AGREEMENT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM

43RD MEETING OF THE PARTIES

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REPORT ON THE INTERNATIONAL DOLPHIN CONSERVATION PROGRAM

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1. INTRODUCTION

In the eastern Pacific Ocean (EPO), schools of yellowfin tuna frequently associate with marine mammals, especially spotted, spinner, and common dolphins. When the purse-seine fishery for tunas in the EPO began around 1960, the fishermen found that their catches of yellowfin in the EPO could be maximized by setting these nets around a herd of dolphins and the associated school of tunas. However, releasing the dolphins while retaining the tuna proved more difficult, and in the early years of the fishery many dolphins died during this process. As techniques and equipment to solve this problem were developed, this mortality fell, gradually at first and dramatically in the 1990s, thanks to the combined efforts of the fishing industry, governments, the Inter-American Tropical Tuna Commission (IATTC), non-governmental environmental organizations, and other interested parties.

The 1992 La Jolla Agreement provided a framework for international efforts to reduce this mortality and introduced novel and effective measures as Dolphin Mortality Limits (DMLs) for individual vessels and the establishment of the International Review Panel to monitor the performance and compliance of the fishing fleet. The Agreement on the International Dolphin Conservation Program (AIDCP), which built on and formalized the provisions of the La Jolla Agreement, was signed in May 1998 and entered into force in February 1999. The Parties to the AIDCP committed to "ensure the sustainability of tuna stocks in the eastern Pacific Ocean and to progressively reduce the incidental dolphin mortalities in the tuna fishery of the eastern Pacific Ocean to levels approaching zero and to avoid, reduce and minimize the incidental catch and the discard of juvenile tuna and the incidental catch of non-target species, taking into consideration the interrelationship among species in the ecosystem."

As of 1 September 2021, Belize, Colombia, Costa Rica, Ecuador, El Salvador, the European Union, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru, the United States, and Venezuela have ratified or acceded to the Agreement. Bolivia and Vanuatu are applying the AIDCP provisionally. At the request of the Parties and in compliance with Article VII, paragraph 1 (t) of the Antigua Convention, the IATTC provides the Secretariat for the AIDCP including support for implementation of the Agreement, which comprises the coordination of the On-Board Observer Program and the <u>Tuna Tracking and Verification System</u>.

2. THE ON-BOARD OBSERVER PROGRAM

The AIDCP On-Board Observer Program is composed of the IATTC observer program and the national observer programs of Colombia (Programa Nacional de Observadores de Colombia, PNOC), Ecuador (Programa Nacional de Observadores Pesqueros de Ecuador; PROBECUADOR), the European Union (Programa Nacional de Observadores de Túnidos, Océano Pacífico; PNOT), Mexico (Programa Nacional de Aprovechamiento del Atún y Protección de Delfines; PNAAPD), Nicaragua (Programa Nacional de Observadores de Nicaragua; PRONAON, administered by the Programa Nacional de Observadores Panameños, (PRONAOP), Panama (PRONAOP), and Venezuela (Programa Nacional de Observadores de Venezuela; PNOV). Additionally, at its 82nd meeting in July 2011, the IATTC agreed on a Memorandum of Cooperation (MOC) with the Western and Central Pacific Fisheries Commission (WCPFC) for cross-endorsement of observers from the IATTC program and the WCPFC's Regional Observer Program to monitor vessels that fish or transit the high-seas or other specified areas in the Convention Areas of both organizations.

2.1. Observer coverage

The AIDCP requires that observers are placed aboard 100% of trips in the Agreement Area by purse-seine vessels of carrying capacity greater than 363 metric tons (Class 6). However, the challenges presented by the COVID-19 pandemic beginning in March 2020 have made necessary several adaptations and deviations from the typical implementation of this observer coverage requirement.

The Chairs of the AIDCP Meeting of the Parties and of the IATTC, through circular memorandum ref. 0150-420 dated 30 March 2020, after contacting and consulting with a number of the Parties and convinced that priority must be given to the right to food security and the need to continue ensuring the provision of food to the people, made a number of recommendations aiming at exempting any vessel for which it is impossible to place an observer on board in compliance with the applicable IATTC and AIDCP rules from its corresponding obligations.

After extensive consultations with the Parties, these recommendations were developed and formalized in a document entitled *COVID-19 Pandemic Exemption Procedure for the Operation of On-Board Observers*, which was circulated through memorandum ref. 0170-420 dated 14 April 2020 (Annex 1). This exemption procedure has been extended several times during 2020 and 2021. The last decision on the matter extended the application of these procedures through 30 September 2021. At their 42nd Meeting in August 2021, the Parties requested that the Secretariat circulate, prior to their expiration, a communication regarding a proposal to extend these provisions through 31 December 2021.

The application of the above stated exceptional procedure had an adverse effect on the level of sampling coverage under the AIDCP. Under normal circumstances, consistent with the provisions of the AIDCP, national observer programs would have covered a specific percentage of the trips made by the various fleets. Normally, the Ecuadorian national program would have a goal of placing observers aboard 33% of the trips by Ecuadorian vessels while the Colombian, European Union, Mexican, Nicaraguan, Panamanian, and Venezuelan national programs each would have a goal of placing observers aboard 50% of the trips by their respective fleets.

The IATTC program would have covered the remainder of the trips by vessels of these seven fleets, plus 100% of the trips by vessels of other fleets, which represented a total of 60% of all trips.

As shown in <u>Table 1</u>, during 2020, observers completed 770 (95%) of the 814 fishing trips made in the Agreement Area by Class-6 vessels operating under the flags of Colombia, Ecuador, El Salvador, European Union (Spain), Mexico, Nicaragua, Panama, Peru, the United States, and Venezuela (<u>Table 1</u>). The difference was 44 trips on which a waiver of the AIDCP requirement to place an observer onboard was issued for the following reasons:

1. The deployed observer had to be disembarked either because of becoming infected, or because it was necessary after a very prolonged stay onboard due to the restrictions imposed due to the pandemic.

2. The restrictions imposed, either in port or for traveling, made it impossible for the observer program to deploy an observer.

Seven of the 44 trips identified above would fit in the first category, while 37 departed without an observer, fitting the second category.

Additionally, there were nine trips in which observers were deployed on vessels of Class-size 5, under the provision of Resolution C-12-08 for vessels with sealed wells.

2.2. Observer training

The IATTC staff did not conduct observer training courses for AIDCP observers during 2020.

The IATTC and WCPFC conducted a training course for 17 WCPFC observers in Port Moresby, Papua New Guinea, from 27 January to 1 February 2020, with financial support from the WCPFC.

3. DOLPHIN MORTALITY

3.1. Dolphin Mortality Limits (DMLs)

3.1.1. 2020 DMLs

The overall dolphin mortality limit (DML) for the international fleet in 2020 was 5,000 animals, and the unreserved portion of 4,900 was divided among 108 qualified vessels that requested DMLs.

As with many aspects of the program stated in this report, the pandemic had an effect on the statistics presented here. As noted above, 44 trips of Class-6 vessels were not completely, or at all monitored with observers as the above-described procedures allowed exemptions of the AIDCP's requirement to carry an observer. The procedure required vessels to self-report fishing activity, catch of targeted species as well as non-targeted species and bycatch including dolphin mortality. Nonetheless, as the source of the dolphin mortality information of these trips is clearly not independent as it is with observed trips, this section does not consider self-reported dolphin mortality, if provided.

Section 6 provides details of the implementation of these procedures and its requirements.

The average individual-vessel DML (ADML), based on 107 DML requests, was 45.37. Three vessels renounced their DML. Additionally, 20 vessels that did not utilize their DMLs prior to 1 April were allowed to keep them for the remainder of the year under the *force majeure* exemption allowed by the AIDCP, but 17 of these DMLs were not utilized. No vessel lost its DML due to no utilization prior to 1 April. One vessel was granted a second-semester DML, and it was utilized. Two vessels were assigned DMLs from the Reserve DML Allocation (RDA) managed at the discretion of the Director, in accordance with paragraph 7, Section I of Appendix IV of the AIDCP; one was not utilized. No vessel exceeded its DML in 2020.

The distribution of dolphin mortalities in the fishery is shown in Figure 1.

3.1.2. 2021 DMLs

The Parties requested 109 DMLs for 2021 from the unreserved portion (4,900) of the overall fleet mortality limit. As of 3 September, the utilization of these DMLs is as follows:

DML (Limit per vessel)	Assigned	Utilized by April 1	Re- nounced	Lost due to no utilization	Exempt due to force majeure
Full year (45)	109	86	4	2	17
Second semester	2	-	-	-	-
RDA	1	-	-	-	-

3.2. Estimates of the mortality of dolphins in 2020 due to fishing

The estimate of the mortality of dolphins in the fishery in 2020 is 689 animals (<u>Table 2</u>), compared to 778 mortalities recorded in 2019. The mortalities for 1979-2020, by species and stock, are shown in <u>Table 3</u>, and the standard errors of these estimates are shown in <u>Table 4</u>. The estimates for 1979-1992 are based on a mortality-per-set ratio, while the mortalities for 1993-2020 are sums of the observed mortalities recorded by the IATTC and national programs, although estimates for 2001-2003 had to be adjusted for unobserved trips.

The mortalities of the principal dolphin species affected by the fishery have declined since the early 1990s (<u>Figures 2-3</u>). Estimates of the abundances of the various stocks of dolphins and the relative mortalities (mortality/abundance) are also presented in <u>Table 2</u>.

The number of sets on dolphin-associated schools of tuna made by Class-6 vessels was 9,810 in 2020, compared to 9,680 in 2019, and this type of set accounted for 42.5% of the total number of sets made in 2020, compared to 37% in 2019. The average mortality per set was 0.070 dolphins in 2020, compared to 0.080 dolphins in 2019. The trends in the numbers of sets on dolphin-associated fish, mortality per set, and total mortality in recent years are shown in Figure 3.

The catches of dolphin-associated yellowfin decreased by 2% in 2020, as compared to 2019. The percentage of the catch of yellowfin taken in dolphin sets was 69% of the total catch in 2020, compared to 71% in 2019, and the average catch of yellowfin per dolphin set was 15.4 metric tons (t) in 2020, compared to 15.1 metric tons in 2019. The mortality of dolphins per metric ton of yellowfin caught was 0.0046 in 2019, compared to 0.0052 in 2019.

The long-term decrease in the mortality per set is the result of efforts by the fishermen to better manage the factors that bring about mortalities of dolphins. Indicative of this effort is the number of sets without mortalities, which has risen from 38% in 1986 to 96.5% in 2020, and the average number of dolphins left in the net after backdown, which has decreased from 6.0 in 1986 to 0.1 or less since 2001 (Table 5). The factors under the control of the fishermen which are likely to affect the mortality of dolphins per set include the occurrence of malfunctions, especially those which lead to net canopies and net collapses, and the time it takes to complete the backdown maneuver (Table 5). The percentage of sets with major mechanical malfunctions has decreased from an average of approximately 11% during the late 1980s to less than 5% during 1998-2020; in the same period the percentage of sets with net collapses decreased from about 30% to less than 2%, and that of net canopies from about 20% to less than 2%. Although the chance of dolphin mortality increases with the duration of the backdown maneuver, the average backdown time has changed little since 1986.

3.3. Reports of dolphin mortality by observers at sea

The AIDCP requires the Parties to establish a system, based on real-time observer reporting, to ensure effective implementation and compliance with per-stock, per-year dolphin mortality caps. Observers prepare weekly reports of dolphin mortality, by stock, which are then transmitted to the Secretariat via e-mail, fax, or radio. In June 2003 the Meeting of the Parties adopted Resolution A-03-02, which makes the vessel personnel responsible for transmitting these reports. During 2020, the reporting rate of observed trips averaged 99.9% (Table 6).

Since 1 January 2001, the Secretariat has been reporting weekly to the Parties the cumulative mortality for the seven stocks of dolphins most frequently associated with the fishery. The most recent reported mortalities are shown in Table 7.

4. DISTRIBUTION OF FISHING EFFORT

<u>Figures 4-6</u> compare the spatial distributions of fishing effort in the Agreement Area by vessels carrying observers, in numbers of sets, by type, in 2019 and 2020. The number of unassociated sets in the far west of the Agreement Area dropped dramatically in 2020, as compared to 2019, reversing a trend of increased unassociated sets near the western boundary that were noted in 2018 and 2019 (<u>Figure 5</u>).

5. INTERNATIONAL REVIEW PANEL

The International Review Panel (IRP) follows a general procedure for reporting to the governments concerned non-compliance by their vessels with measures established by the AIDCP. During each fishing trip, the observer prepares a summary of information pertinent to dolphin mortalities, and this is sent by the Secretariat to the government with jurisdiction over the vessel. Several categories of possible infractions are automatically reported to the government with jurisdiction over the vessel in question; the IRP reviews the observer data for other cases at its meetings, and any cases identified as possible infractions are likewise reported to the relevant government. Governments report back to the IRP on actions taken regarding these possible infractions.

The IRP did not meet in 2020 due to the restrictions caused by the pandemic. Any AIDCP decision that required interaction from the IRP was done by email messaging and presented at the 41st Meeting of the Parties of the AIDCP for approval. There was no review of possible infractions during 2020.

6. TUNA TRACKING AND VERIFICATION

The <u>System for Tracking and Verifying Tuna</u>, established in accordance with Article V.1.f of the AIDCP, enables "dolphin-safe" tuna, defined as tuna caught in sets without mortality or serious injury of dolphins, to be identified and tracked from the time it is caught through unloading, processing, and sale. The Tuna Tracking Forms (TTFs), completed at sea by observers, designate the tuna caught as dolphin safe (Form 'A') or non-dolphin safe (Form 'B'). This, in turn, allows for the verification of the dolphin-safe status of any tuna caught by a vessel covered by the AIDCP. This framework, administered by the Secretariat, also allows each Party to establish its own tracking and verification program, implemented and operated by a designated national authority. These programs include periodic audits and spot checks for tuna at the points of capture, landing, and processing, and provide mechanisms for communication and cooperation between and among national authorities, and timely access to relevant data. Each Party is required to provide the Secretariat with a report detailing its tracking and verification program.

A total of 1,305 trips by vessels fishing in the Agreement Area that arrived between 16 September 2019 and 25 May 2021 with an IDCP observer aboard were issued TTFs. Among these, by 10 August 2021, 1,269 TTF (97%) were transmitted to the Secretariat by the respective national authority. In addition, during the period of this report the Secretariat received 1,028 copies of *dolphin safe* certificates, and 1,004 certificates were considered valid. Finally, in none of the TTFs involved in the certification the certified weight exceeded by 10% the tuna considered as *dolphin safe* in the corresponding TTF.

7. RESOLUTIONS, AMENDMENTS AND OTHER DECISIONS AFFECTING THE OPERATION OF THE IDCP

7.1 Implementation of observer waiver certification process

As noted in <u>Section 2.1</u>, the Parties to the AIDCP and the CPCs of the IATTC enacted a procedure to waive the requirement for observers on Class-6 vessels, under certain circumstances due to restrictions created by the pandemic and based on the assessment of observer programs.

The procedure was adopted based on the following three principles:

- Safeguarding individual and public health.
- Ensuring the conservation of the species covered by the IATTC and AIDCP, without detriment to the food security and productivity of the countries.
- Adopt transitional and exceptional measures that will make it possible to ensure the continuity of fishing operations without detriment to the capture of data as a fundamental basis of fisheries management.

Both the national and the IATTC observer programs have considered very carefully each situation when

implementing this procedure, based on the principles cited, and the result has been that as noted above, the observer coverage have remained high (95%).

There are different circumstances why an observer program may issue a certification, but these can be grouped in the following three categories:

- 1. No observers are available in the area or port of departure of the vessel.
- 2. Local or international travel/emigration restrictions at the point of embarkation or anticipated port of disembarkation present obstacles that cannot be overcome or create uncertainties in terms of getting the observer home after the end of the trip.
- 3. The vessel has experienced contagion onboard in a recent trip and there are no observers available that would accept deployments under those circumstances and the observer program is supportive of this decision.

The procedure requires that the observer program issues the vessel management with a certification of the impossibility of placing an observer onboard, and to inform the authorities of the circumstances. An exemption is considered granted after the appropriate certification.

Fifty-four certifications were issued for 53 trips that started in 2020.

Flag	Obs unav.	Travel restr.	Contagion	Total
COL	1	13	2	16
ECU	8	3	7	18
EU (ESP)		1	1	2
MEX			2	2
NIC	1			1
PAN	3	2		5
PER		1		1
SLV		3		3
USA		1	2	3
VEN	1		2	3
Total	14	24	16	54

Please note that this section of the report focuses on the implementation of the procedure. Section 2.1 provides information of observer coverage and the impact of this procedure on it. Some vessels, after receiving a certification, may have decided to wait for an observer to become available, or provided help to avoid the travel restrictions, for example by traveling to another port to embark the observer. On one occasion, a vessel was issued a certification of the impossibility of placing an observer because none was available. The vessel decided to wait in port for an observer to become available. After departure, a COVID-19 contagion broke on the vessel and decided to return to port to leave the sick personnel, including the observer, and immediately continued its trip with a new certification.

Finally, there were occasions where vessels departing from ports outside the Agreement area requested an observer because they originally had plans to operate in the Agreement area but due to travel restrictions not allowing deployment of an observer, a certificate was issued. Nonetheless, the vessel changed fishing strategy and never entered the Agreement area.

As noted in <u>Section 3.1.1</u>, the exemption procedure requires "AIDCP Parties and IATTC Members ... to collect, record and report data and information for each trip, in simplified forms, exclusively data on tuna catches and bycatch of other species (including dolphin mortality), by gear, fishing area and type of set, in

accordance with the forms used by the IATTC until such time as it is possible to resume normal deployment of on-board observers."

Immediately after the approval of the exemption procedures, the IATTC staff prepared electronic forms that are easy to complete with simple instructions included, for operators to comply with this requirement. As noted in <u>Table 1</u> and <u>Section 2.1</u> above, 44 trips did not have observer onboard for the duration of the trip and their compliance with these data provision requirements is summarized below:

Flag	Total tips	Trips with data provided	Compliance (%)
COL	13	6	46
ECU	15	13	87
EU (ESP)	2	2	100
MEX	1	0	0
NIC	1	0	0
PAN	3	2	67
PER	1	1	100
SLV	3	3	100
USA	1	1	100
VEN	3	2	67
Total	43	30	70

7.2 Resolution A-19-01 on funding of national programs

This resolution approved during the 39th Meeting of the Parties of the AIDCP in Bilbao, Spain, requires that the AIDCP allocates 10% of the surplus of the observer program as of 31 December 2018, "to help replace equipment both for observers and for data processing, such as new-generation computer equipment which could not be updated due to lack of financial resources."

Additionally, this resolution required that the contribution *«be distributed equitably among all national programs»*.

The Secretariat informed the Chair of the AIDCP that the amount of such contribution was US\$31,854 and that it was necessary to convene a meeting among National Programs to better define how this contribution be provided equitably.

8. OTHER FUNCTIONS PERFORMED BY THE SECRETARIAT

8.1. Dolphin safety panel alignments

During 2020, the IATTC staff conducted one alignment of dolphin-safety panels (DSP) and inspections of dolphin rescue gear aboard purse-seine vessels. Additionally, at the request of one Party and due to the restrictions imposed during the pandemic, while deployed, an IATTC observer conducted an inspection of dolphin rescue gear.

8.2. Training and certification of fishing captains

The IATTC has conducted dolphin mortality reduction seminars for tuna fishermen since 1980. Article V of the AIDCP calls for the establishment, within the framework of the IATTC, of a system of technical training and certification of fishing captains. Under the system, the IATTC staff is responsible for maintaining a list of all captains qualified to fish for tunas associated with dolphins in the EPO. The names of the captains who meet the requirements are to be supplied to the IRP for approval and circulation to the Parties to the AIDCP.

The requirements for new captains are (1) attending a training seminar organized by the IATTC staff or by the pertinent national program in coordination with the IATTC staff, and (2) having practical experience

relevant to making sets on tunas associated with dolphins, including a letter of reference from a captain currently on the List, the owner or manager of a vessel with a DML, or a pertinent industry association. These seminars are intended not only for captains, who are directly in charge of fishing operations, but also for other crew members and for administrative personnel responsible for vessel equipment and maintenance. The fishermen and others who attend the seminars are presented with certificates of attendance.

During 2020, two training seminars were held, which was attended by 164 fishermen.

Date	Program	Location
13-Jan	IATTC	Manta, Ecuador
20-Dec	PNAAPD (Mexican National Program)	Mazatlán, Mexico

8.3. Statements of Participation

Statements of Participation are typically issued by the Secretariat on request to vessels that carry observers from the On-Board Observer Program. This statement certifies that the vessel has been participating in the IDCP, and that all its trips have been covered by observers; the second, issued to vessels of non-Parties, certifies only that all the vessel's trips have been covered by observers. During 2020, statements of the first type were issued for 116 fishing trips by vessels of Ecuador, El Salvador, Mexico, Nicaragua, and Venezuela.

8.4 Observer Safety Equipment

During its 38th meeting in October 2018, the Parties of the AIDCP approved resolution <u>A-18-02</u> which provided funding to purchase safety devices for observers described in document <u>MOP-36-INF-A</u> presented at the 36th Meeting of the Parties of the AIDCP in October 2017.

Most of the funding for service and equipment was generously provided by the United States and the Pacific States Marine Commission in late 2018 and 2019. The remainder of the necessary funding came directly from the AIDCP and the safety equipment was purchased and prepared for distribution.

With help from the national programs, the numbers of devices needed by each was finalized in September 2019.

Program	Devices
Colombia	11
Ecuador	28
EU - UE	5
Mexico	31
Nicaragua	6
Panama	11
Venezuela	12
IATTC	
Ecuador	75
Mexico	39
Panama	17
Total	235

Although the devices were ready at the headquarters in La Jolla, a problem with customs in some of the countries was encountered as the IATTC is not recognized as an intergovernmental organization in all countries and in some of them, the customs system is not too clear on this regard and shipment of the devices to the different locations was delayed.

By February 2020 all the shipments were completed but soon after, the pandemic created more challenges for the distribution and deployment of these devices. Most of these challenges were overcome by the third quarter of 2020, and devices are now being regularly deployed for all trips.

MORTALIDAD CAUSADA POR BUQUES CON LMD - 2020 MORTALITY CAUSED BY DML VESSELS - 2020

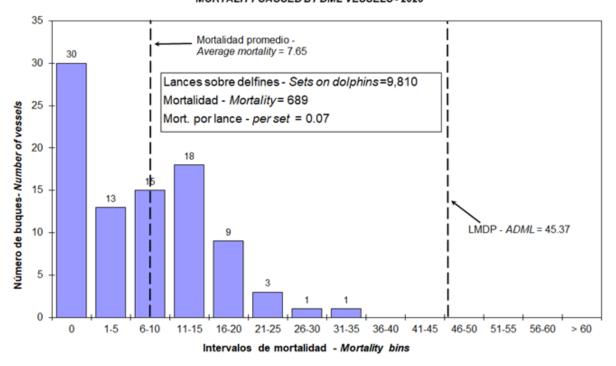


FIGURA 1. Distribución de la mortalidad de delfines causada por buques con LMD durante 2020.

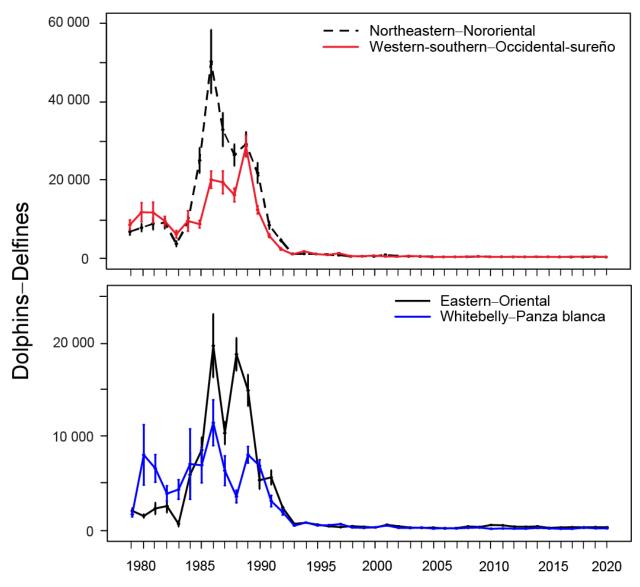


FIGURE 2. Estimated mortalities for the stocks of spotted (upper panel) and spinner (lower panel) dolphins in the Agreement Area, 1979-2020. Each vertical line represents one positive and one negative standard error.

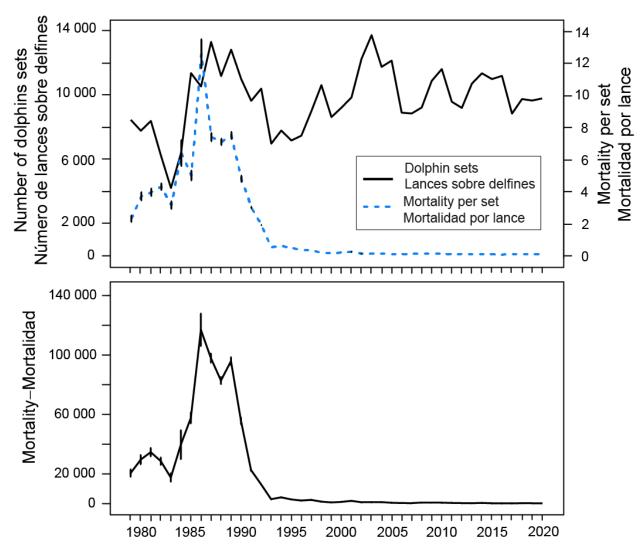


FIGURE 3. Total number of dolphin sets and average mortality per set (upper panel) and estimated total mortality (lower panel) for all dolphins in the Agreement Area, 1979-2020. Each vertical line represents one positive and one negative standard error.

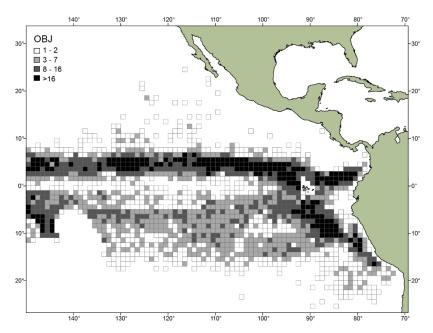


FIGURE 4a. Spatial distribution of sets on tuna associated with floating objects in the Agreement Area, 2019.

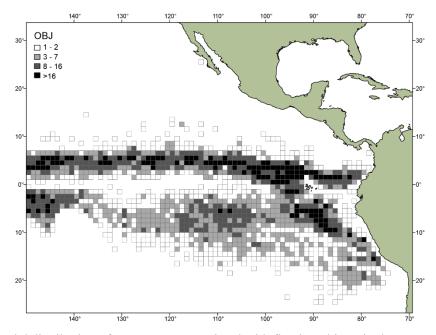


FIGURE 4b. Spatial distribution of sets on tuna associated with floating objects in the Agreement Area, 2020.

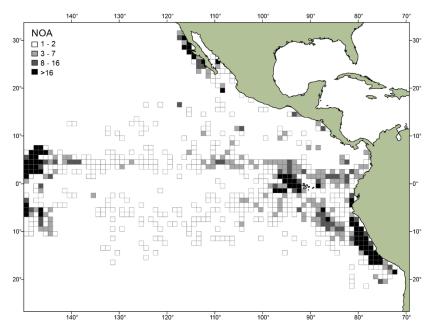


FIGURE 5a. Spatial distribution of sets on unassociated schools of tunas in the Agreement Area, 2019.

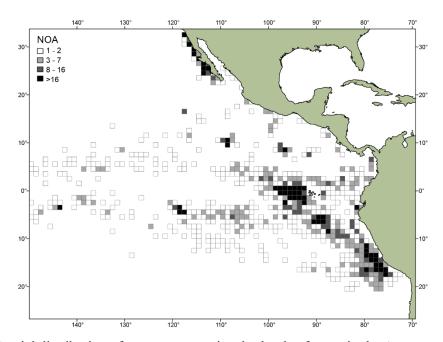


FIGURE 5b. Spatial distribution of sets on unassociated schools of tunas in the Agreement Area, 2020.

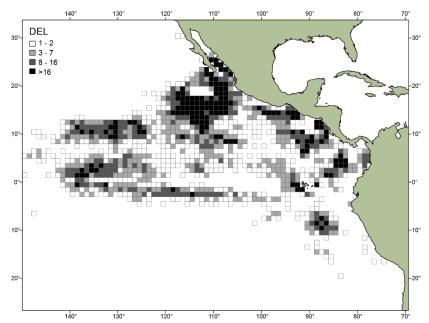


FIGURE 6a. Spatial distribution of sets on tuna associated with dolphins in the Agreement Area, 2019.

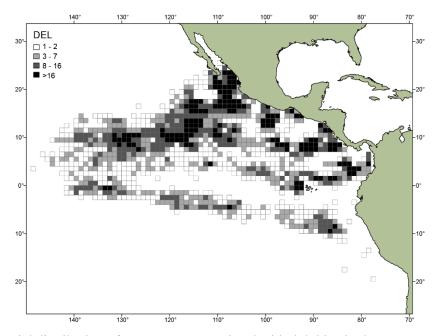


FIGURE 6b. Spatial distribution of sets on tuna associated with dolphins in the Agreement Area, 2020.

TABLE 1. Coverage of vessels by the On-Board Observer Program of trips initiated during 2020 with activity in the Agreement Area.

TABLA 1. Cobertura de buques por el Programa de Observadores a Bordo de viajes iniciados durante 2020 con actividad en el Área del Acuerdo.

	Clase 6 – Class-6 por/by prog.					
			-	None -	%	
Pabellón - Flag	Viajes/Trips	Nac./Nat	CIAT/IATTC	Ninguno	obs.	
Colombia	44	18 (41)	12 (27)	14 (32)	68	
Ecuador	376	137 (36)	224 (60)	15 (4)	96	
El Salvador	17	-	14 (82)	3 (18)	82	
European Union (ESP) –			` ,			
Unión Europea (ESP)	8	4 (50)	2 (25)	2 (25)	75	
México	192	102 (53)	89 (46)	1(1)	99	
Nicaragua	18	8 (44)	9 (50)	1(6)	94	
Panamá	81	33 (41)	45 (56)	3 (4)	96	
Perú	10	-	9 (90)	1 (10)	90	
United States – Estados			` ,	. ,		
Unidos	35	$6(17)^1$	28 (80)	1 (3)	97	
Venezuela	33	12 (36)	18 (55)	3 (9)	91	
Subtotal	814	320 (39)	450 (55)	44 (5)	95	
	Buques de clase 5 – Class 5 vessels					
Ecuador	9	3	6			
Todas las clases – All classes	823	323	456	44		

¹ Muestreados con observadores homologados de la WCPFC – Sampled with cross-endorsed obsevers from WCPFC

TABLE 2. Estimates of mortalities of dolphins in 2020, population abundance, and relative mortality, by stock.

TABLA 2. Estimaciones de la mortalidad de delfines en 2020, la abundancia de las poblaciones, y la mortalidad relativa, por población.

Species and stock	Mortality	Population abundance	Relative mortality (%)
Especie y población	Mortalidad	Abundancia de la población	Mortalidad relativa (%)
Offshore spotted dolphin—Delfin manchado de altamar ¹			
Northeastern—Nororiental	105	911,177	0.01
Western/southern—Occidental y sureño	154	911,830	0.02
Spinner dolphin—Delfin tornillo ¹			
Eastern—Oriental	251	790,613	0.03
Whitebelly—Panza blanca	138	711,883	0.02
Common dolphin—Delfin común ²			
Northern—Norteño	1	449,462	< 0.01
Central	17	577,048	< 0.01
Southern—Sureño	3	1,525,207	< 0.01
Other dolphins—Otros delfines ³	20	· · · · · · · · · · · · · · · · · · ·	
Total	689		

¹Logistic model for 1986-2006 (IATTC SAB-07-05);

¹ Modelo logístico para 1986-2006 (CIAT SAB-07-05)

² Weighted averages for 1998-2003 (IATTC Special Report 14: Appendix 5)

² Promedios ponderados para 1998-2003 (Informe Especial de la CIAT 14: Anexo 5)

³ "Other dolphins" includes the following species and stocks, whose observed mortalities were as follows: Central American spinner dolphin (*Stenella longirostris centroamericana*) 6, striped dolphin (*Stenella coeruleoalba*) 3, roughtoothed dolphin (*Steno bredanensis*) 2, and unidentified dolphins, 1.

³ "Otros delfines" incluye las siguientes especies y poblaciones, con las mortalidades observadas correspondientes: delfin tornillo centroamericano (*Stenella longirostris centroamericana*) 6, (*Steno bredanensis*) 2, y delfines no identificados, 1.

TABLE 3. Annual estimates of dolphin mortality, by species and stock since 1979. **TABLA 3.** Estimaciones anuales de la mortalidad de delfines, por especie y población desde 1979.

	Offshore	spotted ¹	Spir	nner		Common			
	Northeast-			White	Northern	Central	Southern	Others	Total
	ern	southern	Eastern	belly	Normern		Southern		
	Manchado		Torr			Común			
	nor- oriental	Occidental y sureño	Oriental	Panza blanca	Norteño	Central	Sureño	Otros	Total
1979	4,828	6,254	1,460	1,312	4,161	2,342	94	880	21,331
1980	6,468	11,200	1,108	8,132	1,060	963	188	633	29,752
1981	8,096	12,512	2,261	6,412	2,629	372	348	367	32,997
1982	9,254	9,869	2,606	3,716	989	487	28	1,347	28,296
1983	2,430	4,587	745	4,337	845	191	0	353	13,488
1984	7,836	10,018	6,033	7,132	0	7,403	6	156	38,584
1985	25,975	8,089	8,853	6,979	0	6,839	304	1,777	58,816
1986	52,035	20,074	19,526	11,042	13,289	10,884	134	5,185	132,169
1987	35,366	19,298	10,358	6,026	8,216	9,659	6,759	3,200	98,882
1988	26,625	13,916	18,793	3,545	4,829	7,128	4,219	2,074	81,129
1989	28,898	28,530	15,245	8,302	1,066	12,711	576	3,123	98,451
1990	22,616	12,578	5,378	6,952	704	4,053	272	1,321	53,874
1991	9,005	4,821	5,879	2,974	161	3,182	115	990	27,127
1992	4,657	1,874	2,794	2,044	1,773	1,815	64	518	15,539
1993	1,112	773	725	437	139	230	0	185	3,601
1994	847	1,228	828	640	85	170	0	298	4,096
1995	952	859	654	445	9	192	0	163	3,274
1996	818	545	450	447	77	51	30	129	2,547
1997	721	1,044	391	498	9	114	58	170	3,005
1998	298	341	422	249	261	172	33	100	1,876
1999	358	253	363	192	85	34	1	62	1,348
2000	295	435	275	262	54	223	10	82	1,636
2001	592	315	470	374	94	205	46	44	2,140
2002	435	203	403	182	69	155	3	49	1,499
2003	288	335	290	170	133	140	97	39	1,492
2004	261	256	223	214	156	97	225	37	1,469
2005	273	100	275	108	114	57	154	70	1,151
2006	147	135	160	144	129	86	40	45	886
2007	189	116	175	113	55	69	95	26	838
2008	184	167	349	171	104	14	137	43	1,169
2009	266	254	288	222	109	30	49	21	1,239
2010	170	135	510	92	124	116	8	15	1,170
2011	172	124	467	139	35	12	9	28	986
2012	151	187	324	107	49	4	30	18	870
2013	158	145	303	111	69	0	8	7	801
2014	181	168	356	183	49	13	9	16	975
2015	191	158	196	139	43	21	12	5	765 703
2016	127	111	243	89	82	36	9	5	702
2017	92	178	266	98	26	9	16	3	688
2018	99	197	252	205	41	1	18	6	819
2019	104	220	270	142	25	3	2	12	778
2020	105	154	251	138	1	17	3	20	689

¹ Estimates for offshore spotted dolphins include mortalities of coastal spotted dolphins.

¹ Las estimaciones de delfines manchados de altamar incluyen mortalidades de delfines manchados costeros.

TABLE 4. Standard errors of annual mortality estimates of dolphins, by species and stock, for 1979-1994. There are no standard errors for 1995-2000 and after 2003 because the coverage was at or nearly at 100% during those years.

TABLA 4. Errores estándar de las estimaciones anuales de la mortalidad de delfines, por especie y población, para 1979-1994. No se cuenta con errores estándar para 1995-2000 y después de 2003, porque la cobertura fue de 100%, o casi, en esos años.

	Offshor	e spotted	Spi	nner	Common			
	North-east- ern	Western- southern	Eastern	Whitebelly	Northern	Central	Southern	Other
	Manchado	de altamar	Tor	nillo		Común		
	Nor- oriental	Occidental y sureño	Oriental	Panza blanca	Norteño	Central	Sureño	Otros
1979	817	1,229	276	255	1,432	560	115	204
1980	962	2,430	187	3,239	438	567	140	217
1981	1,508	2,629	616	1,477	645	167	230	76
1982	1,529	1,146	692	831	495	168	16	512
1983	659	928	284	1,043	349	87	-	171
1984	1,493	2,614	2,421	3,773	-	5,093	3	72
1985	3,210	951	1,362	1,882	-	2,776	247	570
1986	8,134	2,187	3,404	2,454	5,107	3,062	111	1,722
1987	4,272	2,899	1,199	1,589	4,954	2,507	3,323	1,140
1988	2,744	1,741	1,749	668	1,020	1,224	1,354	399
1989	3,108	2,675	1,674	883	325	4,168	295	430
1990	2,575	1,015	949	640	192	1,223	95	405
1991	956	454	771	598	57	442	30	182
1992	321	288	168	297	329	157	8	95
2001	3	28	1	6	7	7	-	1
2002	1	2	1	1	1	1	1	1
2003	1	1	1	1	-	1	1	-

TABLE 5. Percentages of sets with no dolphin mortalities, with major gear malfunctions, with net collapses, with net canopies, average times of backdown (in minutes), and average number of live dolphins left in the net at the end of backdown. 1986-2008 data are from trips observed by the IATTC program only; data after 2008 include trips covered by national programs.

TABLA 5. Porcentajes de lances sin mortalidad de delfines, con averías mayores, con colapso de la red, con abultamiento de la red, duración media del retroceso (en minutos), y número medio de delfines en la red después del retroceso. Los datos de 1986-2008 provienen de viajes observados por el programa de la CIAT solamente; los datos posteriores a 2008 incluyen viajes observados por los programas nacionales.

	Sets with zero mortality (%)	Sets with major malfunctions (%)	Sets with net collapse (%)	Sets with net canopy (%)	Average duration of backdown (minutes)	Average num- ber of live dol- phins left in net after back- down
1986	38.1	9.5	29.0	22.2	15.3	6.0
1987	46.1	10.9	32.9	18.9	14.6	4.4
1988	45.1	11.6	31.6	22.7	14.3	5.5
1989	44.9	10.3	29.7	18.3	15.1	5.0
1990	54.2	9.8	30.1	16.7	14.3	2.4
1991	61.9	10.6	25.2	13.2	14.2	1.6
1992	73.4	8.9	22.0	7.3	13.0	1.3
1993	84.3	9.4	12.9	5.7	13.2	0.7
1994	83.4	8.2	10.9	6.5	15.1	0.3
1995	85.0	7.7	10.3	6.0	14.0	0.4
1996	87.6	7.1	7.3	4.9	13.6	0.2
1997	87.7	6.6	6.1	4.6	14.3	0.2
1998	90.3	6.3	4.9	3.7	13.2	0.2
1999	91.0	6.6	5.9	4.6	14.0	0.1
2000	90.8	5.6	4.3	5.0	14.9	0.2
2001	91.6	6.5	3.9	4.6	15.6	0.1
2002	93.6	6.0	3.1	3.3	15.0	0.1
2003	93.9	5.2	3.5	3.7	14.5	< 0.1
2004	93.8	5.4	3.4	3.4	15.2	< 0.1
2005	94.9	5.0	2.6	2.7	14.5	< 0.1
2006	93.9	5.7	3.3	3.5	15.8	< 0.1
2007	94.2	5.1	1.6	3.4	15.2	< 0.1
2008	92.4	4.9	2.9	3.7	16.1	0.1
2009	93.3	5.2	1.8	3.1	16.7	< 0.1
2010	94.1	4.7	1.3	2.4	16.2	< 0.1
2011	94.0	4.1	1.9	2.1	16.3	< 0.1
2012	94.5	4.3	1.9	1.5	16.5	< 0.1
2013	95.4	4.2	1.3	1.3	15.4	< 0.1
2014	95.5	3.7	1.3	1.3	16.2	< 0.1
2015	96.4	4.3	1.1	1.2	15.4	< 0.1
2016	96.4	3.8	0.9	0.9	15.2	< 0.1
2017	96.2	3.6	1.0	1.0	15.9	< 0.1
2018	95.8	3.3	0.8	1.5	17.3	< 0.1
2019	95.8	4.1	1.1	1.1	16.6	< 0.1
2020	96.5	3.9	0.3	0.9	17.0	0

TABLE 6. Weekly reports of dolphin mortality received, 2020. **TABLA 6.** Informes semanales de mortalidad de delfines recibidos, 2020.

Flag	Program	Required	Received	%
COL	CIAT - IATTC	175	175	100
	NalNat.	224	224	100
ECU	CIAT - IATTC	1,149	1,149	100
	NalNat	688	688	100
EU (ESP)	CIAT - IATTC	26	26	100
	NalNat.	21	21	100
MEX	CIAT - IATTC	630	630	100
	NalNat.	723	723	100
NIC	CIAT - IATTC	57	56	98
	NalNat.	52	52	100
PAN	CIAT - IATTC	268	268	100
	NalNat.	185	185	100
PER	CIAT - IATTC	27	25	93
SLV	CIAT - IATTC	94	94	100
USA	CIAT - IATTC	14	14	100
	WCPFC	205	205	100
VEN	CIAT - IATTC	164	164	100
	NalNat.	79	79	100
Total		4,781	4,778	99.9

TABLE 7. Preliminary reports of the mortalities of dolphins in 2021, to 3 September. **TABLA 7.** Informes preliminares de las mortalidades de delfines en 2021, hasta el 3 de septiembre.

Species and stock	Total mortality	Limit	Used (%)
Especie y población	Mortalidad total	Límite	Usado (%)
Offshore spotted dolphin – Delfin manchado de altamar			
NortheasternNororiental	140	793	17.7
Western-southernOccidental-sureño	126	881	14.3
Spinner dolphin – Delfin tornillo			
Eastern—Oriental	138	655	21.1
WhitebellyPanza blanca	120	666	18.0
Common dolphin – Delfin común			
Northern—Norteño	3	562	0.5
Central	0	207	0.0
Southern—Sureño	0	1,845	0.0
Others and unidentifiedOtros y no identificados	13		
Total	540	5,000	10.8

TABLE 8. Summary of possible infractions identified by the International Review Panel at its 65th and 66th meetings, **July** and October **2019**.

TABLA 8. Resumen de posibles infracciones identificadas por el Panel Internacional de Revisión en su 65^a and 66^a reuniones, **julio** y octubre de **2019**.

Note: since there were no IRP meetings in 2020, due to the COVID-19 pandemic restrictions, this section includes the data information and updates of the cases identified by the IRP in 2019.

Nota: debido a que no hubo reuniones del PIR in 2020, dadas las restricciones de la pandemia por el COVID-19, esta sección incluye la información y actualización de los casos identificados por el PIR en 2019.

INFRACCIONES MAYORES / MAJOR INFRACTIONS:	
Viaje sin observador	
Trips without an observer	1
Viajes con lances en delfines sin LMD asignado	-
Trips with dolphin sets but no DML assigned	0
Viajes con capitanes no incluidos en la lista del APICD	2
Trips with captains not on the AIDCP list	3
Viajes sin paño de protección de delfines	1
Trips without a dolphin safety panel	1
Lances intencionales después de alcanzar el LMD	0
Intentional sets made after reaching the DML	0
Lances o cazas con uso de explosivos	0
Sets or chases with use of explosives	U
Lances sobre stocks o tipos de manadas prohibidas	0
Sets on banned stocks or school types	0
Lances sin retroceso	0
Sets without a required backdown	U
Lances con embolsamiento o salabardeo de delfines	0
Sets with dolphin sack-up or brail	0
Lances sin evitar herir o matar delfines	0
Sets with unavoided dolphin injury or mortality	
Total	5
OTRAS INFRACCIONES / OTHER INFRACTIONS:	
Viajes sin balsa	3
Trips without a required raft	
Viajes con < 3 lanchas rápidas y/o sin bridas de remolque	1
Trips with < 3 speedboats and/or missing towing bridles	1
Viajes sin reflector de alta intensidad	5
Trips without a required high-intensity floodlight	
Viajes sin máscaras de buceo	1
Trips without required facemasks	
Lances nocturnos (ocurrieron en dos viajes)	0
Night sets (occurred in two trips)	
Lances sin rescate adicional	0
Sets without required deployment of rescuer	
Lances sin rescate después del retroceso	0
Sets without continued rescue effort after backdown	
Viajes con lances sobre delfines antes de la notificación del LMD	0
Trips with dolphin sets before the DML notification	10
Total	10
Casos de interferencia al observador	2
Cases of observer interference	
Viajes revisados en estas reunions	889
Trips reviewed in these meetings	
Lances sobre delfines revisados en estas reuniones	9,827
Dolphin sets reviewed in these meetings	
Lances accidentales revisados en estas reuniones	1
Accidental sets reviewed in these meetings	

TABLE 9. Responses for six types of possible infractions identified by the International Review Panel at its 65th and 66th meetings.

TABLA 9. Respuestas para seis tipos de posibles infracciones identificadas por el Panel Internacional de Revisión en su 65^a y 66^a reuniones.

Note: since there were no IRP meetings in 2020, due to the COVID-19 pandemic restrictions, this section includes the data information and updates of the cases identified by the IRP in 2019.

Nota: debido a que no hubo reuniones del PIR en 2020, dadas las restricciones de la pandemia de COVID-19, esta sección incluye la información y actualización de los casos identificados por el PIR en 2019.

	No do	Cim			Resp	uestas			
	No. de	Sin	Bajo investi-	No hubo	Infracción:	Infracción:	Infracción:		Total
	casos	respuesta	gación ¹	infracción	sin sanción	aviso	sanción ²		Total
	No. of	No			Resp	onses			
			Under in-	No infrac-	Infraction:	Infraction:	Infraction:		Total
	cases	response	vestigation ¹	tion	no sanction	warning	sanction ²		Total
	HOSTIGAMIENTO AL OBSERVADOR – OBSERVER HARASSMENT								
ECU	2	0 -	0	1	0	0	1	2	(100%)
Total:	2	0 -	0	1	0	0	1	2	(100%)
	USO DE EXPLOSIVOS – USE OF EXPLOSIVES								

Ningún caso identificado durante el periodo de este informe No identified cases during this report period

LANCES NOCTURNOS-NIGHT SETS

Ningún caso identificado durante el periodo de este informe No identified cases during this report period

PESCAR SIN OBSERVADOR – FISHING WITHOUT AN OBSERVER										
USA	1	0	-	0	0	0	0	1	1	(100%)
Total:	1	0	-	0	0	0	0	1	1	(100%)

PESCAR SOBRE DELFINES SIN LMD - FISHING ON DOLPHINS WITHOUT A DML

Ningún caso identificado durante el periodo de este informe No identified cases during this report period

LANCES SOBRE DELFINES DESPUES DE ALCANZAR EL LMD--SETS ON DOLPHINS AFTER REACHING DML

Ningún caso identificado durante el periodo de este informe No identified cases during this report period

Appendix A.

POSSIBLE INFRACTIONS IDENTIFIED BY THE IRP

Brief descriptions of government actions taken, as reported to the Secretariat by 3 September 2021, are included. If no action is listed for a possible infraction, the Secretariat has not received a response from the government.

Note: since there were no IRP meetings in 2020, due to the COVID-19 pandemic restrictions, this section includes the data information and updates of the cases identified by the IRP in 2019.

Abbreviations: DSP = Dolphin Safety Panel

COLOMBIA							
Vessel	IRP recno	Review date	Identified infractions				
COL 1	2019-563	2019/10 1) 1 Tri	ip without a required raft				
COL 2	2019-091	2019/07 1) 1 Tri	ip without a required high intensity floodlight				
COL 3	2018-851	2019/07 1) 1 Tri	ip with < 3 speedboats and/or missing towing bridles				
	ECUADOR						
Vessel	IRP recno R	eview dateIdentifi	ed infractions				
ECU 1	2019-052	2019/07 1) 1 Tri	ip without a required raft				
ECU 2	2019-448	2019/10 1) 1 Ca	se of observer interference				
Action taken: 1) The fishing authority carried out the investigations of this case and applied corrective							
		me	asures.				
ECU 3	2019-582	2019/10 1) 1 Tri	ip without a required raft				
2019/10	2019/10 2) 1 Trip without a required high intensity floodlight						
2019/10 3) 1 Trip without required facemasks							
Action taken: 1), 2), 3) After investigating, the government decided that no infraction occurred, since the							
		nat	ional authority had not yet notified the vessel owner of the				

DML allocation.

ECU 4 2019-303 2019/07 1) 1 Trip with captain not on the AIDCP list

Action taken: 1) The government determined that there was no infraction because there were two fishing captains on board who are in the AIDCP List of Qualified Fishing Captains.

ECU 5 2019-372 2019/07 1) 1 Case of observer interference

Action taken: 1) After investigating, the government decided that no infraction occurred.

UNITED STATES

IRP recno Review dateIdentified infractions Vessel USA 1 2019/07 1) 1 Trip without an observer 2018-889

Action taken: 1) A fine was applied to the vessel owner

VENEZUELA

Vessel IRP recno Review dateIdentified infractions

VEN 1 2018-630 2019/07 1) 1 Trip without a required high intensity floodlight

Action taken: 1) The government is in the process of imposing a monetary fine.

1) 1 Trip without a dolphin safety panel 2019-074 2019/07

2019/07 2) 1 Trip without a required high intensity floodlight

Action taken: 1), 2) The government is in the process of imposing a monetary fine. VEN 2 2019-212 2019/07 1) 1 Trip with captain not on the AIDCP list

Action taken: 1) After investigating, the government decided that no infraction occurred. 2019/07 1) 1 Trip without a required high intensity floodlight 2019-278 VEN 3

Action taken: 1) After investigating, the government decided that no infraction occurred.

1) 1 Trip with captain not on the AIDCP list 2019-614 2019/10