Directive 2006/40/EC of the European Parliament and of the Council of 17 May 2006 relating to emissions from air-conditioning systems in motor vehicles and amending Council Directive 70/156/EEC (Text with EEA relevance)



This Directive lays down the requirements for the EC type-approval or national typeapproval of vehicles as regards emissions from, and the safe functioning of, airconditioning systems fitted to vehicles. It also lays down provisions on retrofitting and refilling of such systems.



The Directive shall apply to motor vehicles of categories M_1 and N_1 as defined in Annex II of Directive 70/156/EEC. For the purpose of this Directive, vehicles of category N_1 are limited to those of class I as described in the first table in point 5.3.1.4 of Annex I to Council Directive 70/220/EEC of 20 March 1970 on the approximation of the laws of the Member States on measures to be taken against air pollution by emissions from motor vehicles⁽¹⁾, as inserted by Directive 98/69/EC of the European Parliament and of the Council⁽²⁾.



For the purposes of this Directive the following definitions shall apply:

- 1. 'vehicle' means any motor vehicle falling within the scope of this Directive;
- 2. 'vehicle type' means a type as defined in section B of Annex II of Directive 70/156/ EEC;
- 3. 'air-conditioning system' means any system whose main purpose is to decrease the air temperature and humidity of the passenger compartment of a vehicle;
- 4. 'dual evaporator system' means a system where one evaporator is mounted in the engine compartment and the other in a different compartment of the vehicle; all other systems shall be considered 'single evaporator systems';
- 5. 'fluorinated greenhouse gases' means hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆) as referred to in Annex A of the Kyoto Protocol and preparations containing these substances, but excludes substances controlled under Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer⁽³⁾;
- 6. 'hydrofluorocarbon' means an organic compound consisting of carbon, hydrogen and fluorine, and where no more than six carbon atoms are contained in the molecule;

- 7. 'perfluorocarbon' means an organic compound consisting of carbon and fluorine only, and where no more than six carbon atoms are contained in the molecule;
- 8. 'global warming potential' means the climatic warming potential of a fluorinated greenhouse gas relative to that of carbon dioxide. The global warming potential (GWP) is calculated in terms of the 100 year warming potential of one kilogram of a gas relative to one kilogram of CO₂. The relevant GWP figures are those published in the third assessment report adopted by the Intergovernmental Panel on Climate Change (2001 IPCC GWP values)⁽⁴⁾;
- 9. 'preparation' means a mixture composed of two or more substances at least one of which is a fluorinated greenhouse gas. The total global warming potential⁽⁵⁾ of the preparation shall be determined in accordance with Part 2 of the Annex;
- 10. 'retrofitting' means installing an air-conditioning system in a vehicle after it has been registered.



Obligations of the Member States

1 Member States shall grant, as appropriate, EC type-approval or national type-approval, with regard to emissions from air conditioning systems, only to vehicle types that satisfy the requirements of this Directive.

2 For the purpose of granting whole vehicle type-approval pursuant to Article 4(1)(a) of Directive 70/156/EEC, Member States shall ensure that manufacturers supply information on the type of refrigerant used in air-conditioning systems fitted to new motor vehicles.

3 For the purpose of type-approval of vehicles fitted with air-conditioning systems designed to contain a fluorinated greenhouse gas with a global warming potential higher than 150, Member States shall ensure that, in accordance with the harmonised leakage detection test referred to in Article 7(1), the leakage rate of such gases shall not exceed the maximum permissible limits laid down in Article 5.



Type-approval

1 With effect from six months from the date of adoption of a harmonised leakage detection test, Member States may not, on grounds relating to emissions from air conditioning systems:

- a refuse, in respect of a new type of vehicle, to grant EC type-approval, or national type approval; or
- b prohibit registration, sale or entry into service of new vehicles,

if the vehicle fitted with an air-conditioning system designed to contain fluorinated greenhouse gases with a global warming potential higher than 150 complies with the requirements of this Directive.

2 With effect from 12 months from the date of adoption of a harmonised leakage detection test or 1 January 2007, whichever is later, Member States shall no longer grant EC type-approval or national type-approval for a type of vehicle fitted with an air-conditioning system designed to contain fluorinated greenhouse gases with a global warming potential higher

than 150, unless the rate of leakage from that system does not exceed 40 grams of fluorinated greenhouse gases per year for a single evaporator system, or 60 grams of fluorinated greenhouse gases per year for a dual evaporator system.

3 With effect from 24 months from the date of adoption of a harmonised leakage detection test or 1 January 2008, whichever is later, in respect of new vehicles fitted with air-conditioning systems designed to contain fluorinated greenhouse gases with a global warming potential higher than 150, unless the rate of leakage from that system does not exceed 40 grams of fluorinated greenhouse gases per year for a single evaporator system or 60 grams of fluorinated greenhouse gases per year for a dual evaporator system, Member States shall:

- a consider certificates of conformity to be no longer valid for the purposes of Article 7(1) of Directive 70/156/EEC; and
- b refuse registration and prohibit sale and entry into service.

4 With effect from 1 January 2011 Member States shall no longer grant EC typeapproval or national type-approval for a type of vehicle fitted with an air conditioning system designed to contain fluorinated greenhouse gases with a global warming potential higher than 150.

5 With effect from 1 January 2017, in respect of new vehicles which are fitted with an air-conditioning system designed to contain fluorinated greenhouse gases with a global warming potential higher than 150, Member States shall:

- a consider certificates of conformity to be no longer valid for the purposes of Article 7(1) of Directive 70/156/EEC; and
- b refuse registration and prohibit sale and entry into service.

6 Without prejudice to relevant Community law, in particular Community rules on State aid and Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and of rules on Information Society services⁽⁶⁾, Member States may promote the installation of air-conditioning systems which are efficient, innovative and further reduce the climate impact.

Article 6 U.K.

Retrofitting and refilling

1 With effect from 1 January 2011, air-conditioning systems designed to contain fluorinated greenhouse gases with a global warming potential higher than 150 shall not be retrofitted to vehicles type-approved from that date. With effect from 1 January 2017, such air-conditioning systems shall not be retrofitted to any vehicles.

Air-conditioning systems fitted to vehicles type-approved on or after 1 January 2011 shall not be filled with fluorinated greenhouse gases with a global warming potential higher than 150. With effect from 1 January 2017 air conditioning systems in all vehicles shall not be filled with fluorinated greenhouse gases with a global warming potential higher than 150, with the exception of refilling of air-conditioning systems containing those gases, which have been fitted to vehicles before that date.

3 Service providers offering service and repair for air-conditioning systems shall not fill such equipment with fluorinated greenhouse gases if an abnormal amount of the refrigerant has leaked from the system, until the necessary repair has been completed.



Implementing measures

1 By 4 July 2007, the Commission shall adopt the measures for the implementation of Article 4 and Article 5, and in particular:

- a the administrative provisions for the EC type-approval of vehicles; and
- b a harmonised leakage detection test for measuring the leakage rate of fluorinated greenhouse gases with a global warming potential higher than 150 from air-conditioning systems.

2 The Commission shall adopt the measures in accordance with the procedure referred to in Article 13 of Directive 70/156/EEC.

3 The Commission shall publish these measures in the *Official Journal of the European Union*.

4 The procedure referred to in paragraph 2 shall apply to the adoption, where appropriate, of:

- a measures needed to ensure the safe functioning and proper servicing of refrigerants in mobile air-conditioning systems;
- b measures relating to the retrofitting of in-use vehicles with air-conditioning systems and the refilling of in-use air-conditioning systems to the extent not covered by Article 6;
- c the adaptation of the method for determining the relevant global warming potential of preparations.



Review

1 On the basis of progress in potential containment of emissions from, or replacement of, fluorinated greenhouse gases in air-conditioning systems fitted to motor vehicles, the Commission shall examine whether:

- the present legislation should be extended to other categories of vehicles, in particular categories M_2 and M_3 as well as classes II and III of category N_1 and
- Community provisions concerning the global warming potential of fluorinated greenhouse gases should be amended; any changes should take account of technological and scientific developments and the need to respect industrial product planning timescales,

and shall publish a report by 4 July 2011. Where necessary, it shall present appropriate legislative proposals.

2 Where a fluorinated greenhouse gas with a global warming potential higher than 150, which is not yet covered by the IPCC report referred to in Article 3(8), is included in a future report of the IPCC, the Commission shall assess whether it is appropriate to amend this Directive in order to include that gas. If the Commission considers it necessary, it shall, in accordance with the procedure referred to in Article 13 of Directive 70/156/EEC:

adopt the necessary measures and

- define transition periods for the application of these measures. In doing so the Commission shall strike a balance between the need for an appropriate lead-time and the risk that the fluorinated greenhouse gas poses to the environment.



Amendments to Directive 70/156/EEC

Directive 70/156/EEC is hereby amended in accordance with Part 1 of the Annex to this Directive.



Transposition

1 Member States shall adopt and publish by 4 January 2008 the laws, regulations and administrative provisions necessary to comply with this Directive.

They shall apply those measures from 5 January 2008.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2 Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 11	<i>U.K.</i>
Entry into force	

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

Article 12	<i>U.K.</i>	
Addressees		

This Directive is addressed to the Member States.

Done at Strasbourg, 17 May 2006.

For the European Parliament The President J. BORRELL FONTELLES For the Council The President H. WINKLER

- (1) OJ L 76, 6.4.1970, p. 1. Directive as last amended by Commission Directive 2003/76/EC (OJ L 206, 15.8.2003, p. 29).
- (2) OJ L 350, 28.12.1998, p. 1.
- (3) OJ L 244, 29.9.2000, p. 1. Regulation as last amended by Commission Regulation (EC) No 29/2006 (OJ L 6, 11.1.2006, p. 27).
- (4) IPCC Third Assessment Climate Change 2001. A Report of the Intergovernmental Panel on Climate Change (http://www.ipcc.ch/pub/reports.htm).
- (5) For the calculation of the GWP of non-fluorinated greenhouse gases in preparations, the values published in the First IPCC Assessment shall apply, see: Climate Change, The IPCC Scientific Assessment, J.T. Houghton, G.J. Jenkins, J.J. Ephraums (ed.), Cambridge University Press, Cambridge (UK) 1990.
- (6) OJ L 204, 21.7.1998, p. 37. Directive as last amended by the 2003 Act of Accession.