

Planning of the ongoing oversight cycle

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Aerodromes inspector's classroom training and on-the-job training
together with review of handbooks and procedures - Bilateral Course

22 – 31 July Myanmar

Your safety is our mission.

An Agency of the European Union 

Oversight

Introduction

Oversight



COMMISSION REGULATION (EU) N.
139/2014
of 12 February 2014
laying down requirements and
administrative procedures related to
aerodromes pursuant to Regulation
(EC) No 216/2008 of the European
Parliament and of the Council



Oversight

Oversight

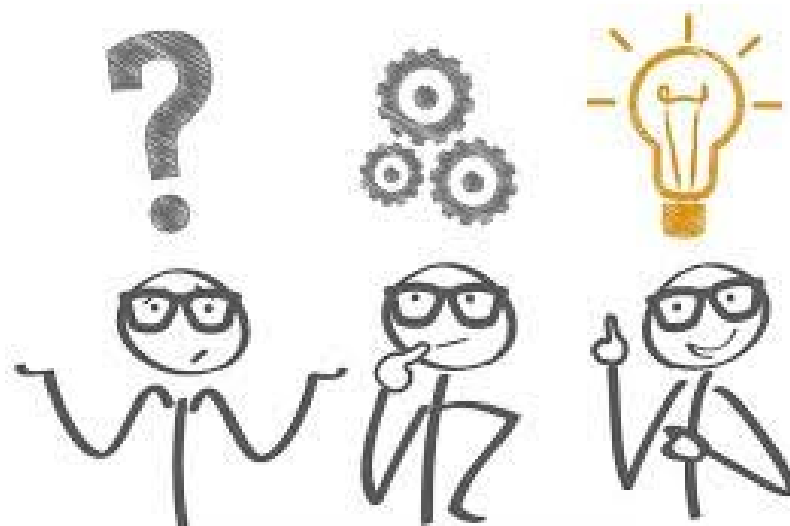
The Competent Authority designated by the Member State in which an aerodrome is located shall be **responsible for** the:



- (a) **certification and oversight** of aerodromes and its aerodrome operators;
- (b) **oversight** of providers of apron management services.

Oversight

Programme and planning cycle



Oversight

Programme and planning cycle

The Competent Authority shall for each aerodrome operator and provider of apron management services:



- (a) establish and maintain an **oversight programme** covering the oversight activities required by ADR.AR.C.005;



Certification basis and applicable requirements

Oversight

Programme and planning cycle

Oversight programme should cover, but not be limited to, items from the following list:

- (1) aerodrome infrastructure and equipment;
- (2) visual aids and aerodrome electrical systems;
- (3) obstacle restriction and control;
- (4) aerodrome data reporting;
- (5) aerodrome emergency planning;
- (6) rescue and firefighting;
- (7) removal of disabled aircraft;
- (8) storage facilities and handling of dangerous goods and fuel, including fuel installations, fuel quality, and fuelling equipment;



Oversight

Programme and planning cycle

- (9) low visibility operations;
- (10) winter and adverse weather operations;
- (11) protection of radar, navigation aids, and other aerodrome equipment;
- (12) apron management;
- (13) apron safety management;
- (14) vehicle control on the movement area;
- (15) wildlife hazard management;
- (16) runway excursion and incursion prevention programmes of the aerodrome operator, as part of the Competent Authority's runway safety programme;
- (17) inspections of the movement area;
- (18) maintenance of the aerodrome systems and the movement area;
- (19) aerodrome works;



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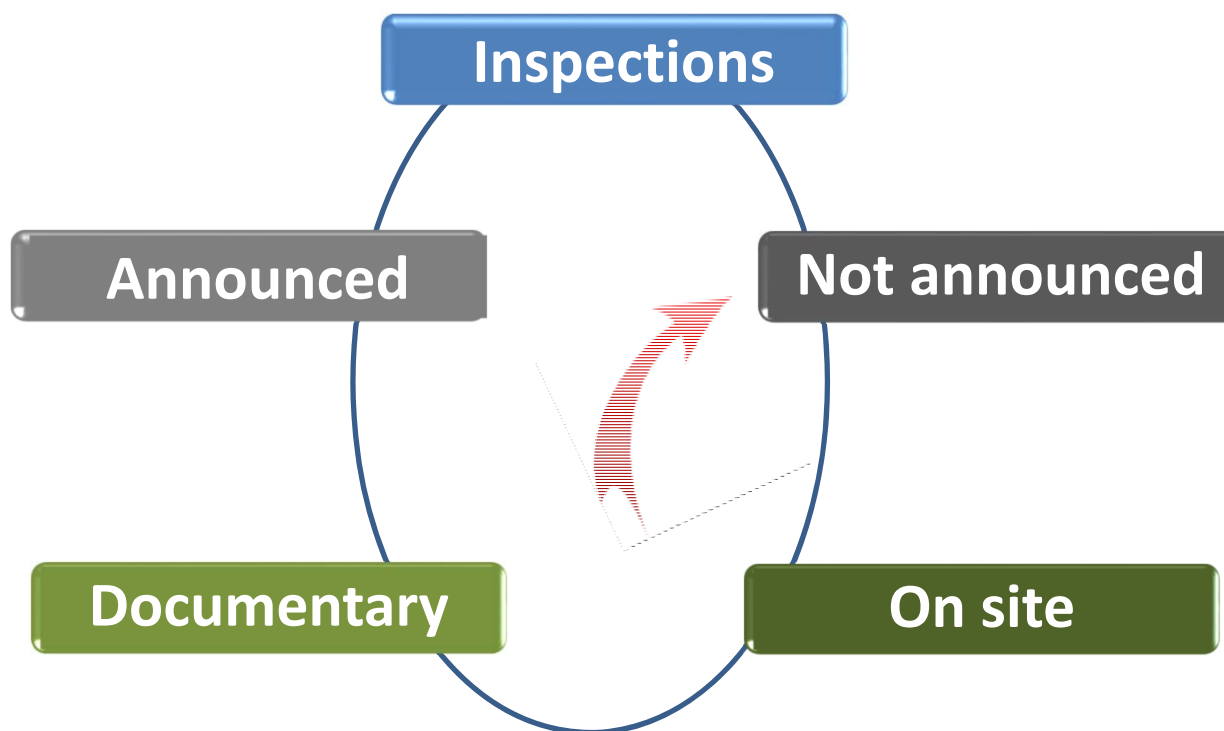
Programme and planning cycle

- (20) protection against hazardous activities in the aerodrome surroundings;
- (21) personnel training and records, including review of training programme on runway excursion and incursion prevention and its implementation;
- (22) aerodrome manuals and documentation;
- (23) operator's management system, including its safety management system and its quality, and security management system for aeronautical data; and
- (24) operator's oversight of the compliance of the organisations operating, or providing services at the aerodrome (third parties).



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Programme and planning cycle



Oversight

Programme and planning cycle



Announced

Not announced

Inspections may, at the discretion of the Competent Authority, be conducted with or without prior notice to the aerodrome operator, or the provider of apron management services.

Normally the inspections that are carried out by the Competent Authority should be with **prior notice** to the aerodrome operator or the provider apron management services.

Such notice should be given **in writing, and in good time before the inspection** so that the inspected entity can make all the necessary arrangements and preparations, and to **avoid the disruption of normal operations**.

In case an inspection is conducted without prior notice (unannounced inspection), the **aerodrome inspectors** should ensure that the **operations are affected to the minimum extent possible**.

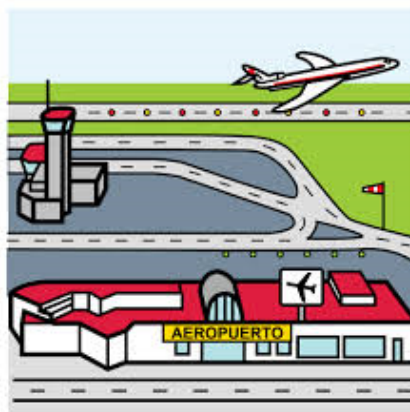
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Programme and planning cycle

Documentary

On site

Audits should include at least one on-site audit within each oversight planning cycle at each aerodrome.



Oversight

Programme and planning cycle

Passengers traffic statistics (2017)

AMC1 ADR.AR.C.010 Oversight programme: Inspections should be on a scale and frequency appropriate to the operation



Aerodrome	ICAO Code	Number of passengers 2017
ADOLFO SUÁREZ MADRID-BARAJAS	LEMD	46.828.279
BARCELONA-EL PRAT	LEBL	39.711.276
PALMA DE MALLORCA	LEPA	23.745.131
MALAGA-COSTA DEL SOL	LEMG	14.404.170
GRAN CANARIA	GCLP	10.627.182
ALICANTE-ELCHE	LEAL	10.574.484
TENERIFE SUR	GCTS	9.117.637
IBIZA	LEIB	6.477.283
LANZAROTE	GCRR	6.124.321
VALENCIA	LEVC	5.051.871
FUERTEVENTURA	GCFV	5.026.902
SEVILLA	LEZL	4.308.852
BILBAO	LEBB	4.277.430
TENERIFE NORTE	GCXO	3.815.315
MENORCA	LEMH	2.867.482
SANTIAGO	LEST	2.296.248
GIRONA	LEGE	1.775.318
ASTURIAS	LEAS	1.119.273
A CORUÑA	LECO	1.025.688
LA PALMA	GCLA	971.676
SEVE BALLESTEROS-SANTANDER	LEXJ	875.920
JEREZ DE LA FRONTERA	LEJR	823.177
VIGO	LEVX	713.563
FGL GRANADA-JAEN	LEGR	707.268
REUS	LERS	705.067
ALMERIA	LEAM	691.488
MELILLA	GEML	317.806
SAN SEBASTIAN	LESO	255.071
PAMPLONA	LEPP	148.710
EL HIERRO	GCHI	146.790
LLEIDA / ALGUAIRE	LEDA	33.237
CASTELLÓN	LECH	22.993
LOGROÑO	LERJ	14.971
VITORIA	LEVT	11.182
BURGOS	LEBG	8.986
HUESCA-PIRINEOS	LEHC	242

Spain

Inspections A ~7
Annual

Inspections B ~28
Biennale

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Programme and planning cycle

	GEN	RS	WIL	AMC(LVP)	VA	OLS	ARF
1A	x		x				x
2A	x			x		x	
3A	x	x					
4A	x				x		
1B	x		x		x		x
3B	x	x		x		x	

GENERAL AREAS: Requirements and Certification Basis (AERODROME MANUAL, SMS, TRAINING, CS, CAP (Corrective Action Plan))

SPECIFIC AREAS: Priority Safety Areas, areas considered in Spain as **safety operational areas**

RS: RUNWAY SAFETY (including incursions and excursions)

WIL: WILDLIFE (including bird strike)

AMC (LVP): ADVERSE METEOROLOGICAL CONDITIONS (including low visibility procedure)

VA: VISUAL AIDS (including airport lighting control and monitoring systems)

OLS: OBSTACLE CONTROL (safeguarding of aerodrome surroundings)

ARF: AIRCRAFT RESCUE AND FIRE FIGHTING

Oversight

Programme and planning cycle

AÑOS 1 - 4: Plan cíclico para aeropuertos CERTIFICADOS 139/2014 de más de 10 millones pax (ANUAL)											
7 AEROPUERTOS											
INSPECCIÓN TIPO 1A (Año 1)			INSPECCIÓN TIPO 2A (Año 2)			INSPECCIÓN TIPO 3A (Año 3)			INSPECCIÓN TIPO 4A (Año 4)		
VIG	CS.V	2	VIG	CS.V	2	VIG	CS.V	2	VIG	CS.V	2
	CS (GEN)	1		CS (OBST)	3		CS (INFR)	4		CS (AVSE)	4
	SMS 1	6		SMS 2	6		SMS 1	6		SMS 2	6
	MAG	12		MAG	12		MAG	12		MAG	12
	FOR	6		FOR	6		FOR	6		FOR	6
	PAC	3		PAC	3		PAC	3		PAC	3
	E.19	0		E.11	2		E.7	3		E.9	3
	E.21	2		E.13	3		E.16	3		E.12	3
	E.28	3		E.24	0		COOR.SNA	2		E.26	2
	E.29	2		E.25	0		COOR.OTR	2		E.27	2
MMP	E.22	10	FAU	E.17+	6	RS	E.8+	12	CE+	E.10+	12
SEI_PEA	E.20+19	12	LVP_CMA	E.23+24+25	12	GP	E.14/E.15	10	SLO	E.18+	6

Oversight

Programme and planning cycle

AÑOS 1 - 4: Plan cíclico para aeropuertos CERTIFICADOS 139/2014 de menos de 10 millones pax (BIENAL)							
28 AEROPUERTOS							
INSPECCIÓN TIPO 1B (Año 1)			AÑO 2	INSPECCIÓN TIPO 3B (Año 3)			AÑO 4
VIG	CS.V	2	SIN INSPECCIÓN	VIG	CS.V	2	SIN INSPECCIÓN
	CS (GEN)	1			CS (INFR)	4	
	CS (AVSE)	4			CS (OBS)	3	
	SMS 1	6			SMS 2	6	
	MAG	12			MAG	12	
	FOR	6			FOR	6	
	PAC	3			PAC	3	
	E.9	3			E.11	2	
	E.7	3			E.13	3	
	E.16	3			E.12	3	
	E.19	0			E.24	0	
	E.21	2			E.25	0	
	E.26	2			E.27	2	
	E.28	3			COOR.SNA	2	
E.29	2	COOR.OTR	2				
MMP	E.22	10	FAU	E.17+	6		
SEI_PEA	E.20+19	12	LVP_CMA	E.23+24+25	12		
RS	E.8+	12	CE	E.10+	12		
GP	E.14/E.15	10	SLO	E.18+	6		

Oversight

Programme and planning cycle

The Programme shall be insert in the Oversight Planning Cycle

The Oversight Planning Cycle is a time period in which continued compliance is verified. This period should not exceed 48 months.



AIRPORT	OVERSIGHT PROGRAMME (TYPE A)							
	2015	2016	2017	2018	2019	2020	2021	2022
Barcelona - El Prat		CERT	1A	2A	3A	4A	2A	3A
Asturias			CERT	1B		2B		1B

Oversight

Programme and planning cycle

Aeropuerto	Planificación inspecciones Plan Cíclico (Continuous oversight)						Observaciones
	2016	2017	2018	2019	2020	2021	
A Coruña (LECO)			FAU (*)	1B		3B	(*) Especifica Fauna
Alicante (LEAL)	VIG (4A)+ CE		3A	4A	1A	2A	
Almería (LEAM)				3B		1B	
Asturias (LEAS)	VIG (1B)+FAU+SSEI+CE			1B		3B	
Barcelona (LEBB)			4A	1A	2A	3A	
Bilbao (LEBB)	VIG (7B)+RS+SLO+LVP	FAU doc + in situ	1B (*)		3B		(*) Se realiza 1B + tipología CE
Burgos (LEBG)	VIG(1B)+FAU+SSEI+CE+MMP			3B		1B	
Castellón (LECH)			3B (*)		1B		(*) Se realiza 3B + tipología RS
El Hierro (GCHI)			1B		3B		
Fuerteventura (GCFV)			1B		3B		
Girona-Costa Brava (LEGE)	VIG (3B) +RS+SLO+LVP+GP			1B		3B	
Gran Canaria (GCLP)			2A	3A	4A	1A	
Granada-Jaén (LEGR)				1B		3B	
Ibiza (LEIB)		GP	1B		3B		
Jerez (LEJR)				1B		3B	
La Palma (GCLA)	FAU doc + in situ		1B		3B		
Lanzarote (GCRR)			3B		1B		
Lleida (LEDA)			1B		3B		
Logroño (LERJ)		VIG(1B)+SEI_PEA+FAU+CE+MMP		1B (*)		3B	(*) Se realiza 1B + tipología LVP
Madrid (LEMD)		FAU doc + in situ	3A	4A	1A	2A	
Málaga (LEMG)			2A	3A	4A	1A	
Melilla (GEML)			1B		3B		
Menorca (LEMH)	VIG (3B) +RS+SLO+LVP		1B (*)	FAU (**)	3B		(*) Se realiza 1B + tipologías CE ; (**) Especifica Fauna
Palma de Mallorca (LEPA)			1A	2A	3A	4A	
Pamplona (LEPP)		FAU doc + in situ		3B		1B	
Reus (LERS)	VIG (7B)+RS+SLO+LVP	FAU doc + in situ	3B (*)		1B		(*) Se realiza 3B - (tipología FAU) + (tipologías MMP, RS, GP, GP)
San Sebastián (LESO)	FAU doc + in situ			1B		3B	
Santander (LEXJ)		GP	3B		1B		
Santiago (LEST)			3B (*)	FAU (**)	1B		(*) Se realiza 3B - (tipología FAU) ; (**) Especifica Fauna
Sevilla (LEZL)	VIG (1B)+SEI+FAU+CE		3B (*)		1B		(*) Se realiza 3B - (tipología FAU) + (tipologías MMP, RS, GP)
Tenerife Norte (GEXO)			3B (*)		1B		(*) No anunciada RS + Usos operacionales
Tenerife Sur (GCTS)	VIG (1B)+SEI+FAU+CE		1A	2A	3A	4A	
Valencia (LEVC)				3B		1B	
Vigo (LEVX)				3B		1B	
Vitoria (LEVT)		VIG(1B)+SEI_PEA+FAU+CE+MMP		1B (*)		3B	(*) Se realiza 1B + tipología LVP

Oversight

Programme and planning cycle

Oversight Plan (2015-2022)

Average of airports that are inspected every year: **21**



AEROPUERTO	INSPECCIÓN							
	2015	2016	2017	2018	2019	2020	2021	2022
Barcelona - El Prat	1A	RECERT	2A	3A	4A	1A	2A	3A
Gran Canaria	CERT	1A	2A	3A	4A	1A	2A	3A
Madrid - Barajas	2A	RECERT	3A	4A	1A	2A	3A	4A
Málaga - Costa del Sol	3A	RECERT	4A	1A	2A	3A	4A	1A
Palma de Mallorca	4A	RECERT	1A	2A	3A	4A	1A	2A
A Coruña		CERT		5B		7B		1B
Alicante	3B		CERT		7B		1B	
Almería	5B		CERT		1B		3B	
Asturias		CERT	1B		3B		5B	
Bilbao	CERT	7B		1B		3B		5B
Burgos		1B	CERT		3B		5B	
Córdoba		7B		1B		3B		5B
El Hierro	1B		CERT		3B		5B	
Fuerteventura	5B		CERT		7B		1B	
Granada - Jaén		CERT	5B		7B		1B	
Gerona - Costa Brava		3B	CERT		5B		7B	
Huesca - Pirineos		CERT		7B		1B		3B
Ibiza	1B	CERT		3B		5B		7B
Jerez		CERT	3B		5B		7B	
La Gomera		CERT		3B		5B		7B
La Palma	3B	CERT		5B		7B		1B
Lanzarote	1B	CERT		1B		3B		5B
Logroño - Agoncillo	CERT		5B		7B		1B	
Madrid - Cuatro Vientos	7B		1B		3B		5B	
Melilla	1B		CERT		3B		5B	
Menorca	CERT		3B		5B		7B	
Pamplona	CERT		1B		3B		5B	
Reus	CERT		7B		1B		3B	
Sabadell		3B		5B		7B		1B
San Sebastián	CERT	5B		7B		1B		3B
Santander	CERT		3B		5B		7B	
Santiago de Compostela	5B	CERT		7B		1B		3B
Sevilla	CERT	1B		3B		5B		7B
Son Bonet (Mallorca)		5B		7B		1B		3B
Tenerife Norte		CERT	5B		7B		1B	
Tenerife Sur	CERT	1B		3B		5B		7B
Valencia		1B	CERT		3B		5B	
Vigo		CERT		3B		5B		7B
Vitoria	CERT		1B		3B		5B	
Zaragoza		CERT	5B		7B		1B	
Castellón		5B		7B		1B		3B
Lleida	5B			7B		1B		3B
Murcia		1B		3B		5B		7B
Teruel		7B		1B		3B		5B
Algeciras		CERT		1B		3B		5B
Ceuta		3B	CERT		5B		7B	
La Seu D'Urgell		5B		7B		1B		3B

Oversight

Programme and planning cycle

Annual Calendar

The Competent Authority should be able to monitor dates when audits and inspections are due, and when they have been carried out

 CALENDARIO ANUAL DE INSPECCIONES 2018 DE LA DSOA		CSA-18-INF 255
DOCUMENTACIÓN INTERNA		Edición 1.0
		DSACPU
		PS-DAN-INSP-01

INFORME

CALENDARIO ANUAL DE INSPECCIONES 2018 DE LA DSOA

	RESPONSABLE	FIRMA	CARGO
Revisión:	Adrián Muelas Gil		Jefe del Servicio de Operaciones y Coordinación de Aeródromos
	Iraia Irazabal Remuiñán		Jefa del Servicio de Infraestructuras y Mantenimiento de Aeródromos
Conformidad:	Ruth Herrero Martín P.A. EL COORDINADOR DE SEGURIDAD DE AEROPUERTOS		Jefa de la División de Seguridad Operacional de Aeródromos
Aprobación:	Juan Luis Maestre Martínez		Coordinador de Seguridad de Aeropuertos

Oversight

Programme and planning cycle

Planned inspections

- Annual inspection for aerodromes with more than 10 million passengers (7 aerodromes **Type A**)
- Biennial inspection for aerodromes with less than 10 million passengers (42 aerodromes **Type B**)

1st distinctions are made considering the risk exposure related to airport activity, such as traffic volume, type of aircraft or physical characteristics of the aerodrome AMC 1 ADR.AR.C.010(b), (c)-(c)-6

- 90% Announced, and 10% not announced-ADR.AR.C.005 (b)

Not planned inspections

- We can afford a 10% of non planned inspections per year (unexpected situations).

Oversight

Programme and planning cycle

The Programme shall include interfaces:



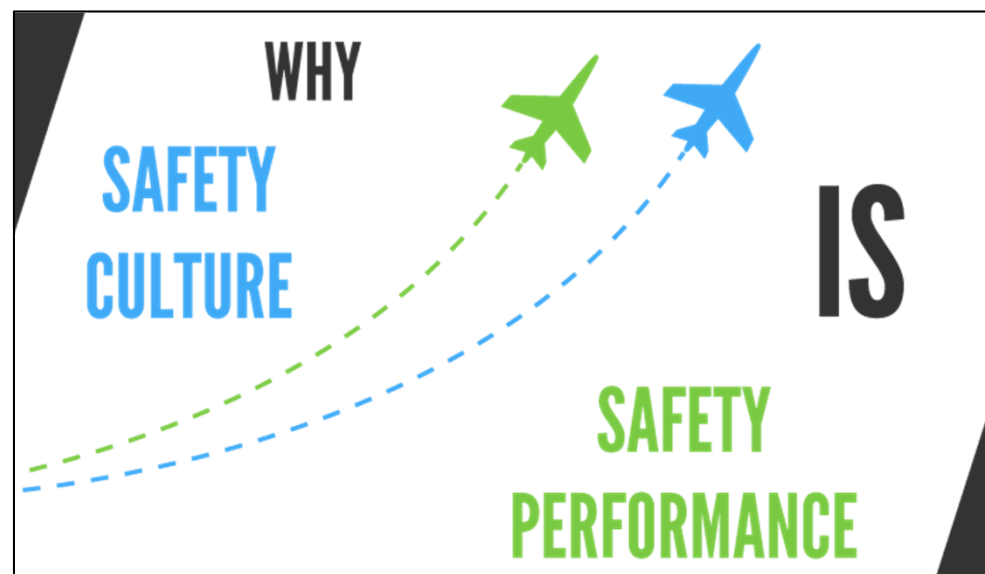
Inspections and audits may be conducted separately or in combination.

Inspections and audits may also be **coordinated** with inspections and audits conducted by the competent authorities responsible for other areas, to address areas of coordination between aerodrome operator and the providers of other services (e.g. ATM/ANS).

Joint audits with competent authorities for other areas should also be performed because they are particularly effective to examine the interfaces between different actors at the aerodrome (e.g. airport and ATC), including the prevention of runway excursions and incursions.

Oversight

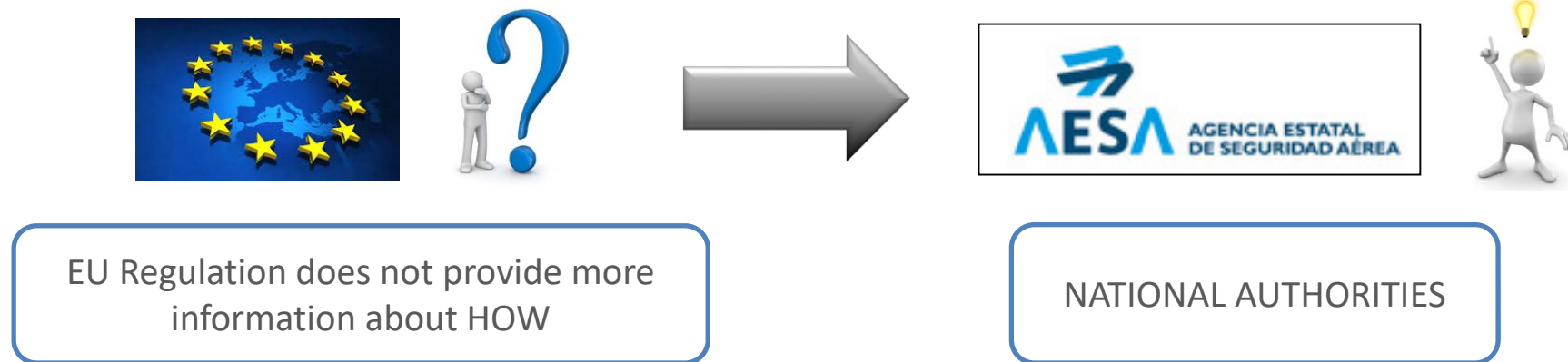
Safety performance



Oversight

Safety performance

How can the oversight programme and planning cycle reflect the safety performance of the aerodrome operator and risk exposure of the aerodrome?



Oversight

Safety performance

The “PREVENTIVE APPROACH METHOD” has two main goals:

1. At inspection level: provide safety information to **nurture** the oversight programme, and the inspectors can **focus the oversight to the risk exposure**.
2. At strategic level: provide information to senior management and technical managers to follow up the most important safety concerns of the aerodromes, and high level decisions can be taken (as change the oversight plan).

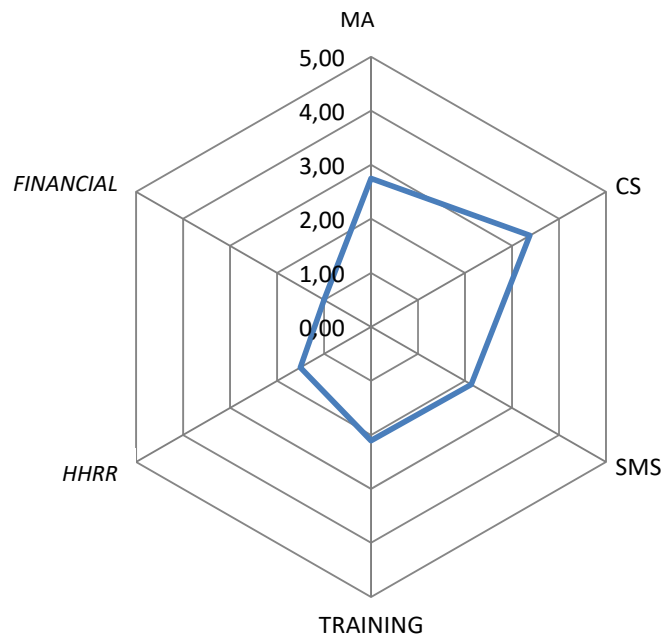


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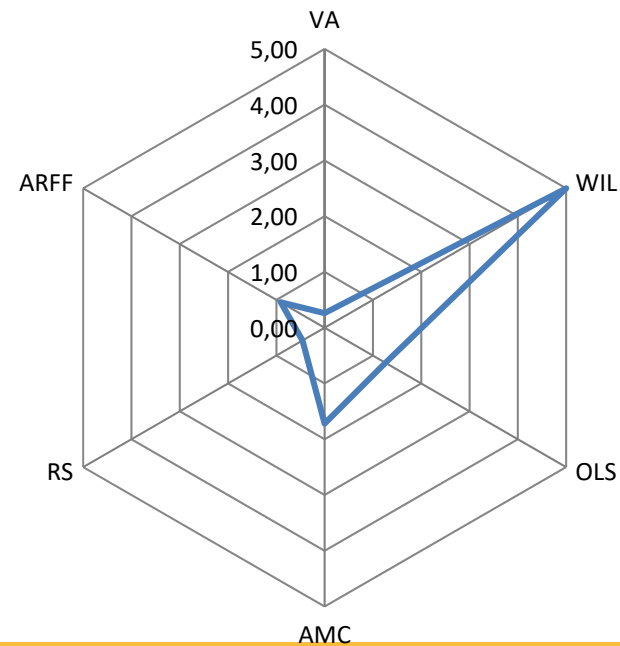
Safety performance

1. Preventive approach method at inspection level

GENERAL AREAS



SPECIFIC AREAS



Oversight

Safety performance

1. Preventive approach method at inspection level

Is a mathematically complicated method. Each area is monitorized by an indicator, which contains information from different sources.

Example: **Runway safety (RS) indicator**

$$I_{ap}^{RS} = \frac{P_{QN} \cdot i_{QN}^{RS} + P_{QL} \cdot i_{QL}^{RS}}{P_{QN} + P_{QL}} + \sum_{inspe} \frac{Def_{no\ sub} \cdot 5 \cdot C_{\tilde{n}}}{Def_{verif\ PAC}} + \frac{\sum Coef_{QSev} \cdot P_{Coef_{tiempo}}}{\sum Coef_{operaciones}}$$

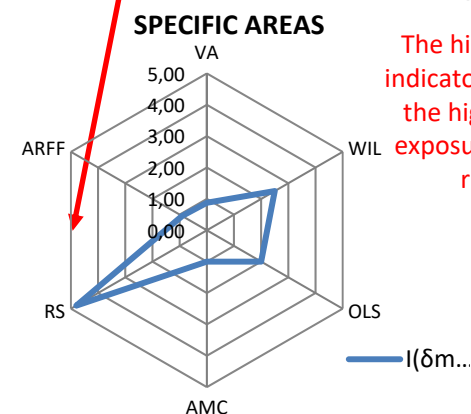
Findings
(Information from previous inspections)

Corrective Action Plan
(How it is carried out by the aerodrome operator)

Data from disidentified occurrence statistics
(Regulation (EU) No 376/2014)



i		SPECIFIC AREAS					
C2013	C2014	VA	RS	OLS	AMC	WIL	ARFF
1	1,5	i _{QN}	i _{QN}	i _{QN}	i _{QN}	i _{QN}	i _{QN}
GCGM		0,23	0,35	1,67	1,03	1,33	0,00
GCLA		0,88	5,00	2,00	1,06	2,50	0,99
GCLP		0,50	2,42	0,69	0,66	1,75	1,67
GCTS		2,02	0,21	0,38	1,33	3,88	1,97
GCXO		-	0,31	-	3,44	-	-



Oversight

Safety performance

1. Preventive approach method at inspection level

EXAMPLE: Ongoing oversight of Barcelona-El Prat Airport 2017: **3A**

Result of the method: Runway safety (RS) indicator is too high

2 situations may occur:

- An extra inspection is NOT required:

3A with necessary changes

- An extra inspection is required:

3A + extra not planned inspection



Oversight

Safety performance

2. Preventive approach method at strategic level

The Committee of the Preventive Approach Methodology

Airports are compared by specific areas
+
Analysis
+
Actions (if required)

4 meetings per year

1 meeting (jan-mar)

2 meeting (abr-jun)

3 meeting (jul-sep)

4 meeting (oct-dic)

ALL THE INFORMATION: REVIEW THE OVERSIGHT PLAN FOR THE NEXT YEAR

AEROPUERTOS DE PRIORIDAD 1 POR ÁREA DE RIESGO Y GRUPO							
GRUPO	GENERAL SUCECOS	VA	WIL	OL	AM	RS	ARFF
I	LEMD LEBL	LEBL	---	S	C	LEMD	LEMD
II	LEZL LEIB GCLP	GCMO	LEIB LECU	LEZL LEIB	LEBB GCTS	LEZL GCLP	LEIB LEBB
III	LEAM LERS	---	LERS	---	GCLA	---	---
IV	LEPP	LEVT	LEPP	---	---	---	---
V	---	GCGM	---	---	---	---	---

Oversight



Thank you for your attention!

easa.europa.eu/connect



Your safety is our mission.

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