

Caracterización de las notificaciones de las aerolíneas sobre colisiones con fauna en el Aeropuerto JT Barcelona-El Prat

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Introducción y objetivo

Una adecuada gestión del peligro que representa la fauna precisa de datos de la mejor calidad.

El gestor aeroportuario realiza actuaciones de concienciación con agentes externos para optimizar la recogida de datos.

¿Se observa un reporte satisfactorio por parte de las aerolíneas?

¿Qué información aportan sus notificaciones?

Contexto



ICAO

International Standards
and Recommended Practices

Annex 14 to the Convention on International Civil Aviation

Aerodromes

Volume I
Aerodrome Design and Operations

Eighth Edition, July 2018

9.4 Wildlife strike hazard reduction

Note.—The presence of wildlife (birds and animals) on and in the aerodrome vicinity poses a serious threat to aircraft operational safety.

9.4.1 The wildlife strike hazard on, or in the vicinity of, an aerodrome shall be assessed through:

- a) the establishment of a national procedure for recording and reporting wildlife strikes to aircraft;**
- b) the collection of information from aircraft operators, aerodrome personnel and other sources on the presence of wildlife on or around the aerodrome constituting a potential hazard to aircraft operations; and
- c) an ongoing evaluation of the wildlife hazard by competent personnel.

Contexto



ICAO

Doc 9981

PROCEDURES FOR AIR NAVIGATION SERVICES

Aerodromes

Third Edition, 2020



6.3.3 Collecting, reporting and recording data on wildlife strikes and observed wildlife

6.3.3.1 An effective WHMP depends on accurate and reliable data. Reviewing and analysing wildlife strikes and wildlife observations will help identify hazards at the aerodrome and its vicinity and indicate the effectiveness of current wildlife strike prevention methods.

6.3.3.2 The aerodrome operator shall establish procedures to record and report wildlife strikes that have occurred at the aerodrome and its vicinity, in close cooperation with all relevant organizations operating at the aerodrome.

6.3.3.3 Wildlife incident reporting should comply with the criteria included in Appendix 2 to this chapter.

6.3.3.4 The aerodrome operator's reporting system shall contain a requirement for all relevant third parties and all aerodrome personnel to report wildlife strikes, wildlife remains, including findings thereof during aerodrome inspections, and any other relevant identified hazards, to the aerodrome operator.

Contexto



Doc 9137

Airport Services Manual

Part 3 — Wildlife Hazard Management
Fifth Edition, 2020



2.2.4 Collecting, reporting and recording data on wildlife incidents and observed wildlife

[...]

Wildlife incidents records and reporting

2.2.4.11 All stakeholders must report wildlife-related incidents defined in Chapter 1, 1.3.4, to the aerodrome operator.

2.2.4.12 The aerodrome operator should have well-defined reporting procedures in place for wildlife-related incidents with different stakeholders and should ensure the appropriate and meaningful review of data, while considering all circumstances. All stakeholders should be made aware of the procedures described in the aerodrome manual or any associated aerodrome documentation.

Contexto

MANUAL ON THE ICAO BIRD STRIKE INFORMATION SYSTEM (IBIS)

THIRD EDITION — 1989



BIRD STRIKE REPORTING FORM

Send to:

Operator	01/02	Effect on Flight	
Aircraft Make/Model	03/04	<i>none</i>	<input type="checkbox"/> 32
Engine Make/Model	05/08	<i>aborted take-off</i>	<input type="checkbox"/> 33
Aircraft Registration	07	<i>precautionary landing</i>	<input type="checkbox"/> 34
Date <i>day</i> <i>month</i> <i>year</i>	08	<i>engines shut down</i>	<input type="checkbox"/> 35
Local time	09	<i>other (specify)</i>	<input type="checkbox"/> 36
<i>dawn</i> <input type="checkbox"/> A <i>day</i> <input type="checkbox"/> B <i>dusk</i> <input type="checkbox"/> C <i>night</i> <input type="checkbox"/> D	10	Sky Condition 37	
Aerodrome Name	11/12	<i>no cloud</i>	<input type="checkbox"/> A
Runway Used	13	<i>some cloud</i>	<input type="checkbox"/> B
Location if En Route	14	<i>overcast</i>	<input type="checkbox"/> C
Height AGL	ft 15	Precipitation	
Speed (IAS)	kt 16	<i>fog</i>	<input type="checkbox"/> 38
Phase of Flight 17		<i>rain</i>	<input type="checkbox"/> 39
<i>parked</i> <input type="checkbox"/> A <i>en route</i> <input type="checkbox"/> E		<i>snow</i>	<input type="checkbox"/> 40
<i>taxi</i> <input type="checkbox"/> B <i>descent</i> <input type="checkbox"/> F		Bird Species*	41
<i>take-off run</i> <input type="checkbox"/> C <i>approach</i> <input type="checkbox"/> G		Number of Birds	
<i>climb</i> <input type="checkbox"/> D <i>landing roll</i> <input type="checkbox"/> H		<i>Seen</i> ⁴²	
Part(s) of Aircraft		1	<input type="checkbox"/> A
<i>radome</i>	<input type="checkbox"/> 18	2-10	<input type="checkbox"/> B
<i>windshield</i>	<input type="checkbox"/> 19	11-100	<input type="checkbox"/> C
<i>nose (excluding above)</i>	<input type="checkbox"/> 20	<i>more</i>	<input type="checkbox"/> D
<i>engine no. 1</i>	<input type="checkbox"/> 21	Size of Bird ⁴⁴	
		<i>small</i>	<input type="checkbox"/> S
		<i>medium</i>	<input type="checkbox"/> M
		<i>large</i>	<input type="checkbox"/> L
		Pilot Warned of Birds ⁴⁵	
		<i>yes</i>	<input type="checkbox"/> Y
		<i>no</i>	<input type="checkbox"/> X

Contexto

L 122/18 EN Official Journal of the European Union 24.4.2014

REGULATION (EU) No 376/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 3 April 2014

on the reporting, analysis and follow-up of occurrences in civil aviation, amending Regulation (EU) No 996/2010 of the European Parliament and of the Council and repealing Directive 2003/42/EC of the European Parliament and of the Council and Commission Regulations (EC) No 1321/2007 and (EC) No 1330/2007

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 100(2) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee ⁽¹⁾,

After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure ⁽²⁾,

Whereas:

(1) A high general level of safety should be ensured in civil aviation in the Union and every effort should be made to reduce the number of accidents and incidents with a view to ensuring public confidence in aviation transport.

(2) The rate of fatal accidents in civil aviation has remained fairly constant over the last decade. Nevertheless, the number of accidents could rise over the decades to come, due to an increase in air traffic and an increase in the

Article 4 **Mandatory reporting**

[...]

2. Each organisation established in a Member State shall establish a mandatory reporting system to facilitate the collection of details of occurrences referred to in paragraph 1.

[...]

6. The following natural persons shall report the occurrences referred to in paragraph 1 through the system established in accordance with paragraph 2 by the organisation which employs, contracts or uses the services of the reporter or, failing that, through the system established in accordance with paragraph 3 [...]

7. The persons listed in paragraph 6 shall report occurrences within 72 hours of becoming aware of the occurrence, unless exceptional circumstances prevent this.

Contexto

ESPAÑA

AEROPUERTOS ESPAÑOLES Y NAVEGACIÓN AÉREA
DIVISIÓN DE INFORMACIÓN AERONÁUTICA
Avda. de Aragón, 402 - Edificio LAMELA
28022 MADRID

AIC

11/14

18-SEP-14

AIS-ESPAÑA

Dirección AFTN: LEANZXTA
Teléfono: +34 913 213 363
Telefax: +34 913 213 157
E-mail: ais@aena.es

Depósito Legal: M.- 23591 - 1994

COMUNICACIONES DE IMPACTOS CON FAUNA A AENA S.A.
COMMUNICATIONS OF WILD STRIKES TO AENA S.A.

1. PROPOSITO

El propósito de esta AIC es establecer un procedimiento adecuado de comunicación entre las compañías y Aena, en relación con las posibles colisiones que puedan acaecer entre las aeronaves y la fauna silvestre existente.

2. PROCEDIMIENTO

Los pilotos comunicarán inmediatamente a ATC las colisiones con fauna.

Además, la compañía se debe asegurar de enviar un informe sobre las colisiones y otros incidentes con fauna al gestor aeroportuario, proporcionando todos los datos que se indican en los formularios del sistema de notificación de los choques con aves de la OACI (IBIS), incluido en el Doc. 9137-AN/898 de la OACI "Manual de Servicios de Aeropuertos", Parte 3, Control y reducción del peligro que representa la fauna silvestre.

Los datos mencionados deben enviarse a
Aena S.A.
E-mail: birdstrike@aena.es

El objeto de estas notificaciones es recopilar información para la mejora de la calidad de los servicios y de la seguridad operacional, independientemente de la notificación obligatoria de

1. PURPOSE

The purpose of this AIC is to establish an appropriate communication procedure between aircraft operators and Aena, regarding the possible collisions which may occur between aircraft and the existing wildlife.

2. PROCEDURE

Pilots will inform ATC immediately about the collisions with fauna.

In addition, the operator must make sure to send a report about the collisions and other incidents with wildlife to the airport management, providing all the data contained in the ICAO Bird Strike Information System (IBIS) reporting forms, included in Doc. 9137-AN/898 of ICAO "Airport Services Manual", Part 3, Wildlife Control and Reduction.

The aforementioned data must be sent to:
Aena S.A.
E-mail: birdstrike@aena.es

The object of these reports is to collect information for the improvement of service quality and operational safety, irrespective of the obligatory notification of occurrences to the re

2. PROCEDIMIENTO

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Además, la compañía se debe asegurar de enviar un informe sobre las colisiones y otros incidentes con fauna al gestor aeroportuario, proporcionando todos los datos que se indican en los formularios del sistema de notificación de los choques con aves de la OACI (IBIS), incluido en el Doc. 9137-AN/898 de la OACI "Manual de Servicios de Aeropuertos", Parte 3, Control y reducción del peligro que representa la fauna silvestre.

Datos analizados: BCN

Período de análisis: **2016-2022**

Colisiones con aves en el recinto aeroportuario (S11): **1.165**

Colisiones con fauna terrestre (S16): **6**

Colisiones con aves en el entorno aeroportuario (S12): **316**

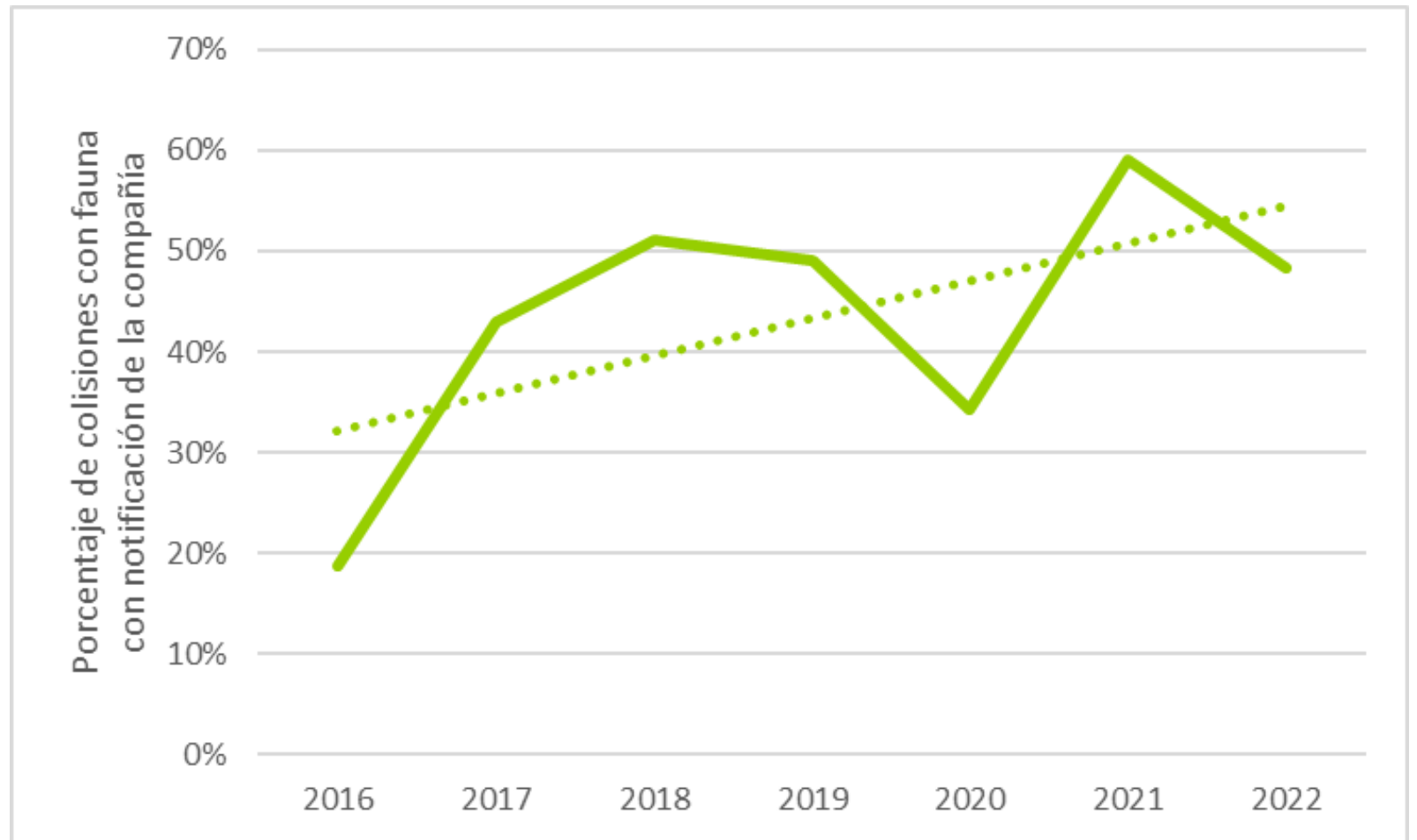
1.487

Aumento global de las notificaciones



43%

Colisiones notificadas
por aerolíneas



Diferencias notables entre compañías

Aerolínea	2016	2017	2018	2019	2020	2021	2022	TOTAL
1	0%	100%	100%	100%		100%	100%	86%
2	18%	90%	86%	64%	50%	75%	95%	72%
3	0%	50%	100%				83%	67%
4	67%	100%			0%	100%	25%	58%
5	26%	53%	67%	64%	53%	70%	69%	58%
6	100%	100%	63%	0%		50%	33%	55%
7	16%	78%	37%	64%	100%	75%	62%	53%
8	17%	83%	75%	50%	33%	29%	27%	41%
9	0%	0%	50%	33%		0%	50%	29%
10	0%	0%	0%	20%	0%	100%	50%	25%
11			0%	0%	0%	100%	29%	25%
12	0%	0%	0%	0%			67%	20%
13	24%	4%	0%	0%	0%	0%	0%	8%
14	0%		0%	0%	0%	33%	9%	8%
15	0%	0%	0%	0%		0%	0%	0%
16	0%	0%	0%	0%	0%		0%	0%
17	0%	0%	0%	0%	0%		0%	0%
18	0%	0%	0%	0%	0%	0%	0%	0%

Como se reportan las notificaciones

Porcentaje más elevado de reportes:

En llegadas vs salidas:	51% (35%)
Fuera del Aeropuerto vs dentro:	76% (34%)
En colisiones con especies no determinadas:	78% (0-38%)
En colisiones con daños vs sin daños:	59% (43%)
En colisiones de mayor severidad (B, peligroso):	63% (0-51%)

Datos que aportan las notificaciones

Altura de impacto.

Velocidad aeronave.

Zona con daños y alcance.

Efectos sobre el vuelo.

Información sobre costes (reparación, tiempo fuera servicio, etc.).*

** En el formulario 2 de información suplementaria*

Cuestiones a debatir

Concienciación de reporte es suficiente?

Facilidad en la notificación de los sucesos.

Utilidad de los datos de los formularios de reporte.

Destino de las notificaciones.



Gracias



Empresa comprometida con los Objetivos de Desarrollo Sostenible (ODS) de Naciones Unidas



AGENDA
2030