

P5_TA(2004)0237

Fluorinated greenhouse gases *I**

European Parliament legislative resolution on the proposal for a European Parliament and Council regulation on certain fluorinated greenhouse gases (COM(2003) 492 – C5-0397/2003 – 2003/0189(COD))

(Codecision procedure: first reading)

The European Parliament,

- having regard to the Commission proposal to the European Parliament and the Council (COM(2003) 492)¹,
 - having regard to Articles 251(2) and 95 of the EC Treaty, pursuant to which the Commission submitted the proposal to Parliament (C5-0397/2003),¹
 - having regard to the opinion of the Committee on Legal Affairs and the Internal Market on the proposed legal basis,
 - having regard to Rules 67 and 63 of its Rules of Procedure,
 - having regard to the report of the Committee on the Environment, Public Health and Consumer Policy and the opinion of the Committee on Industry, External Trade, Research and Energy (A5-0172/2004),
1. Approves the Commission proposal as amended;
 2. Calls on the Commission to refer the matter to Parliament again if it intends to amend the proposal substantially or replace it with another text;
 3. Instructs its President to forward its position to the Council and Commission.

¹ Not yet published in OJ.

Position of the European Parliament adopted at first reading on 31 March 2004 with a view to the adoption of Regulation (EC) No .../2004 of the European Parliament and of the Council on certain fluorinated greenhouse gases

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 95 thereof,

Having regard to the proposal from the Commission¹,

Having regard to the opinion of the European Economic and Social Committee²,

Acting in accordance with the procedure laid down in Article 251 of the Treaty³,

Whereas:

- (1) The sixth Environmental Action Programme: Environment 2010: Our Future, Our Choice⁴ identifies climate change as a priority for action. That Programme recognises that the Community is committed to achieving an 8% reduction in emissions of greenhouse gases within 2008 to 2012 compared to 1990 levels, and that in the longer-term global emissions of greenhouse gases will need to be reduced by approximately 70% compared to 1990 levels.
- (2) The ultimate objective of the United Nations Framework Convention on Climate Change, which was approved by Council Decision 94/69/EC of 15 December 1993 concerning the conclusion of the United Nations Framework Convention on Climate Change⁵, is to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level which prevents dangerous anthropogenic interference with the climate system.

¹ OJ C [...], [...], p. [...].

² OJ C [...], [...], p. [...].

³ *Position of the European Parliament of 31 March 2004.*

⁴ Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme (OJ L 242, 10.9.2002, p. 1).

⁵ OJ L 33, 7.2.1994, p. 11.

- (3) Council Decision 2002/358/EC of 25 April 2002, concerning the conclusion of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfillment of commitments thereunder¹ commits the Community and its Member States to reduce their aggregate anthropogenic emissions of greenhouse gases listed in Annex A to the Kyoto Protocol by 8% compared to 1990 levels in the period 2008 to 2012.
- (4) ***Annex II of Decision 2002/358/EC lays down different reduction targets for individual Member States. The Member States are therefore required to take individual measures. Individual Member States must therefore also be able to take, or maintain, adequate measures to attain their national reduction targets.***
- (5) Provision should be made for the prevention and minimisation of emissions of fluorinated **greenhouse** gases, without prejudice to Council Directive 75/442/EEC of 15 July 1975 on waste², Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control³, to Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of life vehicles⁴ and to Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment⁵.
- (6) ***Since alternatives to hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6) do exist for the vast majority of applications, it is essential to restrict their use to the applications where there is no alternative available.***

¹ OJ L 130, 15.5.2002, p. 1.

² OJ L 194, 25.7.1975, p. 39. *Directive as last amended by Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1).*

³ OJ L 257, 10.10.1996, p. 26. *Directive as last amended by Regulation (EC) No 1882/2003.*

⁴ OJ L 269, 21.10.2000, p. 34. *Directive as amended by Commission Decision 2002/525/EC (OJ L 170, 29.6.2002, p. 81).*

⁵ OJ L 37, 13.2.2003, p. 24. *Directive as amended by Commission Directive 2003/118/EC (OJ L 345, 31.12.2003, p. 106).*

- (7) Member States are taking or planning differing measures to reduce emissions of fluorinated **greenhouse** gases. Such differing measures by Member States could create obstacles or distort competition within the internal market. It is therefore appropriate to take measures at Community level to ensure that the internal market is protected through the harmonisation of requirements on monitoring, containment and marketing and use of fluorinated **greenhouse** gases.
- (8) Marketing and use restrictions for certain applications of fluorinated **greenhouse** gases are considered appropriate to prevent distortions in the internal market that could result from differing measures taken by Member States. *Where* viable alternatives are available and improvement of containment and recovery is not feasible, voluntary initiatives by some industry sectors needs to be taken into account as well as the fact that the development of alternatives is still ongoing.
- (9) The Kyoto Protocol requires reporting on emissions of fluorinated **greenhouse** gases and data on the production, imports and export of fluorinated **greenhouse** gases can help to validate the accuracy of these reports. Annual reporting should therefore be required from producers, importers and exporters of fluorinated **greenhouse** gases. ***In order to fulfil their obligations under the Kyoto Protocol to record and report on emissions of fluorinated greenhouse gases on their territory, the Member States should also be able to stipulate additional national reporting requirements.***

- (10) Emissions of hydrofluorocarbon-134a (HFC-134a) from air conditioners in motor vehicles are of growing concern because of their impact on climate change. Cost-effective and safe alternatives are expected to be available imminently. These alternatives are not damaging or are considerably less damaging to the climate and do not adversely affect vehicles' energy consumption and related carbon dioxide *emissions*.
- (11) In order to facilitate the monitoring and verification of the leakage rates of air conditioning systems in new vehicles, the Commission will promote the preparation of European standards and will take other necessary measures in order to amend the pertinent European vehicle type approval legislation.
- (12) ***Putting into service, servicing, maintenance, as well as recovery and inspection activities are international professions, which should be carried out by adequately trained and certified professionals. The development of a European set of criteria for professional qualifications is essential for achieving the objective of this Regulation.***
- (13) Provision should be made for the monitoring, evaluation and review of the provisions contained in this Regulation.
- (14) Member States should lay down rules on sanctions applicable to infringements of this Regulation and ensure that those rules are implemented. Those sanctions must be effective, proportionate and dissuasive.
- (15) This Regulation respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union.

- (16) Since, in order to preserve the internal market, the objective of the proposed action, *namely* the containment, reporting, control of use and placing on the market of certain fluorinated **greenhouse** gases, cannot be sufficiently achieved by the Member States acting individually, and can therefore by reason of the scale and effects of the proposed action be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective.
- (17) The measures necessary for the implementation of this Regulation should be adopted in accordance with Article 4 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission¹ through the committee established by Regulation (EC) No 2037/2000 *of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer*²,

HAVE ADOPTED THIS REGULATION:

Article 1

Scope

This Regulation shall apply to the containment, the use **and the recovery of** fluorinated greenhouse gases, **including** hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride **as listed in Annex A to the Kyoto Protocol, to the placing on the market and use of products and equipment containing those gases** and to the reporting of **data** on those gases. An indicative list **of the gases covered by this Regulation** is given in Annex I.

This Regulation shall apply without prejudice to *Directives 75/442/EEC, 96/61/EC, 2000/53/EC and 2002/96/EC.*

¹ OJ L 184, 17.7.1999, p. 23.

² OJ L 244, 29.9.2000, p. 1. *Regulation as last amended by Commission Decision 2004/232/EC (OJ L 71, 10.3.2004, p. 28).*

Article 2
Definitions

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

- (a) ***"producer" means any natural or legal person manufacturing fluorinated greenhouse gases within the Community;***
- (b) ***“placing on the market” means the supplying or making available to third parties, against payment or free of charge, of fluorinated greenhouse gases governed by this Regulation, or of products and equipment containing such gases or requiring them for their operation. With regard to vehicles, "placing on the market" relates to new vehicle types;***
- (c) ***“receptacle” means transportable pressure equipment, as defined in Article 2(1) of Council Directive 1999/36/EC of 29 April 1999¹, for the supply of fluorinated greenhouse gases. This definition does not cover containers used in laboratories for analytical purposes and metered dose inhalers;***
- (d) ***“recovery” means the collection and storage of fluorinated greenhouse gases from, for example, machinery, equipment and containment vessels during their servicing or disposal;***
- (e) ***“recycling” means the reuse of a recovered fluorinated greenhouse gas following a basic cleaning process such as filtering and drying. For refrigerants, recycling normally involves recharge back into equipment as is often carried out on site;***

¹ ***OJ L 138, 1.6.1999, p. 20.***

- (f) “reclamation” means the reprocessing and upgrading of a recovered fluorinated **greenhouse** gas through such processes as filtering, drying, distillation and chemical treatment in order to restore the substance to a specified standard of performance, which often involves processing off site at a central facility;
- (g) **“destruction” means the irreversible transformation of the chemical nature of a substance;**
- (h) “vehicles” means any motor vehicle of categories M1 and class I of N1, as defined in Annex II to Directive 70/156/EEC¹;
- (i) **“hydrofluorocarbon” means an organic compound consisting of carbon, hydrogen and fluorine where no more than six carbon atoms are contained in the molecule, whether isolated or in a mixture or preparation, and whether it is virgin, recovered, recycled or reclaimed;**
- (j) **“perfluorocarbon” means an organic compound consisting solely of carbon and fluorine, and where no more than six carbon atoms are contained in the molecule, whether isolated or in a mixture or preparation, and whether it is virgin, recovered, recycled or reclaimed;**
- (k) **“fluorinated greenhouse gases” means hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆) and preparations containing these substances except where the preparation is a controlled substance under Regulation (EC) No 2037/2000 or where the preparation has a global warming potential of less than 15;**

¹ Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers (OJ L 42, 23.2.1970, p. 1). Directive as last amended by Directive 2004/3/EC of the European Parliament and of the Council (OJ L 49, 19.2.2004, p. 36).

- (l) ***“global warming potential” means either the 100 year time horizon Global Warming Potential (GWP) published in the second assessment report adopted by the Intergovernmental Panel on Climate Change (IPCC) or, where this value is not published in that report, a Global Warming Potential (GWP) determined in accordance with IPCC methodology;***
- (m) ***“air conditioning systems containing fluorinated greenhouse gases with a global warming potential higher than 50” means air conditioning systems that use hydrofluorocarbons the global warming potential of which exceeds 50 as specified in Annex I. Where applicable to motor vehicles, it refers to vehicle air conditioning systems designed to condition air in the passenger cabin that use hydrofluorocarbons the global warming potential of which exceeds 50 as specified in Annex I;***
- (n) ***“technical aerosols” means aerosols used in maintenance, repair, cleaning, testing, disinfecting, manufacturing, installation and other applications where a non-flammable formulation is required for safety reasons, including silly string aerosols as referred to in the Annex to Directive 94/48/EC¹;***
- (o) ***“small-scale manufacturers” means manufacturers of vehicles who sell no more than 50 000 vehicles per calendar year in the European Union.***

Article 3

Prevention

All measures that are technically and economically feasible shall be taken to prevent and minimise emissions of fluorinated greenhouse gases.

¹ *Directive 94/48/EC of the European Parliament and of the Council of 7 December 1994 amending for the 13th time Directive 76/769/EEC on the approximation of the laws, regulations and administrative provisions of the Member States relating to restrictions on the marketing and use of certain dangerous substances and preparations (OJ L 331, 21.12.1994, p. 7).*

Article 4

Containment

1. ***Owners and operators shall take*** all measures that are technically and economically ***feasible to*** prevent and minimise emissions of fluorinated ***greenhouse*** gases.
2. ***Before putting refrigeration, air-conditioning and heat-pump systems into service, all components and the whole system shall undergo standardised tests defined in accordance with the procedure referred to in Article 15(2).***
3. ***Operators of stationary refrigeration, air-conditioning and heat-pump equipment and fire protection systems not designed in accordance with the ISO 14520 standard and containing fluorinated greenhouse gases shall ensure that, when they are put into service and, subsequently, in accordance with paragraph 5, systems including at least one circuit containing 3kg or more of fluorinated greenhouse gases, are inspected by a duly authorised company or person.***
4. Subject to *paragraph 5, the owner shall ensure that* stationary - *and mobile, with the exception of the systems referred to in Article 10* - refrigeration, air-conditioning and heat-pump equipment and fire protection systems containing fluorinated ***greenhouse*** gases, ***except equipment and systems exclusively for personal use,*** shall be inspected for leakage ***after maintenance and on a regular basis*** according to the following schedule:
 - (a) equipment ***including at least one independently charged circuit*** containing 3kg or more of fluorinated ***greenhouse*** gases shall be inspected ***by accredited companies/certified personnel*** at least once every year;

- (b) equipment containing 30kg or more of fluorinated **greenhouse** gases shall be inspected **by accredited companies/certified personnel** four times per year;
- (c) equipment containing 300kg or more of fluorinated **greenhouse** gases shall be inspected **by accredited companies/certified personnel** monthly.

In the case of point (a), where leakage is detected and rectified, an additional inspection shall be carried out one month later.

In the case of points (b) and (c), where no leakage is detected on three consecutive inspections, the frequency of inspections shall be halved to six months and two months respectively.

In the case of fire protection equipment where there is an existing inspection regime in place to meet the ISO 14520 standard, those inspections may also fulfill the obligations of this Regulation provided they are at least as frequent.

5. Where ***an integral or mobile*** leakage detection system is in place ***so as to monitor areas where leakage is likely, the inspections referred to in paragraph 4(b) shall be carried out twice a year and those referred to in paragraph 4(c) four times a year.*** The frequency of inspections ***shall be reduced to once a year in the case of paragraph 4(b) and twice a year in the case of paragraph 4(c) if no leakage is detected during inspections in three consecutive years.***

6. ***Operators*** of stationary refrigeration, air-conditioning and heat-pump equipment and fire protection systems ***including at least one independently charged circuit*** containing 300kg or more of fluorinated ***greenhouse*** gases shall install leakage detection systems ***to monitor the areas where leakage is likely.***

7. Owners ***and operators*** of stationary refrigeration, air-conditioning and heat-pump equipment and fire protection systems containing 3kg or more of fluorinated ***greenhouse*** gases shall maintain records on the quantity and type of fluorinated ***greenhouse*** gases installed, any quantities added and the quantity recovered during maintenance and servicing. The records shall be made available on request to the competent authority and to the Commission.

8. ***Leaks shall be identified and repaired as soon as practicable by a duly certified person.***

9. ***Entities that install, distribute or maintain fire protection systems shall register with the relevant competent authority.***

Article 5

Recovery

1. Fluorinated ***greenhouse*** gases contained in the following types of equipment shall be recovered for recycling, reclamation or destruction:

- a) the cooling circuits of refrigeration, air-conditioning and *heat-pump* equipment;
- b) equipment containing solvents;

- c) fire protection systems and fire extinguishers ; and
- d) high voltage switch *gear*.

Recovery shall take place during the servicing and maintenance of that equipment **and** during the final disposal thereof.

2. Unused fluorinated **greenhouse** gases contained in refillable containers shall be recovered for recycling, reclamation or destruction.

3. Fluorinated **greenhouse** gases contained in other products and equipment shall be recovered, to the extent that it is technically feasible and cost-effective for recycling, reclamation or destruction.

4. Member States shall ensure that a publicly accessible electronic register of accredited companies/certified personnel is established.

Article 6

Training and certification programmes

1. Member States shall establish training and certification/**accreditation** programmes for the personnel/**servicing company handling fluorinated greenhouse gases including those involved in putting into service, servicing and maintenance as well as the recovery and inspection** activities provided for in **Article 4(2) to (7) and Article 5, based on a set of criteria that guarantee professional standards or bring already existing schemes into line with the requirements of this Regulation.**

The owner of the equipment/system shall be responsible for ensuring that the personnel/servicing company involved has the required certification/accreditation.

Member States shall designate the competent authorities responsible for delivering mandatory certification/accreditation to companies and personnel in the industrial sectors concerned and for monitoring proper implementation of the certification/accreditation scheme as well as continuing compliance with the required competence and qualifications. The certification/accreditation applies to:

- putting into service,*
- responsible servicing,*
- maintenance,*
- recovery and inspection activities as provided for in Articles 4 and 5.*

2. Certification/accreditation programmes shall ensure that the personnel/servicing company involved in carrying out the activities provided for in Articles 4 and 5 have obtained a competence in applicable regulations and standards as well as competence in handling safely the type and size of equipment that they will be handling in their profession.

3. If a Member State considers that the set of criteria for professional qualifications which attest to a sufficient level of competence for the pursuit of putting into service, servicing, maintenance as well as the recovery and inspection activities as provided for in Articles 4 and 5, on the basis of which the competent authorities accredit the qualifications obtained in another Member State does not offer adequate guarantees with regard to professional qualifications, it shall inform the Commission accordingly.

The Commission shall, if appropriate, take a decision establishing essential requirements and mutual recognition for the training and certification/accreditation programmes in accordance with the procedure referred to in Article 16(2).

4. Within two years of the entry into force of this Regulation, Member States shall notify the Commission of information on the training and certification/*accreditation* programmes referred to in *paragraphs 1 and 2. The Commission shall assess whether a programme is in conformity with paragraph 2 and if so approve it in accordance with the procedure referred to in Article 15(2).* Member States shall give recognition to the certificates issued in another Member State and shall not restrict the freedom to provide services or the freedom of establishment for reasons relating to the certification/*accreditation* issued in another Member State *provided that the certification/accreditation programmes have been approved by the Commission.*

5. Within one year of the entry into force of this Regulation, the Commission, in accordance with the procedure referred to in *Article 15(2)*, shall determine the format of such notifications.

Article 7

Reporting

1. By 31 March each year from the second calendar year following entry into force of this *Regulation*, the following data in respect of the preceding year shall be communicated to the Commission:

- (a) Each producer *of fluorinated greenhouse gas* who produces more than one tonne per annum shall communicate:

- its total production of each fluorinated **greenhouse gas**;
 - *the quantities of each fluorinated greenhouse gas placed on the market in the Community, including estimates of quantities produced for a range of applications;*
 - *any quantities of each used fluorinated greenhouse gas imported for recycling, for reclamation or for destruction;*
 - any quantities recycled, reclaimed or destroyed *of each fluorinated greenhouse gas*;
- (b) Each importer *of fluorinated greenhouse gases*, including any producers who also import, shall communicate:
- any quantities of *each* fluorinated **greenhouse gas imported or supplied** in the **Community**;
 - *the quantities of each fluorinated greenhouse gas placed on the market in the Community, including estimates of quantities imported for a range of applications;*
 - any quantities of *each* used fluorinated **greenhouse gas** imported for recycling, for reclamation or for destruction;
 - *an estimate of the expected emissions over the life-cycle of the substance;*
- (c) Each exporter who exports more than one tonne per annum, including any producers who also export, shall communicate:
- any quantities of *each* fluorinated **greenhouse gas** exported from the Community;

- any quantities of *each* used fluorinated **greenhouse gas** exported for recycling, for reclamation or for destruction.
2. ***The Commission shall undertake a survey to assess the impact of the import and export of equipment containing fluorinated greenhouse gases on the above emission estimates.***
 3. ***The competent Member State authorities shall review every two years a representative sample of the records for each of the categories indicated in Article 4(4) and report to the Commission estimated emissions. The format of the report shall be established in accordance with the procedure referred to in Article 15(2) within one year of the entry into force of this Regulation.***
 4. The format of the report referred to in paragraph 1 shall be established in accordance with the procedure referred to in *Article 15(2)* within one year of the entry into force of this Regulation.
 5. The Commission shall take appropriate steps to protect the confidentiality of the information submitted to it.
 6. ***In the case of fire protection systems, actual emission figures equating to data on refills shall be recorded as set out in Article 4(7), in lieu of the requirements set out in paragraphs 1 and 4 of this Article. Such data shall be recorded by the trained and certified personnel as defined in Article 6(1).***
 7. The Commission may modify the reporting requirements in paragraph 1 in accordance with the procedure referred to in *Article 15(2)*, to improve the practical application of those reporting requirements.

Article 8

Control of use

1. The use of sulphur hexafluoride in magnesium ***die-casting shall*** be prohibited from 1 January 2007.
2. The use of sulphur hexafluoride for the filling of vehicle tyres shall be prohibited from the date of entry into force of this ***Regulation***.

Article 9

Placing on the market

The placing on the market of **products and equipment which contain** fluorinated **greenhouse** gases **or require them for their operation** in applications listed in Annex II shall be prohibited as specified in that Annex.

Member States shall promote the placing on the market of refrigeration and air-conditioning equipment using gases with a global warming potential of less than 150. If Member States introduce fiscal or other incentives to encourage the placing on the market of such equipment, they shall notify these measures to the Commission.

Article 10

Air-conditioning systems in new vehicles

1. From **31 December 2006**, any person placing new **vehicle types** on the market with **air-conditioning** systems containing fluorinated **greenhouse** gases with a global warming potential higher than 150 shall ensure that the rate of leakage has been verified as not exceeding **the limit values laid down under a specific harmonised test procedure adopted by the Commission**.
2. **The Commission shall specify a standard for measuring the leak rate.**

3. From 1 January 2011, Member States shall no longer issue EC type-approval pursuant to Directive 70/156/EEC for any new type of vehicle if the global warming potential of the fluorinated greenhouse gases used in the air-conditioning system is higher than 50. For small-scale manufacturers, this provision shall apply from 1 January 2013.

4. From 1 January 2014, Member States shall refuse the registration and shall prohibit the sale, entry into service or use of new vehicles fitted with an air-conditioning system using fluorinated greenhouse gases with a global warming potential higher than 50.

5. Member States shall promote the installation of air-conditioning systems using a gas, such as CO₂, that is efficient and which has a global warming potential of less than 100. If Member States introduce fiscal or other incentives to encourage the installation of systems with lower global warming potential, they shall notify these measures to the Commission.

6. Member States may grant tax or financial concessions for the conversion of existing vehicles in operation if air-conditioning systems using fluorinated greenhouse gases with a global warming potential of less than 50 are installed.

Article 11

Promotion of alternatives

Member States shall promote the placing on the market of equipment using gases with a global warming potential of less than 100. If Member States introduce fiscal or other incentives to encourage the placing on the market of such equipment they shall notify these measures to the Commission.

Article 12

Information to consumers

Member States shall ensure that consumers and citizens are informed of the global warming potential of products containing fluorinated greenhouse gases.

Article 13

Progress report

The Commission shall, no later than two years after the entry into force of this Regulation, submit to the European Parliament and the Council a progress report on the development of climate-friendly air-conditioning systems. On the basis of this report, the Commission shall review the dates for their introduction pursuant to Article 10(1) and (3), and shall confirm these or, where necessary, submit proposals.

Article 14

Review

1. On the basis of progress in potential containment or replacement of fluorinated **greenhouse** gases in *air-conditioning* and refrigeration *systems*, **the** Commission shall review the present legislation and report thereon to the European Parliament and the Council by 31 December 2005 at the latest. The report shall be accompanied where necessary by legislative proposals.

2. Within two years after the entry into force of this Regulation, the Commission shall submit a report to the European Parliament and the Council on possible actions to gradually remove HFC in new air-conditioning, refrigeration and heat-pump systems based on an assessment of alternative technologies with lower total (direct and indirect) greenhouse gas emissions.

3. Within five years after the entry into force of this Regulation, the Commission shall submit a report to the European Parliament and the Council based on the experience *gained from* the application of this Regulation. In particular, the report shall:

- assess the impact of relevant provisions on emissions and projected emissions of fluorinated **greenhouse** gases and examine the cost-effectiveness of these provisions;
- evaluate the training and certification programmes established by Member States under *Article 6(1)*;
- assess the need for European Community standards relating to the control of emissions of fluorinated **greenhouse** gases from equipment, including technical requirements with respect to the design of products and equipment;

- assess the need for the development and dissemination of notes describing best available techniques and best environmental practices concerning the prevention and minimisation of emissions of fluorinated *greenhouse* gases;
 - include an overall summary of the development of the state of technology, experience gained, environmental requirements and any impacts on the functioning of the internal market;
 - *examine whether the rules and objectives set out in Article 5 concerning recovery, reclamation or destruction of fluorinated greenhouse gases have been complied with and achieved, and assess whether existing definitions, requirements and authorisation procedures for cross-border transport of fluorinated greenhouse gases for recovery or thermal recycling require revision.*
4. The report shall, where necessary, be accompanied by proposals for revision of the relevant provisions of this Regulation, *and for any modifications to Directive 2001/56/EC of the European Parliament and of the Council of 27 September 2001 relating to heating systems for motor vehicles and their trailers¹ to take account of necessary control procedures for the measurement of the rate of leakage from vehicle air-conditioning systems.*

Article 15

Committee on fluorinated greenhouse gases

1. The Commission shall be assisted by *a standing committee on fluorinated greenhouse gases.*
2. Where reference is made to this *paragraph*, Article 4 of Decision 1999/468/EC shall apply, *having regard to* Article 7 and Article 8 thereof.
3. The period provided for in Article 4(3) of Decision 1999/468/EC shall be set at one month.

¹ *OJ L 292, 9.11.2001, p. 21.*

Article 16

Committee on the recognition of professional qualifications

- 1. The Commission shall be assisted by a Committee on the recognition of professional qualifications.*
- 2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to Article 8 thereof.*

The period provided for in Article 5(6) of Decision 1999/468/EC shall be two months.

- 3. The Committee may be asked to give its opinion on any other matter relating to implementation of this Regulation.*
- 4. The Committee shall adopt its rules of procedure.*

Article 17

Sanctions

- 1. Member States shall lay down rules on sanctions applicable to infringements of the provisions of this Regulation and shall take all measures necessary to ensure that such rules are implemented. The sanctions provided for shall be effective, proportionate and dissuasive.*
- 2. Member States shall notify the rules on sanctions to the Commission by one year after the entry into force of this Regulation and shall also notify it without delay of any subsequent amendment affecting those rules.*

Article 18

Entry into force

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 [...],

For the European Parliament
The President

For the Council
The President

ANNEX I

Fluorinated *greenhouse* gases

| Fluorinated <i>greenhouse</i> gas | Chemical Formula | Global Warming Potential |
|-----------------------------------|---|--------------------------|
| Sulphur hexafluoride | SF ₆ | 23900 |
| Hydrofluorocarbons (HFCs): | | |
| HFC-23 | CHF ₃ | 11700 |
| HFC-32 | CH ₂ F ₂ | 650 |
| HFC-41 | CH ₃ F | 150 |
| HFC-43-10mee | C ₅ H ₂ F ₁₀ | 1300 |
| HFC-125 | C ₂ HF ₅ | 2800 |
| HFC-134 | C ₂ H ₂ F ₄ | 1000 |
| HFC-134a | CH ₂ FCF ₃ | 1300 |
| HFC-152a | C ₂ H ₄ F ₂ | 140 |
| HFC-143 | C ₂ H ₃ F ₃ | 300 |
| HFC-143a | C ₂ H ₃ F ₃ | 3800 |
| HFC-227ea | C ₃ HF ₇ | 2900 |
| HFC-236fa | C ₃ H ₂ F ₆ | 6300 |
| HFC-245ca | C ₃ H ₃ F ₅ | 560 |
| HFC-365mfc | CF ₃ CH ₂ CF ₂ CH ₃ | 890 |
| Perfluorocarbons (PFCs): | | |
| Perfluoromethane | CF ₄ | 6500 |
| Perfluoroethane | C ₂ F ₆ | 9200 |
| Perfluoropropane | C ₃ F ₈ | 7000 |
| Perfluorobutane | C ₄ F ₁₀ | 7000 |
| Perfluoropentane | C ₅ F ₁₂ | 7500 |
| Perfluorohexane | C ₆ F ₁₄ | 7400 |
| Perfluorocyclobutane | c-C ₄ F ₈ | 8700 |

ANNEX II

| Fluorinated <i>greenhouse</i> gas | Application | Date of prohibition |
|---|--|--|
| Fluorinated <i>greenhouse</i> gases with a global warming potential higher than 50 | Air conditioning in passenger cars and light commercial vehicles (<i>new vehicle types</i>) | 1 January 2011 (1 January 2013)* |
| Sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons | Non-refillable containers, except for laboratory and analytical use and metered dose inhalers | One year after the date of entry into force |
| Hydrofluorocarbons and perfluorocarbons | Refrigerants in non-confined direct-evaporation systems | Date of entry into <i>force</i> |
| <i>Sulphur</i> hexafluoride, hydrofluorocarbons and perfluorocarbons | Windows | Two years after the date of entry into force |
| Sulphur hexafluoride | Footwear | Date of entry into force |
| Hydrofluorocarbons | One component foams, except when required to meet national safety standards | One year after the <i>date of</i> entry into force |
| Hydrofluorocarbons | <i>Aerosols, except when used in technical aerosols and metered dose inhalers or other pharmaceutical products</i> | <i>Two</i> years after the <i>date of</i> entry into force |
| Hydrofluorocarbons and perfluorocarbons | Footwear | 1 July 2006 |

* *For small-scale manufacturers the date of 1 January 2013 applies.*