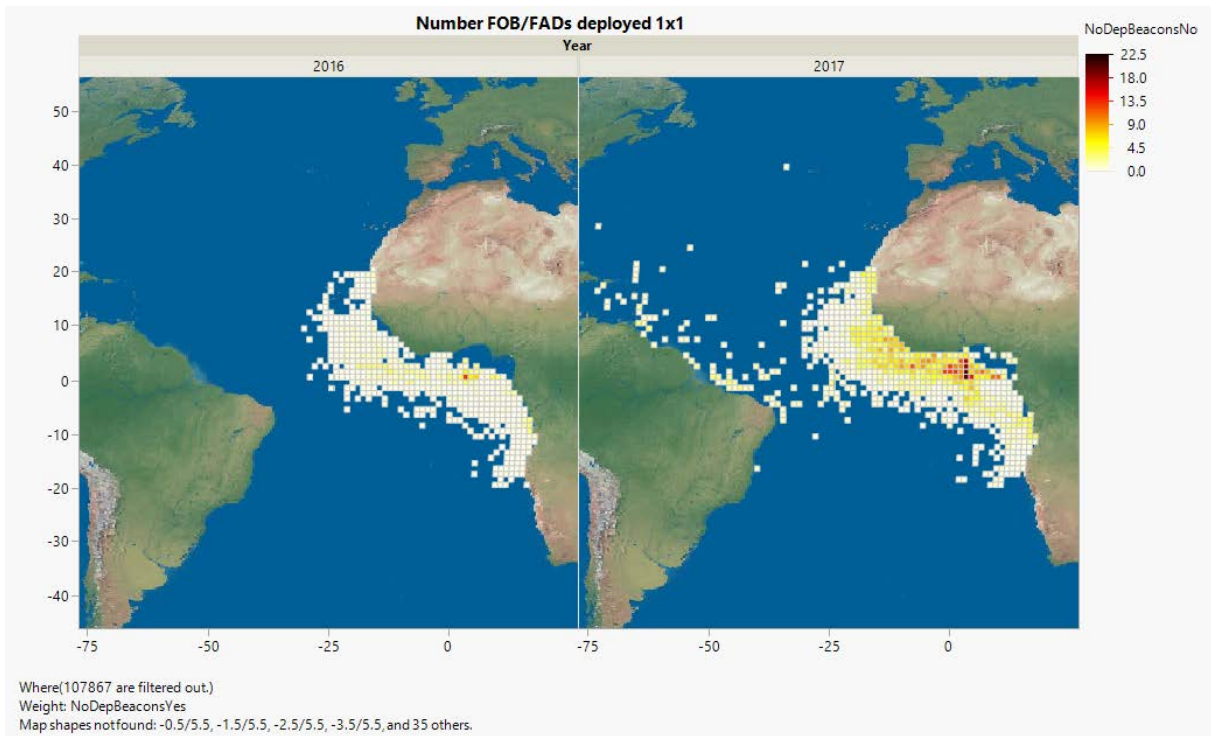


Figure 2. Deployed FOB/FADs by 1x1 lat-lon for 2016-2017. Shade colors are proportional to the total number of deploys by cell-year.

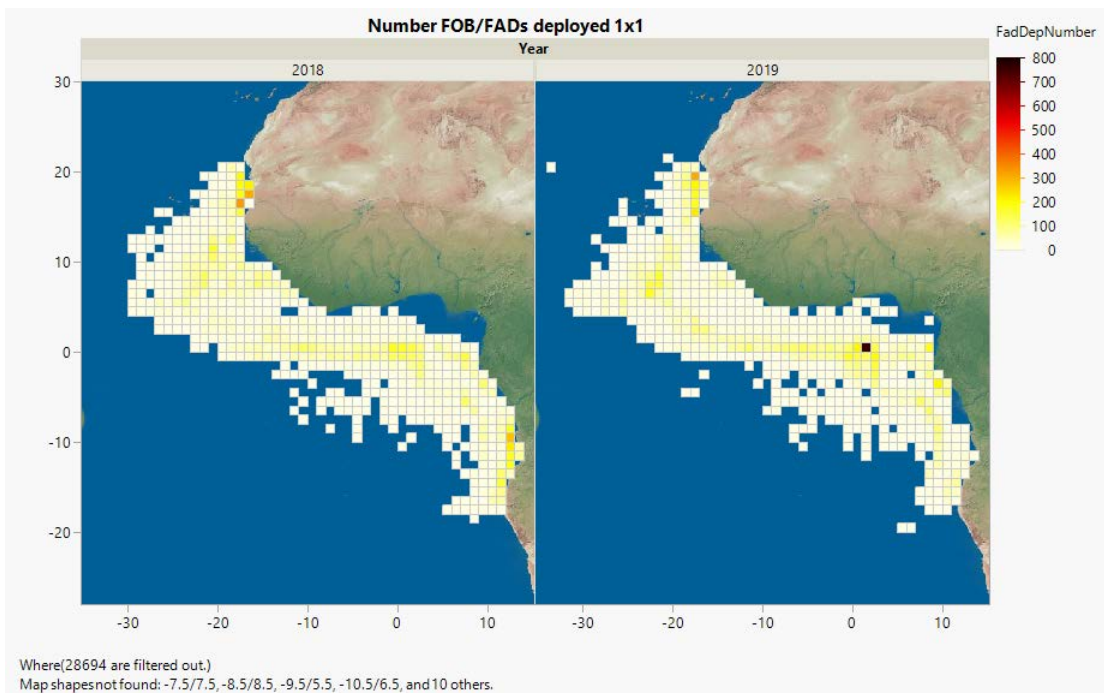


Figure 3. Density of deployed FOB/FADs by 1x1 lat-lon grid. Shade colors are proportional to the total number of deployments per year.

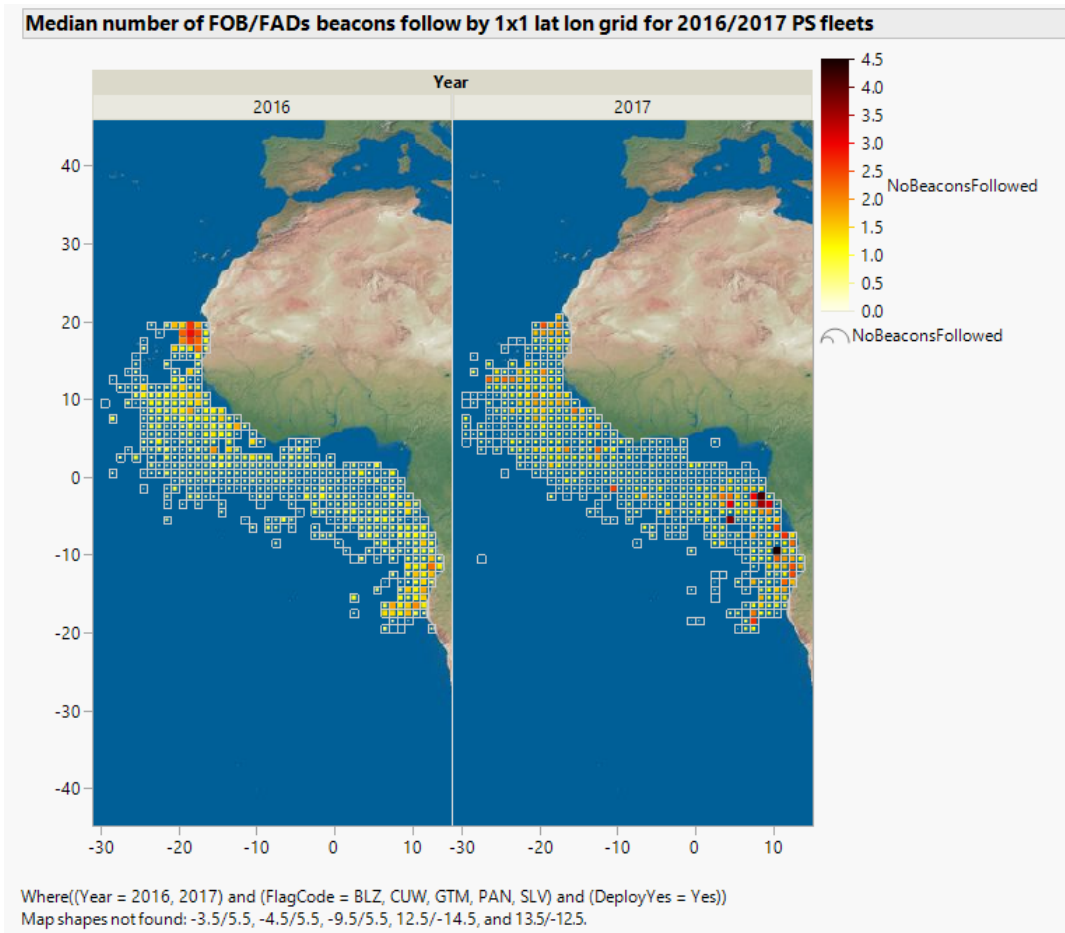


Figure 4. Median annual number of FOB/FADs beacons monitored by 1x1 lat-lon grid for PS fleets.

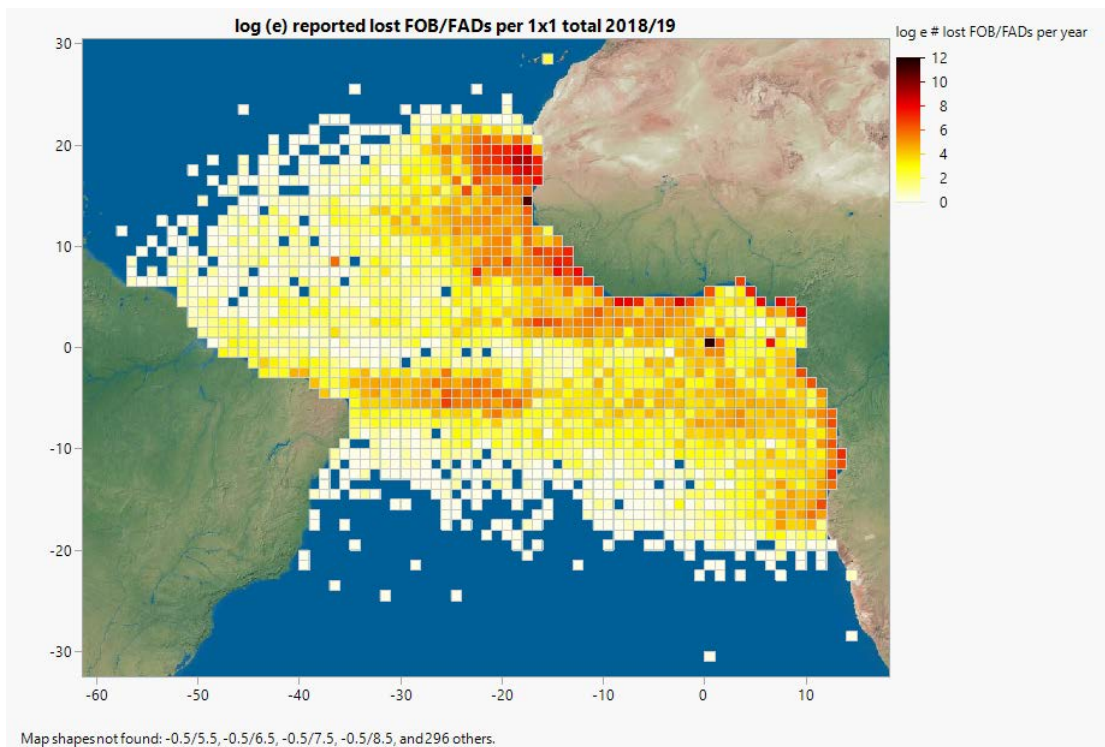


Figure 5. Reported 1x1 lat-lon grid mean number of lost FOB/FADs by year.

U.S. statement to Panel 1 on supplemental FAD measures

No-data-no-FADs: Given the meeting's agenda items on FAD-related issues, we would like to take this opportunity to remind CPCs that have not already reported their historic FAD data to the Secretariat of their obligation to do so. As specified by paragraph 31 of Rec. 19-02, CPCs that fail to report these data shall be prohibited from setting on FADs until such data have been received by the SCRS. These data are necessary to allow both scientists and managers to understand the history of the fishery and to provide a baseline for future scientific efforts, which is critical for advancing many of the questions that Panel 1 has asked the SCRS over the past several years.

FAD closure and FAD limits: Provisions on FAD closures and FAD limits are of utmost importance to ensure appropriate limits on fishing effort on juvenile bigeye and yellowfin tuna. The United States is concerned that the current provisions of Rec. 19-02, including the current three-month Atlantic-wide FAD closure and 300 FAD-per-vessel limit, may not go far enough to protect juvenile bigeye and yellowfin tuna.

Active FADs: In 2019, the following provision was removed from the draft measure late in the negotiations:

20 bis. [FADs / Buoys] shall be activated on the vessel at the time of their deployment and shall remain active until they are retrieved or lost.
(Would fit as 30 bis in the current measure)

This provision reflects a best practice identified by the SCRS, the ICCAT FAD Working Group, and the Kobe Joint Tuna RFMO FAD Working Group. The United States was disappointed that it was not included in Rec. 19-02 and believes it should be reinstated in any amended draft of Rec. 19-02 considered by Panel 1.

Biodegradable FADs: The United States recalls the discussions in 2019 about the need for additional guidance on the definition of "biodegradable" in the context of paragraph 40 of Rec. 19-02. We would like Panel 1 to discuss this further, including the possibility of requesting SCRS advice on this matter.

Discussion paper on the potential of new measures to manage fishing activities on fishing aggregating devices

Disclaimer: The request from the ICCAT Chair for the early submission of proposals to facilitate the intersessional work in 2021 has not allowed the European Union (EU) to conduct the required level of consultations with its Member States and stakeholders. These consultations will not be completed until the third quarter of this year, and the final position of the EU will not be established until then.

The European Union would like to recall that during its 2019 annual meeting, the Commission has already substantially amended the management measures related to fishing activities on FADs. This included a decrease in the maximum number of authorised active FADs per vessel, the adoption of a more comprehensive closure period for these activities, and the introduction of a freezing of the fishing effort on FADs. It will take several years before the effects of these measures on the stocks status can be evaluated by the SCRS.

On this basis, during the 2020 decision making process, the EU offered the view that the priorities for Panel 1 should not be to revisit the recently adopted measures, but rather to focus on the most pressing issues that up to now has not been adequately addressed like the adoption of clear limits for capacity and catches. Nonetheless, since the management of FADs has been included in the agenda of the upcoming intersessional meeting of Panel 1, the European Union would like to submit the following considerations on potential avenues to improve the overall management of these activities. The positions expressed in this document may be subject to possible future revisions once the EU's mandate has been established for this year's ICCAT annual meeting.

Limits on FADs sets

Under paragraph 31 of Recommendation 19-02, the Commission identified the objective of moving towards the management of the fishing effort on FADs based on a maximum number of FADs sets, rather than the current approach involving a limit in terms of FADs numbers. There are indeed a number of advantages in managing FADs sets rather than FADs limits.

- 1) Limits on FADs numbers have been criticised because they are not scientifically justifiable, and there is a lot of uncertainty regarding the effectiveness of past and present limits of FADs number to achieve the Convention objectives. The use of FADs sets could potentially address these shortcomings, since it could offer the possibility to scientifically establish a direct link between the number of FADs sets and the resulting fishing effort on FADs. This fishing effort could in turn easily be adjusted according to specific objectives (e.g. maximum number of juveniles to be caught on FADs, acceptable levels of bycatches etc.).
- 2) The current sharing arrangements of FADs between vessels is likely to undermine the effectiveness of any limit on FADs numbers by creating large pools of mutually accessible FADs. Vessels can currently set on FADs that belong to other vessels, therefore circumventing the objectives of limiting efforts by limiting the number of FADs. The use of limits on FADs sets would provide a solution for both managers and the industry, as these limits could be considered at the levels of fleets segments to maximise flexibility and efficiency for the operators while remaining consistent with management objectives.
- 3) The process of verifying the current limits on FADs number is complex and challenging, relying on data made available by the buoy providers, who have a commercial relationship with the fishing operators. This process lacks transparency and independence from fishing operators. By contrast, the verification of the number of FADs sets would be much easier and could be performed by the observers already onboard purse seiners under the existing requirement for those operating on FADs, or in the context of a possible Regional Observer program.

On this basis, the Commission should give consideration to the possibility of managing FADs activities through the use of limits expressed in terms of FADs sets rather than FADs numbers, and this should be supported by the input from the SCRS, as requested under paragraph 31 of Recommendation 19-02.

FADs registry

Our exchanges with scientists and control authorities point towards a range of issues related to the lack of clarity around the ownership and legal status of a FAD. This currently prevents the consideration of more ambitious measures related to the retrieval of FADs, or making operators accountable for the damage caused by their FADs (e.g. coral reefs, navigational hazards), or what could be considered as the dumping at sea of non-degradable materials. In addition, this lack of ownership can also be related to activities ranging from fishing on someone else FADs without consent, to the retrieving and the stealing FADs.

This occurs in the context of growing pressure to address marine litter and thus to reconsider the sustainability of deploying FADs without facing proper accountability for their impact on the environment. In order to secure a sustainable future for fishing activities on FADs, fishing operators will need to become more accountable and more transparent about their activities than is currently the case, and this requires addressing the issue of FADs ownership.

Such ownership could be established through the setting up of a FADs registry, similar to the farms registry implemented by ICCAT for the BFT farms. This would of course require further discussions but we believe that it should be explored whether it would be possible for ICCAT (Secretariat) to deliver FADs ID numbers, clearly linked to a single owner-vessel, and affixed to the FADs. This could open a wide range of opportunities in terms of more efficient management of the activities on FADs. Furthermore, it should be explored whether it would be feasible to set up a recovery fund, which could potentially be supported by compulsory fees for FADs that have not been recovered by the operators, in order to substantially improve the rate of recovery of FADs.

We suggest that Panel 1 explore these preliminary ideas, seeking advice from the SCRS as necessary, with a view to possibly advise the Commission on their likely benefits.

Japan's proposal on supplemental measures on FADs

In order to reduce the fishing mortality of bigeye tuna stock, Japan believes that a combination of TAC reduction and effective FADs management is essential. Effective FADs management would increase the productivity of tropical tunas and MSY, leading to higher TAC levels, and thus potentially contribute to a constructive negotiation on TAC and its allocation.

ICCAT has introduced a FADs closure period and the limit on the number of operational FADs at any one time. Japan is of the view that, in addition to these measures, a more direct control measure, namely number of FAD sets limitation, should be introduced for more effective FADs management.

It should be recalled that Rec.19-02 paragraph 31 urged CPCs to submit historical FAD set data and the SCRS to analyze these data and provide advice on the maximum number of FAD sets per vessel or per CPC. Such information from the SCRS is unfortunately not fully available at this stage.

Given the background mentioned above, Japan proposes that the Panel 1 should:

- i. Request the SCRS and/or Tropical Tunas Species Group to provide Panel 1 with advice on FAD sets limitation by 11 August 2021 (i.e. three weeks before the second Panel 1 intersessional meeting);
- ii. Discuss the number of FAD sets limitation during its second intersessional meeting from 1-3 September.

Recommendation 19-02

31. *With a view to establishing FAD set limits to keep the catches of juvenile tropical tunas at sustainable levels, in 2021 the SCRS should inform the Commission about the maximum number of FAD sets which should be established per vessel or per CPC. To support this analysis, CPCs with purse seine vessels shall urgently undertake to report to the SCRS by 31 July 2020 the required historical FAD set data. CPCs that do not report these data in accordance with this paragraph shall be prohibited from setting on FADs until such data have been received by the SCRS.*

**U.S. statement regarding potential MCS measures
for consideration during July 2021 Panel 1 Intersessional Meeting**

The United States thanks the Chair of Panel 1 and the Secretariat for their work in preparing for the Panel 1 intersessional meeting in July. We would like to take the opportunity to submit our ideas and comments on monitoring, control, and surveillance (MCS) elements for potential revision of Recommendation 19-02, in accordance with the work plan (PA1-01_APP1).

Capacity limits: The United States strongly believes that appropriate capacity limits, in combination with catch limits, are necessary both for major harvesters and in the purse seine fishery to help ensure the TAC will be respected. Panel 1 must revise paragraph 22 of Recommendation 19-02 to adopt meaningful - and measurable - capacity limits.

Support vessel control and management: The United States was disappointed that several provisions related to support vessel control and management were removed from Recommendation 19-02 late in the negotiations. We would like to take this opportunity to remind CPCs of these provisions, as set out in PA1-506D/2019, so that they can be reconsidered this year:

- 17 *ter*. Starting in 2020, CPCs shall limit their number of support vessels, to a maximum of 1 support vessel for a minimum of 5 authorised purse seiners operating in the context of FADs related fisheries.* (Footnote: CPCs with less than 5 purse seine vessels may have one supply vessel.)
(*Would fit as 23 bis in the current measure*)
46. [Starting in 2020 CPCs shall ensure that all support vessels have [100%] observer coverage.]
(*Would fit as 58 bis in the current measure*)

In addition, the United States recalls that paragraph 23 of Rec. 19-02 required CPCs to submit the names and characteristics of all support vessels by January 31, 2020. We look forward to reviewing this information in the Secretariat's report prior to the 2021 annual meeting.

Electronic monitoring (EM) and observer provisions: The June IMM meeting outcomes should inform Panel 1's discussions on EM. The United States also supports re-engaging in discussions on the development of a regional observer program for the tropical tuna surface fishery operating in the Gulf of Guinea at this meeting. Such a centralized regional observer program existed a few years ago and a review of this previous requirement could facilitate consideration of this matter during the Panel 1 intersessional meeting.

Review of MCS mechanisms: Paragraph 66(c) of Rec. 19-02 calls for a consultant to undertake a review of MCS mechanisms. The United States is not aware of any progress in this regard, noting, of course, the difficult circumstances created by the global pandemic. The United States would like to discuss how to advance this work at the July meeting. From our perspective, it would be most useful for the review to focus on large-scale industrial vessels, both those operating in the Gulf of Guinea surface fishery as well as large-scale pelagic longlines operating on the high seas.

**Proposal to amend Recommendation 19-02 by ICCAT to
replace Recommendation 16-01 by ICCAT on a multi-annual conservation and management
programme for tropical tunas**

(submitted by the European Union)

Disclaimer: The request from the ICCAT President for early submission of proposals to facilitate the intersessional work in 2021 has not allowed the European Union to conduct the required level of consultations with its Member States and stakeholders. These Consultations will not be completed until the third quarter of this year, and the final position of the EU will not be established until then. The EU however wishes to contribute to the important discussions within the framework proposed by the ICCAT President and therefore submits this draft proposal without prejudice to its final position and notes the positions expressed in this draft may be subject to possible future revisions.

Regarding the Agenda of the first intersessional meeting of Panel 1, and the request by its Chair for CPCs to table proposals on MCS by 14 May, the European Union would like to highlight that the introduction of a Regional Observer Program should be the priority of the Commission. We also note that discussions on such a Regional Observer Program are expected to take place in both IMM and SCRS and that it would be premature to propose specific measures before then. We therefore introduce a place-holder under paragraph 62 of this draft proposal.

RECALLING the current multi-annual conservation and management programme for tropical tunas;

NOTING that the stocks of bigeye and yellowfin tuna are currently overfished, and that bigeye tuna is also subject to overfishing;

RECOGNISING that the TAC for bigeye tuna for 2017 was exceeded by more than 20% and that this level of catch is projected to reduce the probability to reach the Convention objectives by 2028 is less than 10%;

ACKNOWLEDGING that the TAC for yellowfin tuna was also exceeded in 2016 by 37% and by 26% in 2017;

TAKING INTO ACCOUNT that *Recommendation 11-13 on the Principles for Decision Making on Conservation and Management Measures* of ICCAT mandates that for stocks that are overfished and subject to overfishing (i.e., stocks in the red quadrant of the Kobe plot), the Commission shall immediately adopt management measures, taking into account, *inter alia*, the biology of the stock and SCRS advice, designed to result in a high probability of ending overfishing in as short a period as possible. In addition, the Commission shall adopt a plan to rebuild these stocks taking into account, *inter alia*, the biology of the stock and SCRS advice;

TAKING FURTHER INTO ACCOUNT that it is necessary to explore alternative and more effective systems or regimes for the management of tropical tunas and for this the SCRS' recommendation is required;

CONSIDERING that the SCRS continues to recommend that effective measures be found to reduce FAD-related and other fishing mortality of small yellowfin and bigeye tuna;

TAKING INTO ACCOUNT the recommendations made by the Panel on the Second ICCAT Performance Review regarding the carryover of underage of catches from one year to another;

FURTHER TAKING INTO ACCOUNT the recommendations made by the first meeting of the Joint Tuna RFMO FAD Working Group and the third meeting of ICCAT's *Ad Hoc* Working Group on FADs, on FAD management objectives and the availability of FAD management measures to reduce juvenile tuna mortality;

NOTING that the SCRS has advised that increased harvests on FADs as well as other fisheries as well as development of new fisheries could have had negative consequences for the productivity of bigeye and yellowfin tuna fisheries (e.g. reduced yield at MSY);

FURTHER NOTING that support vessels contribute to the increase in efficiency and capacity of purse seiner vessels using FADs and that the number of support vessels has increased significantly over the years;

RECALLING the significant body of international law that recognizes the rights and special requirements of developing States, including but not limited to, as applicable, Article 119 of UNCLOS and Article 25 and Part VII of UNFSA;

RECOGNISING the interests of developing coastal States to develop their fishing opportunities, and committing to achieve a more equitable distribution of fishing opportunities to developing coastal States over time;

THE INTERNATIONAL COMMISSION FOR THE CONSERVATION OF
ATLANTIC TUNAS (ICCAT) RECOMMENDS THAT:

**PART I
GENERAL PROVISIONS**

Interim conservation and management measures

1. Without prejudice to the allocation of fishing rights and opportunities to be adopted in the future, for the years 2020 and 2021, the Contracting Parties and the Cooperating Non-Contracting Parties, Entities or Fishing Entities (hereinafter referred to as CPCs) with vessels that have been actively fishing for tropical tunas in the Atlantic will apply the following interim management measures with the objective of reducing current levels of fishing mortality of tropical tunas, in particular small bigeye and yellowfin, while the Commission obtains additional scientific advice to adopt a long-term multi-annual management and rebuilding programme.

Multi-annual Management, Conservation, and Rebuilding Programme

2. CPCs whose vessels have been actively fishing for tropical tunas in the Atlantic shall implement a 15-year rebuilding programme for bigeye tuna starting in 2020 and continuing through 2034, with the goal of achieving B_{MSY} with a probability of more than 50%. CPCs shall also implement management measures with the objectives of ensuring that the stocks of yellowfin and skipjack tuna continue to be exploited sustainably.

**PART II
CATCH LIMITS**

Catch limits for bigeye tuna

3. The Total Allowable Catch (TAC) for bigeye tuna shall be 62,500 t in 2020 and 61,500 t in 2021. The TAC for 2022 and future years shall be considered in 2021 on the basis of SCRS advice.
4. As an interim measure for 2020, the following provisions shall apply:
 - a) CPCs with catch limits greater than 10,000 t in para. 3 of Rec. 16-01, shall apply a 21% reduction to those catch limits.

- b) CPCs that are not captured by (a) that have a recent average catch¹ of greater than 3,500 t, shall apply a catch limit that is 17% less than their recent average catch or their catch limit in para. 3 of Rec. 16-01.
 - c) CPCs that have a recent average catch of between 1,000 and 3,500 t shall apply a catch limit that is 10% less than their recent average catch.
 - d) Those CPCs with recent average catch of less than 1,000 t are encouraged to maintain catch and effort at recent levels.
5. The provisions of paragraph 4 of this Recommendation shall not prejudice the rights and obligations under international law of those developing coastal CPCs in the Convention Area whose current fishing activity for bigeye tuna is limited or non-existent, but that have a real interest in fishing for the species, that may wish to develop their own fisheries targeting bigeye tuna in the future. CPCs shall implement robust monitoring, control and surveillance measures, as applicable in relation to their capacity and resources.
 6. Small scale artisanal fishers shall be given special consideration to their specificities and needs.
 7. The annual quotas and catch limits described in this Recommendation do not constitute long term rights and are without prejudice to any future process of allocation.
 8. Korea may transfer up to 223 t of its bigeye tuna fishing possibilities to Chinese Taipei in 2020².
 9. If the total catch exceeds in any year the relevant TAC specified in paragraph 3, the Commission shall review these measures.

Underage or overage of catch of bigeye tuna

10. Overage of an annual catch limit for CPCs listed in paragraph 4 for bigeye tuna shall be deducted from the annual catch limit of the following year:

<i>Year of catch</i>	<i>Adjustment Year</i>
2018	2020
2019	2021
2020	2022
2021	2023

11. Notwithstanding paragraph 10, if any CPC exceeds its annual catch limit:
 - a) In one year, then the amount deducted in the adjustment year shall be determined as 100% of the overage; and
 - b) During any two consecutive years, the Commission will recommend appropriate measures, which shall include reduction in the catch limit equal to 125% of the excess harvest.
12. For CPCs listed in Paragraph 3 of Rec. 16-01, underage or overage of an annual catch limit in 2019 shall be added to/or deducted from their 2021 annual catch limit, subject to 10% of initial quota restrictions noted in paragraphs 9a and 10 of Rec. 16-01.

¹ Recent average catch for the purposes of paragraph 4 means the annual average catch for the 4-year period 2014-2017 or the average of real catches for the 5-year period 2014-2018 if in that period the catch was equal to zero in any of those years.

² Japan may transfer up to 600 t of bigeye tuna fishing possibilities to China and up to 300 t of bigeye tuna fishing possibilities to the European Union.

Monitoring of catch

13. CPCs shall report quarterly to the Secretariat the amount of tropical tunas (by species) caught by vessels flying their flag, within 30 days of the end of the period during which the catches were made.
14. For purse seiners and large longline vessels (LOA 20m or greater), CPCs shall report on a monthly basis, increasing to weekly when 80% of their catch limits have been caught.
15. The Secretariat shall notify all CPCs once 80% of the TAC has been caught.
16. CPCs shall report to the ICCAT Secretariat the dates when their entire catch limit of bigeye tuna has been utilized. The ICCAT Secretariat shall promptly circulate this information to all CPCs.

TAC for yellowfin tuna

17. The annual TAC for 2020 and subsequent years of the Multi-annual Programme is 110,000 t for yellowfin tuna and shall remain in place until changed based on scientific advice.
18. Based on the stock assessment and SCRS advice, the Commission shall adopt additional conservation measures for yellowfin tuna at the 2020 annual meeting, which may include a revised TAC, closures or allocated catch limits.
19. If the total catch exceeds in any year the TAC in paragraph 17, the Commission shall consider additional management measures for yellowfin tuna. Any other measures shall recognise the obligations of international law and the rights of CPC developing coastal States.

Fishing Plans

20. CPCs should provide ICCAT with a fishing and capacity management plan on how they will implement any catch reductions necessary as a result of paragraph 4.
21. Any developing CPC intending to increase its participation in ICCAT fisheries for tropical tunas shall endeavor to prepare a statement of its development intentions for tropical tuna with the purpose of informing other CPCs of potential changes in the fishery over time. These statements should include details of proposed/potential fleet additions, including vessel size and gear type. The statements shall be submitted to the ICCAT Secretariat and be made available to all CPCs. Those CPCs may amend their statement as their situation and opportunities change.

**PART III
CAPACITY MANAGEMENT MEASURES**

Capacity limitation for tropical tunas

22. A capacity limitation shall be applied for the duration of the Multi-annual Programme, in accordance with the following provisions:
 - a) By 31 January each year, each CPC fishing with recent average catches of more than 1,000 t for tropical tuna shall produce an annual capacity/fishing plan that outlines how that CPC will ensure that its overall longline and purse seine fleet capacity will be managed to ensure that the CPC can meet its obligation to limit the catch of bigeye, and its yellowfin and skipjack catches, consistent with the catch limit established under paragraph 4.
 - b) Any CPCs with recent average catches of less than 1,000 t that have planned an expansion of capacity in 2020, will provide a declaration by 31 January 2020.
 - c) The Compliance Committee shall annually review CPCs' compliance with capacity management measures.

- d) When submitting their capacity/fishing plan to ICCAT, CPCs shall limit the numbers of their purse seiners and large scale longliners (LOA>20m) to the numbers authorised in any given year [2015 or 2019], and shall provide the chosen year of reference to the Secretariat by 31 January 2021.
23. Any CPC having vessels that operate, part-time or full-time, in support of purse seiners shall report the names and characteristics of all of their vessels to the ICCAT Secretariat, including which of those vessels were active in 2019 in the ICCAT Convention area, and the names of the purse seiner(s) that received the support of each support vessel. This information shall be reported no later than 31 January 2020. The Secretariat shall prepare a report for the Commission to be able to consider the type of limitation that support vessels shall be subject to in the future, including a phasing-out plan, where required. Notwithstanding this, CPCs shall not increase the number of support vessels from the numbers recorded by the time of adoption of this measure.
24. For the purposes of this measure, a support vessel is defined as any vessel that carries out activities in support of purse seine vessels that increases the efficiency of their operations including, but not limited to deploying, servicing and retrieving FADs.

PART IV MANAGEMENT OF FADs

FAD management objectives

25. The general objectives for management of FADs and support vessels in the Convention area are defined as follows:
- a) To minimize potential impacts that high FAD density may have on purse seine fishing efficiency, while minimizing disproportionate impacts to the fishing opportunities of fleets that use other gear or other fishing strategies while also targeting tropical tunas;
 - b) To minimize the impact of FAD fishing on the productivity of bigeye and yellowfin stocks that result from the capture of high numbers of juveniles that aggregate with skipjack on FADs;
 - c) To minimize the impact of FAD fishing on non-target species, where appropriate, including entanglement of marine species, particularly those of conservation concern;
 - d) To minimize the impact of FADs and FAD fishing on pelagic and coastal ecosystems, including by preventing the beaching, stranding or grounding of FADs in sensitive habitats or the alteration of pelagic habitat.

FAD closure

26. For the purpose of this Recommendation, the following definitions shall apply:
- i. Floating object (FOB): Any natural or artificial floating (i.e. surface or subsurface) object with no capability of moving on its own. FADs are those FOBs that are man-made and intentionally deployed and/or tracked. Logs are those FOBs that are accidentally lost from anthropic and natural sources.
 - ii. Fish-Aggregating device (FAD): Permanent, semi-permanent or temporary object, structure or device of any material, man-made or natural, which is deployed and/or tracked, and used to aggregate fish for subsequent capture. FADs can either be anchored (aFADs) or drifting (dFADs).
 - iii. FAD set: setting a fishing gear around a tuna school associated with a FAD.
 - iv. Operational buoy: Any instrumented buoy, previously activated, switched on and deployed at sea, which transmits position and any other available information such as eco-sounder estimates.

- v. Activation: The act of enabling satellite communication services by the buoy supplier company at the request of the buoy owner. The owner then starts paying fees for communication services. The buoy can be transmitting or not, depending if it has been manually switched on.
27. In order to reduce the fishing mortality of juvenile bigeye and yellowfin tunas, purse seine and baitboat vessels fishing for, or vessels supporting activities to fish for, bigeye, yellowfin and skipjack tunas in association with FADs in the high seas or EEZs shall be prohibited during a two- and three-month period, split into 2020 and 2021, respectively, as indicated in paragraph 28 below:
 28. 1 January to 28 February for 2020 and 1 January to 31 March in 2021, throughout the Convention area. This should be reviewed and, if necessary, revised based on advice by the SCRS taking into account monthly trends in free school and FAD-associated catches and the monthly variability in the proportion of juvenile tuna in catches. SCRS should provide this advice to the Commission in 2020.
 29. In addition, each CPC shall ensure its vessels do not deploy drifting FADs during a period of 15 days prior to the start of the closure period.

FAD limitations

30. CPCs shall ensure that, for vessels flying their flag, the following limits shall apply on the number of FADs with operational buoys at any one time according to definitions given in paragraph 26. The number of FADs with operational buoys will be verified through the verification of telecommunication bills. Such verifications shall be conducted by the competent authorities of the CPCs:
 - a) 2020: 350 FADs per vessel
 - b) 2021: 300 FADs per vessel
31. With a view to establishing FAD set limits to keep the catches of juvenile tropical tunas at sustainable levels, in 2021 SCRS should inform the Commission about the maximum number of FAD sets which should be established per vessel or per CPC. To support this analysis, CPCs with purse seine vessels shall urgently undertake to report to the SCRS by 31 July 2020 the required historical FAD set data. CPCs that do not report these data in accordance with this paragraph shall be prohibited from setting on FADs until such data have been received by the SCRS.

In addition, each CPC with purse seine fishing vessels is encouraged not to increase its total fishing effort on FADs from its 2018 level. CPCs shall report the difference between the 2018 level and the 2020 level to the 2021 Commission meeting.

32. CPCs may authorize their purse seine vessels to set on floating objects provided that the fishing vessel has either an observer or a functioning electronic monitoring system on board which is capable of verifying set type, species composition, and providing information on fishing activities to the SCRS.
33. Further analysis shall be conducted by the SCRS on the impact of support vessels on the catches of juvenile yellowfin and bigeye tuna to be considered in 2020.

FAD Management Plans

34. CPCs with purse seine and/or baitboat vessels fishing for bigeye, yellowfin and skipjack tunas in association with FADs, shall submit to the Executive Secretary Management Plans for the use of aggregating devices by vessels flying their flag by 31 January each year.
35. The objective of the FAD Management Plans shall be the following:
 - i. improve the knowledge about FAD characteristics, buoy characteristics, FAD fishing, including fishing effort of purse seiners and associated support vessels, and related impacts on target and non-target species;

- ii. effectively manage the deployment and recovery of FADs, the activation of buoys and their potential loss;
 - iii. reduce and limit the impacts of FADs and FAD fishing on the ecosystem, including, where appropriate, by acting on the different components of the fishing mortality (e.g. number of deployed FADs, including number of FADs set by purse seiners, fishing capacity, number of support vessels).
36. The Plans shall be drawn up by following the Guidelines for Preparation of FAD Management Plans as provided in **Annex 1**.

FAD logbook and list of deployed FADs

37. CPCs shall ensure that all purse seine and baitboat fishing vessels and all support vessels (including supply vessels) flying their flag, and/or authorized by CPCs to fish in areas under their jurisdiction, when fishing in association with or deploying FADs, collect and report, for each deployment of a FAD, each visit on a FAD, whether followed or not by a set, or each loss of a FAD, the following information and data:
- a) Deployment of any FAD
 - i. Position
 - ii. Date
 - iii. FAD type (anchored FAD, drifting artificial FAD)
 - iv. FAD identifier (i.e., FAD marking and buoy ID, type of buoy – e.g. simple buoy or associated with echo-sounder)
 - v. FAD design characteristics (material of the floating part and of the underwater hanging structure and the entangling or non-entangling feature of the underwater hanging structure)
 - b) Visit on any FAD
 - i. Type of the visit (deployment of a FAD and/or buoy³, retrieving FAD and/or buoy, strengthening/consolidation of FAD, intervention on electronic equipment, random encounter (without fishing) of a log or a FAD belonging to another vessel, visit (without fishing) of a FAD belonging to the vessel, fishing set on a FAD⁴)
 - ii. Position
 - iii. Date
 - iv. FAD type (anchored FAD, drifting natural FAD, drifting artificial FAD)
 - v. Log description or FAD identifier (i.e., FAD Marking and buoy ID or any information allowing to identify the owner)
 - vi. Buoy ID
 - vii. If the visit is followed by a set, the results of the set in terms of catch and by-catch, whether retained or discarded dead or alive. If the visit is not followed by a set, note the reason (e.g. not enough fish, fish too small, etc.)
 - c) Loss of any FAD
 - i. Last registered position
 - ii. Date of the last registered position
 - iii. FAD identifier (i.e., FAD Marking and buoy ID)

For the purpose of the collection and reporting of the information referred to above and where paper or electronic logbooks already in place do not allow it, CPCs shall either update their reporting system or establish FAD logbooks. In establishing FAD logbooks, CPCs should consider using the template laid down in **Annex 2** as reporting format. When using paper logbooks, CPCs may seek, with the support of the Executive Secretary, harmonized formats. In both cases, CPCs shall use the minimum standards recommended by SCRS in **Annex 3**.

³ Deploying a buoy on a FAD includes three aspects: deploying a buoy on a foreign FAD, transferring a buoy (which changes the FAD's owner) and changing the buoy on the same FAD (which does not change the FADs owner).

⁴ A fishing set on a FAD includes two aspects: fishing after a visit to a vessel's own FAD (targeted) or fishing after a random encounter with a FAD (opportunistic).

38. CPCs shall also ensure that all vessels referred to in paragraph 30 keep updated on a monthly basis and per 1°x1° statistical rectangles a list of deployed FADs and buoys, containing at least the information as laid down in **Annex 4**.

Reporting obligations on FADs and on support vessels

39. CPCs shall ensure that the following information is submitted every year to the Executive Secretary in a format provided by the ICCAT Secretariat. This information shall be made available to the SCRS and to the Ad Hoc Working Group on FADs in a database developed by the ICCAT Secretariat:
- i. the number of FADs actually deployed on a monthly basis per 1°x1° statistical rectangles, by FAD type, indicating the presence or absence of a beacon/buoy or of an echo-sounder associated to the FAD and specifying the number of FADs deployed by associated support vessels, irrespective of their flag;
 - ii. the number and type of beacons/buoys (e.g. radio, sonar only, sonar with echo-sounder) deployed on a monthly basis per 1°x1° statistical rectangles;
 - iii. the average numbers of beacons/buoys activated and deactivated on a monthly basis that have been followed by each vessel;
 - iv. average numbers of lost FADs with active buoys on a monthly basis;
 - v. for each support vessel, the number of days spent at sea, per 1° grid area, month and flag State;
 - vi. purse seine and baitboat catches, efforts and number of sets (for purse seines) by fishing mode (floating-object associated schools and free school fisheries) in line with Task II data requirements (i.e. per 1°x1° statistical rectangles and per month);
 - vii. when the activities of purse seine are carried out in association with baitboat, report catches and effort in line with Task I and Task II requirements as “purse seine associated to baitboats” (PS+BB).

Non-entangling and biodegradable FADs

40. In order to minimize the ecological impact of FADs, in particular the entanglement of sharks, turtles and other non-targeted species, and the release of synthetic persistent marine debris, CPCs shall:
- i. Ensure that all FADs deployed are non-entangling in line with the guidelines under **Annex 5** of this Recommendation, in accordance with previous ICCAT Recommendations;
 - ii. Endeavour that as of January 2021 all FADs deployed are non-entangling, and constructed from biodegradable materials, including non-plastics, with the exception of materials used in the construction of FAD tracking buoys;
 - iii. Report on an annual basis on the steps undertaken to comply with these provisions in their FADs Management Plans.

**PART V
CONTROL MEASURES**

Specific authorization to fish for tropical tunas

41. CPCs shall issue specific authorizations to vessels 20 meters LOA or greater flying their flag allowed to fish bigeye and/or yellowfin and/or skipjack tunas in the Convention area, and to vessels flying their flag used for any kind of support of this fishing activity (hereafter referred to as “authorized vessels”).

ICCAT Record of authorized tropical tuna vessels

42. The Commission shall establish and maintain an ICCAT record of authorized tropical tuna vessels, including support vessels. Fishing vessels 20 meters LOA or greater not entered into this record are deemed not to be authorized to fish, retain on board, tranship, transport, transfer, process or land bigeye and/or yellowfin and/or skipjack tunas from the Convention area or to carry out any kind of support to those activities, including deploying and retrieving FADs and/or buoys.

43. A CPC may allow by-catch of tropical tunas by vessels not authorized to fish for tropical tunas pursuant to paragraph 41 and 42, if this CPC establishes a maximum onboard by-catch limit for such vessels and the by-catch in question is accounted for within the CPC's quota or catch limit. Each CPC shall provide in its Annual Report the maximum by-catch limit it allows for such vessels and information about how the CPC ensures compliance with the limit. That information shall be compiled by the ICCAT Secretariat and made available to CPCs.
44. CPCs shall notify the list of authorized vessels to the Executive Secretary in an electronic form and in accordance with the format set in the *Guidelines for Submitting Data and Information Required by ICCAT*.
45. CPCs shall, without delay, notify the Executive Secretary of any addition to, deletion from and/or modifications of the initial list. Periods of authorization for modifications or additions to the list shall not include dates more than 45 days prior to the date of submission of the changes to the Secretariat. The Secretariat shall remove from the ICCAT Record of Vessels any vessel for which the periods of authorization have expired.
46. The Executive Secretary shall, without delay, post the record of authorized vessels on the ICCAT website, including any additions, deletions and/or modifications so notified by CPCs.
47. Conditions and procedures referred to in the *Recommendation by ICCAT Concerning the Establishment of an ICCAT Record of Vessels 20 meters in Length Overall or Greater Authorized to Operate in the Convention Area* (Rec. 13-13) shall apply mutatis mutandis to the ICCAT record of authorized tropical tuna vessels.

Vessels actively fishing tropical tunas in a given year

48. Transshipments at sea

Starting in 2022, CPCs whose Large Scale Pelagic Longline Vessels (LSPLVs) are transshipping tuna and tuna-like species in the Convention area shall ensure that a minimum of [20]% of these transshipments take place in ports.

49. Each CPC shall, by 31 July each year, notify to the Executive Secretary the list of authorized vessels flying their flag which have fished bigeye and/or yellowfin and/or skipjack tunas in the Convention area or have offered any kind of support to the fishing activity (support vessels) in the previous calendar year. For purse seines this list shall also include the support vessels that have supported the fishing activity, irrespective of their flag.

The Executive Secretary shall report each year these lists of vessels to the Compliance Committee and to the SCRS.

50. The provisions of paragraphs 41 to 47 do not apply to recreational vessels.

Recording of catch and fishing activities

51. Each CPC shall ensure that its vessels 20 meters LOA or greater fishing bigeye and/or yellowfin and/or skipjack tunas in the Convention area record their catch in accordance with the requirements set out in Annex 6 and in the *Recommendation by ICCAT Concerning the Recording of Catch by Fishing Vessels in the ICCAT Convention Area* (Rec. 03-13).

Identification IUU activity

52. The Executive Secretary shall, without delay, verify that any vessel identified or reported in the context of this Multi-annual Programme is on the ICCAT record of authorized vessels. If a possible violation is detected, the Executive Secretary shall, without delay, notify the flag CPC. The flag CPC shall immediately investigate the situation and, if the vessel is fishing in relation to objects that could affect fish aggregation, including FADs, during the period of closure request the vessel to stop fishing and, if necessary, leave the area. The flag CPC shall, without delay, report to the Executive Secretary the results of its investigation and the corresponding measures taken.

53. The Executive Secretary shall report to the Compliance Committee at each annual meeting of the Commission on any issue related to identification of unauthorized vessels, the implementation of the VMS, the observer provisions, and the results of the relevant investigation made as well as any relevant measures taken by the flag CPCs concerned.
54. The Executive Secretary shall propose to include any vessels identified in accordance with paragraph 52, or vessels for which the flag CPC has not carried out the required investigation and taken, if necessary, adequate measures in accordance with paragraph 51, on the provisional IUU list.

Observers

55. For observers on board vessels targeting bigeye, yellowfin and/or skipjack tunas in the area east of meridian 20°/West longitude and north of parallel 28°/ South latitude, the following shall apply:
 - Observers shall automatically be recognized by all CPCs. Such recognition shall allow the scientific observer to continue the collection of information throughout the EEZ visited by the vessel observed. The coastal CPCs concerned shall receive from the flag CPC which mandated the observer the information collected by the observer and related to fishing activities on ICCAT species in their EEZ.
56. For longline vessels flying their flag 20 meters length overall (LOA) or greater targeting bigeye, yellowfin and/or skipjack in the Convention area, CPCs shall ensure a minimum of 10% observer coverage of fishing effort by 2022, through the presence of a human observer on board in accordance with **Annex 7** and/or an Electronic Monitoring system. For this purpose, the Working Group on Integrated Monitoring Measures (IMM WG), in cooperation with the SCRS, shall make a recommendation to the Commission for endorsement at its 2021 Annual meeting on the following:
 - a) Minimum standards for an electronic monitoring system such as:
 - i) the minimum specifications of the recording equipment (e.g. resolution, recording time capacity), data storage type, data protection
 - ii) the number of cameras to be installed at which points on board
 - b) What shall be recorded
 - c) Data analysis standards, e.g., converting video footage into actionable data by the use of artificial intelligence
 - d) Data to be analyzed, e.g., species, length, estimated weight, fishing operation details
 - e) Reporting format to the Secretariat

In 2020 CPCs are encouraged to conduct trials on electronic monitoring and report the results back to the IMM and the SCRS in 2021 for their review.

CPCs shall report the information collected by the observers or the electronic monitoring system from the previous year by 30 April to the ICCAT Secretariat and to SCRS taking into account CPC confidentiality requirements.

57. Starting in 2022 CPCs shall ensure that all supply vessels have [100%] observer coverage.
58. CPCs shall submit all relevant data and administer scientific observer programs for tropical tunas in accordance with *Recommendation by ICCAT to Establish Minimum Standards for Fishing Vessel Scientific Observers* [Rec. 16-14]. In 2023, the SCRS shall provide advice on the improvements to observer programs including how coverage should be stratified across vessels, seasons and areas to achieve maximum effectiveness.
59. CPCs shall endeavour to further increase observer coverage rates for longline vessels, including through trials and implementation of electronic monitoring to supplement human observers. CPCs that trial electronic monitoring shall share technical specifications and standards with the Commission towards the development of agreed ICCAT standards.

60. For purse seine vessels flying their flag and targeting bigeye, yellowfin and/or skipjack in the Convention area, CPCs shall ensure 100% observer coverage of fishing effort, through the presence of an observer on board in accordance with **Annex 7** or through an approved electronic monitoring system. CPCs shall report the information collected by the observers from the previous year by 30 April to the ICCAT Secretariat and to SCRS.
61. Each year, the ICCAT Secretariat shall compile the information collected under observer programs, including on the observer coverage for each tropical tuna fishery, and make it available to the Commission before the annual meeting for further deliberation, taking into account CPC confidentiality requirements.
62. Regional Observer Program
[to be defined following the work of IMM and SCRS]

[...]

Port Sampling Programme

63. The port sampling programme developed by the SCRS in 2012 shall be continued for landing or transshipment ports. Data and information collected from this sampling programme shall be reported to ICCAT each year, describing, at a minimum, the following by country of landing and quarter: species composition, landings by species, length composition, and weights. Biological samples suitable for determining life history should be collected as practicable.

PART VI MANAGEMENT PROCEDURES/MANAGEMENT STRATEGY EVALUATION

Management Strategy Evaluation (MSE) and Candidate Harvest Control Rules

64. The SCRS shall refine the MSE process in line with the SCRS roadmap and continue testing the candidate management procedures. On this basis, the Commission shall review the candidate management procedures, including pre-agreed management actions to be taken under various stock conditions. These shall take into account the differential impacts of fishing operations (e.g. purse seine, longline and baitboat) on juvenile mortality and the yield at MSY.

PART VII FINAL PROVISIONS

Availability of data to SCRS and to national scientists

65. CPCs shall ensure that:
 - a) Both paper and electronic fishing logbooks and the FAD-logbooks referred to in paragraph 37, where applicable, are promptly collected and made available to national scientists;
 - b) The Task II data include the information collected from the fishing or FAD logbooks, where applicable, and is submitted every year to the ICCAT Executive Secretary, to be made available to the SCRS.
66. CPCs should encourage their national scientists to undertake collaborative work with their national industry to analyse data related to FADs (e.g. logbooks, buoy data) and to present the outcomes of that analysis to the SCRS. CPCs should take steps to facilitate making the data available for such collaborative work, subject to relevant confidentiality constraints.

Confidentiality

67. All data submitted in accordance with this Recommendation shall be treated in a manner consistent with ICCAT's data confidentiality guidelines and solely for the purposes of this Recommendation and in accordance with the requirements and procedures developed by the Commission.

Final Provisions

68. Actions required from the SCRS and the Secretariat:
- a) The SCRS shall explore the efficacy that full fishery closures along the lines of those proposed in draft recommendation by ICCAT to replace Recommendation 16-01 by ICCAT on a multi-annual conservation and management programme for tropical tunas⁵ might have to reduce the catches of tropical tunas to the agreed levels; and the potential of such scheme to reduce the catches of juvenile bigeye and yellowfin tunas, in line with recommendations from the SCRS;
 - b) The ICCAT Secretariat shall work with the SCRS in preparing an estimate of capacity in the Convention area, to include at least all the fishing units that are large-scale or operate outside the EEZ of the CPC they are registered in. All CPCs shall cooperate with this work, providing estimates of the number of fishing units fishing for tuna and tuna-like species under their flag, and the species or species groups each fishing unit targets (e.g. tropical tunas, temperate tunas, swordfish, other billfish, small tunas, sharks, etc.); this work shall be presented to the next meeting of the SCRS in 2020 and forwarded to the Commission for consideration;
 - c) The ICCAT Secretariat shall identify a Consultant to carry out an evaluation of the monitoring, control and surveillance mechanisms in place in ICCAT CPCs. This work shall primarily focus on the evaluation of data collection and processing systems in each CPC, and the ability to produce estimates of catch and effort, and length frequency for all stocks under ICCAT management, with a focus on stocks for which input and/or output measures are in place; in preparing this work the Consultant shall evaluate how efficient the catch monitoring systems that each CPC has implemented are to achieve robust estimates of catches for the stocks subject to a TAC; the ICCAT Secretariat shall work with SCRS scientists to prepare a TOR for this work as soon as possible.
69. An intersessional meeting of Panel 1 will be held in 2020 to review existing measures and *inter alia* develop catch limits and associated catch verification mechanisms for 2021.
70. This Recommendation replaces Rec. 16-01⁶ and 18-01 and shall be reviewed by the Commission in 2021.
71. All CPCs commit to implement the present Recommendation on a voluntary basis as of 1 January 2020.

⁵ Available upon request at the Secretariat or on the ICCAT website <https://www.iccat.int/com2019/index.htm#en>

⁶ Recommendation 16-01 is preserved as necessary for the cross-references herein.

Guidelines for Preparation of FAD Management Plans

The FAD Management Plan for a CPC purse seine and baitboat fleets must include the following:

1. Description
 - a) FAD types: AFAD = anchored; DFAD = drifting
 - b) Type of beacon/buoy
 - c) Maximum number of FAD to be deployed per purse seine and per FAD type and active at any one time per vessel
 - d) Minimum distance between AFADs
 - e) Incidental by-catch reduction and utilization policy
 - f) Consideration of interaction with other gear types
 - g) Statement or policy on “FAD ownership”
 - h) Use of support vessels, including from other flag CPCs
2. Institutional arrangements
 - a) Institutional responsibilities for the FAD Management plan
 - b) Application processes for FAD deployment approval
 - c) Obligations of vessel owners and masters in respect of FAD deployment and use
 - d) FAD replacement policy
 - e) Additional reporting obligations beyond this Recommendation
 - f) Conflict resolution policy in respect of FADs
 - g) Details of any closed areas or periods e.g. territorial waters, shipping lanes, proximity to artisanal fisheries, etc.
3. FAD construction specifications and requirements
 - a) FAD design characteristics (a description)
 - b) Lighting requirements
 - c) Radar reflectors
 - d) Visible distance
 - e) FAD markings and identifier
 - f) Radio buoys markings and identifier (requirement for serial numbers)
 - g) Echo-sounder buoys markings and identifier (requirement for serial numbers)
 - h) Satellite transceivers
 - i) Research undertaken on biodegradable FADs
 - j) Prevention of loss or abandonment of FADs
 - k) Management of FADs recovery.
4. Applicable period for the FAD Management Plan
5. Means for monitoring and reviewing the implementation of the FAD Management Plan

Annex 2

FAD logbook

<i>FAD marking</i>	<i>Buoys ID</i>	<i>FAD type</i>	<i>Type of visit</i>	<i>Date</i>	<i>Time</i>	<i>Position</i>		<i>Estimated catches</i>			<i>By-catch</i>			<i>Observations</i>	
						<i>Latitude</i>	<i>Longitude</i>	<i>SKJ</i>	<i>YFT</i>	<i>BET</i>	<i>Taxonomic group</i>	<i>Estimated catches</i>	<i>Unit</i>		<i>Specimen released alive</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(7)	(8)	(8)	(8)	(9)	(10)	(11)	(12)	(13)
...
...

- (1,2) If FAD marking and associated beacon/buoy ID are absent or unreadable, report it in this section. However, if FAD marking and associated beacon/buoy ID are absent or unreadable, the FAD shall not be deployed.
- (3) Anchored FAD, drifting natural FAD or drifting artificial FAD.
- (4) I.e., deployment, hauling, strengthening/consolidation, removing/retrieving, changing the beacon, loss and mention if the visit has been followed by a set.
- (5) dd/mm/yy
- (6) hh:mm
- (7) N/S/(in degrees and minutes) or °E/W/(in degrees and minutes).
- (8) Estimated catches expressed in metric tons.
- (9) Use a line per taxonomic group.
- (10) Estimated catches expressed in weight or in number.
- (11) Unit used.
- (12) Expressed as number of specimen.
- (13) If no FAD marking or associated beacon ID is available, report all available information in this section which may help to describe the FAD and to identify the owner of the FAD.

Annex 3

Table 1. Codes, names and examples of different types of floating object that should be collected in the fishing logbook as a minimum data requirement. Table from 2016 SCRS report (section 18.2 Table 7).

<i>Code</i>	<i>Name</i>	<i>Example</i>
DFAD	Drifting FAD	Bamboo or metal raft
AFAD	Anchored FAD	Very large buoy
FALOG	Artificial log resulting from related to human activity (and related to fishing activities)	Nets, wreck, ropes
HALOG	Artificial log resulting from human activity (not related to fishing activities)	Washing machine, oil tank
ANLOG	Natural log of animal origin	Carcasses, whale shark
VNLOG	Natural log of plant origin	Branches, trunk, palm leaf

Table 2. Names and description of the activities related to floating objects and buoys that should be collected in the fishing logbook as a minimum data requirement (codes are not listed here). Table from 2016 SCRS report (section 18.2 Table 8).

	<i>Name</i>	<i>Description</i>
FO	Encounter	Random encounter (without fishing) of a log or a FAD belonging to another vessel (unknown position)
	Visit	Visit (without fishing) of a FOB (known position)
	Deployment	FAD deployed at sea
	Strengthening	Consolidation of a FOB
	Remove FAD	FAD retrieval
Buo	Fishing	Fishing set on a FOB ¹
	Tagging	Deployment of a buoy on FOB ²
	Remove BUOY	Retrieval of the buoy equipping the FOB
	Loss	Loss of the buoy/End of transmission of the buoy

¹ A fishing set on a Fishing Object (FOB) includes two aspects: fishing after a visit to a vessel's own FOB (targeted) or fishing after a random encounter of a FOB (opportunistic).

² Deploying a buoy on a FOB includes three aspects: deploying a buoy on a foreign FOB, transferring a buoy (which changes the FOB owner) and changing the buoy on the same FOB (which does not change the FOB owner).

List of deployed FADs and buoys on a monthly basis

Month:

<i>FAD Identifier</i>		<i>FAD & electronic equipment types</i>		<i>FAD</i>				<i>Observation</i>
<i>FAD Marking</i>	<i>Associated buoy ID</i>	<i>FAD Type</i>	<i>Type of the associated buoy and /or electronic devices</i>	<i>FAD floating part</i>	<i>FAD underwater hanging structure</i>			
(1)	(1)	(2)	(3)	(4)	(5)			(6)
...
...

- (1) If FAD marking and associated beacon/buoy ID are absent or unreadable, the FAD shall not be deployed.
- (2) Anchored FAD, drifting natural FAD or drifting artificial FAD.
- (3) E.g. GPS, sounder, etc. If no electronic device is associated to the FAD, note this absence of equipment.
- (4) Mention the material of the structure and of the cover and if biodegradable.
- (5) E.g. nets, ropes, palms, etc., and mention the entangling and/or biodegradable features of the material.
- (6) Lighting specifications, radar reflectors and visible distances shall be reported in this section.

Annex 5

Guidelines for reducing the ecological impact of FADs in ICCAT fisheries

1. The surface structure of the FAD should not be covered or only covered with material implying minimum risk of entangling by-catch species.
2. The sub-surface components should be exclusively composed of non-entangling material (e.g. ropes or canvas).
3. When designing FADs the use of biodegradable materials should be prioritised.

Requirements for Catch

Recording Minimum specification for paper or electronic

logbooks:

1. The logbook must be numbered by sheets
2. The logbook must be filled in every day (midnight) and before port arrival
3. One copy of the sheets must remain attached to the logbook
4. Logbooks must be kept on board to cover a period of one-trip operation

Minimum standard information for logbooks:

1. Master name and address
2. Dates and ports of departure, Dates and ports of arrival
3. Vessel name, registry number, ICCAT number and IMO number (if available)
4. Fishing gear:
 - (a) Type FAO code
 - (b) Dimension (length, mesh size, number of hooks...)
5. Operations at sea with one line (minimum) per day of trip, providing:
 - (a) Activity (fishing, steaming...)
 - (b) Position: Exact daily positions (in degree and minutes), recorded for each fishing operation or at noon when no fishing has been conducted during this day
 - (c) Record of catches
6. Species identification:
 - (a) By FAO code
 - (b) Round (RWT) weight in t per set
 - (c) Fishing mode (FAD, free school, etc.)
7. Master signature
8. Observer signature, if applicable
9. Means of weight measure: estimation, weighing on board and counting
10. The logbook is kept in equivalent live weight of fish and mentions the conversion factors used in the evaluation.

Minimum information in case of landing, transshipments:

1. Dates and port of landing/transshipments
2. Products: number of fish and quantity in kg
3. Signature of the Master or Vessel Agent

Observer Programme

1. The observers referred to in paragraph 54-60 of this Recommendation shall have the following qualifications to accomplish their tasks:
 - Sufficient experience to identify species and fishing gear;
 - Satisfactory knowledge of the ICCAT conservation and management measures assessed by a certificate provided by the CPCs and based on ICCAT training guidelines;
 - The ability to observe and record accurately;
 - The ability to collect biological samples;
 - A satisfactory knowledge of the language of the flag of the vessel observed.
2. The observers shall not be a crew member of the fishing vessel being observer and shall:
 - (a) Be nationals of one of the CPCs;
 - (b) Be capable of performing the duties set forth in point 3 below;
 - (c) Not have current financial or beneficial interests in the tropical tuna fisheries.
3. The observer tasks shall be in particular:
 - (a) To monitor the fishing vessels' compliance with the relevant conservation and management measures adopted by the Commission.

In particular the observers shall:

- i. Record and report upon the fishing activities carried out;
- ii. Observe and estimate catches and verify entries made in the logbook;
- iii. Sight and record vessels which may be fishing in contravention to ICCAT conservation and management measures;
- iv. Verify the position of the vessel when engaged in catching activity;
- v. Verify the number of instrumental buoys active at any one time;
- vi. Carry out scientific work such as collecting Task II data when required by the Commission, based on the directives from the SCRS, observing and recording data on FAD properties in accordance with **Table 1** below.
- (b) Establish general reports compiling the information collected in accordance with this paragraph and provide the master the opportunity to include therein any relevant information.

Obligations of the observer

4. Observers shall treat as confidential all information with respect to the fishing and transshipment operations of the fishing vessels and accept this requirement in writing as a condition of appointment as an observer.
5. Observers shall comply with requirements established in the laws and regulations of the flag State which exercises jurisdiction over the vessel to which the observer is assigned.
6. Observers shall respect the hierarchy and general rules of behaviour which apply to all vessel personnel, provided such rules do not interfere with the duties of the observer under this programme, and with the obligations of vessel personnel set forth in point 7 of this Annex.

Obligations of the flag States of fishing vessels

7. The responsibilities regarding observers of the flag States of the fishing vessels and their masters shall include the following, notably:
 - a) Observers shall be allowed to access to the vessel personnel and to the gear and equipment;
 - b) Upon request, observers shall also be allowed access to the following equipment, if present on the vessels to which they are assigned, in order to facilitate the carrying out of their duties set forth in point 3 of this Annex:
 - i) satellite navigation equipment;
 - ii) radar display viewing screens when in use;
 - iii) electronic means of communication, including FAD/buoys signals.
 - c) Observers shall be provided accommodations, including lodging, food and adequate sanitary facilities, equal to those of officers;
 - d) Observers shall be provided with adequate space on the bridge or pilot house for clerical work, as well as space on deck adequate for carrying out observer duties; and
 - e) The flag States shall ensure that masters, crew and vessel owners do not obstruct, intimidate, interfere with, influence, bribe or attempt to bribe an observer in the performance of his/her duties.

Table 1. FOB/FAD information added to observer onboard form to comply with RFMOs recommendations. Table from 2016 SCRS report (section 18.2 Table 9).

<i>Properties</i>	<i>DFAD</i>	<i>AFAD</i>	<i>HALOG</i>	<i>FALOG</i>	<i>ANLOG</i>	<i>VNLOG</i>
FOB built using biodegradable materials (true/false/undefined)	X	X	X	X		
FOB is non-entangling (true/false/undefined)	X	X	X	X		
Meshed material (true/false/undefined) in FOB	X	X		X		
Size of largest mesh (in millimeters)	X	X		X		
Distance between the surface and the deepest part of the FOB (in meters)	X	X	X	X		
Approximate surface area of the FOB	X	X	X	X		
Specifies the FOB's ID whenever present	X	X	X	X		
Fleet owning the tracking device/echo sounder buoy	X	X	X	X	X	X
Vessel owning the tracking device/echo sounder buoy	X	X	X	X	X	X
Anchorage type used for mooring (AFAD registry)		X				
Radar reflectors (presence or not) (AFAD registry)		X				
Lighting (presence or not) (AFAD registry)		X				
Visual range (in nautical miles) (AFAD registry)		X				
Materials used for the floating part of the FOB (list to be defined)	X	X	X	X		
Materials making up the FOB underwater structure (list to be defined)	X	X	X	X		
Tracking device TYPE+ID if possible, otherwise no or undefined.	X	X	X	X	X	X