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**ANNEX II to EASA Opinion No 09/2017**

**COMMISSION REGULATION (EU) No .../..**

**of **XXX****

**amending Commission Regulation (EU) No 748/2012 as regards the implementation of essential requirements for environmental protection**

# DRAFT COMMISSION REGULATION (EU) .../...

of **XXX**

## amending Commission Regulation (EU) No 748/2012 as regards the implementation of essential requirements for environmental protection

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC <sup>(1)</sup>, and in particular Article 6(2) thereof,

Whereas:

- (1) Article 6(1) of Regulation (EC) No 216/2008 requires that products, parts and appliances comply with the aviation environmental protection requirements contained in Volumes I and II of Annex 16 to the Convention on International Civil Aviation (hereinafter referred to as the ‘Chicago Convention’) as applicable on 17 November 2011, except for the Appendices to that Annex.
- (2) Volumes I and II of Annex 16 to the Chicago Convention have been amended in 2017 to update the aviation environmental protection technical requirements and to address non-volatile particulate matter engine emissions.
- (3) Volume III of Annex 16 to the Chicago Convention has been introduced in 2017 to address aeroplane CO<sub>2</sub> emissions.
- (4) Regulation (EC) No 748/2012 should therefore be amended accordingly.
- (5) The measures provided for in this Regulation are based on the opinion <sup>(2)</sup> issued by the European Aviation Safety Agency in accordance with Articles 17(2)(b) and 19(1) of Regulation (EC) No 216/2008.
- (6) The measures provided for in this Regulation are in accordance with the opinion of the committee established by Article 65 of Regulation (EC) No 216/2008,

HAS ADOPTED THIS REGULATION:

### *Article 1*

Annex I (Part 21) to Commission Regulation (EU) No 748/2012 is amended as follows:

1. In Section A, Subpart B, points 21.A.18(b) and (c) are replaced by the following:
  - ‘(b) The applicable fuel venting, smoke, gaseous and particulate matter aircraft engine emissions requirements for the issue of a type-certificate for an aircraft and engine

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<sup>(1)</sup> OJ L 79, 19.3.2008, p. 1.

<sup>(2)</sup> EASA Opinion No 09/2017 ‘Implementation of the CAEP/10 amendments on climate change, emissions and noise’.

are prescribed according to the provisions of Chapter 1 of Part II and Chapter 1 of Part III of Annex 16, Volume II to the Chicago Convention and:

1. for prevention of intentional fuel venting, in Volume II, Part II, Chapter 2;
  2. for smoke and gaseous emissions of turbo-jet and turboprop engines intended for propulsion only at subsonic speeds, in Volume II, Part III, Chapter 2;
  3. for smoke and gaseous emissions of turbojet and turboprop engines for propulsion only at supersonic speeds, in Volume II, Part III, Chapter 3; and
  4. for particulate matter emissions of turbojet and turboprop engines intended for propulsion only at subsonic speeds, in Volume II, Part III, Chapter 4.
- (c) The applicable aeroplane CO<sub>2</sub> emissions requirements for the issue of a type-certificate for an aeroplane are prescribed according to the provisions of Chapter 1 of Part II of Annex 16, Volume III to the Chicago Convention and:
1. for subsonic jet aeroplanes, in Volume III, Part II, Chapter 2; and
  2. for propeller-driven aeroplanes, in Volume III, Part II, Chapter 2.
- (d) The Agency shall issue, in accordance with Article 19 of Regulation (EC) No 216/2008, certification specifications providing for acceptable means to demonstrate compliance with the noise and emission requirements laid down in points (a), (b) and (c) respectively.’
2. In Section A, Subpart B, point 21.A.31(a)4 is replaced by the following:
    - ‘4. any other data necessary to allow by comparison the determination of the airworthiness and the environmental characteristics (where applicable) of later products of the same type.’
  3. In Section A, Subpart B, point 21.A.41 is replaced by the following:

‘The type-certificate and restricted type-certificate shall include the type design, the operating limitations, the type-certificate data sheet for airworthiness and emissions, the applicable type-certification basis and environmental protection requirements with which the Agency records compliance, and any other conditions or limitations prescribed for the product in the applicable certification specifications and environmental protection requirements. The aircraft type-certificate and restricted type-certificate, in addition, shall both include the applicable operational suitability data certification basis, the operational suitability data and the type-certificate data sheet for noise. The aircraft type-certificate and restricted type-certificate data sheet shall include the record of CO<sub>2</sub> emissions compliance, and the engine type-certificate data sheet shall include the record of exhaust emissions compliance.’
  4. In Section A, Subpart D, point 21.A.91 is replaced by the following:

‘Changes in type-certificate are classified as minor and major. A ‘minor change’ is one that has no appreciable effect on the mass, balance, structural strength, reliability, operational characteristics, operational suitability data, or other characteristics affecting the airworthiness of the product or its environmental characteristics. Without prejudice to

point 21.A.19, all other changes are ‘major changes’ under this Subpart. Major and minor changes shall be approved in accordance with points 21.A.95 or 21.A.97, as appropriate, and shall be adequately identified.’

5. In Section A, Subpart F, point 21.A.130(b) is replaced by the following:

‘(b) A statement of conformity shall include:

1. for each product, part or appliance, a statement that the product, part or appliance conforms to the approved design data and is in condition for safe operation; and
2. for each aircraft, a statement that the aircraft has been ground- and flight-checked in accordance with point 21.A.127(a); and
3. for each engine, or variable pitch propeller, a statement that the engine or variable pitch propeller has been subjected by the manufacturer to a final functional test in accordance with point 21.A.128; and
4. additionally, in the case of environmental requirements:
  - (i) a statement that the completed engine is in compliance with the applicable engine exhaust emissions requirements on the date of manufacture of the engine; and
  - (ii) a statement that the completed aeroplane is in compliance with the applicable CO<sub>2</sub> emissions requirements on the date its first certificate of airworthiness is issued;

6. In Section A, Subpart G, points 21.A.145(b) and (c) are replaced by the following:

‘(b) with regard to all necessary airworthiness and environmental data:

1. the production organisation is in receipt of such data from the Agency, and from the holder of, or applicant for, the type-certificate, restricted type-certificate or design approval, including any exemption granted against the CO<sub>2</sub> production cut-off requirements, to determine conformity with the applicable design data;
2. the production organisation has established a procedure to ensure that airworthiness and environmental data are correctly incorporated in its production data; and
3. such data are kept up to date and made available to all personnel who need access to such data to perform their duties;

(c) with regard to management and staff:

1. a manager has been nominated by the production organisation, and is accountable to the competent authority. His or her responsibilities within the organisation shall consist of ensuring that all production is performed to the required standards and that the production organisation is continuously in compliance with the data and procedures identified in the exposition referred to in point 21.A.143;

2. a person or group of persons have been nominated by the production organisation to ensure that the organisation is in compliance with the requirements of this Annex (Part 21), and are identified, together with the extent of their authority. Such person(s) shall act under the direct authority of the accountable manager referred to in point (1). The person(s) nominated shall be able to show the appropriate knowledge, background and experience to discharge their responsibilities;
  3. staff at all levels have been given appropriate authority to be able to discharge their allocated responsibilities and that there is full and effective coordination within the production organisation in respect of airworthiness and environmental data matters;’
7. In Section A, Subpart G, point 21.A.147(a) is replaced by the following:
- ‘(a) After the issue of a production organisation approval, each change to the approved production organisation that is significant to the showing of conformity or to the airworthiness and environmental characteristics of the product, part or appliance, particularly changes to the quality system, shall be approved by the competent authority. An application for approval shall be submitted in writing to the competent authority and the organisation shall demonstrate to the competent authority, before implementation of the change, that it will continue to comply with this Subpart.’
8. In Section A, Subpart H, point 21.A.174(b) is replaced by the following:
- ‘(b) Each application for a certificate of airworthiness or restricted certificate of airworthiness shall include:
1. the class of airworthiness certificate applied for;
  2. with regard to new aircraft:
    - (i) a statement of conformity:
      - issued under point 21.A.163(b); or
      - issued under point 21.A.130 and validated by the competent authority; or
      - for an imported aircraft, a statement signed by the exporting authority that the aircraft conforms to a design approved by the Agency;
    - (ii) a weight and balance report with a loading schedule; and
    - (iii) the flight manual, when required by the applicable certification specifications for the particular aircraft.
  3. with regard to used aircraft:
    - (i) originating from a Member State, an airworthiness review certificate issued in accordance with Part-M;

- (ii) originating from a non-Member State:
  - a statement by the competent authority of the State where the aircraft is, or was, registered, reflecting the airworthiness status of the aircraft on its register at the time of transfer;
  - a weight and balance report with a loading schedule;
  - the flight manual when such material is required by the applicable airworthiness code for the particular aircraft;
  - historical records to establish the production, modification, and maintenance standard of the aircraft, including all limitations associated with a restricted certificate of airworthiness under point 21.B.327(c);
  - a recommendation for the issue of a certificate of airworthiness or restricted certificate of airworthiness and an airworthiness review certificate following an airworthiness review in accordance with Part-M; and
  - the date on which the first certificate of airworthiness was issued and, if the standards of Annex 16 Volume III apply, the CO<sub>2</sub> metric value data.’

9. In Section A, Subpart J, point 21.A.251 is replaced by the following:

‘The terms of approval shall identify the types of design work, the categories of products, parts and appliances for which the design organisation holds a design organisation approval, and the functions and duties that the organisation is approved to perform with regard to the airworthiness, operational suitability and environmental characteristics of the products. For design organisation approvals covering type-certification or ETSO authorisation for auxiliary power units (APUs), the terms of approval shall contain in addition the list of products or APUs. Those terms shall be issued as part of a design organisation approval.’

10. In Section B, Subpart H, point 21.B.326 is replaced by the following:

‘The competent authority of the Member State of registry shall issue a certificate of airworthiness for:

(a) new aircraft:

1. upon presentation of the documentation required by point 21.A.174(b)(2);
2. when the competent authority of the Member State of registry is satisfied that the aircraft conforms to an approved design and is in a condition for safe operation; this may include inspections by the competent authority of the Member State of registry; and
3. when the competent authority of the Member State of registry is satisfied that the aircraft is in compliance with the applicable CO<sub>2</sub> emissions

requirements on the date on which the certificate of airworthiness is first issued.

- (b) used aircraft:
1. upon presentation of the documentation required by point 21.A.174(b)(3) demonstrating that:
    - (i) the aircraft conforms to a type design approved under a type-certificate and any supplemental type-certificate, change or repair approved in accordance with this Annex I (Part 21); and
    - (ii) the applicable airworthiness directives have been complied with; and
    - (iii) the aircraft has been inspected in accordance with the applicable provisions of Annex I (Part-M) to Regulation (EC) No 2042/2003; and
    - (iv) the aircraft was in compliance with the applicable CO<sub>2</sub> emissions requirements on the date on which the certificate of airworthiness was first issued;
  2. when the competent authority of the Member State of registry is satisfied that the aircraft conforms to an approved design and is in a condition for safe operation; this may include inspections by the competent authority of the Member State of registry; and
  3. when the competent authority of the Member State of registry is satisfied that the aircraft was in compliance with the applicable CO<sub>2</sub> emissions requirements on the date on which the certificate of airworthiness was first issued.'

#### *Article 2*

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

*For the Commission*  
*The President*  
[\[...\]](#)