



GOBIERNO
DE ESPAÑA

MINISTERIO
DE FOMENTO



Cambios Normativos

M^a Cristina Hernández Martín & Javier Cabrera Espinós
Madrid, 19 de junio de 2019



Mª Cristina Hernández Martín

- Jefa de División de Aprobaciones y Estandarización de Aeronavegabilidad.

Fco. Javier Cabrera Espinós

- Inspector de Procesos Aeronáuticos y Certificación (OSV nº3).

- 1.- INTRODUCCIÓN**
- 2.- REGLAMENTO BASE 2018/1139**
- 3.- REGLAMENTO 2019/XXX**
- 4.- IMPLEMENTACIÓN**



- 1.- INTRODUCCIÓN**
- 2.- REGLAMENTO BASE 2018/1139**
- 3.- REGLAMENTO 2019/XXX**
- 4.- IMPLEMENTACIÓN**





NORMATIVA
AERONAVEGABILIDAD

ESTADO
ACTUAL

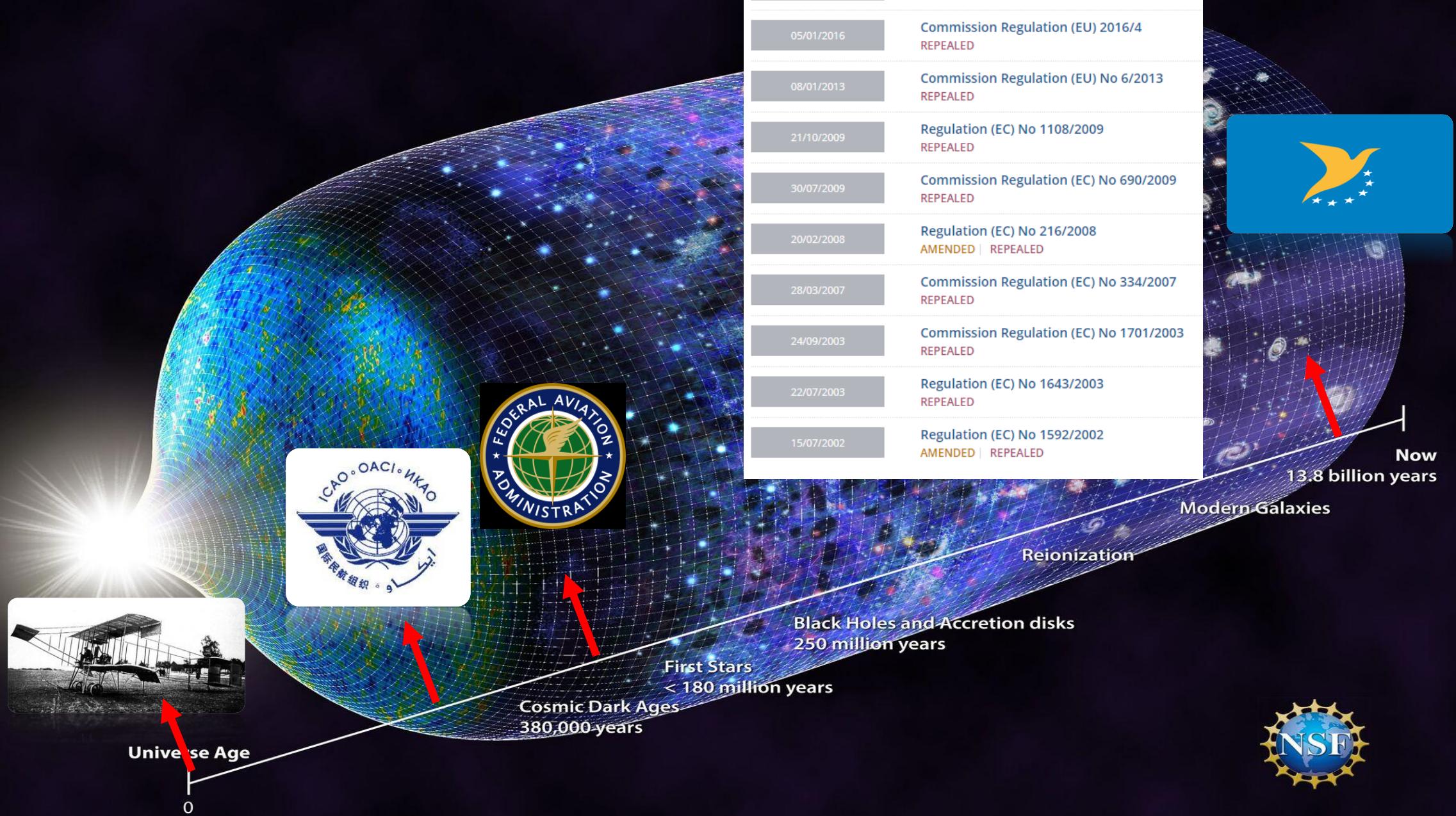
DESARROLLO
FUTURO



NORMATIVA
AERONAVEGABILIDAD

ESTADO
ACTUAL

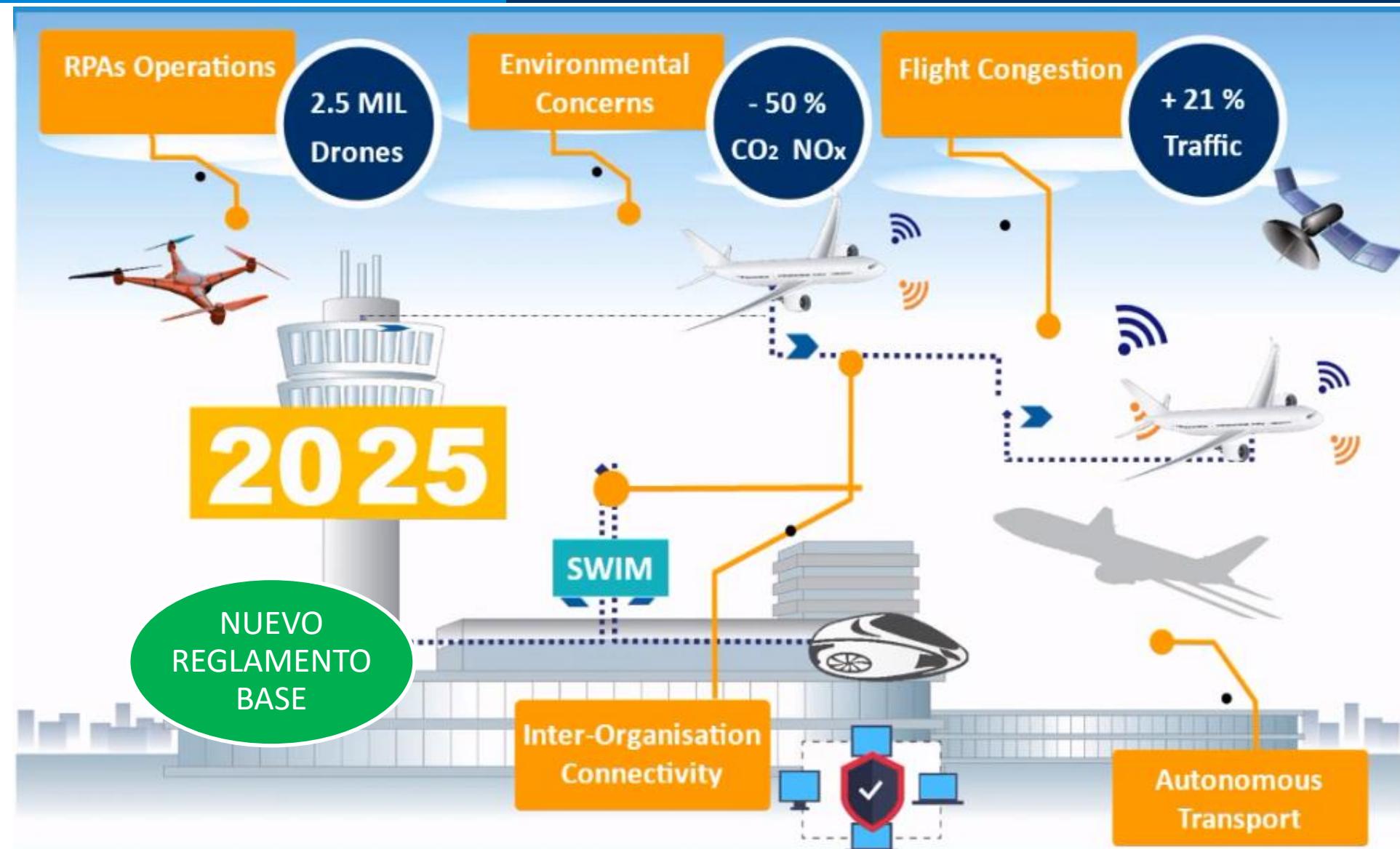
DESARROLLO
FUTURO

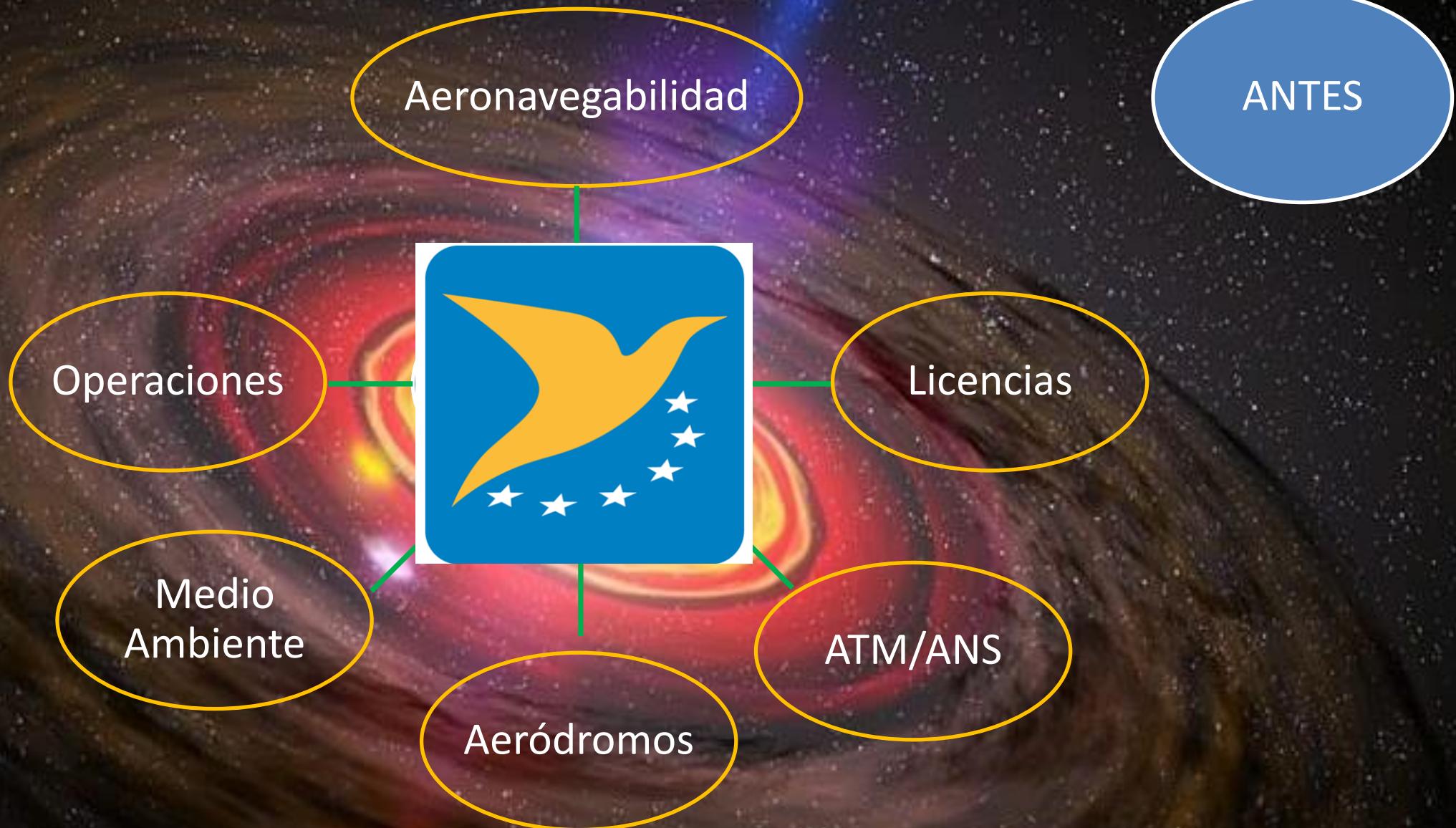


- 1.- INTRODUCCIÓN**
- 2.- REGLAMENTO BASE 2018/1139**
- 3.- REGLAMENTO 2019/XXX**
- 4.- IMPLEMENTACIÓN**











NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

OBJETIVOS



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

- Mejorar el uso de los recursos limitados



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

- Mejorar el uso de los recursos limitados
- **Performance Based System**



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

- Mejorar el uso de los recursos limitados
- Performance Based System
- **Cerrar huecos e inconsistencias normativas**



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

- Mejorar el uso de los recursos limitados
- Performance Based System
- Cerrar huecos e inconsistencias normativas
- Mejorar gestión EASA



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

- Mejorar el uso de los recursos limitados



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

• Performance Based System



- Reforzar análisis de riesgos.
- Flexibilidad regulatoria para Aviación General.
- Safety Management System a nivel Europeo y autoridades nacionales.
- Flexibilidad en el alcance regulatorio (OPT-IN; OPT-OUT)



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

- **Cerrar huecos e inconsistencias normativas**



- Marco único regulatorio
“Unmanned Aircraft”
- Estandares de Seguridad
“Ground Handling”
- Ciber-seguridad.
- Legislación medioambiental.



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

- Mejorar Gestión EASA



- Flexibilidad financiera
- Flexibilidad contratación
- Apoyo a otras instituciones



NUEVO
REGLAMENTO
BASE

REGULATION (EU) 2018/1139 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
of 4 July 2018

AERONAVEGABILIDAD.

- **Diseño de productos:**
 - Certificados de conformidad
 - Certificado de tipo separado para motores y hélices
 - Specific Airworthiness Certifications (SAC)
- **Aeronaves: Certificado de ruido**





NORMATIVA
AERONAVEGABILIDAD

ESTADO
ACTUAL

DESARROLLO
FUTURO



- 1.- INTRODUCCIÓN**
- 2.- REGLAMENTO BASE 2018/1139**
- 3.- REGLAMENTO 2019/XXX**
- 4.- IMPLEMENTACIÓN**



NEW!

3.- REGLAMENTO 2019/XXX

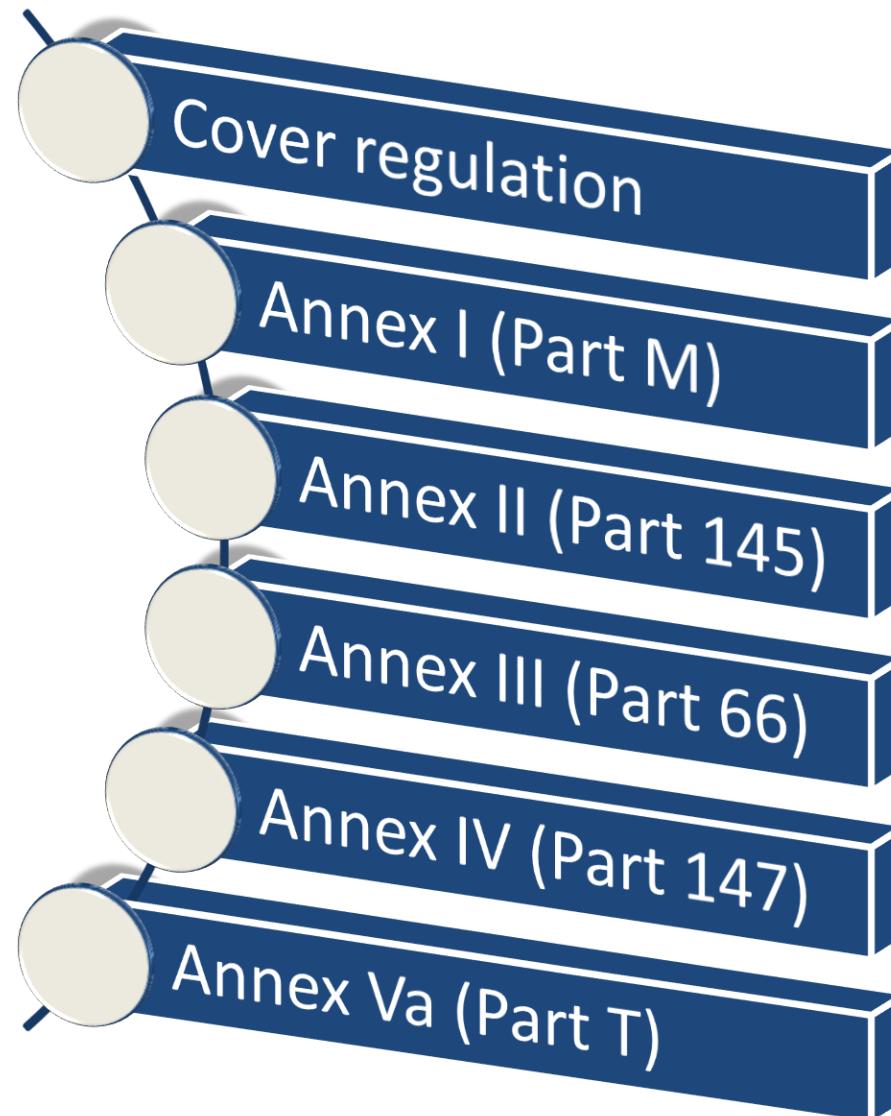
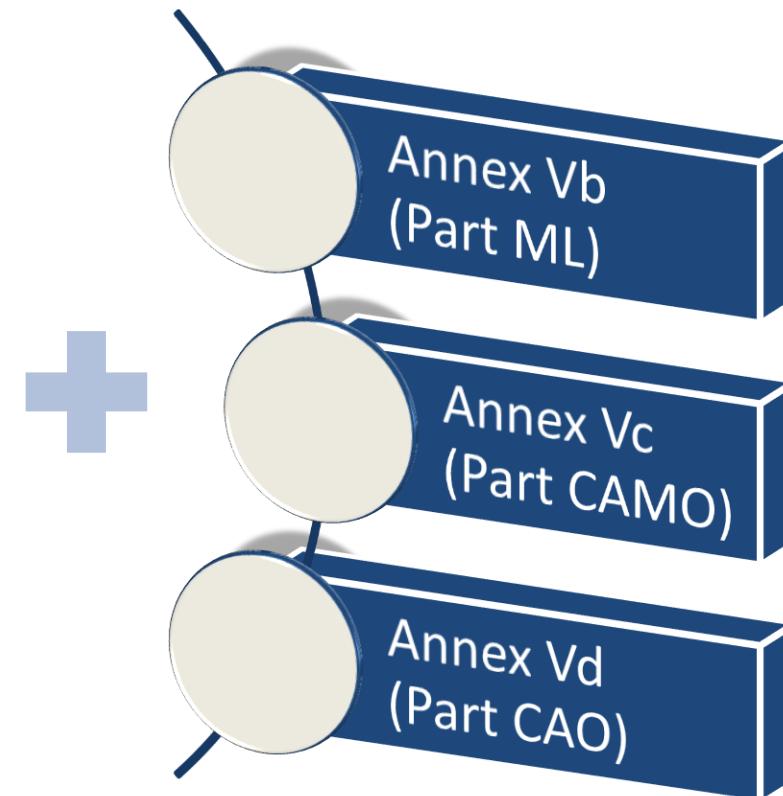
ANNEX

to the

COMMISSION IMPLEMENTING REGULATION

amending and correcting Regulation (EU) No 1321/2014 as regards safety management systems in continuing airworthiness management organisations and alleviations for general aviation aircraft concerning maintenance and continuing airworthiness management



Regulation (EU) No 1321/2014New! Regulation (EU) No 2019/XXX

Simplified representation	Non-'Licenced Air Carrier'						'Licenced Air Carrier' ¹			
	Non-commercial			Commercial ²						
	Non-CMPA		CMPA	Non-CMPA		CMPA				
	Light ⁴	Non-Light		Light	Non-Light					
	Part-M (Annex I)		N/A	Part-M Mandatory		N/A	Part-M Mandatory			
Part-ML (Annex Vb)		Part-ML Mandatory	N/A		Part-ML Mandatory	N/A				
Part-CAMO (SMS) (Annex Vc)		Individual CAM ⁵ or CAO-CAM or CAMO	Part-CAMO Mandatory	CAO-CAM ⁶ or CAMO		Part-CAMO Mandatory				
Part-CAO (no SMS) (Annex Vd)	for CA management (CAO-CAM)			N/A	CAO-M or Part-145		N/A			
	for Maintenance (CAO-M)	Individual maintenance ⁷ or CAO-M ⁸ or Part-145	Part-145 Mandatory	N/A	Part-145 Mandatory		N/A			
Part-145 (SMS to come) (Annex II)						Part-145 Mandatory				

¹ Licenced Air Carrier in accordance with Reg. (EC) No 1008/2008² Commercial = aircraft operated under Subpart-ADD of Part-BOP or Subpart-DEC of Part-SAO or aircraft, other than sailplane and balloon, not operated under Part-NCO; includes commercial ATO and commercial DTO³ CMPA = Complex motor-powered aircraft, ref. Article 3(j) of Reg. (EC) No 216/2008⁴ Light a/c = Aeroplanes up to 2730 Kg MTOM, helicopters up to 1200 Kg MTOM / max 4 occupants, and other ELA2 aircraft⁵ Individual CAM = continuing airworthiness of the a/c managed by the owner under its own responsibility⁶ CAO-CAM = Part-CAO organisation with continuing airworthiness management privilege⁷ Individual maintenance = maintenance released by pilot-owner or independent Certifying Staff⁸ CAO-M = Part-CAO organisation with maintenance privilege

RESPECTO
NORMATIVARESPECTO
ORGANIZACIONES

RESPECTO TAREAS

**PART
M****PART
CAMO****PROG.
MTTO.****PART
ML****PART
145****REV.
AERONAVE-
GABILIDAD****PART
CAO****CERTIFI-
CACIÓN
MTTO.**~~SUBPART
G~~~~SUBPART
F~~INDIVIDUAL
CAM/MAINTENANCE

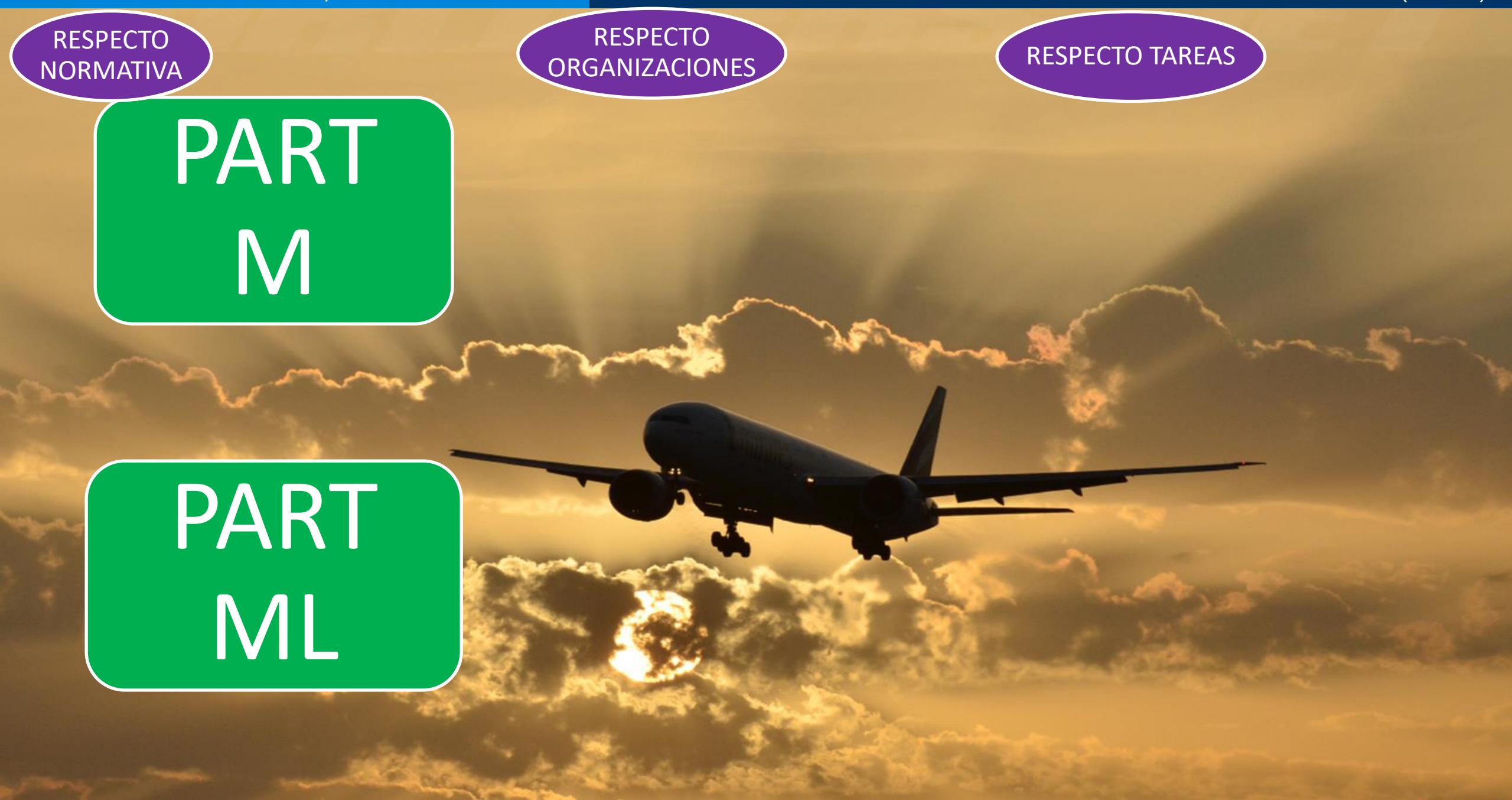
RESPECTO
NORMATIVA

RESPECTO
ORGANIZACIONES

RESPECTO TAREAS

PART
M

PART
ML



New! Regulation (EU) No 2019/XXX

3.1 ANEXO Vb (PART ML)





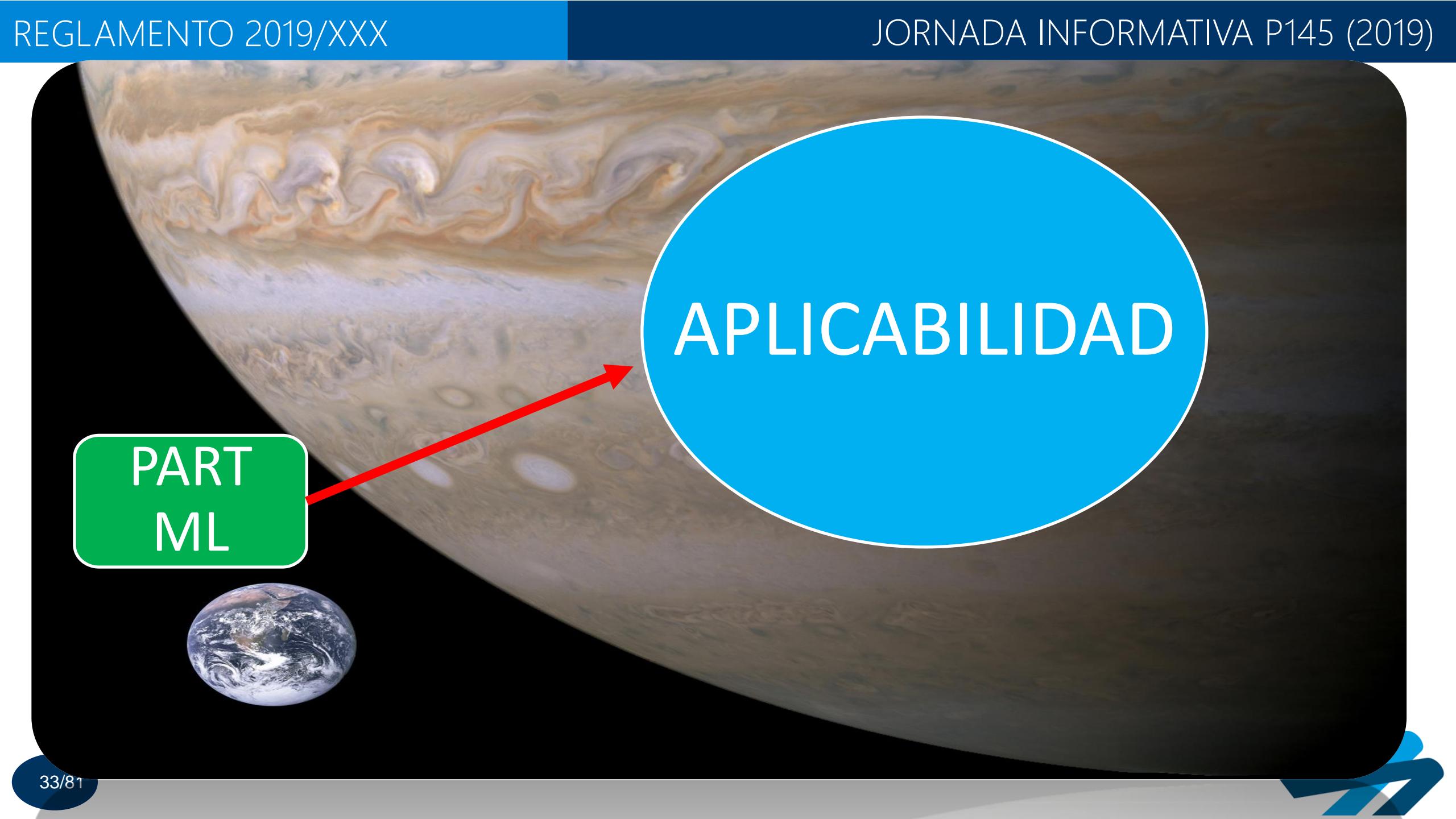
VENTAJAS PART-ML

- Simple de comprender
- No requiere aprobación del Programa de Mantenimiento por parte de la Autoridad Nacional. Se aceptan posibles desviaciones respecto recomendaciones del Fabricante.
- Revisiones de Aeronavegabilidad pueden ser efectuadas por organizaciones de mantenimiento (junto revisión 100h/anual) o por Personal certificador independiente.
- El piloto puede diferir ciertos defectos sin necesidad de personal certificador.

DESVENTAJAS

- **Parte-ML es la única opción para esta categoría de aeronaves.** (No pueden usar Parte-M)
- **El resto de aeronaves obligatoriamente Parte-M**
- **Si una aeronave pasa de Parte ML a Parte M** (porque cambia de operación):
 - **Programa de mantenimiento aprobado por la autoridad competente.** Puede ser necesario mtto. adicional.
 - **Revisión de aeronavegabilidad (CAMO o autoridad competente) y nuevo ARC**





A large, semi-transparent circular overlay containing the text "APLICABILIDAD" in white capital letters is positioned over the upper right portion of the Jupiter image. A green rounded rectangle labeled "PART ML" is located in the lower left foreground, with a red arrow pointing from it towards the "APLICABILIDAD" circle.

PART
ML

APLICABILIDAD



RESPECTO
NORMATIVA

PART ML

NO TAC
+
NO CMPA
+
LIGHT AIRCRAFT



RESPECTO
NORMATIVA

PART ML

not listed in the air operator certificate of an air carrier licensed in accordance with Regulation (EC) No 1008/2008:

NO TAC

+

NO CMPA

+

LIGHT AIRCRAFT



RESPECTO
NORMATIVA

PART ML

not listed in the air operator certificate of an air carrier licensed in accordance with Regulation (EC) No 1008/2008:

NO TAC
+
NO CMPA —————→
+
LIGHT AIRCRAFT

“complex motor-powered aircraft” shall mean:

(i) an aeroplane:

- with a maximum certificated take-off mass exceeding 5700 kg, or
- certificated for a maximum passenger seating configuration of more than nineteen, or
- certificated for operation with a minimum crew of at least two pilots, or
- equipped with (a) turbojet engine(s) or more than one turboprop engine, or

(ii) a helicopter certificated:

- for a maximum take-off mass exceeding 3175 kg, or
- for a maximum passenger seating configuration of more than nine, or
- for operation with a minimum crew of at least two pilots, or

(iii) a tilt rotor aircraft;”



RESPECTO
NORMATIVA

PART ML

NO TAC
+
NO CMPA
+
LIGHT AIRCRAFT

'ELA2 aircraft' means the following manned European Light Aircraft:

1. an aeroplane with a Maximum Take-off Mass (MTOM) of 2000 kg or less that is not classified as complex motor-powered aircraft;
2. a sailplane or powered sailplane of 2000 kg MTOM or less;
3. a balloon;
4. a Very Light Rotorcraft with a MTOM not exceeding 600 kg which is of a simple design, designed to carry not more than two occupants, not powered by turbine and/or rocket engines; restricted to VFR day operations."

not listed in the air operator certificate of an air carrier licensed in accordance with Regulation (EC) No 1008/2008:

"complex motor-powered aircraft' shall mean:

(i) an aeroplane:

- with a maximum certificated take-off mass exceeding 5700 kg, or
- certificated for a maximum passenger seating configuration of more than nineteen, or
- certificated for operation with a minimum crew of at least two pilots, or
- equipped with (a) turbojet engine(s) or more than one turboprop engine, or

(ii) a helicopter certificated:

- for a maximum take-off mass exceeding 3175 kg, or
- for a maximum passenger seating configuration of more than nine, or
- for operation with a minimum crew of at least two pilots, or

(iii) a tilt rotor aircraft;"

- (1) **aeroplanes of 2 730 kg maximum take-off mass (MTOM) or less;**
- (2) **rotorcraft of 1 200 kg MTOM or less, certified for a maximum of up to 4 occupants;**
- (3) **other ELA2 aircraft.**

RESPECTO
NORMATIVA

PART
ML

PART
M

- RESTO DE AERONAVES Y TIPOS DE OPERACIÓN.

- NO TAC
- < 2730 kg
- < 19 PAX
- 1 PILOTO
- NO REACTOR NI + DE 1 TURBOPROP

- NO TAC
- < 1200 kg
- < 4 PAX

- OTROS ELA 2

*ANNEX Vb (Part-ML)***SECTION A — TECHNICAL REQUIREMENTS**

SUBPART A — GENERAL

SUBPART B — ACCOUNTABILITY

SUBPART C — CONTINUING AIRWORTHINESS

SUBPART D — MAINTENANCE STANDARDS

SUBPART E — COMPONENTS

SUBPART H — CERTIFICATE OF RELEASE TO SERVICE (CRS)

SUBPART I — AIRWORTHINESS REVIEW CERTIFICATE (ARC)

SECTION B — PROCEDURE FOR COMPETENT AUTHORITIES

SUBPART A — GENERAL

SUBPART B — ACCOUNTABILITY

SUBPART C — CONTINUING AIRWORTHINESS

SUBPART I — AIRWORTHINESS REVIEW CERTIFICATE (ARC)



Declaración/aprobación P. MTTO. (no aprobado por autoridad competente)

- **P.M. incluirá:**
 - **MIP** (programa de inspección mínimo)
 - **ICA** (instrucciones de aeronavegabilidad continuada del fabricante)
- **P.M. puede incluir:**
 - **Acciones de mantenimiento adicionales** (Recomendaciones como TBO o según requerimientos especiales u operacionales, altímetro, brújula, transponder)
 - **Acciones de mantenimiento alternativas** a las propuestas por el fabricante (no menos restrictivas que MIP tales como desviaciones o exenciones)



Declaración/aprobación P. MTTO. (no aprobado por autoridad competente)

- Aeronaves gestionadas por CAMO/CAO (**mandatorio para operaciones comerciales**):
 - CAMO/CAO aprueba el PM.
 - Justificaciones de las desviaciones a las recomendaciones del fabricante.
- Aeronaves NO gestionadas por CAMO/CAO (**operaciones no comerciales**):
 - El dueño declara el PM.
 - No es necesario aportar justificaciones de las desviaciones a las recomendaciones del fabricante.



REVISIÓN DE AERONAVEGABILIDAD.

- Personal certificador independiente puede emitir ARC junto inspección 100h/anual (**operaciones no comerciales**)
 - Autorización emitida por Autoridad competente (el que emitió Lic. P66 o cualificación nacional) tras
 - Evaluar conocimientos R.A. y PART –ML
 - 1 R.A. bajo supervisión.
 - Autorización válida durante 5 años.
 - Autorización válida para todos estados miembros si se basa en licencia Parte 66 (si cualificación nacional, sólo emite ARC en aeronaves de ese país).



REVISIÓN DE AERONAVEGABILIDAD.

- **FORM 15c**
- **Formato figura en PARTE ML.**
- **El reverso puede utilizarse para expedir el CRS de la inspección 100hrs/anual**

Appendix IV

Airworthiness Review Certificate - EASA Form 15c

FORM 15c

NOTE: persons and organisations performing the airworthiness review in combination with the 100-h/annual inspection may use the reverse side of this form in order to issue the CRS referred to in point ML.A.801 corresponding to the 100-h/annual inspection.

AIRWORTHINESS REVIEW CERTIFICATE (ARC) (for aircraft complying with Annex Vb (Part-ML))

ARC reference:

Pursuant to Regulation (EC) 2018/1139 of the European Parliament and of the Council:

[NAME OF THE COMPETENT AUTHORITY]

[NAME OF APPROVED ORGANISATION, ADDRESS and APPROVAL REFERENCE]

[FULL NAME OF THE CERTIFYING STAFF AND PART-66 LICENCE NUMBER (OR NATIONAL EQUIVALENT)]

hereby certifies that it has performed an airworthiness review in accordance with Regulation (EU) No 1321/2014 on the following aircraft:

Aircraft manufacturer: Manufacturer's designation:

Aircraft registration: Aircraft serial number:

and this aircraft is considered airworthy at the time of the review.

Date of issue: Date of expiry:

Airframe flight hours (FH) at date of review (*):

Signed: Authorisation No (if applicable):

1st Extension: the aircraft complies with the conditions of point ML.A.901(c) of Annex Vb (Part-ML).

Date of issue: Date of expiry:

Airframe flight hours (FH) at date of issue (*):

Signed: Authorisation No:

Company name: Approval reference:

2nd Extension: the aircraft complies with the conditions of point ML.A.901(c) of Annex Vb (Part-ML).

Date of issue: Date of expiry:

Airframe flight hours (FH) at date of issue (*):

Signed: Authorisation No:

Company name: Approval reference:

(*) except for balloons and airships

EASA Form 15c, Issue 3¹

CESSNA 172M

Ejemplos

- No comercial
- Dueño puede gestionar **aeronavegabilidad continuada**
- **Mantenimiento** puede realizarlo personal certificador independiente
- Dueño puede declarar el **PM**, con desviaciones posibles a las recomendaciones del fabricante
- Personal certificador independiente puede hacer **RA** y emitir **ARC** junto con inspección 100 hrs/anual.

PART
ML

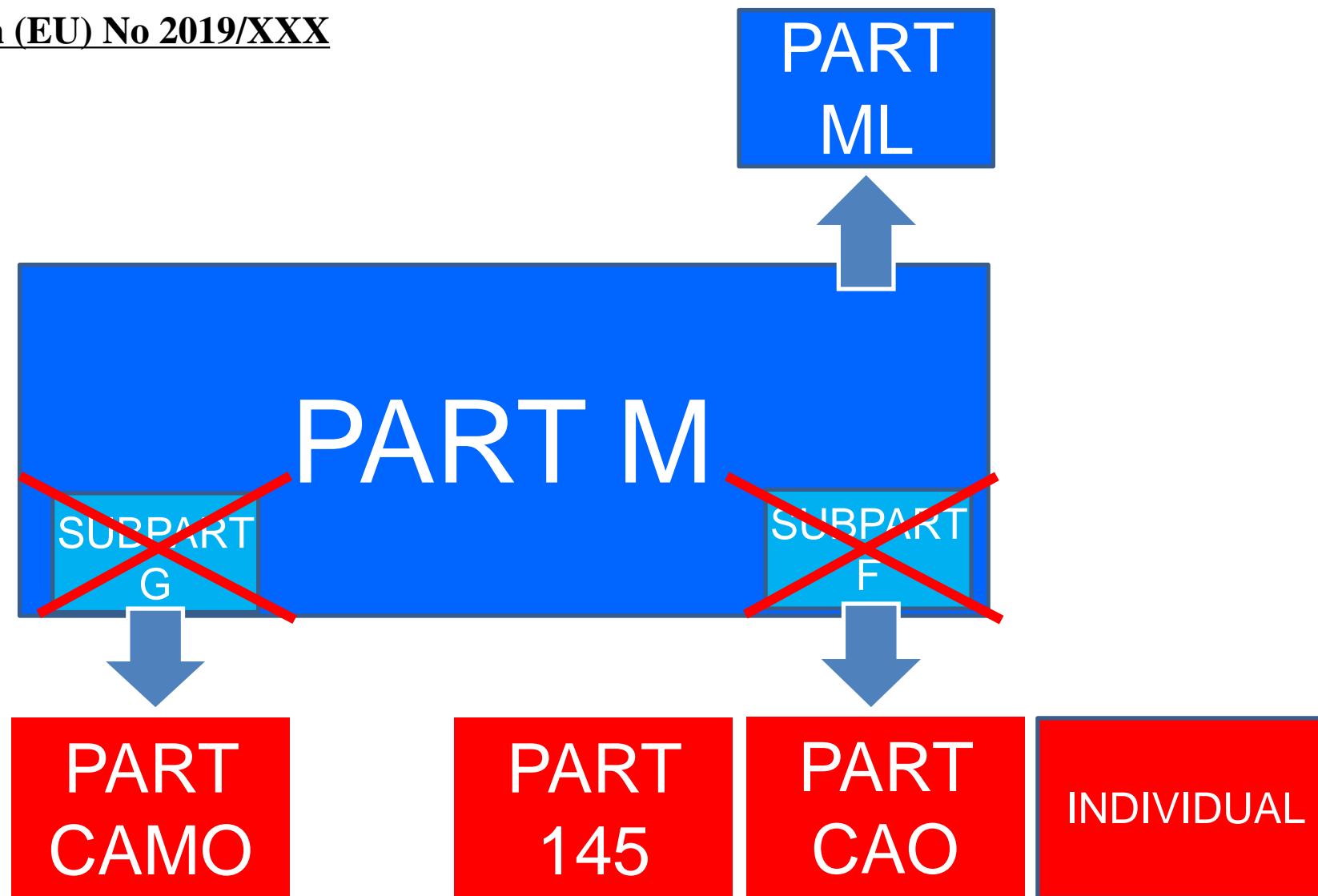


New! Regulation (EU) No 2019/XXX

3.2 ANEXO I (PART M)



New! Regulation (EU) No 2019/XXX



*ANNEX I (Part-M)***SECTION A — TECHNICAL REQUIREMENTS**

SUBPART A — GENERAL

SUBPART B — ACCOUNTABILITY

SUBPART C — CONTINUING AIRWORTHINESS

SUBPART D — MAINTENANCE STANDARDS

SUBPART E — COMPONENTS

SUBPART F — MAINTENANCE ORGANISATION

SUBPART G — CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

SUBPART H — CERTIFICATE OF RELEASE TO SERVICE (CRS)

SUBPART I — AIRWORTHINESS REVIEW CERTIFICATE

SECTION B — PROCEDURE FOR COMPETENT AUTHORITIES

SUBPART A — GENERAL

SUBPART B — ACCOUNTABILITY

SUBPART C — CONTINUING AIRWORTHINESS

SUBPART D — MAINTENANCE STANDARDS

SUBPART E — COMPONENTS

SUBPART F — MAINTENANCE ORGANISATION

SUBPART G — CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION

SUBPART H — CERTIFICATE OF RELEASE TO SERVICE (CRS)

SUBPART I — AIRWORTHINESS REVIEW CERTIFICATE



FORM 3-MF

Appendix V
Maintenance Organisation Certificate – EASA Form 3-MF

Page 1 of 2

[MEMBER STATE (*)]

A Member of the European Union (**)

MAINTENANCE ORGANISATION CERTIFICATE

Reference: [MEMBER STATE CODE (*)].MF.[XXXX]

Pursuant to Regulation (EU) 2018/1139 of the European Parliament and of the Council and to Commission Regulation (EU) No 1321/2014 and subject to the conditions specified below, the [COMPETENT AUTHORITY OF THE MEMBER STATE (*)] hereby certifies:

[COMPANY NAME AND ADDRESS]

as a maintenance organisation in compliance with Section A, Subpart F of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014, approved to maintain the products, parts and appliances listed in the attached terms of approval and issue related certificates of release to service using the above references and, when stipulated, airworthiness review certificates after an airworthiness review as specified in point ML.A.903 of Annex Vb (Part-ML) to Commission Regulation (EU) No 1321/2014 for those aircraft listed in the attached approval schedule.

CONDITIONS:

1. This certificate is limited to what is specified in the scope of work section of the approved maintenance organisation manual as referred to in Section A, Subpart F of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014; and
2. This certificate requires compliance with the procedures specified in the approved maintenance organisation manual; and
3. This certificate is valid whilst the approved maintenance organisation remains in compliance with Annex I (Part-M) and Annex Vb (Part-ML) to Commission Regulation (EU) No 1321/2014.
4. Subject to compliance with the foregoing conditions, this certificate shall remain valid until [(insert date - 2 years after the date of entry into force of this amending Regulation] unless the certificate has been surrendered, superseded, suspended or revoked before that date.

Date of original issue:.....

Date of this revision:.....

Revision No:.....

Signed:.....

For the competent authority: [COMPETENT AUTHORITY OF THE MEMBER STATE (*)]

EASA Form 3-MF Issue 4

(*) Or 'EASA', if EASA is the competent authority.

(**) Delete for non-EU Member States or EASA.

ANNEX I (Part-M)

FORM 14

Page 2 of ...

**CONTINUING AIRWORTHINESS MANAGEMENT ORGANISATION
TERMS OF APPROVAL**

Reference: [MEMBER STATE CODE*].CAMO.XXXX

(Ref.: AOC XX.XXXX)

Organisation: [COMPANY NAME AND ADDRESS]

Aircraft type/series/group	Airworthiness review authorised	Permits to fly authorised	Subcontracted organisation(s)
	[YES / NO] ***	[YES / NO] ***	
	[YES / NO] ***	[YES / NO] ***	
	[YES / NO] ***	[YES / NO] ***	
	[YES / NO] ***	[YES / NO] ***	

The terms of approval are limited to the scope of work contained in the approved CAME section.....

CAME reference:.....

Date of original issue:.....

Signed:.....

Date of this revision:..... Revision No:.....

For the competent authority: [COMPETENT AUTHORITY OF THE MEMBER STATE *]

EASA Form 14 Issue 5

* Or 'EASA', if EASA is the competent authority.

** Delete for non-EU Member State or EASA.

*** Delete as appropriate if the organisation is not approved. *

'Appendix III'**Airworthiness Review Certificate – EASA****Form 15****FORM 15a****ANNEX I (Part-M)****FORM 15b**

[MEMBER STATE]
A Member of the European Union (*)

AIRWORTHINESS REVIEW CERTIFICATE (ARC)
ARC reference:

Pursuant to Regulation (EU) 2018/1139 of the European Parliament and of the Council the [COMPETENT AUTHORITY OF THE MEMBER STATE] hereby certifies that the following aircraft:

Aircraft manufacturer:.....
Manufacturer's designation:.....
Aircraft registration:.....
Aircraft serial number:.....
is considered airworthy at the time of the review.

Date of issue: Date of expiry:
Airframe flight hours (FH) at date of issue (**):.....
Signed: Authorisation No:

1st extension: The aircraft has remained in a controlled environment in accordance with point M.A.901 of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014 for the last year. The aircraft is considered to be airworthy at the time of the issue.
Date of issue: Date of expiry:
Airframe flight hours (FH) at date of issue (**):.....
Signed: Authorisation No:

Company name: Approval reference:

2nd extension: The aircraft has remained in a controlled environment in accordance with point M.A.901 of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014 for the last year. The aircraft is considered to be airworthy at the time of the issue.
Date of issue: Date of expiry:
Airframe flight hours (FH) at date of issue (**):.....
Signed: Authorisation No:

Company name: Approval reference:

EASA Form 15a Issue 5
(*) Delete for non-EU Member States.
(**) Except for airships. :

[MEMBER STATE]
A Member of the European Union (*)

AIRWORTHINESS REVIEW CERTIFICATE (ARC)
ARC reference:

Pursuant to Regulation (EU) 2018/1139 of the European Parliament and of the Council the following organisation, approved in accordance with Section A of Annex Vc (Part-CAMO) or Section A of Annex Vb (Part-CAO) to Commission Regulation (EU) No 1321/2014,

[NAME OF ORGANISATION APPROVED AND ADDRESS]
Approval reference: [MEMBER STATE CODE] MG [NNNN].

hereby certifies that it has performed an airworthiness review in accordance with point M.A.901 of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014 on the following aircraft:
Aircraft manufacturer:.....
Manufacturer's designation:.....
Aircraft registration:.....
Aircraft serial number:.....
and this aircraft is considered airworthy at the time of the review.

Date of issue: Date of expiry:
Airframe flight hours (FH) at date of issue (**):.....
Signed: Authorisation No:

1st extension: The aircraft has remained in a controlled environment in accordance with point M.A.901 of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014 for the last year. The aircraft is considered to be airworthy at the time of the issue.
Date of issue: Date of expiry:
Airframe Flight Hours (FH) at date of issue (**):.....
Signed: Authorisation No:

Company name: Approval reference:

2nd extension: The aircraft has remained in a controlled environment in accordance with point M.A.901 of Annex I (Part-M) to Commission Regulation (EU) No 1321/2014 for the last year. The aircraft is considered to be airworthy at the time of the issue.
Date of issue: Date of expiry:
Airframe flight hours (FH) at date of issue (**):.....
Signed: Authorisation No:

Company name: Approval reference:

* Delete for non-EU Member States

RESPECTO
NORMATIVA

RESPECTO
ORGANIZACIONES

PART
ML

PART
CAMO

PART
145

PART
M

~~SUBPART
G~~

PART
CAO

INDIVIDUAL
CAM/MAINTENANCE

~~SUBPART
F~~



New! Regulation (EU) No 2019/XXX

3.3 ANEXO II (PART 145)



ANNEX II (Part-145)

(1) point 145.A.30 is amended as follows:

(a) point (k) is replaced by the following:

'(k) If the organisation performs airworthiness reviews and issues the corresponding airworthiness review certificate in accordance with point ML.A.903 of **Annex Vb (Part-ML)**, it shall have airworthiness review staff qualified and authorised in accordance with point ML.A.904 of **Annex Vb (Part-ML)**.';

[MEMBER STATE (*)]
A Member of the European Union (**)

MAINTENANCE ORGANISATION CERTIFICATE
Reference: [MEMBER STATE CODE(*)].145.XXXX

Pursuant to Regulation (EU) 2018/1139 of the European Parliament and of the Council and to Commission Regulation (EU) No 1321/2014 and subject to the condition specified below, the [COMPETENT AUTHORITY OF THE MEMBER STATE (*)] hereby certifies:

[COMPANY NAME AND ADDRESS]

as a maintenance organisation in compliance with [Section A of Annex II \(Part-145\)](#) of Regulation (EU) No 1321/2014, approved to maintain products, parts and appliances listed in the attached terms of approval and issue related certificates of release to service using the above references and, when stipulated, to issue airworthiness review certificates after an airworthiness review as specified in point ML.A.903 of Annex Vb (Part-ML) to Commission Regulation (EU) No 1321/2014 for those aircraft listed in the attached approval schedule.

CONDITIONS:

1. This approval is limited to that specified in the scope of work section of the approved maintenance organisation exposition as referred to in [Section A of Annex II \(Part-145\)](#), and
2. This approval requires compliance with the procedures specified in the approved maintenance organisation exposition, and
3. This approval is valid whilst the approved maintenance organisation remains in compliance with Annex II ([Part-145](#)) of Regulation (EU) No 1321/2014.
4. Subject to compliance with the foregoing conditions, this approval shall remain valid for an unlimited duration unless the approval has previously been surrendered, superseded, suspended or revoked.

Date of original issue:

Date of this revision:

Revision No:

Signed:

For the competent authority: [COMPETENT AUTHORITY OF THE MEMBER STATE(*)]

EASA Form 3-145 Issue 4

FORM 3-145

New! Regulation (EU) No 2019/XXX

3.4 ANEXO Vc (PART CAMO)



SAFETY MANAGEMENT SYSTEM (SMS)



ANNEX Vc (Part-CAMO)**SECTION A — ORGANISATION REQUIREMENTS**

- CAMO.A.005 Scope
- CAMO.A.105 Competent authority
- CAMO.A.115 Application for an organisation certificate
- CAMO.A.120 Means of compliance
- CAMO.A.125 Terms of approval and privileges
- CAMO.A.130 Changes to the organisation
- CAMO.A.135 Continued validity
- CAMO.A.140 Access
- CAMO.A.150 Findings
- CAMO.A.155 Immediate reaction to a safety problem**
- CAMO.A.160 Occurrence reporting**
- CAMO.A.200 Management system**
- CAMO.A.202 Internal safety reporting scheme**
- CAMO.A.205 Contracting and subcontracting
- CAMO.A.215 Facilities
- CAMO.A.220 Record-keeping
- CAMO.A.300 Continuing airworthiness management exposition
- CAMO.A.305 Personnel requirements
- CAMO.A.310 Airworthiness review staff qualifications
- CAMO.A.315 Continuing airworthiness management
- CAMO.A.320 Airworthiness review
- CAMO.A.325 Continuing airworthiness management data

SECTION B — AUTHORITY REQUIREMENTS

- CAMO.B.005 Scope
- CAMO.B.115 Oversight documentation
- CAMO.B.120 Means of compliance
- CAMO.B.125 Information to the Agency
- CAMO.B.135 Immediate reaction to a safety problem
- CAMO.B.200 Management system
- CAMO.B.205 Allocation of tasks to qualified entities
- CAMO.B.210 Changes in the management system
- CAMO.B.220 Record-keeping
- CAMO.B.300 Oversight principles
- CAMO.B.305 Oversight programme
- CAMO.B.310 Initial certification procedure
- CAMO.B.330 Changes
- CAMO.B.350 Findings and corrective actions
- CAMO.B.355 Suspension, limitation and revocation



CAMO.A.155 Immediate reaction to a safety problem

The organisation shall implement:

- (a) any safety measures mandated by the competent authority in accordance with point CAMO.B.135;
- (b) any relevant mandatory safety information issued by the Agency.

CAMO.A.160 Occurrence reporting

- (a) As part of its management system the organisation shall implement an occurrence reporting system that meets the requirements defined in Regulation (EU) No 376/2014 and Implementing Regulation (EU) 2015/1018¹.
- (b) Without prejudice to point (a), the organisation shall ensure that any incident, malfunction, technical defect, exceeding of technical limitations, occurrence that would highlight inaccurate, incomplete or ambiguous information contained in data established in accordance with Annex I (Part-21) to Regulation (EU) No 748/2012 or other irregular circumstance that has or may have endangered the safe operation of the aircraft and that has not resulted in an accident or serious incident are reported to the competent authority and to the organisation responsible for the design of the aircraft.
- (c) Without prejudice to Regulation (EU) No 376/2014 and Implementing Regulation (EU) 2015/1018, the reports referred to in points (a) and (b) shall be made in a form and manner established by the competent authority and shall contain all pertinent information about the condition known to the organisation.
- (d) Reports shall be made as soon as possible, but in any case within 72 hours of the organisation identifying the condition to which the report relates, unless exceptional circumstances prevent this.
- (e) Where relevant, the organisation shall produce a follow-up report to provide details of actions it intends to take to prevent similar occurrences in the future, as soon as these actions have been identified. This report shall be produced in a form and manner established by the competent authority.

CAMO.A.200 Management system

- (a) The organisation shall establish, implement, and maintain a management system that includes:
 - (1) clearly defined lines of responsibility and accountability throughout the organisation, including a direct safety accountability of the accountable manager;
 - (2) a description of the overall philosophies and principles of the organisation with regard to safety, referred to as the safety policy;
 - (3) the identification of aviation safety hazards entailed by the activities of the organisation, their evaluation and the management of associated risks, including taking actions to mitigate the risks and verify their effectiveness;
 - (4) maintaining personnel trained and competent to perform their tasks;
 - (5) documentation of all management system key processes, including a process for making personnel aware of their responsibilities and the procedure for amending this documentation;
 - (6) a function to monitor compliance of the organisation with the relevant requirements. Compliance monitoring shall include a feedback system of findings to the accountable manager to ensure effective implementation of corrective actions as necessary;
 - (7) any additional requirements that are laid down in this Regulation.
- (b) The management system shall correspond to the size of the organisation and the nature and complexity of its activities, taking into account the hazards and associated risks inherent in these activities.
- (c) Where the organisation holds one or more additional organisation certificates within the scope of Regulation (EU) 2018/1139 and its delegated and implementing acts, the management system may be integrated with that required under the additional certificate(s) held.
- (d) Notwithstanding point (c), for air carriers licensed in accordance with Regulation (EC) No 1008/2008, the management system provided for in this Annex shall be an integrated part of the operator's management system.

SAFETY MANAGEMENT SYSTEM (SMS)

“El SMS es un sistema que asegura una supervisión efectiva del cumplimiento, gestión de riesgos de seguridad y supervisión para todas las actividades de gestión de aeronavegabilidad continua y ayuda a entender las diferencias entre una buena gestión de cumplimiento y el riesgo de seguridad de la aviación”

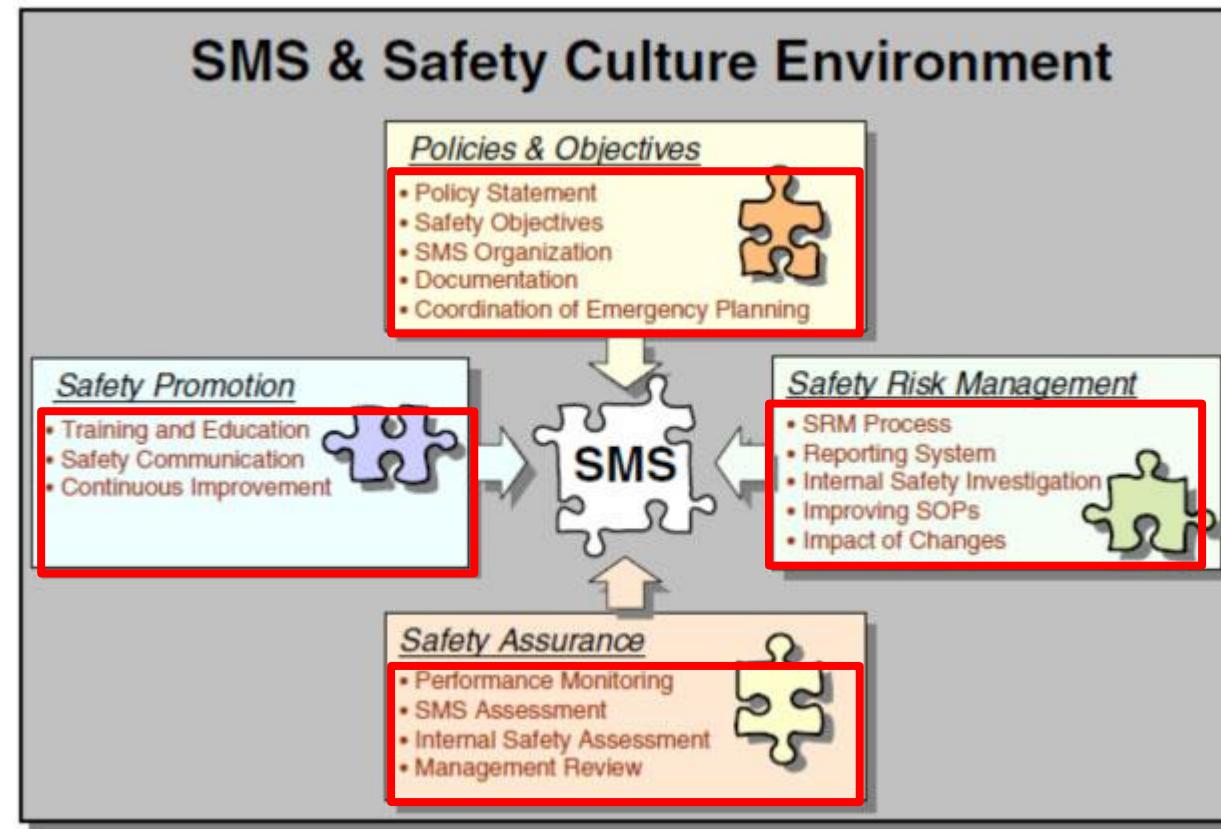


Conjunto de procesos y herramientas para administrar formalmente un programa de seguridad estructurado

SAFETY MANAGEMENT SYSTEM (SMS)

1.- POLÍTICA DE SEGURIDAD

Se organiza en torno a cuatro pilares básicos



4.- PROMOCIÓN DE LA SEGURIDAD

2.- GESTIÓN DE RIESGOS DE SEGURIDAD

3.- GARANTÍA DE LA SEGURIDAD

En cada componente o pilar hay entre dos y cinco elementos para organizar aún más el sistema.





New! Regulation (EU) No 2019/XXX

3.5 ANEXO Vd (PART CAO)



ANNEX Vd (Part-CAO)

ORGANIZACIÓN CAO

- Combina privilegios de Organización de mtto. Subparte F y CAMO.
- No SMS: Se continua con el actual sistema de calidad (o revisiones organizativas si pequeña).



ANNEX Vd (Part-CAO)

ORGANIZACIÓN CAO

Requerimientos simplificados:

- **Privilegios combinados** para mtto, gestión aeronavegabilidad, R.A y Permit to fly.
- **Única exposición** para todas las actividades.

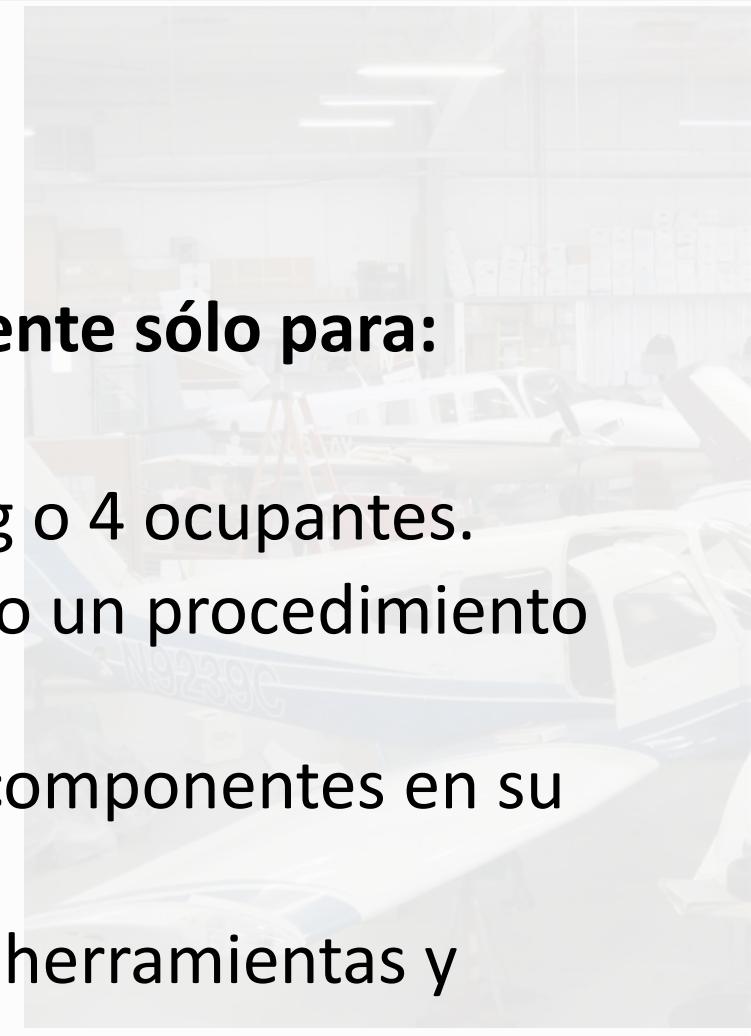


ANNEX Vd (Part-CAO)

ORGANIZACIÓN CAO

Privilegios gestión cambios:

- **Aprobación autoridad competente sólo para:**
 - Aviones de mas de 2730 kg.
 - Helicópteros más de 1200 kg o 4 ocupantes.
- **La organización puede** (siguiendo un procedimiento aprobado):
 - Introducir otras aeronaves y componentes en su alcance de trabajo.
 - Cambios en las instalaciones, herramientas y equipos.



ANNEX Vd (Part-CAO)**SECTION A — ORGANISATION REQUIREMENTS**

- CAO.A.010 Scope
- CAO.A.015 Application
- CAO.A.017 Means of compliance
- CAO.A.020 Terms of approval
- CAO.A.025 Combined airworthiness exposition
- CAO.A.030 Facilities
- CAO.A.035 Personnel requirements
- CAO.A.040 Certifying staff
- CAO.A.045 Airworthiness review staff
- CAO.A.050 Components, equipment and tools
- CAO.A.055 Maintenance data and work orders
- CAO.A.060 Maintenance standards
- CAO.A.065 Aircraft certificate of release to service
- CAO.A.070 Component certificate of release to service
- CAO.A.075 Continuing-airworthiness management
- CAO.A.080 Continuing-airworthiness management data
- CAO.A.085 Airworthiness review
- CAO.A.090 Record-keeping
- CAO.A.095 Privileges of the organisation
- CAO.A.100 Quality system and organisational review
- CAO.A.105 Changes to the organisation
- CAO.A.110 Continued validity
- CAO.A.115 Findings

SECTION B — AUTHORITY REQUIREMENTS

- CAO.B.010 Scope
- CAO.B.015 Competent authority
- CAO.B.017 Means of compliance
- CAO.B.020 Record-keeping
- CAO.B.025 Mutual exchange of information
- CAO.B.030 Responsibilities
- CAO.B.035 Exemptions
- CAO.B.040 Application
- CAO.B.045 Initial approval
- CAO.B.050 Issue of approval
- CAO.B.055 Continuing oversight
- CAO.B.060 Findings
- CAO.B.065 Changes
- CAO.B.070 Suspension, limitation and revocation



RESPECTO
NORMATIVA

PART
ML

NO TAC
+
NO CMPA
+
LIGHT AIRCRAFT

PART
CAO

NO TAC
+
NO CMPA

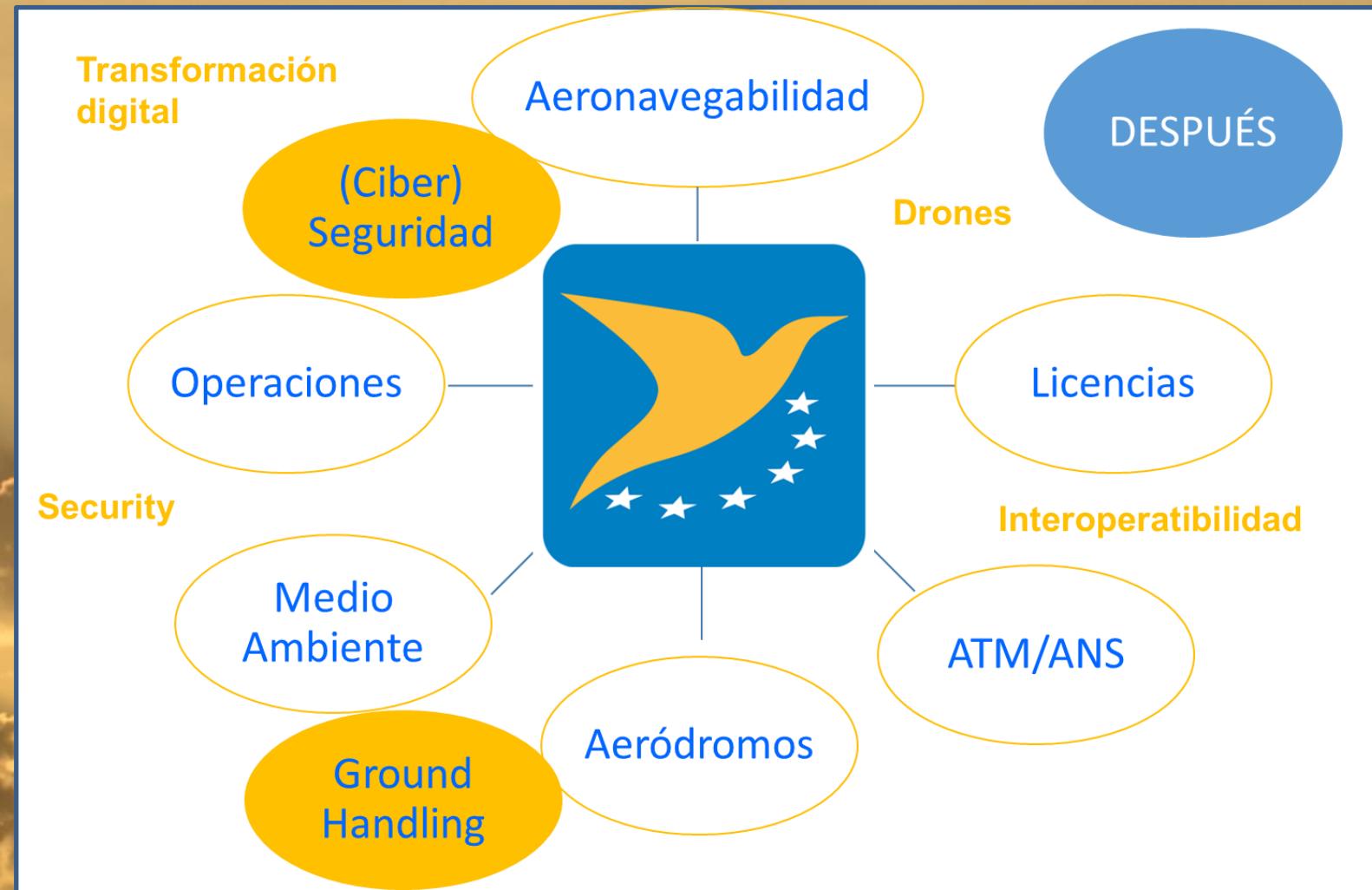
Simplified representation	Non-'Licenced Air Carrier'						'Licenced Air Carrier' ¹				
	Non-commercial			Commercial ²							
	Non-CMPA		CMPA	Non-CMPA		CMPA	Non-CMPA	CMPA ³			
	Light ⁴	Non-Light		Light	Non-Light						
	Part-M (Annex I)		N/A	Part-M Mandatory		N/A	Part-M Mandatory				
Part-ML (Annex Vb)		Part-ML Mandatory	N/A		Part-ML Mandatory	N/A					
Part-CAMO (SMS) (Annex Vc)		Individual CAM ⁵ or CAO-CAM or CAMO	Part-CAMO Mandatory	CAO-CAM ⁶ or CAMO		Part-CAMO Mandatory					
Part-CAO (no SMS) (Annex Vd)	for CA management (CAO-CAM)			N/A	N/A						
	for Maintenance (CAO-M)	Individual maintenance ⁷ or CAO-M ⁸ or Part-145	Part-145 Mandatory	CAO-M or Part-145		N/A					
Part-145 (SMS to come) (Annex II)						Part-145 Mandatory					

¹ Licenced Air Carrier in accordance with Reg. (EC) No 1008/2008² Commercial = aircraft operated under Subpart-ADD of Part-BOP or Subpart-DEC of Part-SAO or aircraft, other than sailplane and balloon, not operated under Part-NCO; includes commercial ATO and commercial DTO³ CMPA = Complex motor-powered aircraft, ref. Article 3(j) of Reg. (EC) No 216/2008⁴ Light a/c = Aeroplanes up to 2730 Kg MTOM, helicopters up to 1200 Kg MTOM / max 4 occupants, and other ELA2 aircraft⁵ Individual CAM = continuing airworthiness of the a/c managed by the owner under its own responsibility⁶ CAO-CAM = Part-CAO organisation with continuing airworthiness management privilege⁷ Individual maintenance = maintenance released by pilot-owner or independent Certifying Staff⁸ CAO-M = Part-CAO organisation with maintenance privilege

CONCLUSIONES



RESPECTO
REGLAMENTO BASE



RESPECTO
1321/2014

PART
CAMO



CRÉDITOS

- NASA Goddard Space Center
- Airliners.net
- Wikipedia.org
- EASA web page (www.easa.europa.eu)
- AESA web page (www.seguridadaer ea.gob.es)

GRACIAS POR SU ATENCIÓN

A continuación:

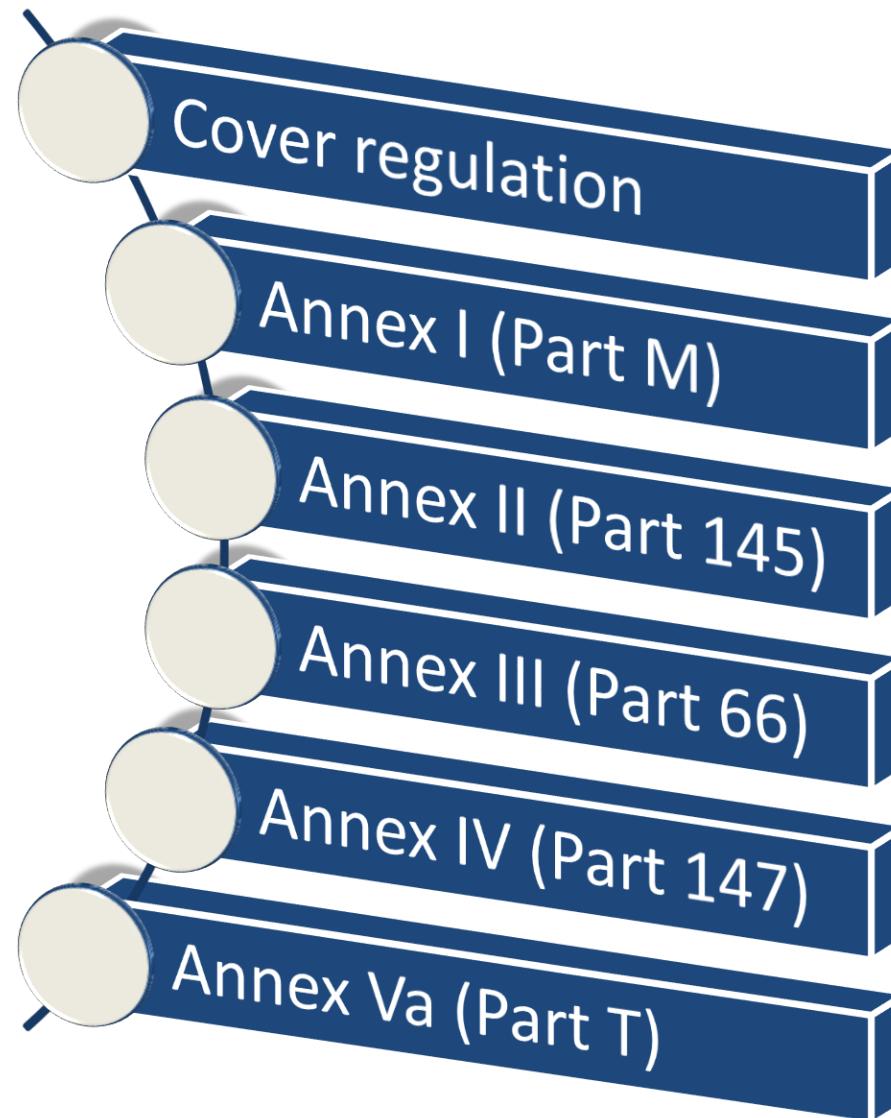
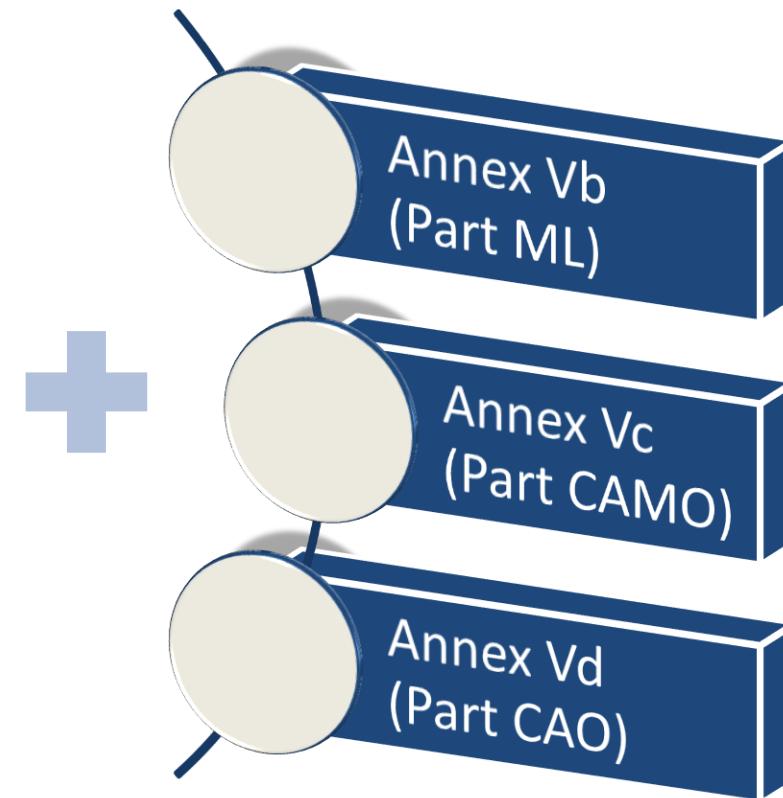
- M^a Cristina Hernández Martín

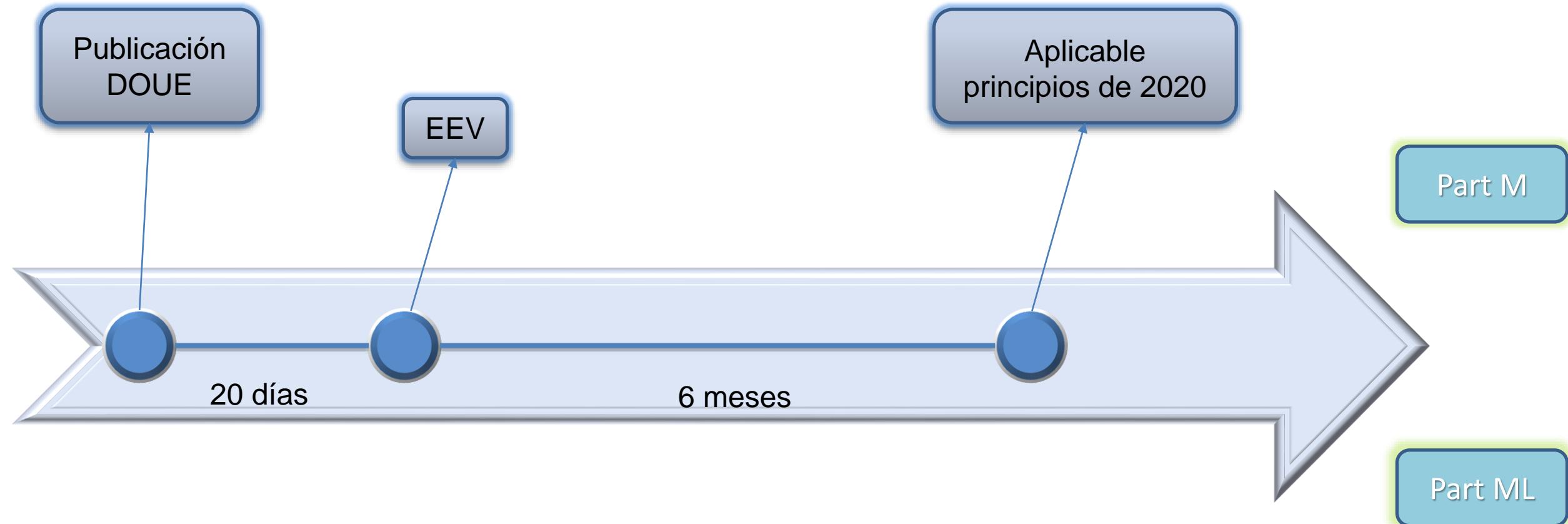
- 1.- INTRODUCCIÓN**
- 2.- REGLAMENTO BASE 2018/1139**
- 3.- REGLAMENTO 2019/XXXX**
- 4.- IMPLEMENTACIÓN**



4.1 Cambios y aplicabilidad



Regulation (EU) No 1321/2014New! Regulation (EU) No 2019/XXX



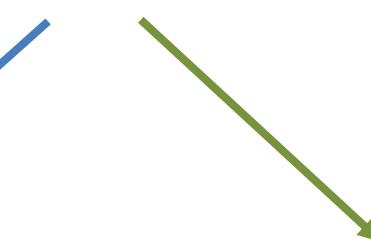
4.2 Transición organizaciones



PART 145

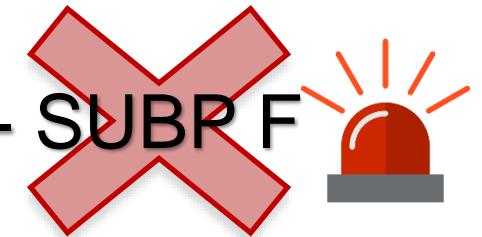


PART 145



PART CAO

PART M - SUBP F



PART CAO

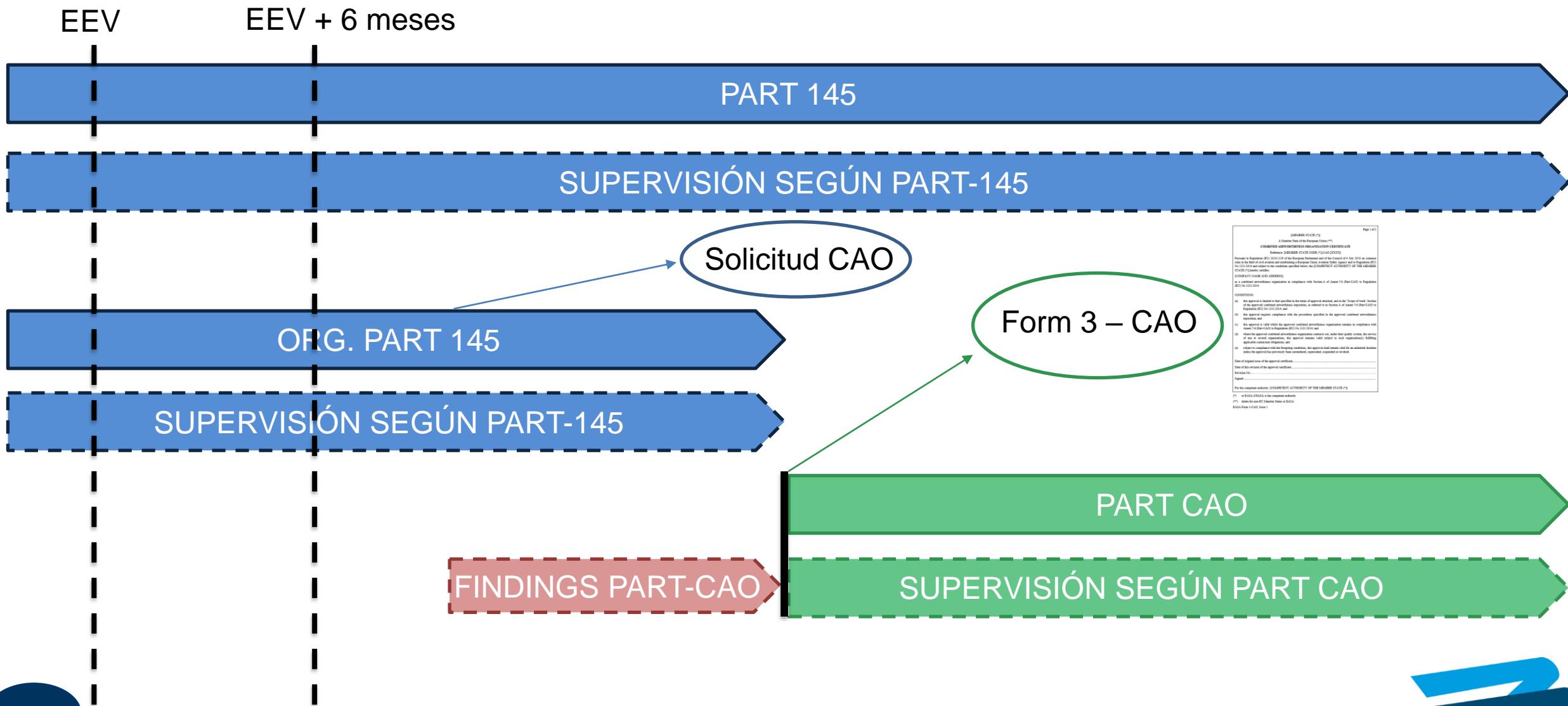
Simplified representation	Non-'Licenced Air Carrier'						'Licenced Air Carrier' ¹			
	Non-commercial			Commercial ²						
	Non-CMPA		CMPA	Non-CMPA		CMPA				
	Light ⁴	Non-Light		Light	Non-Light					
Part-M (Annex I)	N/A	Part-M Mandatory		N/A	Part-M Mandatory					
Part-ML (Annex Vb)	Part-ML Mandatory	N/A		Part-ML Mandatory	N/A					
Part-CAMO (SMS) (Annex Vc)	Individual CAM ⁵ or CAO-CAM or CAMO		Part-CAMO Mandatory	CAO-CAM ⁶ or CAMO		Part-CAMO Mandatory				
Part-CAO (no SMS) (Annex Vd)	for CA management (CAO-CAM) for Maintenance (CAO-M)	N/A		N/A		N/A				
Part-145 (SMS to come) (Annex II)		Individual maintenance ⁷ or CAO-M ⁸ or Part-145		Part-145 Mandatory	CAO-M or Part-145		N/A			
							Part-145 Mandatory			



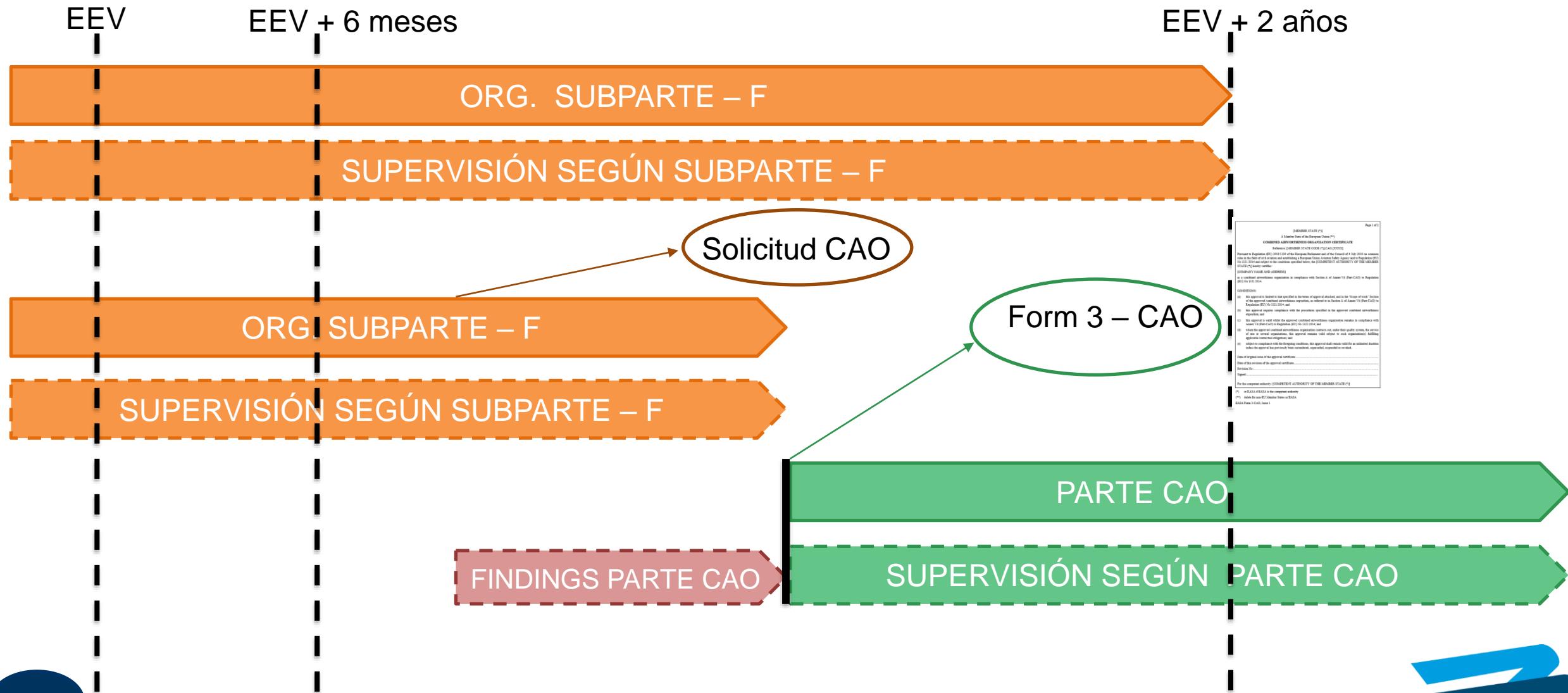
Part CAO only non-CMPA non AOC



PART 145 ó CAO



SUBP F → CAO



SUBP F → CAO

Aprobaciones iniciales SUBP F → emitidas hasta EEV + 1y

EEV

EEV + 6 meses

EEV + 2 años



Solicitud CAO

ORG. SUBPARTE – F

SUPERVISIÓN SEGÚN SUBPARTE – F

SUBPARTE – F REVOCADA (FINDINGS NO CERRADOS)



Néá'eshe teru
 Cám džiekuje Kulo ederim
 Tinotenda Multumesc
 Multumesc Tak Marahaba Aalghistapcham
 Blagodaram Xie Evgaristo.
 Gunasakulila Webale Tapaidh
 Imela Khrap Dzjakuju.
 maith Doh Blagodaryja òn Faleminderit
 asko Fafetai Doh Blagodaryja shukuriyyaa
 Kiitos mamexes Dêkuji Ha'evete Uzbekco
 blu Puno todà Ah hvala Gratias Netjer
 Grazzie Ntyox dimo Kommol Khawp Shokrán Arigato
 Spaisíva ek agaibh Sag Moltes Dankon Xié Barka
 Dekoju Fa'afetai gràcies Ka khawp Grazias Maketai Maraba
 Graziaj Shokrán Bedankt Thanks Dannaba Mwebare
 Emitekati Tesekkür jai Dakujem Trugarez Tack
 jai syaabaas syaabaas so Ashoge leibh qúi
 Dyuspagrasunki chawe syaabaas Murakoze
 GyalailaaThai Yuspagara
 Kili Ngeyabonga Matu
 maluhlap Mahalo
 Alla Rahmet Danke
 Dios raibh

Ngijybongja Merci Hvala Gracias

