

## **European Aviation Safety Agency**

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### **DECISION N° 2012/001/R OF THE EXECUTIVE DIRECTOR OF THE EUROPEAN AVIATION SAFETY AGENCY**

**OF 27<sup>TH</sup> JANUARY 2012**

**on**

**termination of rulemaking task 25.035 'Cabin air quality on board Large Aeroplanes'  
without amending EASA regulations**

THE EXECUTIVE DIRECTOR OF THE EUROPEAN AVIATION SAFETY AGENCY,

Having regard to the 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> (hereinafter the 'Basic Regulation'), and in particular Article 38(3)(a) and (e) thereof,

Whereas:

- (1) The Agency has been made aware that some stakeholders (some pilots, cabin crews and some of their staff unions, some passengers and some consumers associations) have expressed concerns regarding the risk of contamination of cabin air on board commercial large aeroplanes, in particular the risk of contamination by lubricating oil and hydraulic fluid used in engines and auxiliary power units, on aircraft using bleed air architectures to feed air conditioning systems.
- (2) Opposite opinions exist among stakeholders concerning the safety and health implications stemming from this risk.
- (3) The Agency is obliged, pursuant to Article 19 of the Basic Regulation to reflect the state of the art and the best practices in the fields concerned and update Certification Specifications taking into account worldwide aircraft experience in service, and scientific and technical progress.
- (4) The Basic Regulation recital (20) considers that in order to respond to increasing concerns about the health and welfare of passengers during flights, it is necessary to develop aircraft designs which better protect the safety and health of passengers.

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<sup>1</sup> OJ L 79, 19.03.2008, p. 1. Regulation as last amended by Regulation (EC) No 1108/2009 (OJ L 309, 24.11.2009, p. 51).

- (5) The Agency, pursuant to Article 52(1)(c) of the Basic Regulation and Article 14 of the Rulemaking Procedure<sup>2</sup>, has widely consulted interested parties on the matters which are the subject of this Decision in the framework of the rulemaking task 25.035. The consultation was performed through the A-NPA 2009-10 (dated 28 September 2009) along with on-line confidential questionnaires which aimed at presenting the Agency's view on the subject and at collecting any relevant new information and data from stakeholders. Thereafter, the Agency provided the outcome of this consultation as well as written responses to the comments received through the document CRD to A-NPA 2009-10 (dated 28 May 2011)<sup>3</sup>.
- (6) An aircraft cabin air sampling study was conducted independently by the Institute of Environment and Health at Cranfield University (UK)<sup>4</sup>. This study successfully completed a range of air quality measurements during the course of 100 flights with 5 different large aeroplanes types (Boeing 757 (1 cargo and 1 passengers aircraft), Airbus A319, A320, BAE 146). During these flights, no fume events occurred that triggered the airline's protocols for formal reporting of incidents. Flight and cabin crew, as well as the investigating scientists reported a number of fume/smell events in a post-flight questionnaire. Samples specifically taken during recorded air quality events did not have notably elevated concentrations of any of the individually measured pollutants. Therefore, the study concludes that, with respect to the conditions of flight that were experienced during this study, there was no evidence for target pollutants occurring in the cabin air at levels exceeding available health and safety standards and guidelines.

HAS DECIDED:

#### Article 1

The Agency concludes that, based on currently available reports and evidences, there is no safety case that would justify an immediate and general rulemaking action.

#### Article 2

According to the existing literature and study reports, the Agency understands that a causal relationship between the health symptoms reported by some stakeholders (some pilots, cabin crews or passengers) and oil/hydraulic fluid contamination has not been established. As there is no conclusive scientific evidence available, the Agency is not able to justify a rulemaking task to change the existing designs or Certification Specifications.

#### Article 3

The rulemaking task 25.035 'Cabin air quality on board Large Aeroplanes' is hereby terminated without amending EASA regulations.

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<sup>2</sup> Management Board Decision concerning the procedure to be applied by the Agency for the issuing of opinions, certification specifications and guidance material (Rulemaking Procedure), EASA MB/08/07, 13.6.2007.

<sup>3</sup> A-NPA 2009-10 and CRD 2009-10 are available on the following EASA Rulemaking Archives web page: <http://www.easa.europa.eu/rulemaking/r-archives.php>.

<sup>4</sup> Report for the UK Department for Transport (DfT) by the Institute of Environment and Health (Cranfield Ref No YE29016V), dated March 2011, available on the following Cranfield University web page: <http://www.cranfield.ac.uk/health/researchareas/environmenthealth/ieh/page51289.html>.

Article 4

Although the Agency has not found a justification to launch a regulatory change activity, this topic will be continuously monitored, and some recommendations are provided in the document CRD to A-NPA 2009-10 to further improve the knowledge on exposure health issues and on technologies for bleed air filtering and monitoring. If in the future new elements become available and show that the occurrences of engine or auxiliary power unit contamination of bleed air are a serious threat to safety or health, then the Agency will take appropriate corrective actions including considering regulatory changes options.

Article 5

This Decision shall enter into force on 3<sup>rd</sup> February 2012. It shall be published in the Official Publication of the Agency.

Done in Cologne, on 27<sup>th</sup> January 2012.

P. GOUDOU