

# Seventh Meeting of the Seabird Bycatch Working Group

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# Novel legal framework for mitigation of incidental bycatch for albatrosses and petrels in Brazil

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#### SUMMARY

The Brazilian government launched in 2014 a new longline fisheries regulation to reduce the seabird bycatch to a minimum level. The measures are a combination of weighted branch lines, bird scaring lines and night setting that should be applied simultaneously by authorized vessels to fish the target species in the area of territorial sea, Exclusive Economic Zone (EEZ) and south international waters 20° S. The mitigation measures have been established in two stages: the transient and the permanent. From November 2014 to April 2015, the transitional mitigation measures were in force. Since May 2015 the fishermen must comply with all mitigation measures in a permanent way. The former regulation launched in 2011 established the mandatory use of only bird scaring line and weight branch line. The Brazilian recent regulation is based on the National Plan of Action that aims to contribute to the long term conservation of albatrosses and petrels interacting with fisheries in the Brazilian territory and also meets the ACAP's best practice mitigation measures.

# Nuevo marco legal para la mitigación de la captura secundaria de albatros y petreles en Brasil

#### RESUMEN

En 2014, el gobierno de Brasil lanzó una nueva norma para las pesquerías con palangre a fin de reducir al mínimo la captura secundaria de aves marinas. Las medidas son una combinación de brazoladas lastradas, líneas espantapájaros y calado nocturno que los barcos autorizados deberían aplicar en simultáneo a la hora de pescar la especie objetivo en el mar territorial, en la zona económica exclusiva (ZEE) y al sur del paralelo 20° S, en aguas internacionales. Las medidas de mitigación se han establecido en dos etapas: la temporal y la permanente. Las medidas temporales estuvieron en vigor entre noviembre de 2014 y abril de 2015. A partir de mayo de 2015, los pescadores deben cumplir con todas las medidas de forma permanente. La norma anterior, que se lanzó en 2011, establecía el uso obligatorio de líneas espantapájaros y brazoladas lastradas solamente. La nueva norma de Brasil está basada en el Plan de Acción Nacional cuyo objetivo es contribuir a la conservación a largo plazo de los albatros y petreles que interactúan con las pesquerías del territorio brasileño. A su vez, esta nueva norma cumple con las mejores prácticas en medidas de mitigación del ACAP.

# Nouveau cadre juridique pour la réduction des captures accessoires d'albatros et de pétrels au Brésil

# RÉSUMÉ

Le gouvernement brésilien a ratifié en 2014 une nouvelle réglementation sur la pêche à la palangre afin de réduire autant que possible les captures accessoires. Les mesures associent le lestage des lignes secondaires, des dispositifs d'effarouchement des oiseaux et la pose nocturne des lignes; elles doivent être mises en place simultanément par les navires autorisés afin de pouvoir cibler les espèces à pêcher dans la mer territoriale, la Zone économique exclusive (ZEE) et les eaux internationales au sud de 20 ° S. Les mesures d'atténuation ont été établies en deux étapes : transitoires et permanentes. Les mesures d'atténuation transitoires étaient en vigueur de novembre 2014 à avril 2015. Depuis 2015, les pêcheurs doivent se conformer à toutes les mesures d'atténuation de façon permanente. La réglementation actuelle, ratifiée en 2011, a rendu obligatoire l'utilisation des dispositifs d'effarouchement des oiseaux et des lignes secondaires lestées. La récente réglementation brésilienne s'appuie sur le Plan d'action national visant à contribuer à la conservation sur le long terme des albatros et des pétrels en contact avec les pêcheries du territoire brésilien, et respecte les mesures de meilleure pratique et d'atténuation de l'ACAP.

In 2014, the Brazilian government launched a new longline fisheries regulation aimed at reducing seabird bycatch to a minimal level. These measures are a combination of weighted branch lines, bird scaring lines and night settings that should be applied by all authorized vessels when fishing target species in areas of territorial seas, exclusive economic zone (EEZ), and south international water at 20°S. The simultaneous use of these measures recommended by ACAP can mitigate the catch of albatrosses and petrels, and have been proven highly effective in various parts of the world, especially when used in combination (ACAP, 2013b).

The process of regulation of fishing activities in Brazil that negatively affect seabird populations began with the recommendation 07/2007 from the International Commission for the Conservation of Atlantic Tunas (ICCAT). Brazil is part of the ICCAT's committee since 1969, and with the decree 65-026 of 20 August 1969, ICCAT's recommendations have legal impact in Brazil. This recommendation, which aims to protect oceanic seabirds against incidental catch by pelagic longline fisheries, emphasizes the need for mitigation measures, monitoring and control of incidental capture of birds, which should be implemented by all countries. It established, amongst other measures, the mandatory use of tori lines by all vessels operating south of 20°S, except for the vessels using longline monofilaments directed towards swordfish, which need to be released overnight.

In order to reduce by-catches to a minimal level, and for implementing 07/2007 ICCAT's recommendation, the Brazilian Ministry of Environment and the Ministry of Aquaculture and Fisheries formulated regulation no.4/2011, together with the fishing productive sector. It established the simultaneous use of tori lines and weight branch lines by longline fishing vessels authorized to operate in waters under Brazilian jurisdiction south of latitude 20°S. A few months later, ICCAT launched the Recommendation 09/2011, and established the mandatory use of at least two out of the three mitigation measures (tori lines, weights branch lines in all longline fisheries south of 25°S).

The revision process of the INI 04/2011 began in 2012 with members of Brazil's Fishery Management Council of Tuna. This council is composed of representatives of various branches that are relevant to the regulation of fishing activities, such as government agencies and fishing industry stakeholders advised by scientific subcommittees. The main focus of this review is to discuss the implementation of ACAP's recommendations, in particular whether to change the requirement of the use of two obligatory mitigation measures (toriline and weights branch lines) and include a third new one (i.e., the mandatory use of night settings). The major goal in this new combination of measures is to protect the populations of albatrosses and petrels, in accordance with the National Action Plan of albatrosses and petrels.

The purpose of this review was to broaden conservation and protection measures with the inclusion of additional standards from ACAP's Best Practice Guide. The recommendations in this guide are based on evidence from scientific studies that demonstrate that the isolated use of toriline (ACAP, 2011b; Petersen *et al.*, 2008), night settings (ACAP, 2011b), and systems of line branch weights (ACAP, 2011a) are not sufficient to prevent seabird bycatch. This revision also includes other technical issues, such as fisherman safety, toriline dimensions, and use of onboard cameras.

The new regulatory framework provided by the IN 07/2014 covers several gaps in the former regulation, and details safety measures for fisherman, including electronic monitoring,

and size of the toriline proportional to the size of the vessel. Application of the standards have been established in two stages: transitional and permanent. Between these two steps, there is a difference in the specifications of the weights system of hooks and the extent of toriline. All these details are specified in the English version of the IN 07/2014, included in the Annex I of this InfoNews.

#### REFERENCES

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#### **ANNEX 1**

Interministerial Normative Instruction No 7, October 30 of 2014

Union Official Diary Date: 31/10/2014

Pages: 47-48

Establish mitigation measures to reduce seabird incidental capture by fishing vessels operating with superficial horizontal longline South of 20° S.

THE STATE MINISTERS OF THE FISHING AND AQUACULTURE and OF THE ENVIRONMENT, in the use of their attributions, considering the Law n° 10.683, from May 28 of 2003, the Law n° 11.959, from June 29 of 2009, in the Decree n° 6.691, from October 13 of 2009, in the Ministerial Directive MPA/MMA n° 2, from November 13 of 2009, and included in the Process n° 00350.007804/2010-40, resolve:

Art. 1º Establish mitigation measures for seabird incidental capture in vessels authorized to operate in the territorial sea, Economic Exclusive Zone (EEZ) and international waters, south of 20° S, in the modality of surface horizontal longline, for the target species of tuna and swordfish, according to the Interministerial Normative Instruction nº 10 of June 2011.

#### Chapter I

#### **General Dispositions**

Art. 2° The mitigation measures for the reduction of seabird incidental capture will be presented in two distinct groups, with different applications and effectiveness, to know:

- I Transitory Mitigation Measures; and
- II Permanent Mitigation Measures;

Art. 3° The Transitory Mitigation Measures will be applied and effective for a limited period of six months starting from the publication of this Interministerial Normative Instruction (INI), after this period, it will be active and mandatory the Permanent Mitigation Measures.

Art. 4 ° For the purpose of this INI the following definitions are adopted:

I – Toriline: equipment composed by a cable divided in segments, with an aerial portion containing ribbons and a submerse portion for trawl tension. Fixed over the vessel's stern during gear setting, parallel to the longline main line;

- II Night Setting: longline setting done in its totality during the period between the sunset and sunrise, according to Brazil's Navy Marine Almanac data;
- III Weight Regime: standardization between distance and weight of lead swivel ratio to the hook, in the longline secondary line, with the objective of increasing the gear sinking rate;
- IV Safe Lead: longline weight system, in which the weight slides along in the line instead of been fixed to it;
- V Electronic Monitoring: system composed by onboard video cameras, activated during the longline setting and hauling, in order to monitor, control and collect fishing operation data;
- VI Bait Casting Machine: device used onboard of vessel, allowing to position automatically the hooks in the water, during the longline setting;
- VII Line Shooter: device used onboard of vessels, allowing to position automatically the main longline line in the water during the gear setting;
- Art. 5° For means of control and inspection;
- I is considered the information included in the vessel fishing permission, of mandatory presence in the vessel;
- II longlines and torilines transported, stored or used in fishing activities that do not have the characteristics defined in this INI is portrayed as irregular fishing with forbidden gear; and
- III it is considered the vessel Gross Tonnage (GT) the one established in the Vessel Register Title, issued by the Maritime Authority;
- Art. 6° Vessels with gross tonnage (GT) over 15 (fifteen), authorized to operate in Brazilian waters in the Southeast and South, to the border of the Espírito Santo and Bahia states, in the modality of horizontal surface longline with target species of tuna, swordfish or dolphin fish, are obligated, starting march 1° of 2015, to subscribe and maintain functioning the remote monitoring equipment linked to PREPS (Fishing Vessel Satellite Tracking National Program).
- Art. 7° The vessels specified in art. 1° are obligated to emit signal from the remote monitoring equipment, linked to PREPS, in intervals no longer than 20 (twenty) minutes.
- Art. 8° The seabird incidental captures must be registered in the Official Logbook, Onboard Observer report and any other ways to register according with the present legislation.

Single Paragraph. The Fishing and Aquaculture Ministry (MPA) remains responsible to supply the Environment Ministry (MMA), access to the Fishing and Aquaculture National Information System data (Sinpesq), or others systems that come to replace it, regarding the mentioned registers in the head of this article.

Art. 9° The Fishing and Aquaculture Ministry or Environment Ministry can determine that vessels owners or charterers, according to this INI, provide accommodations and provisions for people designated for information and data gathering, linked to scientific research that can subside the sustainable fishery resources management and for environmental monitoring.

Art 10° The MPA and MMA can determine that the ship owners or charterers, regarding this IN, supply necessary physical space for research, with the purpose of testing the image electronic monitoring.

# Chapter II

**Transitory Mitigation Measures** 

Art. 11° The transitory mitigation measures for the reduction of seabirds to be mandatory adopted by the vessels defined in the Art. 1° are:

- I Toriline;
- II Night Setting; and III Weight Regime;
- § 1º The specifications of the mitigation measures to be adopted, established in items I to III of this article are described in the Annex I of this INI.
- § 2º The vessels referenced in the Art. 1º are obliged to carry onboard and make use of the toriline during fishing operations, according to specifications described in the Annex I of this INI.
- § 3° The vessels referenced in the Art. 1° are obliged to transport at least two spare torilines, to replace the equipment in use in case of damage.
- Art. 12° The transitory mitigation measures must be applied according with the latitudinal disposition of the fishing operations as follows:
- I to the north of 20°S the use of the mitigation measures will be elective; and
- II to the south of 20°S all vessels referenced in Art. 1° are obliged to use toriline and, additionally, use either the night setting or the weight regime.

## Chapter III

### **Permanent Mitigation Measures**

Art. 13° After the duration of the transitory mitigation measures present in Chapter II, the vessels referenced in Art. 1° of this INI must adopt, simultaneously, the following measures:

- I Toriline;
- II Night Setting; and III Weight Regime.
- §1° The specifications to adopt for the mitigation measures, established in the items I to III of this article, is described in the Annex II of this INI.
- § 2º The vessels with length over 35 (thirty five) meters must, obligatory, use two torilines simultaneously during fishing operations, as well as carry on board four spare torilines, for replacement in case of equipment damage during its use.
- § 3º The vessels with length under 35 (thirty five) meters, must, obligatory, use one toriline during fishing operations, as well as, carry onboard, two spare torilines, for replacement in case of equipment damage during its use.
- § 4º for the means of crew safety, it is authorized the use of Safe Lead System

### Chapter IV

### Final disposition

Art. 14 The MPA and MMA will promote wide release of the measures established in this INI, especially along the fishing sector and the suppliers company of longline weight in the Southeast and South regions.

Art. 15° It will be considered illegal fishing the non-use or absence in the transportation and onboard storage of the equipment's and fishing gear related to the mitigation measures defined in this INI, from the port of origin to the port of destiny, by vessels entering Territorial Sea, EEZ and adjacent waters, south of 20°S.

Art. 16° The fishing operations carried out by the vessels related in Art. 1°, if in disagreement with the disposition hereby contained in this INI, will be considered illegal fishing according to the Law n° 9.605, of February 12 of 1998, and the Decree n° 6.514, of July 22° of 2008, without the loss of others legal commination.

Art. 17° Starting from the assessment of the pelagic longline fishery, including fishing effort, the use of mitigation measures, and the seabird mortality associated, must be considered as additional management measures, complying with the scientific recommendations and with the purpose of reducing incidental captures.

Art. 18° Revoke the INI n° 4 of April 15 of 2011.

Art. 19° This INI comes in action in the date of its released

#### ANNEX I

Specifications of the transitory mitigation measures

- I Toriline; must be use during the longline setting operations to avoid that seabirds attack the baits, according to the following:
- a) For vessels of 35 (thirty-five) meters of length or larger:
- 1- Use of at least one toriline. Been it is recommended the use of a second toriline simultaneously, when there is a high abundance of birds;
- 2- The aerial extension, defined as the portion of the toriline cable between the fixation point in the vessel and the point in which it touches the water must be equal to or higher than 100 (one hundred) meters;
- 3 The ribbons that compose the toriline must be of assorted colors and long enough, in way that it touches the sea surface in calm conditions;
- 4- The toriline ribbons must be fixed in intervals equal to or smaller than 5 (five) meters.
- b) For vessels under 35 (thirty-five) meters of length:
- 1- The toriline must possess at least 130 (one hundred and thirty) meters of length and be composed by tree segments united by swivels;
- 2- The toriline must be fixed over the vessel stern at a height of 8 (eight) meters or more in consideration to the water line;
- 3- The first segment of the toriline must have 60 (sixty) meters of length and made of monofilament nylon, with diameter ranging from of 3 to 4 (three to four) millimeters. There must be fixed, in at 2 (two) meters intervals, beams of six, one meter polypropylene color ribbon (or three ribbons of two meters of length folded in half);
- 4- The second segment of the toriline, connected to the first though a swivel without aggregated weight, must have a length of 40 (forty) meters and be made of monofilament

nylon, with diameter ranging from 2 to 3 (two to three), but always with a diameter inferior to the first segment (so it breaks up in case of entangling with the fishing gear). In this segment also must have fixed every two meters, beams of six, one meter polypropylene colored ribbon (or three ribbons of two meters each, folded in half);

- 5- The third segment must have 30 (thirty) meters of length and stay underwater. It is a trawling device with the purpose of traction force generation, and this way, maintain the first and second segment above water. It must be composed of twisted synthetic cable, eight millimeters of diameter, with several one meter rigid plastic ribbon, in intervals of 20 (twenty) centimeters;
- 6- Vessels under 20 (twenty) meters of total length are authorized to append the toriline in minimal height of six meters, relatively to the water line.
- II- Night setting: the setting of the longline gear in the water must occur, in its totality, in the periods comprehended between the nautical sunset and sunrise with minimal deck lighting;
- III- Weight Regime: The weight used in the secondary line must be installed according to one of the following specifications:
- a) At least 45 (forty five) grams, at no further than one meter away from the hook;
- b) At least 60 (sixty) grams, at no further than 3.5 (three point five) meters away from the hook;
- c) At least 90 (ninety) grams, at no further than 4 (four) meters away from the hook;

#### ANNEX II

Specifications of the permanent mitigation measures

- I Toriline; must be used during the longline setting operations to avoid that seabirds attack the baits, according to the following:
- a) For vessels of 35 (thirty five) meters or longer:
- 1- The total length of the toriline must be equal to or longer than 200 (two hundreds) meters;
- 2- During the release of the longline main line, the toriline must always be in parallel position to it;
- 3- The ribbons that compose these lines must be colored and long enough, starting from 8 (eight) meters of length near the stern of the vessel, and ending in 30 (thirty) centimeters, at least, in the furthest portion, in manner that touches the sea surface in calm conditions;

- 4- The toriline ribbons must be fixed in intervals equal or inferior to five meters;
- 5- The toriline must be fixed over the vessel stern at a height of at least eight meters from water line;
- 6- An adequate towing device must be used, in way to provide the necessary trawl to maximize the toriline aerial extension and keep it directly behind the vessel:
- 7- The vessels that make use of bait cast machine during the fishing operations must configure it in a way that the longline hooks hit the water surface beneath the cover area of the torilines:
- 8- The vessels that make use of line shooters during fishing operations must configure it in a way that the longline mainline enters the water outside the turbulence generated by the vessel propeller;
- b) Vessels under 35 (thirty five) meters of length:
- 1- The toriline must have at least 130 (one hundred and thirty) meters of length and composed by three segments united by swivels;
- 2- During the longline mainline setting, the toriline must always be in parallel position to it;
- 3- The toriline must me fixed over the vessel stern, in a height of, at least 8 (eight) meters from the water line;
- 4- The toriline first segment must have 60 (sixty) meters of length and built of monofilament nylon, with diameter ranging from 3 to 4 (three to four) millimeters. Must be fixed, every two meters, colored beams of six ribbons of one meter polypropylene (or three ribbons of two meters long folded in half);
- 5- The toriline second segment, connected to the first an swivel without weight aggregated, must have 40 (forty) meters long and built of monofilament nylon, of two to three millimeters of diameter, but always with diameter inferior to the first segment (for if it breaks up in case of entangling with the fishing gear). In this segment also must be fixed every two meters, colored beams of six ribbons of one meter polypropylene each (or three, two meters long ribbons folded in half);
- 6- The third segment must have 30 (thirty) meters long and stay underwater. It is a trawling device intended to generate a traction force and, this way, maintain the first and second segments overwater. It must be built of 8 (eight) millimeters diameter twisted synthetic cable with several one meter long rigid plastic ribbons, every 20 (twenty) centimeters intervals;
- 7- The vessels that make use of bait cast machine during the fishing operations must configure it in a way that the longline hooks hit the water surface beneath the cover area of the torilines:

- 8- The vessels that make use of line shooters during fishing operations must configure it in a way that the longline mainline enters the water outside the turbulence generated by the vessel propeller;
- 9- Vessels under 20 (twenty) meters long are authorized to affix the torilines in a minimal height of six meters from the water line;
- II- Night setting: The setting of the longline in the water must occur in its totality in the periods comprehended between the nautical sunset and sunrise with minimal lighting in the deck, according to data from Brazil's Navy Maritime Almanac;
- III- Weight Regime:
- a) The weight attached to the secondary line must be installed according to one of the following specifications;
- 1- At least 45 (forty five) grams, at no further than one meter away from the hook;
- 2- At least 60 (sixty) grams, at no further than 3.5 (three point five) meters away from the hook;
- 3- At least 98 (ninety eight) grams, at no further than four meters away from the hook;
- b) It is authorized, for a period of 15 (fifteen) months, starting from the publish of this INI, the use of weights of at least 90 (ninety) grams at no further than four meters away from the hook; and
- c) The safe lead must comply with the Weight Regime, described in this annex.