



**DIRECTIVE 2003/87/EC OF THE EUROPEAN PARLIAMENT
AND OF THE COUNCIL**

of 13 October 2003

**establishing a scheme for greenhouse gas emission allowance
trading within the Community and amending Council Directive
96/61/EC**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE
EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and
in particular Article 175(1) thereof,

Having regard to the proposal from the Commission ⁽¹⁾,

Having regard to the opinion of the European Economic and Social
Committee ⁽²⁾,

Having regard to the opinion of the Committee of the Regions ⁽³⁾,

Acting in accordance with the procedure laid down in Article 251 of the
Treaty ⁽⁴⁾,

Whereas:

- (1) The Green Paper on greenhouse gas emissions trading within the European Union launched a debate across Europe on the suitability and possible functioning of greenhouse gas emissions trading within the European Union. The European Climate Change Programme has considered Community policies and measures through a multi-stakeholder process, including a scheme for greenhouse gas emission allowance trading within the Community (the Community scheme) based on the Green Paper. In its Conclusions of 8 March 2001, the Council recognised the particular importance of the European Climate Change Programme and of work based on the Green Paper, and underlined the urgent need for concrete action at Community level.
- (2) The Sixth Community Environment Action Programme established by Decision No 1600/2002/EC of the European Parliament and of the Council ⁽⁵⁾ identifies climate change as a priority for action and provides for the establishment of a Community-wide emissions trading scheme by 2005. That Programme recognises that the Community is committed to achieving an 8 % reduction in emissions of greenhouse gases by 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.
- (3) 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 Change ⁽⁶⁾, 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 75 E, 26.3.2002, p. 33.

⁽²⁾ OJ C 221, 17.9.2002, p. 27.

⁽³⁾ OJ C 192, 12.8.2002, p. 59.

⁽⁴⁾ Opinion of the European Parliament of 10 October 2002 (not yet published in the Official Journal), Council Common Position of 18 March 2003 (OJ C 125 E, 27.5.2003, p. 72), Decision of the European Parliament of 2 July 2003 (not yet published in the Official Journal) and Council Decision of 22 July 2003.

⁽⁵⁾ OJ L 242, 10.9.2002, p. 1.

⁽⁶⁾ OJ L 33, 7.2.1994, p. 11.

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- (4) Once it enters into force, the Kyoto Protocol, which was approved by Council Decision 2002/358/EC of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder⁽¹⁾, will commit the Community and its Member States to reducing their aggregate anthropogenic emissions of greenhouse gases listed in Annex A to the Protocol by 8 % compared to 1990 levels in the period 2008 to 2012.
- (5) The Community and its Member States have agreed to fulfil their commitments to reduce anthropogenic greenhouse gas emissions under the Kyoto Protocol jointly, in accordance with Decision 2002/358/EC. This Directive aims to contribute to fulfilling the commitments of the European Community and its Member States more effectively, through an efficient European market in greenhouse gas emission allowances, with the least possible diminution of economic development and employment.
- (6) Council Decision 93/389/EEC of 24 June 1993 for a monitoring mechanism of Community CO₂ and other greenhouse gas emissions⁽²⁾, established a mechanism for monitoring greenhouse gas emissions and evaluating progress towards meeting commitments in respect of these emissions. This mechanism will assist Member States in determining the total quantity of allowances to allocate.
- (7) Community provisions relating to allocation of allowances by the Member States are necessary to contribute to preserving the integrity of the internal market and to avoid distortions of competition.
- (8) Member States should have regard when allocating allowances to the potential for industrial process activities to reduce emissions.
- (9) Member States may provide that they only issue allowances valid for a five-year period beginning in 2008 to persons in respect of allowances cancelled, corresponding to emission reductions made by those persons on their national territory during a three-year period beginning in 2005.
- (10) Starting with the said five-year period, transfers of allowances to another Member State will involve corresponding adjustments of assigned amount units under the Kyoto Protocol.
- (11) Member States should ensure that the operators of certain specified activities hold a greenhouse gas emissions permit and that they monitor and report their emissions of greenhouse gases specified in relation to those activities.
- (12) Member States should lay down rules on penalties applicable to infringements of this Directive and ensure that they are implemented. Those penalties must be effective, proportionate and dissuasive.
- (13) In order to ensure transparency, the public should have access to information relating to the allocation of allowances and to the results of monitoring of emissions, subject only to restrictions provided for in Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information⁽³⁾.
- (14) Member States should submit a report on the implementation of this Directive drawn up on the basis of Council Directive

⁽¹⁾ OJ L 130, 15.5.2002, p. 1.

⁽²⁾ OJ L 167, 9.7.1993, p. 31. Decision as amended by Decision 1999/296/EC (OJ L 117, 5.5.1999, p. 35).

⁽³⁾ OJ L 41, 14.2.2003, p. 26.

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91/692/EEC of 23 December 1991 standardising and rationalising reports on the implementation of certain Directives relating to the environment ⁽¹⁾.

- (15) The inclusion of additional installations in the Community scheme should be in accordance with the provisions laid down in this Directive, and the coverage of the Community scheme may thereby be extended to emissions of greenhouse gases other than carbon dioxide, *inter alia* from aluminium and chemicals activities.
- (16) This Directive should not prevent any Member State from maintaining or establishing national trading schemes regulating emissions of greenhouse gases from activities other than those listed in Annex I or included in the Community scheme, or from installations temporarily excluded from the Community scheme.
- (17) Member States may participate in international emissions trading as Parties to the Kyoto Protocol with any other Party included in Annex B thereto.
- (18) Linking the Community scheme to greenhouse gas emission trading schemes in third countries will increase the cost-effectiveness of achieving the Community emission reductions target as laid down in Decision 2002/358/EC on the joint fulfilment of commitments.
- (19) Project-based mechanisms including Joint Implementation (JI) and the Clean Development Mechanism (CDM) are important to achieve the goals of both reducing global greenhouse gas emissions and increasing the cost-effective functioning of the Community scheme. In accordance with the relevant provisions of the Kyoto Protocol and Marrakech Accords, the use of the mechanisms should be supplemental to domestic action and domestic action will thus constitute a significant element of the effort made.
- (20) This Directive will encourage the use of more energy-efficient technologies, including combined heat and power technology, producing less emissions per unit of output, while the future directive of the European Parliament and of the Council on the promotion of cogeneration based on useful heat demand in the internal energy market will specifically promote combined heat and power technology.
- (21) Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control ⁽²⁾ establishes a general framework for pollution prevention and control, through which greenhouse gas emissions permits may be issued. Directive 96/61/EC should be amended to ensure that emission limit values are not set for direct emissions of greenhouse gases from an installation subject to this Directive and that Member States may choose not to impose requirements relating to energy efficiency in respect of combustion units or other units emitting carbon dioxide on the site, without prejudice to any other requirements pursuant to Directive 96/61/EC.
- (22) This Directive is compatible with the United Nations Framework Convention on Climate Change and the Kyoto Protocol. It should be reviewed in the light of developments in that context and to take into account experience in its implementation and progress achieved in monitoring of emissions of greenhouse gases.
- (23) Emission allowance trading should form part of a comprehensive and coherent package of policies and measures implemented at Member State and Community level. Without prejudice to the application of Articles 87 and 88 of the Treaty, where activities

⁽¹⁾ OJ L 377, 31.12.1991, p. 48.

⁽²⁾ OJ L 257, 10.10.1996, p. 26.

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are covered by the Community scheme, Member States may consider the implications of regulatory, fiscal or other policies that pursue the same objectives. The review of the Directive should consider the extent to which these objectives have been attained.

- (24) The instrument of taxation can be a national policy to limit emissions from installations temporarily excluded.
- (25) Policies and measures should be implemented at Member State and Community level across all sectors of the European Union economy, and not only within the industry and energy sectors, in order to generate substantial emissions reductions. The Commission should, in particular, consider policies and measures at Community level in order that the transport sector makes a substantial contribution to the Community and its Member States meeting their climate change obligations under the Kyoto Protocol.
- (26) Notwithstanding the multifaceted potential of market-based mechanisms, the European Union strategy for climate change mitigation should be built on a balance between the Community scheme and other types of Community, domestic and international action.
- (27) This Directive respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union.
- (28) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ⁽¹⁾.
- (29) As the criteria (1), (5) and (7) of Annex III cannot be amended through comitology, amendments in respect of periods after 2012 should only be made through codecision.
- (30) Since the objective of the proposed action, the establishment of a Community scheme, 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 Directive does not go beyond what is necessary in order to achieve that objective,

HAVE ADOPTED THIS DIRECTIVE:

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CHAPTER I

GENERAL PROVISIONS

▼B*Article 1***Subject matter**

This Directive establishes a scheme for greenhouse gas emission allowance trading within the Community (hereinafter referred to as

⁽¹⁾ OJ L 184, 17.7.1999, p. 23.

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the ‘Community scheme’) in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner.

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This Directive also provides for the reductions of greenhouse gas emissions to be increased so as to contribute to the levels of reductions that are considered scientifically necessary to avoid dangerous climate change.

This Directive also lays down provisions for assessing and implementing a stricter Community reduction commitment exceeding 20 %, to be applied upon the approval by the Community of an international agreement on climate change leading to greenhouse gas emission reductions exceeding those required in Article 9, as reflected in the 30 % commitment endorsed by the European Council of March 2007.

▼ B*Article 2***Scope**

1. This Directive shall apply to emissions from the activities listed in Annex I and greenhouse gases listed in Annex II.
2. This Directive shall apply without prejudice to any requirements pursuant to Directive 96/61/EC.

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3. The application of this Directive to the airport of Gibraltar is understood to be without prejudice to the respective legal positions of the Kingdom of Spain and the United Kingdom with regard to the dispute over sovereignty over the territory in which the airport is situated.

▼ B*Article 3***Definitions**

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

- (a) ‘allowance’ means an allowance to emit one tonne of carbon dioxide equivalent during a specified period, which shall be valid only for the purposes of meeting the requirements of this Directive and shall be transferable in accordance with the provisions of this Directive;

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- (b) ‘emissions’ means the release of greenhouse gases into the atmosphere from sources in an installation or the release from an aircraft performing an aviation activity listed in Annex I of the gases specified in respect of that activity;

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- (c) ‘greenhouse gases’ means the gases listed in Annex II and other gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and re-emit infrared radiation;

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- (d) ‘greenhouse gas emissions permit’ means the permit issued in accordance with Articles 5 and 6;
- (e) ‘installation’ means a stationary technical unit where one or more activities listed in Annex I are carried out and any other directly associated activities which have a technical connection with the activities carried out on that site and which could have an effect on emissions and pollution;
- (f) ‘operator’ means any person who operates or controls an installation or, where this is provided for in national legislation, to whom

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decisive economic power over the technical functioning of the installation has been delegated;

- (g) ‘person’ means any natural or legal person;

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- (h) ‘new entrant’ means:

- any installation carrying out one or more of the activities indicated in Annex I, which has obtained a greenhouse gas emissions permit for the first time after 30 June 2011,
- any installation carrying out an activity which is included in the Community scheme pursuant to Article 24(1) or (2) for the first time, or
- any installation carrying out one or more of the activities indicated in Annex I or an activity which is included in the Community scheme pursuant to Article 24(1) or (2), which has had a significant extension after 30 June 2011, only in so far as this extension is concerned;

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- (i) ‘the public’ means one or more persons and, in accordance with national legislation or practice, associations, organisations or groups of persons;
- (j) ‘tonne of carbon dioxide equivalent’ means one metric tonne of carbon dioxide (CO₂) or an amount of any other greenhouse gas listed in Annex II with an equivalent global-warming potential;

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- (k) ‘Annex I Party’ means a Party listed in Annex I to the United Nations Framework Convention on Climate Change (UNFCCC) that has ratified the Kyoto Protocol as specified in Article 1(7) of the Kyoto Protocol;
- (l) ‘project activity’ means a project activity approved by one or more Annex I Parties in accordance with Article 6 or Article 12 of the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol;
- (m) ‘emission reduction unit’ or ‘ERU’ means a unit issued pursuant to Article 6 of the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol;
- (n) ‘certified emission reduction’ or ‘CER’ means a unit issued pursuant to Article 12 of the Kyoto Protocol and the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol;

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- (o) ‘aircraft operator’ means the person who operates an aircraft at the time it performs an aviation activity listed in Annex I or, where that person is not known or is not identified by the owner of the aircraft, the owner of the aircraft;
- (p) ‘commercial air transport operator’ means an operator that, for remuneration, provides scheduled or non-scheduled air transport services to the public for the carriage of passengers, freight or mail;
- (q) ‘administering Member State’ means the Member State responsible for administering the Community scheme in respect of an aircraft operator in accordance with Article 18a;
- (r) ‘attributed aviation emissions’ means emissions from all flights falling within the aviation activities listed in Annex I which depart from an aerodrome situated in the territory of a Member State and those which arrive in such an aerodrome from a third country;

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- (s) ‘historical aviation emissions’ means the mean average of the annual emissions in the calendar years 2004, 2005 and 2006 from aircraft performing an aviation activity listed in Annex I;

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- (t) ‘combustion’ means any oxidation of fuels, regardless of the way in which the heat, electrical or mechanical energy produced by this process is used, and any other directly associated activities, including waste gas scrubbing;
- (u) ‘electricity generator’ means an installation that, on or after 1 January 2005, has produced electricity for sale to third parties, and in which no activity listed in Annex I is carried out other than the ‘combustion of fuels’.

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CHAPTER II

AVIATION

*Article 3a***Scope**

The provisions of this Chapter shall apply to the allocation and issue of allowances in respect of aviation activities listed in Annex I.

*Article 3b***Aviation activities**

By 2 August 2009, the Commission shall, in accordance with the regulatory procedure referred to in Article 23(2), develop guidelines on the detailed interpretation of the aviation activities listed in Annex I.

*Article 3c***Total quantity of allowances for aviation**

1. For the period from 1 January 2012 to 31 December 2012, the total quantity of allowances to be allocated to aircraft operators shall be equivalent to 97 % of the historical aviation emissions.
2. For the period referred to in ►M4 Article 13(1) ◀ beginning on 1 January 2013, and, in the absence of any amendments following the review referred to in Article 30(4), for each subsequent period, the total quantity of allowances to be allocated to aircraft operators shall be equivalent to 95 % of the historical aviation emissions multiplied by the number of years in the period.

This percentage may be reviewed as part of the general review of this Directive.

3. The Commission shall review the total quantity of allowances to be allocated to aircraft operators in accordance with Article 30(4).
4. By 2 August 2009, the Commission shall decide on the historical aviation emissions, based on best available data, including estimates based on actual traffic information. That decision shall be considered within the Committee referred to in Article 23(1).

*Article 3d***Method of allocation of allowances for aviation through auctioning**

1. In the period referred to in Article 3c(1), 15 % of allowances shall be auctioned.

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2. From 1 January 2013, 15 % of allowances shall be auctioned. This percentage may be increased as part of the general review of this Directive.

3. A Regulation shall be adopted containing detailed provisions for the auctioning by Member States of allowances not required to be issued free of charge in accordance with paragraphs 1 and 2 of this Article or Article 3f(8). The number of allowances to be auctioned in each period by each Member State shall be proportionate to its share of the total attributed aviation emissions for all Member States for the reference year reported pursuant to Article 14(3) and verified pursuant to Article 15. For the period referred to in Article 3c(1), the reference year shall be 2010 and for each subsequent period referred to in Article 3c the reference year shall be the calendar year ending 24 months before the start of the period to which the auction relates.

That Regulation, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

4. It shall be for Member States to determine the use to be made of revenues generated from the auctioning of allowances. Those revenues should be used to tackle climate change in the EU and third countries, *inter alia*, to reduce greenhouse gas emissions, to adapt to the impacts of climate change in the EU and third countries, especially developing countries, to fund research and development for mitigation and adaptation, including in particular in the fields of aeronautics and air transport, to reduce emissions through low-emission transport and to cover the cost of administering the Community scheme. The proceeds of auctioning should also be used to fund contributions to the Global Energy Efficiency and Renewable Energy Fund, and measures to avoid deforestation.

Member States shall inform the Commission of actions taken pursuant to this paragraph.

5. Information provided to the Commission pursuant to this Directive does not free Member States from the notification obligation laid down in Article 88(3) of the Treaty.

Article 3e

Allocation and issue of allowances to aircraft operators

1. For each period referred to in Article 3c, each aircraft operator may apply for an allocation of allowances that are to be allocated free of charge. An application may be made by submitting to the competent authority in the administering Member State verified tonne-kilometre data for the aviation activities listed in Annex I performed by that aircraft operator for the monitoring year. For the purposes of this Article, the monitoring year shall be the calendar year ending 24 months before the start of the period to which it relates in accordance with Annexes IV and V or, in relation to the period referred to in Article 3c(1), 2010. Any application shall be made at least 21 months before the start of the period to which it relates or, in relation to the period referred to in Article 3c(1), by 31 March 2011.

2. At least 18 months before the start of the period to which the application relates or, in relation to the period referred to in Article 3c(1), by 30 June 2011, Member States shall submit applications received under paragraph 1 to the Commission.

3. At least 15 months before the start of each period referred to in Article 3c(2) or, in relation to the period referred to in Article 3c(1), by 30 September 2011, the Commission shall calculate and adopt a decision setting out:

(a) the total quantity of allowances to be allocated for that period in accordance with Article 3c;

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- (b) the number of allowances to be auctioned in that period in accordance with Article 3d;
- (c) the number of allowances in the special reserve for aircraft operators in that period in accordance with Article 3f(1);
- (d) the number of allowances to be allocated free of charge in that period by subtracting the number of allowances referred to in points (b) and (c) from the total quantity of allowances decided upon under point (a); and
- (e) the benchmark to be used to allocate allowances free of charge to aircraft operators whose applications were submitted to the Commission in accordance with paragraph 2.

The benchmark referred to in point (e), expressed as allowances per tonne-kilometre, shall be calculated by dividing the number of allowances referred to in point (d) by the sum of the tonne-kilometre data included in applications submitted to the Commission in accordance with paragraph 2.

4. Within three months from the date on which the Commission adopts a decision under paragraph 3, each administering Member State shall calculate and publish:

- (a) the total allocation of allowances for the period to each aircraft operator whose application it submitted to the Commission in accordance with paragraph 2, calculated by multiplying the tonne-kilometre data included in the application by the benchmark referred to in paragraph 3(e); and
- (b) the allocation of allowances to each aircraft operator for each year, which shall be determined by dividing its total allocation of allowances for the period calculated under point (a) by the number of years in the period for which that aircraft operator is performing an aviation activity listed in Annex I.

5. By 28 February 2012 and by 28 February of each subsequent year, the competent authority of the administering Member State shall issue to each aircraft operator the number of allowances allocated to that aircraft operator for that year under this Article or Article 3f.

Article 3f

Special reserve for certain aircraft operators

1. In each period referred to in Article 3c(2), 3 % of the total quantity of allowances to be allocated shall be set aside in a special reserve for aircraft operators:

- (a) who start performing an aviation activity falling within Annex I after the monitoring year for which tonne-kilometre data was submitted under Article 3e(1) in respect of a period referred to in Article 3c(2); or
- (b) whose tonne-kilometre data increases by an average of more than 18 % annually between the monitoring year for which tonne-kilometre data was submitted under Article 3e(1) in respect of a period referred to in Article 3c(2) and the second calendar year of that period;

and whose activity under point (a), or additional activity under point (b), is not in whole or in part a continuation of an aviation activity previously performed by another aircraft operator.

2. An aircraft operator who is eligible under paragraph 1 may apply for a free allocation of allowances from the special reserve by making an application to the competent authority of its administering Member State. Any application shall be made by 30 June in the third year of the period referred to in Article 3c(2) to which it relates.

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An allocation to an aircraft operator under paragraph 1(b) shall not exceed 1 000 000 allowances.

3. An application under paragraph 2 shall:
 - (a) include verified tonne-kilometre data in accordance with Annexes IV and V for the aviation activities listed in Annex I performed by the aircraft operator in the second calendar year of the period referred to in Article 3c(2) to which the application relates;
 - (b) provide evidence that the criteria for eligibility under paragraph 1 are fulfilled; and
 - (c) in the case of aircraft operators falling within paragraph 1(b), state:
 - (i) the percentage increase in tonne-kilometres performed by that aircraft operator between the monitoring year for which tonne-kilometre data was submitted under Article 3e(1) in respect of a period referred to in Article 3c(2) and the second calendar year of that period;
 - (ii) the absolute growth in tonne-kilometres performed by that aircraft operator between the monitoring year for which tonne-kilometre data was submitted under Article 3e(1) in respect of a period referred to in Article 3c(2) and the second calendar year of that period; and
 - (iii) the absolute growth in tonne-kilometres performed by that aircraft operator between the monitoring year for which tonne-kilometre data was submitted under Article 3e(1) in respect of a period referred to in Article 3c(2) and the second calendar year of that period which exceeds the percentage specified in paragraph 1(b).
 4. No later than six months from the deadline for making an application under paragraph 2, Member States shall submit applications received under that paragraph to the Commission.
 5. No later than 12 months from the deadline for making an application under paragraph 2, the Commission shall decide on the benchmark to be used to allocate allowances free of charge to aircraft operators whose applications were submitted to the Commission in accordance with paragraph 4.
- Subject to paragraph 6, the benchmark shall be calculated by dividing the number of the allowances in the special reserve by the sum of:
- (a) the tonne-kilometre data for aircraft operators falling within paragraph 1(a) included in applications submitted to the Commission in accordance with paragraphs 3(a) and 4; and
 - (b) the absolute growth in tonne-kilometres exceeding the percentage specified in paragraph 1(b) for aircraft operators falling within paragraph 1(b) included in applications submitted to the Commission in accordance with paragraphs 3(c)(iii) and 4.
6. The benchmark referred to in paragraph 5 shall not result in an annual allocation per tonne-kilometre greater than the annual allocation per tonne-kilometre to aircraft operators under Article 3e(4).
 7. Within three months from the date on which the Commission adopts a decision under paragraph 5, each administering Member State shall calculate and publish:
 - (a) the allocation of allowances from the special reserve to each aircraft operator whose application it submitted to the Commission in accordance with paragraph 4. This allocation shall be calculated by multiplying the benchmark referred to in paragraph 5 by:
 - (i) in the case of an aircraft operator falling within paragraph 1(a), the tonne-kilometre data included in the application submitted to the Commission under paragraphs 3(a) and 4;

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- (ii) in the case of an aircraft operator falling within paragraph 1(b), the absolute growth in tonne-kilometres exceeding the percentage specified in paragraph 1(b) included in the application submitted to the Commission under paragraphs 3(c)(iii) and 4; and
 - (b) the allocation of allowances to each aircraft operator for each year, which shall be determined by dividing its allocation of allowances under point (a) by the number of full calendar years remaining in the period referred to in Article 3c(2) to which the allocation relates.
8. Any unallocated allowances in the special reserve shall be auctioned by Member States.
9. The Commission may establish detailed rules on the operation of the special reserve under this Article, including the assessment of compliance with eligibility criteria under paragraph 1. Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

*Article 3g***Monitoring and reporting plans**

The administering Member State shall ensure that each aircraft operator submits to the competent authority in that Member State a monitoring plan setting out measures to monitor and report emissions and tonne-kilometre data for the purpose of an application under Article 3e and that such plans are approved by the competent authority in accordance with ► **M4** the regulation referred to in Article 14 ◀.

CHAPTER III

STATIONARY INSTALLATIONS

*Article 3h***Scope**

The provisions of this Chapter shall apply to greenhouse gas emissions permits and the allocation and issue of allowances in respect of activities listed in Annex I other than aviation activities.

▼ M4*Article 4***Greenhouse gas emissions permits**

Member States shall ensure that, from 1 January 2005, no installation carries out any activity listed in Annex I resulting in emissions specified in relation to that activity unless its operator holds a permit issued by a competent authority in accordance with Articles 5 and 6, or the installation is excluded from the Community scheme pursuant to Article 27. This shall also apply to installations opted in under Article 24.

▼ B*Article 5***Applications for greenhouse gas emissions permits**

An application to the competent authority for a greenhouse gas emissions permit shall include a description of:

- (a) the installation and its activities including the technology used;

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- (b) the raw and auxiliary materials, the use of which is likely to lead to emissions of gases listed in Annex I;
- (c) the sources of emissions of gases listed in Annex I from the installation; and

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- (d) the measures planned to monitor and report emissions in accordance with the regulation referred to in Article 14.

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The application shall also include a non-technical summary of the details referred to in the first subparagraph.

*Article 6***Conditions for and contents of the greenhouse gas emissions permit**

1. The competent authority shall issue a greenhouse gas emissions permit granting authorisation to emit greenhouse gases from all or part of an installation if it is satisfied that the operator is capable of monitoring and reporting emissions.

A greenhouse gas emissions permit may cover one or more installations on the same site operated by the same operator.

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The competent authority shall, at least every five years, review the greenhouse gas emissions permit and make any amendments as are appropriate.

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2. Greenhouse gas emissions permits shall contain the following:

- (a) the name and address of the operator;
- (b) a description of the activities and emissions from the installation;

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- (c) a monitoring plan that fulfils the requirements under the regulation referred to in Article 14. Member States may allow operators to update monitoring plans without changing the permit. Operators shall submit any updated monitoring plans to the competent authority for approval;

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- (d) reporting requirements; and

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- (e) an obligation to surrender allowances, other than allowances issued under Chapter II, equal to the total emissions of the installation in each calendar year, as verified in accordance with Article 15, within four months following the end of that year.

▼ M4*Article 7***Changes relating to installations**

The operator shall inform the competent authority of any planned changes to the nature or functioning of the installation, or any extension or significant reduction of its capacity, which may require updating the greenhouse gas emissions permit. Where appropriate, the competent authority shall update the permit. Where there is a change in the identity of the installation's operator, the competent authority shall update the permit to include the name and address of the new operator.

▼B*Article 8***Coordination with Directive 96/61/EC**

Member States shall take the necessary measures to ensure that, where installations carry out activities that are included in Annex I to Directive 96/61/EC, the conditions of, and procedure for, the issue of a greenhouse gas emissions permit are coordinated with those for the permit provided for in that Directive. The requirements of Articles 5, 6 and 7 of this Directive may be integrated into the procedures provided for in Directive 96/61/EC.

▼M4*Article 9***Community-wide quantity of allowances**

The Community-wide quantity of allowances issued each year starting in 2013 shall decrease in a linear manner beginning from the mid-point of the period from 2008 to 2012. The quantity shall decrease by a linear factor of 1,74 % compared to the average annual total quantity of allowances issued by Member States in accordance with the Commission Decisions on their national allocation plans for the period from 2008 to 2012.

The Commission shall, by 30 June 2010, publish the absolute Community-wide quantity of allowances for 2013, based on the total quantities of allowances issued or to be issued by the Member States in accordance with the Commission Decisions on their national allocation plans for the period from 2008 to 2012.

The Commission shall review the linear factor and submit a proposal, where appropriate, to the European Parliament and to the Council as from 2020, with a view to the adoption of a decision by 2025.

*Article 9a***Adjustment of the Community-wide quantity of allowances**

1. In respect of installations that were included in the Community scheme during the period from 2008 to 2012 pursuant to Article 24(1), the quantity of allowances to be issued from 1 January 2013 shall be adjusted to reflect the average annual quantity of allowances issued in respect of those installations during the period of their inclusion, adjusted by the linear factor referred to in Article 9.

2. In respect of installations carrying out activities listed in Annex I, which are only included in the Community scheme from 2013 onwards, Member States shall ensure that the operators of such installations submit to the relevant competent authority duly substantiated and independently verified emissions data in order for them to be taken into account for the adjustment of the Community-wide quantity of allowances to be issued.

Any such data shall be submitted, by 30 April 2010, to the relevant competent authority in accordance with the provisions adopted pursuant to Article 14 (1).

If the data submitted are duly substantiated, the competent authority shall notify the Commission thereof by 30 June 2010 and the quantity of allowances to be issued, adjusted by the linear factor referred to in Article 9, shall be adjusted accordingly. In the case of installations emitting greenhouse gases other than CO₂, the competent authority may notify a lower amount of emissions according to the emission reduction potential of those installations.

3. The Commission shall publish the adjusted quantities referred to in paragraphs 1 and 2 by 30 September 2010.

4. In respect of installations which are excluded from the Community scheme in accordance with Article 27, the Community-wide quantity of

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allowances to be issued from 1 January 2013 shall be adjusted downwards to reflect the average annual verified emissions of those installations in the period from 2008 to 2010, adjusted by the linear factor referred to in Article 9.

*Article 10***Auctioning of allowances**

1. From 2013 onwards, Member States shall auction all allowances which are not allocated free of charge in accordance with Article 10a and 10c. By 31 December 2010, the Commission shall determine and publish the estimated amount of allowances to be auctioned.

2. The total quantity of allowances to be auctioned by each Member State shall be composed as follows:

- (a) 88 % of the total quantity of allowances to be auctioned being distributed amongst Member States in shares that are identical to the share of verified emissions under the Community scheme for 2005 or the average of the period from 2005 to 2007, whichever one is the highest, of the Member State concerned;
- (b) 10 % of the total quantity of allowances to be auctioned being distributed amongst certain Member States for the purpose of solidarity and growth within the Community, thereby increasing the amount of allowances that those Member States auction under point (a) by the percentages specified in Annex IIa; and
- (c) 2 % of the total quantity of allowances to be auctioned being distributed amongst Member States the greenhouse gas emissions of which were, in 2005, at least 20 % below their emissions in the base year applicable to them under the Kyoto Protocol. The distribution of this percentage amongst the Member States concerned is set out in Annex IIb.

For the purposes of point (a), in respect of Member States which did not participate in the Community scheme in 2005, their share shall be calculated using their verified emissions under the Community scheme in 2007.

If necessary, the percentages referred to in points (b) and (c) shall be adapted in a proportional manner to ensure that the distribution is 10 % and 2 % respectively.

3. Member States shall determine the use of revenues generated from the auctioning of allowances. At least 50 % of the revenues generated from the auctioning of allowances referred to in paragraph 2, including all revenues from the auctioning referred to in paragraph 2, points (b) and (c), or the equivalent in financial value of these revenues, should be used for one or more of the following:

- (a) to reduce greenhouse gas emissions, including by contributing to the Global Energy Efficiency and Renewable Energy Fund and to the Adaptation Fund as made operational by the Poznan Conference on Climate Change (COP 14 and COP/MOP 4), to adapt to the impacts of climate change and to fund research and development as well as demonstration projects for reducing emissions and for adaptation to climate change, including participation in initiatives within the framework of the European Strategic Energy Technology Plan and the European Technology Platforms;
- (b) to develop renewable energies to meet the commitment of the Community to using 20 % renewable energies by 2020, as well as to develop other technologies contributing to the transition to a safe and sustainable low-carbon economy and to help meet the commitment of the Community to increase energy efficiency by 20 % by 2020;
- (c) measures to avoid deforestation and increase afforestation and reforestation in developing countries that have ratified the international

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agreement on climate change, to transfer technologies and to facilitate adaptation to the adverse effects of climate change in these countries;

- (d) forestry sequestration in the Community;
- (e) the environmentally safe capture and geological storage of CO₂, in particular from solid fossil fuel power stations and a range of industrial sectors and subsectors, including in third countries;
- (f) to encourage a shift to low-emission and public forms of transport;
- (g) to finance research and development in energy efficiency and clean technologies in the sectors covered by this Directive;
- (h) measures intended to increase energy efficiency and insulation or to provide financial support in order to address social aspects in lower and middle income households;
- (i) to cover administrative expenses of the management of the Community scheme.

Member States shall be deemed to have fulfilled the provisions of this paragraph if they have in place and implement fiscal or financial support policies, including in particular in developing countries, or domestic regulatory policies, which leverage financial support, established for the purposes set out in the first subparagraph and which have a value equivalent to at least 50 % of the revenues generated from the auctioning of allowances referred to in paragraph 2, including all revenues from the auctioning referred to in paragraph 2, points (b) and (c).

Member States shall inform the Commission as to the use of revenues and the actions taken pursuant to this paragraph in their reports submitted under Decision No 280/2004/EC.

4. By 30 June 2010, the Commission shall adopt a regulation on timing, administration and other aspects of auctioning to ensure that it is conducted in an open, transparent, harmonised and non-discriminatory manner. To this end, the process should be predictable, in particular as regards the timing and sequencing of auctions and the estimated volumes of allowances to be made available.

Auctions shall be designed to ensure that:

- (a) operators, and in particular any SMEs covered by the Community scheme, have full, fair and equitable access;
- (b) all participants have access to the same information at the same time and that participants do not undermine the operation of the auction;
- (c) the organisation and participation in auctions is cost-efficient and undue administrative costs are avoided; and
- (d) access to allowances is granted for small emitters.

That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

Member States shall report on the proper implementation of the auctioning rules for each auction, in particular with respect to fair and open access, transparency, price formation and technical and operational aspects. These reports shall be submitted within one month of the auction concerned and shall be published on the Commission's website.

5. The Commission shall monitor the functioning of the European carbon market. Each year, it shall submit a report to the European Parliament and to the Council on the functioning of the carbon market including the implementation of the auctions, liquidity and the volumes traded. If necessary, Member States shall ensure that any

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relevant information is submitted to the Commission at least two months before the Commission adopts the report.

*Article 10a***Transitional Community-wide rules for harmonised free allocation**

1. By 31 December 2010, the Commission shall adopt Community-wide and fully-harmonised implementing measures for the allocation of the allowances referred to in paragraphs 4, 5, 7 and 12, including any necessary provisions for a harmonised application of paragraph 19.

Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

The measures referred to in the first subparagraph shall, to the extent feasible, determine Community-wide ex-ante benchmarks so as to ensure that allocation takes place in a manner that provides incentives for reductions in greenhouse gas emissions and energy efficient techniques, by taking account of the most efficient techniques, substitutes, alternative production processes, high efficiency cogeneration, efficient energy recovery of waste gases, use of biomass and capture and storage of CO₂, where such facilities are available, and shall not provide incentives to increase emissions. No free allocation shall be made in respect of any electricity production, except for cases falling within Article 10c and electricity produced from waste gases.

For each sector and subsector, in principle, the benchmark shall be calculated for products rather than for inputs, in order to maximise greenhouse gas emissions reductions and energy efficiency savings throughout each production process of the sector or the subsector concerned.

In defining the principles for setting ex-ante benchmarks in individual sectors and subsectors, the Commission shall consult the relevant stakeholders, including the sectors and subsectors concerned.

The Commission shall, upon the approval by the Community of an international agreement on climate change leading to mandatory reductions of greenhouse gas emissions comparable to those of the Community, review those measures to provide that free allocation is only to take place where this is fully justified in the light of that agreement.

2. In defining the principles for setting ex-ante benchmarks in individual sectors or subsectors, the starting point shall be the average performance of the 10 % most efficient installations in a sector or subsector in the Community in the years 2007-2008. The Commission shall consult the relevant stakeholders, including the sectors and subsectors concerned.

The regulations pursuant to Articles 14 and 15 shall provide for harmonised rules on monitoring, reporting and verification of production-related greenhouse gas emissions with a view to determining the ex-ante benchmarks.

3. Subject to paragraphs 4 and 8, and notwithstanding Article 10c, no free allocation shall be given to electricity generators, to installations for the capture of CO₂, to pipelines for transport of CO₂ or to CO₂ storage sites.

4. Free allocation shall be given to district heating as well as to high efficiency cogeneration, as defined by Directive 2004/8/EC, for economically justifiable demand, in respect of the production of heating or cooling. In each year subsequent to 2013, the total allocation to such installations in respect of the production of that heat shall be adjusted by the linear factor referred to in Article 9.

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5. The maximum annual amount of allowances that is the basis for calculating allocations to installations which are not covered by paragraph 3 and are not new entrants shall not exceed the sum of:

- (a) the annual Community-wide total quantity, as determined pursuant to Article 9, multiplied by the share of emissions from installations not covered by paragraph 3 in the total average verified emissions, in the period from 2005 to 2007, from installations covered by the Community scheme in the period from 2008 to 2012; and
- (b) the total average annual verified emissions from installations in the period from 2005 to 2007 which are only included in the Community scheme from 2013 onwards and are not covered by paragraph 3, adjusted by the linear factor, as referred to in Article 9.

A uniform cross-sectoral correction factor shall be applied if necessary.

6. Member States may also adopt financial measures in favour of sectors or subsectors determined to be exposed to a significant risk of carbon leakage due to costs relating to greenhouse gas emissions passed on in electricity prices, in order to compensate for those costs and where such financial measures are in accordance with state aid rules applicable and to be adopted in this area.

Those measures shall be based on ex-ante benchmarks of the indirect emissions of CO₂ per unit of production. The ex-ante benchmarks shall be calculated for a given sector or subsector as the product of the electricity consumption per unit of production corresponding to the most efficient available technologies and of the CO₂ emissions of the relevant European electricity production mix.

7. Five percent of the Community-wide quantity of allowances determined in accordance with Articles 9 and 9a over the period from 2013 to 2020 shall be set aside for new entrants, as the maximum that may be allocated to new entrants in accordance with the rules adopted pursuant to paragraph 1 of this Article. Allowances in this Community-wide reserve that are neither allocated to new entrants nor used pursuant to paragraph 8, 9 or 10 of this Article over the period from 2013 to 2020 shall be auctioned by the Member States, taking into account the level to which installations in Member States have benefited from this reserve, in accordance with Article 10(2) and, for detailed arrangements and timing, Article 10(4), and the relevant implementing provisions.

Allocations shall be adjusted by the linear factor referred to in Article 9.

No free allocation shall be made in respect of any electricity production by new entrants.

By 31 December 2010, the Commission shall adopt harmonised rules for the application of the definition of 'new entrant', in particular in relation to the definition of 'significant extensions'.

Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

8. Up to 300 million allowances in the new entrants' reserve shall be available until 31 December 2015 to help stimulate the construction and operation of up to 12 commercial demonstration projects that aim at the environmentally safe capture and geological storage (CCS) of CO₂ as well as demonstration projects of innovative renewable energy technologies, in the territory of the Union.

The allowances shall be made available for support for demonstration projects that provide for the development, in geographically balanced locations, of a wide range of CCS and innovative renewable energy technologies that are not yet commercially viable. Their award shall be dependent upon the verified avoidance of CO₂ emissions.

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Projects shall be selected on the basis of objective and transparent criteria that include requirements for knowledge-sharing. Those criteria and the measures shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3), and shall be made available to the public.

Allowances shall be set aside for the projects that meet the criteria referred to in the third subparagraph. Support for these projects shall be given via Member States and shall be complementary to substantial co-financing by the operator of the installation. They could also be co-financed by the Member State concerned, as well as by other instruments. No project shall receive support via the mechanism under this paragraph that exceeds 15 % of the total number of allowances available for this purpose. These allowances shall be taken into account under paragraph 7.

9. Lithuania, which, pursuant to Article 1 of Protocol No 4 on the Ignalina nuclear power plant in Lithuania, annexed to the 2003 Act of Accession, has committed to the closure of unit 2 of the Ignalina Nuclear Power Plant by 31 December 2009, may, if the total verified emissions of Lithuania in the period from 2013 to 2015 within the Community scheme exceed the sum of the free allowances issued to installations in Lithuania for electricity production emissions in that period and three-eighths of the allowances to be auctioned by Lithuania for the period from 2013 to 2020, claim allowances from the new entrants reserve for auctioning in accordance with the regulation referred to in Article 10(4). The maximum amount of such allowances shall be equivalent to the excess emissions in that period to the extent that this excess is due to increased emissions from electricity generation, minus any quantity by which allocations in that Member State in the period from 2008 to 2012 exceeded verified emissions within the Community scheme in Lithuania during that period. Any such allowances shall be taken into account under paragraph 7.

10. Any Member State with an electricity network which is interconnected with Lithuania and which, in 2007, imported more than 15 % of its domestic electricity consumption from Lithuania for its own consumption, and where emissions have increased due to investment in new electricity generation, may apply paragraph 9 *mutatis mutandis* under the conditions set out in that paragraph.

11. Subject to Article 10b, the amount of allowances allocated free of charge under paragraphs 4 to 7 of this Article in 2013 shall be 80 % of the quantity determined in accordance with the measures referred to in paragraph 1. Thereafter the free allocation shall decrease each year by equal amounts resulting in 30 % free allocation in 2020, with a view to reaching no free allocation in 2027.

12. Subject to Article 10b, in 2013 and in each subsequent year up to 2020, installations in sectors or subsectors which are exposed to a significant risk of carbon leakage shall be allocated, pursuant to paragraph 1, allowances free of charge at 100 % of the quantity determined in accordance with the measures referred to in paragraph 1.

13. By 31 December 2009 and every five years thereafter, after discussion in the European Council, the Commission shall determine a list of the sectors or subsectors referred to in paragraph 12 on the basis of the criteria referred to in paragraphs 14 to 17.

Every year the Commission may, at its own initiative or at the request of a Member State, add a sector or subsector to the list referred to in the first subparagraph if it can be demonstrated, in an analytical report, that this sector or subsector satisfies the criteria in paragraphs 14 to 17, following a change that has a substantial impact on the sector's or subsector's activities.

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For the purpose of implementing this Article, the Commission shall consult the Member States, the sectors or subsectors concerned and other relevant stakeholders.

Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

14. In order to determine the sectors or subsectors referred to in paragraph 12, the Commission shall assess, at Community level, the extent to which it is possible for the sector or subsector concerned, at the relevant level of disaggregation, to pass on the direct cost of the required allowances and the indirect costs from higher electricity prices resulting from the implementation of this Directive into product prices without significant loss of market share to less carbon efficient installations outside the Community. These assessments shall be based on an average carbon price according to the Commission's impact assessment accompanying the package of implementation measures for the EU's objectives on climate change and renewable energy for 2020 and, if available, trade, production and value added data from the three most recent years for each sector or subsector.

15. A sector or subsector shall be deemed to be exposed to a significant risk of carbon leakage if:

- (a) the sum of direct and indirect additional costs induced by the implementation of this Directive would lead to a substantial increase of production costs, calculated as a proportion of the gross value added, of at least 5 %; and
- (b) the intensity of trade with third countries, defined as the ratio between the total value of exports to third countries plus the value of imports from third countries and the total market size for the Community (annual turnover plus total imports from third countries), is above 10 %.

16. Notwithstanding paragraph 15, a sector or subsector is also deemed to be exposed to a significant risk of carbon leakage if:

- (a) the sum of direct and indirect additional costs induced by the implementation of this Directive would lead to a particularly high increase of production costs, calculated as a proportion of the gross value added, of at least 30 %; or
- (b) the intensity of trade with third countries, defined as the ratio between the total value of exports to third countries plus the value of imports from third countries and the total market size for the Community (annual turnover plus total imports from third countries), is above 30 %.

17. The list referred to in paragraph 13 may be supplemented after completion of a qualitative assessment, taking into account, where the relevant data are available, the following criteria:

- (a) the extent to which it is possible for individual installations in the sector or subsector concerned to reduce emission levels or electricity consumption, including, as appropriate, the increase in production costs that the related investment may entail, for instance on the basis of the most efficient techniques;
- (b) current and projected market characteristics, including when trade exposure or direct and indirect cost increase rates are close to one of the thresholds mentioned in paragraph 16;
- (c) profit margins as a potential indicator of long-run investment or relocation decisions.

18. The list referred to in paragraph 13 shall be determined after taking into account, where the relevant data are available, the following:

- (a) the extent to which third countries, representing a decisive share of global production of products in sectors or subsectors deemed to be

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at risk of carbon leakage, firmly commit to reducing greenhouse gas emissions in the relevant sectors or subsectors to an extent comparable to that of the Community and within the same time-frame; and

- (b) the extent to which the carbon efficiency of installations located in these countries is comparable to that of the Community.

19. No free allocation shall be given to an installation that has ceased its operations, unless the operator demonstrates to the competent authority that this installation will resume production within a specified and reasonable time. Installations for which the greenhouse gas emissions permit has expired or has been withdrawn and installations for which the operation or resumption of operation is technically impossible shall be considered to have ceased operations.

20. The Commission shall, as part of the measures adopted under paragraph 1, include measures for defining installations that partially cease to operate or significantly reduce their capacity, and measures for adapting, as appropriate, the level of free allocations given to them accordingly.

Article 10b

Measures to support certain energy-intensive industries in the event of carbon leakage

1. By 30 June 2010, the Commission shall, in the light of the outcome of the international negotiations and the extent to which these lead to global greenhouse gas emission reductions, and after consulting with all relevant social partners, submit to the European Parliament and to the Council an analytical report assessing the situation with regard to energy-intensive sectors or subsectors that have been determined to be exposed to significant risks of carbon leakage. This shall be accompanied by any appropriate proposals, which may include:

- (a) adjustment of the proportion of allowances received free of charge by those sectors or subsectors under Article 10a;
- (b) inclusion in the Community scheme of importers of products which are produced by the sectors or subsectors determined in accordance with Article 10a;
- (c) assessment of the impact of carbon leakage on Member States' energy security, in particular where the electricity connections with the rest of the Union are insufficient and where there are electricity connections with third countries, and appropriate measures in this regard.

Any binding sectoral agreements which lead to global greenhouse gas emissions reductions of the magnitude required to effectively address climate change, and which are monitorable, verifiable and subject to mandatory enforcement arrangements shall also be taken into account when considering what measures are appropriate.

2. The Commission shall assess, by 31 March 2011, whether the decisions made regarding the proportion of allowances received free of charge by sectors or subsectors in accordance with paragraph 1, including the effect of setting ex-ante benchmarks in accordance with Article 10a(2), are likely to significantly affect the quantity of allowances to be auctioned by Member States in accordance with Article 10(2)(b), compared to a scenario with full auctioning for all sectors in 2020. It shall, if appropriate, submit adequate proposals to the European Parliament and to the Council, taking into account the possible distributional effects of such proposals.

▼ M4*Article 10c***Option for transitional free allocation for the modernisation of electricity generation**

1. By derogation from Article 10a(1) to (5), Member States may give a transitional free allocation to installations for electricity production in operation by 31 December 2008 or to installations for electricity production for which the investment process was physically initiated by the same date, provided that one of the following conditions is met:

- (a) in 2007, the national electricity network was not directly or indirectly connected to the network interconnected system operated by the Union for the Coordination of Transmission of Electricity (UCTE);
- (b) in 2007, the national electricity network was only directly or indirectly connected to the network operated by UCTE through a single line with a capacity of less than 400 MW; or
- (c) in 2006, more than 30 % of electricity was produced from a single fossil fuel, and the GDP per capita at market price did not exceed 50 % of the average GDP per capita at market price of the Community.

The Member State concerned shall submit to the Commission a national plan that provides for investments in retrofitting and upgrading of the infrastructure and clean technologies. The national plan shall also provide for the diversification of their energy mix and sources of supply for an amount equivalent, to the extent possible, to the market value of the free allocation with respect to the intended investments, while taking into account the need to limit as far as possible directly linked price increases. The Member State concerned shall submit to the Commission, every year, a report on investments made in upgrading infrastructure and clean technologies. Investment undertaken from 25 June 2009 may be counted for this purpose.

2. Transitional free allocations shall be deducted from the quantity of allowances that the respective Member State would otherwise auction pursuant to Article 10(2). In 2013, the total transitional free allocation shall not exceed 70 % of the annual average verified emissions in 2005-2007 from such electricity generators for the amount corresponding to the gross final national consumption of the Member State concerned and shall gradually decrease, resulting in no free allocation in 2020. For those Member States which did not participate in the Community scheme in 2005, the relevant emissions shall be calculated using their verified Community scheme emissions under the Community scheme in 2007.

The Member State concerned may determine that the allowances allocated pursuant to this Article may only be used by the operator of the installation concerned for surrendering allowances pursuant to Article 12(3) with respect to emissions of the same installation during the year for which the allowances are allocated.

3. Allocations to operators shall be based on the allocation under the verified emissions in 2005-2007 or an ex-ante efficiency benchmark based on the weighted average of emission levels of most greenhouse gas efficient electricity production covered by the Community scheme for installations using different fuels. The weighting may reflect the shares of the different fuels in electricity production in the Member State concerned. The Commission shall, in accordance with the regulatory procedure referred to in Article 23(2), provide guidance to ensure that the allocation methodology avoids undue distortions of competition and minimises negative impacts on the incentives to reduce emissions.

4. Any Member State applying this Article shall require benefiting electricity generators and network operators to report every 12 months on the implementation of their investments referred to in the national

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plan. Member States shall report on this to the Commission and shall make such reports public.

5. Any Member State that intends to allocate allowances on the basis of this Article shall, by 30 September 2011, submit to the Commission an application containing the proposed allocation methodology and individual allocations. An application shall contain:

- (a) evidence that the Member State meets at least one of the conditions set out in paragraph 1;
- (b) a list of the installations covered by the application and the amount of allowances to be allocated to each installation in accordance with paragraph 3 and the Commission guidance;
- (c) the national plan referred to in the second subparagraph of paragraph 1;
- (d) monitoring and enforcement provisions with respect to the intended investments pursuant to the national plan;
- (e) information showing that the allocations do not create undue distortions of competition.

6. The Commission shall assess the application taking into account the elements set out in paragraph 5 and may reject the application, or any aspect thereof, within six months of receiving the relevant information.

7. Two years before the end of the period during which a Member State may give transitional free allocation to installations for electricity production in operation by 31 December 2008, the Commission shall assess the progress made in the implementation of the national plan. If the Commission considers, on request of the Member State concerned, that there is a need for a possible extension of that period, it may submit to the European Parliament and to the Council appropriate proposals, including the conditions that would have to be met in the case of an extension of that period.

*Article 11***National implementation measures**

1. Each Member State shall publish and submit to the Commission, by 30 September 2011, the list of installations covered by this Directive in its territory and any free allocation to each installation in its territory calculated in accordance with the rules referred to in Article 10a(1) and Article 10c.

2. By 28 February of each year, the competent authorities shall issue the quantity of allowances that are to be allocated for that year, calculated in accordance with Articles 10, 10a and 10c.

3. Member States may not issue allowances free of charge under paragraph 2 to installations whose inscription in the list referred to in paragraph 1 has been rejected by the Commission.

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CHAPTER IV

PROVISIONS APPLYING TO AVIATION AND STATIONARY INSTALLATIONS

▼ M4*Article 11a***Use of CERs and ERUs from project activities in the Community scheme before the entry into force of an international agreement on climate change**

1. Without prejudice to the application of Article 28(3) and (4), paragraphs 2 to 7 of this Article shall apply.

2. To the extent that the levels of CER and ERU use, allowed to operators or aircraft operators by Member States for the period from 2008 to 2012, have not been used up or an entitlement to use credits is granted under paragraph 8, operators may request the competent authority to issue allowances to them valid from 2013 onwards in exchange for CERs and ERUs issued in respect of emission reductions up until 2012 from project types which were eligible for use in the Community scheme during the period from 2008 to 2012.

Until 31 March 2015, the competent authority shall make such an exchange on request.

3. To the extent that the levels of CER and ERU use, allowed to operators or aircraft operators by Member States for the period from 2008 to 2012, have not been used up or an entitlement to use credits is granted under paragraph 8, competent authorities shall allow operators to exchange CERs and ERUs from projects that were registered before 2013 issued in respect of emission reductions from 2013 onwards for allowances valid from 2013 onwards.

The first subparagraph shall apply to CERs and ERUs for all project types which were eligible for use in the Community scheme during the period from 2008 to 2012.

4. To the extent that the levels of CER and ERU use, allowed to operators or aircraft operators by Member States for the period from 2008 to 2012, have not been used up or an entitlement to use credits is granted under paragraph 8, competent authorities shall allow operators to exchange CERs issued in respect of emission reductions from 2013 onwards for allowances from new projects started from 2013 onwards in LDCs.

The first subparagraph shall apply to CERs for all project types which were eligible for use in the Community scheme during the period from 2008 to 2012, until those countries have ratified a relevant agreement with the Community or until 2020, whichever is the earlier.

5. To the extent that the levels of CER and ERU use, allowed to operators or aircraft operators by Member States for the period from 2008 to 2012, have not been used up or an entitlement to use credits is granted under paragraph 8 and in the event that the negotiations on an international agreement on climate change are not concluded by 31 December 2009, credits from projects or other emission reducing activities may be used in the Community scheme in accordance with agreements concluded with third countries, specifying levels of use. In accordance with such agreements, operators shall be able to use credits from project activities in those third countries to comply with their obligations under the Community scheme.

6. Any agreements referred to in paragraph 5 shall provide for the use of credits in the Community scheme from project types which were eligible for use in the Community scheme during the period from 2008 to 2012, including renewable energy or energy efficiency technologies which promote technological transfer and sustainable development. Any such agreement may also provide for the use of credits from projects

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where the baseline used is below the level of free allocation under the measures referred to in Article 10a or below the levels required by Community legislation.

7. Once an international agreement on climate change has been reached, only credits from projects from third countries which have ratified that agreement shall be accepted in the Community scheme from 1 January 2013.

8. All existing operators shall be allowed to use credits during the period from 2008 to 2020 up to either the amount allowed to them during the period from 2008 to 2012, or to an amount corresponding to a percentage, which shall not be set below 11 %, of their allocation during the period from 2008 to 2012, whichever is the highest.

Operators shall be able to use credits beyond the 11 % provided for in the first subparagraph, up to an amount which results in their combined free allocation in the period from 2008 to 2012 and overall project credits entitlement equal to a certain percentage of their verified emissions in the period from 2005 to 2007.

New entrants, including new entrants in the period from 2008 to 2012 which received neither free allocation nor an entitlement to use CERs and ERUs in the period from 2008-2012, and new sectors shall be able to use credits up to an amount corresponding to a percentage, which shall not be set below 4,5 %, of their verified emissions during the period from 2013 to 2020. Aircraft operators shall be able to use credits up to an amount corresponding to a percentage, which shall not be set below 1,5 %, of their verified emissions during the period from 2013 to 2020.

Measures shall be adopted to specify the exact percentages which shall apply under the first, second and third subparagraphs. At least one-third of the additional amount which is to be distributed to existing operators beyond the first percentage referred to in the first subparagraph shall be distributed to the operators which had the lowest level of combined average free allocation and project credit use in the period from 2008 to 2012.

Those measures shall ensure that the overall use of credits allowed does not exceed 50 % of the Community-wide reductions below the 2005 levels of the existing sectors under the Community scheme over the period from 2008 to 2020 and 50 % of the Community-wide reductions below the 2005 levels of new sectors and aviation over the period from the date of their inclusion in the Community scheme to 2020.

Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

9. From 1 January 2013, measures may be applied to restrict the use of specific credits from project types.

Those measures shall also set the date from which the use of credits under paragraphs 1 to 4 shall be in accordance with these measures. That date shall be, at the earliest, six months from the adoption of the measures or, at the latest, three years from their adoption.

Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3). The Commission shall consider submitting to the Committee a draft of the measures to be taken where a Member State so requests.

▼ M1*Article 11b***Project activities**

1. Member States shall take all necessary measures to ensure that baselines for project activities, as defined by subsequent decisions adopted under the UNFCCC or the Kyoto Protocol, undertaken in countries having signed a Treaty of Accession with the Union fully comply with the *acquis communautaire*, including the temporary derogations set out in that Treaty of Accession.

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The Community and its Member States shall only authorise project activities where all project participants have headquarters either in a country that has concluded the international agreement relating to such projects or in a country or sub-federal or regional entity which is linked to the Community scheme pursuant to Article 25.

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2. Except as provided for in paragraphs 3 and 4, Member States hosting project activities shall ensure that no ERUs or CERs are issued for reductions or limitations of greenhouse gas emissions from ► M2 activities ◀ falling within the scope of this Directive.

3. Until 31 December 2012, for JI and CDM project activities which reduce or limit directly the emissions of an installation falling within the scope of this Directive, ERUs and CERs may be issued only if an equal number of allowances is cancelled by the operator of that installation.

4. Until 31 December 2012, for JI and CDM project activities which reduce or limit indirectly the emission level of installations falling within the scope of this Directive, ERUs and CERs may be issued only if an equal number of allowances is cancelled from the national registry of the Member State of the ERUs' or CERs' origin.

5. A Member State that authorises private or public entities to participate in project activities shall remain responsible for the fulfilment of its obligations under the UNFCCC and the Kyoto Protocol and shall ensure that such participation is consistent with the relevant guidelines, modalities and procedures adopted pursuant to the UNFCCC or the Kyoto Protocol.

6. In the case of hydroelectric power production project activities with a generating capacity exceeding 20 MW, Member States shall, when approving such project activities, ensure that relevant international criteria and guidelines, including those contained in the World Commission on Dams November 2000 Report 'Dams and Development — A New Framework for Decision-Making', will be respected during the development of such project activities.

▼ M3

7. Provisions for the implementation of paragraphs 3 and 4, particularly in respect of the avoidance of double counting, shall be adopted by the Commission in accordance with the regulatory procedure referred to in Article 23(2). The Commission shall adopt provisions for the implementation of paragraph 5 of this Article where the host party meets all eligibility requirements for JI project activities. Those measures, designed to amend non-essential elements of this Directive, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

▼ B*Article 12***Transfer, surrender and cancellation of allowances**

1. Member States shall ensure that allowances can be transferred between:

- (a) persons within the Community;

▼ B

- (b) persons within the Community and persons in third countries, where such allowances are recognised in accordance with the procedure referred to in Article 25 without restrictions other than those contained in, or adopted pursuant to, this Directive.

▼ M4

1a. The Commission shall, by 31 December 2010, examine whether the market for emissions allowances is sufficiently protected from insider dealing or market manipulation and, if appropriate, shall bring forward proposals to ensure such protection. The relevant provisions of Directive 2003/6/EC of the European Parliament and of the Council of 28 January 2003 on insider dealing and market manipulation (market abuse) ⁽¹⁾ may be used with any appropriate adjustments needed to apply them to trade in commodities.

▼ B

2. Member States shall ensure that allowances issued by a competent authority of another Member State are recognised for the purpose ► **M2** of meeting an aircraft operator's obligations under paragraph 2a or ◀ of meeting an operator's obligations under paragraph 3.

▼ M2

2a. Administering Member States shall ensure that, by 30 April each year, each aircraft operator surrenders a number of allowances equal to the total emissions during the preceding calendar year from aviation activities listed in Annex I for which it is the aircraft operator, as verified in accordance with Article 15. Member States shall ensure that allowances surrendered in accordance with this paragraph are subsequently cancelled.

3. Member States shall ensure that, by 30 April each year, the operator of each installation surrenders a number of allowances, other than allowances issued under Chapter II, equal to the total emissions from that installation during the preceding calendar year as verified in accordance with Article 15, and that these are subsequently cancelled.

▼ M4

3a. An obligation to surrender allowances shall not arise in respect of emissions verified as captured and transported for permanent storage to a facility for which a permit is in force in accordance with Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide ⁽²⁾.

▼ B

4. Member States shall take the necessary steps to ensure that allowances will be cancelled at any time at the request of the person holding them.

▼ M4

5. Paragraphs 1 and 2 apply without prejudice to Article 10c.

*Article 13***Validity of allowances**

1. Allowances issued from 1 January 2013 onwards shall be valid for emissions during periods of eight years beginning on 1 January 2013.

2. Four months after the beginning of each period referred to in paragraph 1, allowances which are no longer valid and have not been surrendered and cancelled in accordance with Article 12 shall be cancelled by the competent authority.

⁽¹⁾ OJ L 96, 12.4.2003, p. 16.

⁽²⁾ OJ L 140, 5.6.2009, p. 114.

▼M4

Member States shall issue allowances to persons for the current period to replace any allowances held by them which are cancelled in accordance with the first subparagraph.

*Article 14***Monitoring and reporting of emissions**

1. By 31 December 2011, the Commission shall adopt a regulation for the monitoring and reporting of emissions and, where relevant, activity data, from the activities listed in Annex I, for the monitoring and reporting of tonne-kilometre data for the purpose of an application under Articles 3e or 3f, which shall be based on the principles for monitoring and reporting set out in Annex IV and shall specify the global warming potential of each greenhouse gas in the requirements for monitoring and reporting emissions for that gas.

That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

2. The regulation referred to in paragraph 1 shall take into account the most accurate and up-to-date scientific evidence available, in particular from the IPCC, and may also specify requirements for operators to report on emissions associated with the production of goods produced by energy intensive industries which may be subject to international competition. That regulation may also specify requirements for this information to be verified independently.

Those requirements may include reporting on levels of emissions from electricity generation covered by the Community scheme associated with the production of such goods.

3. Member States shall ensure that each operator of an installation or an aircraft operator monitors and reports the emissions from that installation during each calendar year, or, from 1 January 2010, the aircraft which it operates, to the competent authority after the end of that year in accordance with the regulation referred to in paragraph 1.

4. The regulation referred to in paragraph 1 may include requirements on the use of automated systems and data exchange formats to harmonise communication on the monitoring plan, the annual emission report and the verification activities between the operator, the verifier and competent authorities.

▼M2*Article 15***►M4 Verification and accreditation ◀**

Member States shall ensure that the reports submitted by operators and aircraft operators pursuant to Article 14(3) are verified in accordance with the criteria set out in Annex V and any detailed provisions adopted by the Commission in accordance with this Article, and that the competent authority is informed thereof.

Member States shall ensure that an operator or aircraft operator whose report has not been verified as satisfactory in accordance with the criteria set out in Annex V and any detailed provisions adopted by the Commission in accordance with this Article by 31 March each year for emissions during the preceding year cannot make further transfers of allowances until a report from that operator or aircraft operator has been verified as satisfactory.

The Commission may adopt detailed provisions for the verification of reports submitted by aircraft operators pursuant to Article 14(3) and applications under Articles 3e and 3f, including the verification procedures to be used by verifiers, in accordance with the regulatory procedure referred to in Article 23(2).

▼ M4

By 31 December 2011, the Commission shall adopt a regulation for the verification of emission reports based on the principles set out in Annex V and for the accreditation and supervision of verifiers. It shall specify conditions for the accreditation and withdrawal of accreditation, for mutual recognition and peer evaluation of accreditation bodies, as appropriate.

That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

*Article 15a***Disclosure of information and professional secrecy**

Member States and the Commission shall ensure that all decisions and reports relating to the quantity and allocation of allowances and to the monitoring, reporting and verification of emissions are immediately disclosed in an orderly manner ensuring non-discriminatory access.

Information covered by professional secrecy may not be disclosed to any other person or authority except by virtue of the applicable laws, regulations or administrative provisions.

▼ B*Article 16***Penalties**

1. Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that such rules are implemented. The penalties provided for must be effective, proportionate and dissuasive. Member States shall notify these provisions to the Commission ► M2 ————— ◀ and shall notify it without delay of any subsequent amendment affecting them.

▼ M2

2. Member States shall ensure publication of the names of operators and aircraft operators who are in breach of requirements to surrender sufficient allowances under this Directive.

3. Member States shall ensure that any operator or aircraft operator who does not surrender sufficient allowances by 30 April of each year to cover its emissions during the preceding year shall be held liable for the payment of an excess emissions penalty. The excess emissions penalty shall be EUR 100 for each tonne of carbon dioxide equivalent emitted for which the operator or aircraft operator has not surrendered allowances. Payment of the excess emissions penalty shall not release the operator or aircraft operator from the obligation to surrender an amount of allowances equal to those excess emissions when surrendering allowances in relation to the following calendar year.

▼ M4

4. The excess emissions penalty relating to allowances issued from 1 January 2013 onwards shall increase in accordance with the European index of consumer prices.

▼ M2

5. In the event that an aircraft operator fails to comply with the requirements of this Directive and where other enforcement measures have failed to ensure compliance, its administering Member State may request the Commission to decide on the imposition of an operating ban on the aircraft operator concerned.

6. Any request by an administering Member State under paragraph 5 shall include:

- (a) evidence that the aircraft operator has not complied with its obligations under this Directive;

▼ M2

- (b) details of the enforcement action which has been taken by that Member State;
- (c) a justification for the imposition of an operating ban at Community level; and
- (d) a recommendation for the scope of an operating ban at Community level and any conditions that should be applied.

7. When requests such as those referred to in paragraph 5 are addressed to the Commission, the Commission shall inform the other Member States through their representatives on the Committee referred to in Article 23(1) in accordance with the Committee's Rules of Procedure.

8. The adoption of a decision following a request pursuant to paragraph 5 shall be preceded, when appropriate and practicable, by consultations with the authorities responsible for regulatory oversight of the aircraft operator concerned. Whenever possible, consultations shall be held jointly by the Commission and the Member States.

9. When the Commission is considering whether to adopt a decision following a request pursuant to paragraph 5, it shall disclose to the aircraft operator concerned the essential facts and considerations which form the basis for such decision. The aircraft operator concerned shall be given an opportunity to submit written comments to the Commission within 10 working days from the date of disclosure.

10. At the request of a Member State, the Commission may, in accordance with the regulatory procedure referred to in Article 23(2), adopt a decision to impose an operating ban on the aircraft operator concerned.

11. Each Member State shall enforce, within its territory, any decisions adopted under paragraph 10. It shall inform the Commission of any measures taken to implement such decisions.

12. Where appropriate, detailed rules shall be established in respect of the procedures referred to in this Article. Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

▼ M1*Article 17***Access to information**

Decisions relating to the allocation of allowances, information on project activities in which a Member State participates or authorises private or public entities to participate, and the reports of emissions required under the greenhouse gas emissions permit and held by the competent authority, shall be made available to the public in accordance with Directive 2003/4/EC.

▼ B*Article 18***Competent authority**

Member States shall make the appropriate administrative arrangements, including the designation of the appropriate competent authority or authorities, for the implementation of the rules of this Directive. Where more than one competent authority is designated, the work of these authorities undertaken pursuant to this Directive must be coordinated.

▼ M1

Member States shall in particular ensure coordination between their designated focal point for approving project activities pursuant to

▼ M1

Article 6 (1)(a) of the Kyoto Protocol and their designated national authority for the implementation of Article 12 of the Kyoto Protocol respectively designated in accordance with subsequent decisions adopted under the UNFCCC or the Kyoto Protocol.

▼ M2*Article 18a***Administering Member State**

1. The administering Member State in respect of an aircraft operator shall be:
 - (a) in the case of an aircraft operator with a valid operating licence granted by a Member State in accordance with the provisions of Council Regulation (EEC) No 2407/92 of 23 July 1992 on licensing of air carriers ⁽¹⁾, the Member State which granted the operating licence in respect of that aircraft operator; and
 - (b) in all other cases, the Member State with the greatest estimated attributed aviation emissions from flights performed by that aircraft operator in the base year.
2. Where in the first two years of any period referred to in Article 3c, none of the attributed aviation emissions from flights performed by an aircraft operator falling within paragraph 1(b) of this Article are attributed to its administering Member State, the aircraft operator shall be transferred to another administering Member State in respect of the next period. The new administering Member State shall be the Member State with the greatest estimated attributed aviation emissions from flights performed by that aircraft operator during the first two years of the previous period.
3. Based on the best available information, the Commission shall:
 - (a) before 1 February 2009, publish a list of aircraft operators which performed an aviation activity listed in Annex I on or after 1 January 2006 specifying the administering Member State for each aircraft operator in accordance with paragraph 1; and
 - (b) before 1 February of each subsequent year, update the list to include aircraft operators which have subsequently performed an aviation activity listed in Annex I.
4. The Commission may, in accordance with the regulatory procedure referred to in Article 23(2), develop guidelines relating to the administration of aircraft operators under this Directive by administering Member States.
5. For the purposes of paragraph 1, 'base year' means, in relation to an aircraft operator which started operating in the Community after 1 January 2006, the first calendar year of operation, and in all other cases, the calendar year starting on 1 January 2006.

*Article 18b***Assistance from Eurocontrol**

For the purposes of carrying out its obligations under Articles 3c(4) and 18a, the Commission may request the assistance of Eurocontrol or another relevant organisation and may conclude to that effect any appropriate agreements with those organisations.

⁽¹⁾ OJ L 240, 24.8.1992, p. 1.

▼ B*Article 19***Registries****▼ M4**

1. Allowances issued from 1 January 2012 onwards shall be held in the Community registry for the execution of processes pertaining to the maintenance of the holding accounts opened in the Member State and the allocation, surrender and cancellation of allowances under the Commission Regulation referred to in paragraph 3.

Each Member State shall be able to fulfil the execution of authorised operations under the UNFCCC or the Kyoto Protocol.

▼ B

2. Any person may hold allowances. The registry shall be accessible to the public and shall contain separate accounts to record the allowances held by each person to whom and from whom allowances are issued or transferred.

▼ M3

3. In order to implement this Directive, the Commission shall adopt a Regulation for a standardised and secured system of registries in the form of standardised electronic databases containing common data elements to track the issue, holding, transfer and cancellation of allowances, to provide for public access and confidentiality as appropriate and to ensure that there are no transfers which are incompatible with the obligations resulting from the Kyoto Protocol. That Regulation shall also include provisions concerning the use and identification of CERs and ERUs in the Community scheme and the monitoring of the level of such use. That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

▼ M4

4. The Regulation referred to in paragraph 3 shall contain appropriate modalities for the Community registry to undertake transactions and other operations to implement arrangements referred to in Article 25(1b). That Regulation shall also include processes for the change and incident management for the Community registry with regard to issues in paragraph 1 of this Article. It shall contain appropriate modalities for the Community registry to ensure that initiatives of the Member States pertaining to efficiency improvement, administrative cost management and quality control measures are possible.

▼ B*Article 20***Central Administrator**

1. The Commission shall designate a Central Administrator to maintain an independent transaction log recording the issue, transfer and cancellation of allowances.

2. The Central Administrator shall conduct an automated check on each transaction in registries through the independent transaction log to ensure there are no irregularities in the issue, transfer and cancellation of allowances.

3. If irregularities are identified through the automated check, the Central Administrator shall inform the Member State or Member States concerned who shall not register the transactions in question or any further transactions relating to the allowances concerned until the irregularities have been resolved.

▼B*Article 21***Reporting by Member States**

1. Each year the Member States shall submit to the Commission a report on the application of this Directive. ► **M4** That report shall pay particular attention to the arrangements for the allocation of allowances, the operation of registries, the application of the implementing measures on monitoring and reporting, verification and accreditation and issues relating to compliance with this Directive and on the fiscal treatment of allowances, if any. ◀ The first report shall be sent to the Commission by 30 June 2005. The report shall be drawn up on the basis of a questionnaire or outline drafted by the Commission in accordance with the procedure laid down in Article 6 of Directive 91/692/EEC. The questionnaire or outline shall be sent to Member States at least six months before the deadline for the submission of the first report.

2. On the basis of the reports referred to in paragraph 1, the Commission shall publish a report on the application of this Directive within three months of receiving the reports from the Member States.

▼M4

3. The Commission shall organise an exchange of information between the competent authorities of the Member States concerning developments relating to issues of allocation, the use of ERUs and CERs in the Community scheme, the operation of registries, monitoring, reporting, verification, accreditation, information technology, and compliance with this Directive.

▼M1*Article 21a***Support of capacity-building activities**

In accordance with the UNFCCC, the Kyoto Protocol and any subsequent decision adopted for their implementation, the Commission and the Member States shall endeavour to support capacity-building activities in developing countries and countries with economies in transition in order to help them take full advantage of JI and the CDM in a manner that supports their sustainable development strategies and to facilitate the engagement of entities in JI and CDM project development and implementation.

▼M4*Article 22***Amendments to the Annexes**

The Annexes to this Directive, with the exception of Annexes I, IIa and IIb, may be amended in the light of the reports provided for in Article 21 and of the experience of the application of this Directive. Annexes IV and V may be amended in order to improve the monitoring, reporting and verification of emissions.

Those measures, designed to amend non-essential elements of this Directive, inter alia, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

▼B*Article 23***Committee**

1. The Commission shall be assisted by the committee instituted by Article 8 of Decision 93/389/EEC.

2. Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

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3. Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

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4. Where reference is made to this paragraph, Article 4 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

*Article 24***Procedures for unilateral inclusion of additional activities and gases**

1. From 2008, Member States may apply emission allowance trading in accordance with this Directive to activities and to greenhouse gases which are not listed in Annex I, taking into account all relevant criteria, in particular the effects on the internal market, potential distortions of competition, the environmental integrity of the Community scheme and the reliability of the planned monitoring and reporting system, provided that inclusion of such activities and greenhouse gases is approved by the Commission

- (a) in accordance with the regulatory procedure referred to in Article 23(2), if the inclusion refers to installations which are not covered by Annex I; or
- (b) in accordance with the regulatory procedure with scrutiny referred to in Article 23(3), if the inclusion refers to activities and greenhouse gases which are not listed in Annex I. Those measures are designed to amend non-essential elements of this Directive by supplementing it.

2. When the inclusion of additional activities and gases is approved, the Commission may at the same time authorise the issue of additional allowances and may authorise other Member States to include such additional activities and gases.

3. On the initiative of the Commission or at the request of a Member State, a regulation may be adopted on the monitoring of, and reporting on, emissions concerning activities, installations and greenhouse gases which are not listed as a combination in Annex I, if that monitoring and reporting can be carried out with sufficient accuracy.

That measure, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

*Article 24a***Harmonised rules for projects that reduce emissions**

1. In addition to the inclusions provided for in Article 24, implementing measures for issuing allowances or credits in respect of projects administered by Member States that reduce greenhouse gas emissions not covered by the Community scheme may be adopted.

Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

Any such measures shall not result in the double-counting of emission reductions nor impede the undertaking of other policy measures to reduce emissions not covered by the Community scheme. Measures shall only be adopted where inclusion is not possible in accordance with Article 24, and the next review of the Community scheme shall consider harmonising the coverage of those emissions across the Community.

▼ M4

2. Implementing measures that set out the details for crediting in respect of Community-level projects referred to in paragraph 1 may be adopted.

Those measures, designed to amend non-essential elements of this Directive by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

3. A Member State can refuse to issue allowances or credits in respect of certain types of projects that reduce greenhouse gas emissions on its own territory.

Such projects will be executed on the basis of the agreement of the Member State in which the project takes place.

▼ B*Article 25***Links with other greenhouse gas emissions trading schemes**

1. Agreements should be concluded with third countries listed in Annex B to the Kyoto Protocol which have ratified the Protocol to provide for the mutual recognition of allowances between the Community scheme and other greenhouse gas emissions trading schemes in accordance with the rules set out in Article 300 of the Treaty.

▼ M4

1a. Agreements may be made to provide for the recognition of allowances between the Community scheme and compatible mandatory greenhouse gas emissions trading systems with absolute emissions caps established in any other country or in sub-federal or regional entities.

1b. Non-binding arrangements may be made with third countries or with sub-federal or regional entities to provide for administrative and technical coordination in relation to allowances in the Community scheme or other mandatory greenhouse gas emissions trading systems with absolute emissions caps.

▼ M3

2. Where an agreement referred to in paragraph 1 has been concluded, the Commission shall adopt any necessary provisions relating to the mutual recognition of allowances under that agreement. Those measures, designed to amend non-essential elements of this Directive, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

▼ M2*Article 25a***Third country measures to reduce the climate change impact of aviation**

1. Where a third country adopts measures for reducing the climate change impact of flights departing from that country which land in the Community, the Commission, after consulting with that third country, and with Member States within the Committee referred to in Article 23(1), shall consider options available in order to provide for optimal interaction between the Community scheme and that country's measures.

Where necessary, the Commission may adopt amendments to provide for flights arriving from the third country concerned to be excluded from the aviation activities listed in Annex I or to provide for any other amendments to the aviation activities listed in Annex I which are required by an agreement pursuant to the fourth subparagraph. Those measures, designed to amend non-essential elements of this

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Directive, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

The Commission may propose to the European Parliament and the Council any other amendments to this Directive.

The Commission may also, where appropriate, make recommendations to the Council in accordance with Article 300(1) of the Treaty to open negotiations with a view to concluding an agreement with the third country concerned.

2. The Community and its Member States shall continue to seek an agreement on global measures to reduce greenhouse gas emissions from aviation. In the light of any such agreement, the Commission shall consider whether amendments to this Directive as it applies to aircraft operators are necessary.

▼B*Article 26***Amendment of Directive 96/61/EC**

In Article 9(3) of Directive 96/61/EC the following subparagraphs shall be added:

‘Where emissions of a greenhouse gas from an installation are specified in Annex I to Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (*) in relation to an activity carried out in that installation, the permit shall not include an emission limit value for direct emissions of that gas unless it is necessary to ensure that no significant local pollution is caused.

For activities listed in Annex I to Directive 2003/87/EC, Member States may choose not to impose requirements relating to energy efficiency in respect of combustion units or other units emitting carbon dioxide on the site.

Where necessary, the competent authorities shall amend the permit as appropriate.

The three preceding subparagraphs shall not apply to installations temporarily excluded from the scheme for greenhouse gas emission allowance trading within the Community in accordance with Article 27 of Directive 2003/87/EC.

(*) OJ L 275, 25.10.2003, p. 32.’

▼M4*Article 27***Exclusion of small installations subject to equivalent measures**

1. Following consultation with the operator, Member States may exclude from the Community scheme installations which have reported to the competent authority emissions of less than 25 000 tonnes of carbon dioxide equivalent and, where they carry out combustion activities, have a rated thermal input below 35 MW, excluding emissions from biomass, in each of the three years preceding the notification under point (a), and which are subject to measures that will achieve an equivalent contribution to emission reductions, if the Member State concerned complies with the following conditions:

- (a) it notifies the Commission of each such installation, specifying the equivalent measures applying to that installation that will achieve an equivalent contribution to emission reductions that are in place, before the list of installations pursuant to Article 11(1) has to be

▼M4

submitted and at the latest when this list is submitted to the Commission;

- (b) it confirms that monitoring arrangements are in place to assess whether any installation emits 25 000 tonnes or more of carbon dioxide equivalent, excluding emissions from biomass, in any one calendar year. Member States may allow simplified monitoring, reporting and verification measures for installations with average annual verified emissions between 2008 and 2010 which are below 5 000 tonnes a year, in accordance with Article 14;
- (c) it confirms that if any installation emits 25 000 tonnes or more of carbon dioxide equivalent, excluding emissions from biomass, in any one calendar year or the measures applying to that installation that will achieve an equivalent contribution to emission reductions are no longer in place, the installation will be reintroduced into the Community scheme;
- (d) it publishes the information referred to in points (a), (b) and (c) for public comment.

Hospitals may also be excluded if they undertake equivalent measures.

2. If, following a period of three months from the date of notification for public comment, the Commission does not object within a further period of six months, the exclusion shall be deemed approved.

Following the surrender of allowances in respect of the period during which the installation is in the Community scheme, the installation shall be excluded and the Member State shall no longer issue free allowances to the installation pursuant to Article 10a.

3. When an installation is reintroduced into the Community scheme pursuant to paragraph 1(c), any allowances issued pursuant to Article 10a shall be granted starting with the year of the reintroduction. Allowances issued to these installations shall be deducted from the quantity to be auctioned pursuant to Article 10(2) by the Member State in which the installation is situated.

Any such installation shall stay in the Community scheme for the rest of the trading period.

4. For installations which have not been included in the Community scheme during the period from 2008 to 2012, simplified requirements for monitoring, reporting and verification may be applied for determining emissions in the three years preceding the notification under paragraph 1 point (a).

Article 28

Adjustments applicable upon the approval by the Community of an international agreement on climate change

1. Within three months of the signature by the Community of an international agreement on climate change leading, by 2020, to mandatory reductions of greenhouse gas emissions exceeding 20 % compared to 1990 levels, as reflected in the 30 % reduction commitment as endorsed by the European Council of March 2007, the Commission shall submit a report assessing, in particular, the following elements:

- (a) the nature of the measures agreed upon in the framework of the international negotiations as well as the commitments made by other developed countries to comparable emission reductions to those of the Community and the commitments made by economically more advanced developing countries to contributing adequately according to their responsibilities and respective capabilities;
- (b) the implications of the international agreement on climate change, and consequently, options required at Community level, in order to

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move to the more ambitious 30 % reduction target in a balanced, transparent and equitable way, taking into account work under the Kyoto Protocol's first commitment period;

- (c) the Community manufacturing industries' competitiveness in the context of carbon leakage risks;
- (d) the impact of the international agreement on climate change on other Community economic sectors;
- (e) the impact on the Community agriculture sector, including carbon leakage risks;
- (f) the appropriate modalities for including emissions and removals related to land use, land use change and forestry in the Community;
- (g) afforestation, reforestation, avoided deforestation and forest degradation in third countries in the event of the establishment of any internationally recognised system in this context;
- (h) the need for additional Community policies and measures in view of the greenhouse gas reduction commitments of the Community' and of Member States.

2. On the basis of the report referred to in paragraph 1, the Commission shall, as appropriate, submit a legislative proposal to the European Parliament and to the Council amending this Directive pursuant to paragraph 1, with a view to the amending Directive entering into force upon the approval by the Community of the international agreement on climate change and in view of the emission reduction commitment to be implemented under that agreement.

The proposal shall be based upon the principles of transparency, economic efficiency and cost-effectiveness, as well as fairness and solidarity in the distribution of efforts between Member States.

3. The proposal shall allow, as appropriate, operators to use, in addition to the credits provided for in this Directive, CERs, ERUs or other approved credits from third countries which have ratified the international agreement on climate change.

4. The proposal shall also include, as appropriate, any other measures needed to help reach the mandatory reductions in accordance with paragraph 1 in a transparent, balanced and equitable way and, in particular, shall include implementing measures to provide for the use of additional types of project credits by operators in the Community scheme to those referred to in paragraphs 2 to 5 of Article 11a or the use by such operators of other mechanisms created under the international agreement on climate change, as appropriate.

5. The proposal shall include the appropriate transitional and suspensive measures pending the entry into force of the international agreement on climate change.

Article 29

Report to ensure the better functioning of the carbon market

If, on the basis of the regular reports on the carbon market referred to in Article 10(5), the Commission has evidence that the carbon market is not functioning properly, it shall submit a report to the European Parliament and to the Council. The report may be accompanied, if

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appropriate, by proposals aiming at increasing transparency of the carbon market and addressing measures to improve its functioning.

*Article 29a***Measures in the event of excessive price fluctuations**

1. If, for more than six consecutive months, the allowance price is more than three times the average price of allowances during the two preceding years on the European carbon market, the Commission shall immediately convene a meeting of the Committee established by Article 9 of Decision No 280/2004/EC.

2. If the price evolution referred to in paragraph 1 does not correspond to changing market fundamentals, one of the following measures may be adopted, taking into account the degree of price evolution:

- (a) a measure which allows Member States to bring forward the auctioning of a part of the quantity to be auctioned;
- (b) a measure which allows Member States to auction up to 25 % of the remaining allowances in the new entrants reserve.

Those measures shall be adopted in accordance with the management procedure referred to in Article 23(4).

3. Any measure shall take utmost account of the reports submitted by the Commission to the European Parliament and to the Council pursuant to Article 29, as well as any other relevant information provided by Member States.

4. The arrangements for the application of these provisions shall be laid down in the regulation referred to in Article 10(4).

▼B*Article 30***Review and further development**

1. On the basis of progress achieved in the monitoring of emissions of greenhouse gases, the Commission may make a proposal to the European Parliament and the Council by 31 December 2004 to amend Annex I to include other activities and emissions of other greenhouse gases listed in Annex II.

2. On the basis of experience of the application of this Directive and of progress achieved in the monitoring of emissions of greenhouse gases and in the light of developments in the international context, the Commission shall draw up a report on the application of this Directive, considering:

- (a) how and whether Annex I should be amended to include other relevant sectors, *inter alia* the chemicals, aluminium and transport sectors, activities and emissions of other greenhouse gases listed in Annex II, with a view to further improving the economic efficiency of the scheme;
- (b) the relationship of Community emission allowance trading with the international emissions trading that will start in 2008;
- (c) further harmonisation of the method of allocation (including auctioning for the time after 2012) and of the criteria for national allocation plans referred to in Annex III;

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- (d) the use of credits from project activities, including the need for harmonisation of the allowed use of ERUs and CERs in the Community scheme;

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- (e) the relationship of emissions trading with other policies and measures implemented at Member State and Community level, including taxation, that pursue the same objectives;
- (f) whether it is appropriate for there to be a single Community registry;
- (g) the level of excess emissions penalties, taking into account, *inter alia*, inflation;
- (h) the functioning of the allowance market, covering in particular any possible market disturbances;
- (i) how to adapt the Community scheme to an enlarged European Union;
- (j) pooling;
- (k) the practicality of developing Community-wide benchmarks as a basis for allocation, taking into account the best available techniques and cost-benefit analysis;

▼M1

- (l) the impact of project mechanisms on host countries, particularly on their development objectives, whether JI and CDM hydroelectric power production project activities with a generating capacity exceeding 500 MW and having negative environmental or social impacts have been approved, and the future use of CERs or ERUs resulting from any such hydroelectric power production project activities in the Community scheme;
- (m) the support for capacity-building efforts in developing countries and countries with economies in transition;
- (n) the modalities and procedures for Member States' approval of domestic project activities and for the issuing of allowances in respect of emission reductions or limitations resulting from such activities from 2008;
- (o) technical provisions relating to the temporary nature of credits and the limit of 1 % for eligibility for land use, land-use change and forestry project activities as established in Decision 17/CP.7, and provisions relating to the outcome of the evaluation of potential risks associated with the use of genetically modified organisms and potentially invasive alien species by afforestation and reforestation project activities, to allow operators to use CERs and ERUs resulting from land use, land-use change and forestry project activities in the Community scheme from 2008, in accordance with the decisions adopted pursuant to the UNFCCC or the Kyoto Protocol.

▼B

The Commission shall submit this report to the European Parliament and the Council by 30 June 2006, accompanied by proposals as appropriate.

▼M1

3. In advance of each period referred to in Article 11(2), each Member State shall publish in its national allocation plan its intended use of ERUs and CERs and the percentage of the allocation to each installation up to which operators are allowed to use ERUs and CERs in the Community scheme for that period. The total use of ERUs and CERs shall be consistent with the relevant complementarity obligations under the Kyoto Protocol and the UNFCCC and the decisions adopted thereunder.

▼ M1

Member States shall, in accordance with Article 3 of Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol ⁽¹⁾, report to the Commission every two years on the extent to which domestic action actually constitutes a significant element of the efforts undertaken at national level, as well as the extent to which use of the project mechanisms is actually supplemental to domestic action, and the ratio between them, in accordance with the relevant provisions of the Kyoto Protocol and the decisions adopted thereunder. The Commission shall report on this in accordance with Article 5 of the said Decision. In the light of this report, the Commission shall, if appropriate, make legislative or other proposals to complement provisions adopted by Member States to ensure that use of the mechanisms is supplemental to domestic action within the Community.

▼ M2

4. By 1 December 2014 the Commission shall, on the basis of monitoring and experience of the application of this Directive, review the functioning of this Directive in relation to aviation activities in Annex I and may make proposals to the European Parliament and the Council pursuant to Article 251 of the Treaty as appropriate. The Commission shall give consideration in particular to:

- (a) the implications and impacts of this Directive as regards the overall functioning of the Community scheme;
- (b) the functioning of the aviation allowance market, covering in particular any possible market disturbances;
- (c) the environmental effectiveness of the Community scheme and the extent by which the total quantity of allowances to be allocated to aircraft operators under Article 3c should be reduced in line with overall EU emissions reduction targets;
- (d) the impact of the Community scheme on the aviation sector, including issues of competitiveness, taking into account in particular the effect of climate change policies implemented for aviation outside the EU;
- (e) continuing with the special reserve for aircraft operators, taking into account the likely convergence of growth rates across the industry;
- (f) the impact of the Community scheme on the structural dependency on aviation transport of islands, landlocked regions, peripheral regions and the outermost regions of the Community;
- (g) whether a gateway system should be included to facilitate the trading of allowances between aircraft operators and operators of installations whilst ensuring that no transactions would result in a net transfer of allowances from aircraft operators to operators of installations;
- (h) the implications of the exclusion thresholds as specified in Annex I in terms of certified maximum take-off mass and number of flights per year performed by an aircraft operator;
- (i) the impact of the exemption from the Community scheme of certain flights performed in the framework of public service obligations imposed in accordance with Council Regulation (EEC) No 2408/92 of 23 July 1992 on access for Community air carriers to intra-Community air routes ⁽²⁾;
- (j) developments, including the potential for future developments, in the efficiency of aviation and in particular the progress towards meeting the Advisory Council for Aeronautics Research in Europe

⁽¹⁾ OJ L 49, 19.2.2004, p. 1.

⁽²⁾ OJ L 240, 24.8.1992, p. 8.

▼M2

(ACARE) goal to develop and demonstrate technologies able to reduce fuel consumption by 50 % by 2020 and whether further measures to increase efficiency are necessary;

- (k) developments in scientific understanding on the climate change impacts of contrails and cirrus clouds caused by aviation with a view to proposing effective mitigation measures.

The Commission shall then report to the European Parliament and the Council.

CHAPTER V

FINAL PROVISIONS

▼B*Article 31***Implementation**

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 2003 at the latest. They shall forthwith inform the Commission thereof. The Commission shall notify the other Member States of these laws, regulations and administrative provisions.

When Member States adopt these measures, they shall contain a reference to this Directive or 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 provisions of national law which they adopt in the field covered by this Directive. The Commission shall inform the other Member States thereof.

*Article 32***Entry into force**

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

*Article 33***Addressees**

This Directive is addressed to the Member States.

▼M4

ANNEX I

CATEGORIES OF ACTIVITIES TO WHICH THIS DIRECTIVE APPLIES

1. Installations or parts of installations used for research, development and testing of new products and processes and installations exclusively using biomass are not covered by this Directive.
2. The thresholds values given below generally refer to production capacities or outputs. Where several activities falling under the same category are carried out in the same installation, the capacities of such activities are added together.
3. When the total rated thermal input of an installation is calculated in order to decide upon its inclusion in the Community scheme, the rated thermal inputs of all technical units which are part of it, in which fuels are combusted within the installation, are added together. These units could include all types of boilers, burners, turbines, heaters, furnaces, incinerators, calciners, kilns, ovens, dryers, engines, fuel cells, chemical looping combustion units, flares, and thermal or catalytic post-combustion units. Units with a rated thermal input under 3 MW and units which use exclusively biomass shall not be taken into account for the purposes of this calculation. 'Units using exclusively biomass' includes units which use fossil fuels only during start-up or shut-down of the unit.
4. If a unit serves an activity for which the threshold is not expressed as total rated thermal input, the threshold of this activity shall take precedence for the decision about the inclusion in the Community scheme.
5. When the capacity threshold of any activity in this Annex is found to be exceeded in an installation, all units in which fuels are combusted, other than units for the incineration of hazardous or municipal waste, shall be included in the greenhouse gas emission permit.
6. From 1 January 2012 all flights which arrive at or depart from an aerodrome situated in the territory of a Member State to which the Treaty applies shall be included.

Activities	Greenhouse gases
Combustion of fuels in installations with a total rated thermal input exceeding 20 MW (except in installations for the incineration of hazardous or municipal waste)	Carbon dioxide
Refining of mineral oil	Carbon dioxide
Production of coke	Carbon dioxide
Metal ore (including sulphide ore) roasting or sintering, including pelletisation	Carbon dioxide
Production of pig iron or steel (primary or secondary fusion) including continuous casting, with a capacity exceeding 2,5 tonnes per hour	Carbon dioxide
Production or processing of ferrous metals (including ferro-alloys) where combustion units with a total rated thermal input exceeding 20 MW are operated. Processing includes, inter alia, rolling mills, re-heaters, annealing furnaces, smitheries, foundries, coating and pickling	Carbon dioxide
Production of primary aluminium	Carbon dioxide and perfluorocarbons
Production of secondary aluminium where combustion units with a total rated thermal input exceeding 20 MW are operated	Carbon dioxide

▼M4

Activities	Greenhouse gases
Production or processing of non-ferrous metals, including production of alloys, refining, foundry casting, etc., where combustion units with a total rated thermal input (including fuels used as reducing agents) exceeding 20 MW are operated	Carbon dioxide
Production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other furnaces with a production capacity exceeding 50 tonnes per day	Carbon dioxide
Production of lime or calcination of dolomite or magnesite in rotary kilns or in other furnaces with a production capacity exceeding 50 tonnes per day	Carbon dioxide
Manufacture of glass including glass fibre with a melting capacity exceeding 20 tonnes per day	Carbon dioxide
Manufacture of ceramic products by firing, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day	Carbon dioxide
Manufacture of mineral wool insulation material using glass, rock or slag with a melting capacity exceeding 20 tonnes per day	Carbon dioxide
Drying or calcination of gypsum or production of plaster boards and other gypsum products, where combustion units with a total rated thermal input exceeding 20 MW are operated	Carbon dioxide
Production of pulp from timber or other fibrous materials	Carbon dioxide
Production of paper or cardboard with a production capacity exceeding 20 tonnes per day	Carbon dioxide
Production of carbon black involving the carbonisation of organic substances such as oils, tars, cracker and distillation residues, where combustion units with a total rated thermal input exceeding 20 MW are operated	Carbon dioxide
Production of nitric acid	Carbon dioxide and nitrous oxide
Production of adipic acid	Carbon dioxide and nitrous oxide
Production of glyoxal and glyoxylic acid	Carbon dioxide and nitrous oxide
Production of ammonia	Carbon dioxide
Production of bulk organic chemicals by cracking, reforming, partial or full oxidation or by similar processes, with a production capacity exceeding 100 tonnes per day	Carbon dioxide

▼M4

Activities	Greenhouse gases
Production of hydrogen (H ₂) and synthesis gas by reforming or partial oxidation with a production capacity exceeding 25 tonnes per day	Carbon dioxide
Production of soda ash (Na ₂ CO ₃) and sodium bicarbonate (NaHCO ₃)	Carbon dioxide
Capture of greenhouse gases from installations covered by this Directive for the purpose of transport and geological storage in a storage site permitted under Directive 2009/31/EC	Carbon dioxide
Transport of greenhouse gases by pipelines for geological storage in a storage site permitted under Directive 2009/31/EC	Carbon dioxide
Geological storage of greenhouse gases in a storage site permitted under Directive 2009/31/EC	Carbon dioxide
<p data-bbox="327 882 408 907">Aviation</p> <p data-bbox="327 931 743 1010">Flights which depart from or arrive in an aerodrome situated in the territory of a MemberState to which the Treaty applies.</p> <p data-bbox="327 1032 619 1057">This activity shall not include:</p> <p data-bbox="327 1079 743 1308">(a) flights performed exclusively for the transport, on official mission, of a reigning Monarch and his immediate family, Heads of State, Heads of Government and Government Ministers, of a country other than a Member State, where this is substantiated by an appropriate status indicator in the flight plan;</p> <p data-bbox="327 1330 743 1377">(b) military flights performed by military aircraft and customs and police flights;</p> <p data-bbox="327 1400 743 1516">(c) flights related to search and rescue, fire-fighting flights, humanitarian flights and emergency medical service flights authorised by the appropriate competent authority;</p> <p data-bbox="327 1538 743 1608">(d) any flights performed exclusively under visual flight rules as defined in Annex 2 to the Chicago Convention;</p> <p data-bbox="327 1630 743 1724">(e) flights terminating at the aerodrome from which the aircraft has taken off and during which no intermediate landing has been made;</p> <p data-bbox="327 1747 743 1975">(f) training flights performed exclusively for the purpose of obtaining a licence, or a rating in the case of cockpit flight crew where this is substantiated by an appropriate remark in the flight plan provided that the flight does not serve for the transport of passengers and/or cargo or for the positioning or ferrying of the aircraft;</p> <p data-bbox="327 1998 743 2114">(g) flights performed exclusively for the purpose of scientific research or for the purpose of checking, testing or certifying aircraft or equipment whether airborne or ground-based;</p>	Carbon dioxide

▼ M4

Activities	Greenhouse gases
<p>(h) flights performed by aircraft with a certified maximum take-off mass of less than 5 700 kg;</p> <p>(i) flights performed in the framework of public service obligations imposed in accordance with Regulation (EEC) No 2408/92 on routes within outermost regions, as specified in Article 299(2) of the Treaty, or on routes where the capacity offered does not exceed 30 000 seats per year; and</p> <p>(j) flights which, but for this point, would fall within this activity, performed by a commercial air transport operator operating either:</p> <ul style="list-style-type: none"> — fewer than 243 flights per period for three consecutive four-month periods, or — flights with total annual emissions lower than 10 000 tonnes per year. <p>Flights performed exclusively for the transport, on official mission, of a reigning Monarch and his immediate family, Heads of State, Heads of Government and Government Ministers, of a MemberState may not be excluded under this point.</p>	

▼B

ANNEX II

GREENHOUSE GASES REFERRED TO IN ARTICLES 3 AND 30

Carbon dioxide (CO₂)

Methane (CH₄)

Nitrous Oxide (N₂O)

Hydrofluorocarbons (HFCs)

Perfluorocarbons (PFCs)

Sulphur Hexafluoride (SF₆)

▼ **M4***ANNEX IIa***Increases in the percentage of allowances to be auctioned by Member States pursuant to Article 10(2)(a), for the purpose of Community solidarity and growth in order to reduce emissions and adapt to the effects of climate change**

	Member State share
Belgium	10 %
Bulgaria	53 %
Czech Republic	31 %
Estonia	42 %
Greece	17 %
Spain	13 %
Italy	2 %
Cyprus	20 %
Latvia	56 %
Lithuania	46 %
Luxembourg	10 %
Hungary	28 %
Malta	23 %
Poland	39 %
Portugal	16 %
Romania	53 %
Slovenia	20 %
Slovakia	41 %
Sweden	10 %

▼ M4*ANNEX IIb***DISTRIBUTION OF ALLOWANCES TO BE AUCTIONED BY MEMBER STATES PURSUANT TO ARTICLE 10(2)(c) REFLECTING EARLY EFFORTS OF SOME MEMBER STATES TO ACHIEVE 20 % REDUCTION OF GREENHOUSE GAS EMISSIONS**

Member State	Distribution of the 2 % against the Kyoto base in percentages
Bulgaria	15 %
Czech Republic	4 %
Estonia	6 %
Hungary	5 %
Latvia	4 %
Lithuania	7 %
Poland	27 %
Romania	29 %
Slovakia	3 %

▼ B*ANNEX IV***PRINCIPLES FOR MONITORING AND REPORTING REFERRED TO IN ARTICLE 14(1)****▼ M2****PART A — Monitoring and reporting of emissions from stationary installations****▼ B****Monitoring of carbon dioxide emissions**

Emissions shall be monitored either by calculation or on the basis of measurement.

Calculation

Calculations of emissions shall be performed using the formula:

$$\text{Activity data} \times \text{Emission factor} \times \text{Oxidation factor}$$

Activity data (fuel used, production rate etc.) shall be monitored on the basis of supply data or measurement.

Accepted emission factors shall be used. Activity-specific emission factors are acceptable for all fuels. Default factors are acceptable for all fuels except non-commercial ones (waste fuels such as tyres and industrial process gases). Seam-specific defaults for coal, and EU-specific or producer country-specific defaults for natural gas shall be further elaborated. IPCC default values are acceptable for refinery products. The emission factor for biomass shall be zero.

If the emission factor does not take account of the fact that some of the carbon is not oxidised, then an additional oxidation factor shall be used. If activity-specific emission factors have been calculated and already take oxidation into account, then an oxidation factor need not be applied.

Default oxidation factors developed pursuant to Directive 96/61/EC shall be used, unless the operator can demonstrate that activity-specific factors are more accurate.

A separate calculation shall be made for each activity, installation and for each fuel.

Measurement

Measurement of emissions shall use standardised or accepted methods, and shall be corroborated by a supporting calculation of emissions.

Monitoring of emissions of other greenhouse gases**▼ M3**

Standardised or accepted methods shall be used, developed by the Commission in collaboration with all relevant stakeholders. Those measures, designed to amend non-essential elements of this Directive, by supplementing it, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 23(3).

▼ B**Reporting of emissions**

Each operator shall include the following information in the report for an installation:

A. Data identifying the installation, including:

- Name of the installation;
- Its address, including postcode and country;
- Type and number of Annex I activities carried out in the installation;
- Address, telephone, fax and email details for a contact person; and
- Name of the owner of the installation, and of any parent company.

▼B

- B. For each Annex I activity carried out on the site for which emissions are calculated:
- Activity data;
 - Emission factors;
 - Oxidation factors;
 - Total emissions; and
 - Uncertainty.
- C. For each Annex I activity carried out on the site for which emissions are measured:
- Total emissions;
 - Information on the reliability of measurement methods; and
 - Uncertainty.
- D. For emissions from combustion, the report shall also include the oxidation factor, unless oxidation has already been taken into account in the development of an activity-specific emission factor.

Member States shall take measures to coordinate reporting requirements with any existing reporting requirements in order to minimise the reporting burden on businesses.

▼M2**PART B — Monitoring and reporting of emissions from aviation activities****Monitoring of carbon dioxide emissions**

Emissions shall be monitored by calculation. Emissions shall be calculated using the formula:

Fuel consumption × emission factor

Fuel consumption shall include fuel consumed by the auxiliary power unit. Actual fuel consumption for each flight shall be used wherever possible and shall be calculated using the formula:

Amount of fuel contained in aircraft tanks once fuel uplift for the flight is complete – amount of fuel contained in aircraft tanks once fuel uplift for subsequent flight is complete + fuel uplift for that subsequent flight.

If actual fuel consumption data are not available, a standardised tiered method shall be used to estimate fuel consumption data based on best available information.

Default IPCC emission factors, taken from the 2006 IPCC Inventory Guidelines or subsequent updates of these Guidelines, shall be used unless activity-specific emission factors identified by independent accredited laboratories using accepted analytical methods are more accurate. The emission factor for biomass shall be zero.

A separate calculation shall be made for each flight and for each fuel.

Reporting of emissions

Each aircraft operator shall include the following information in its report under Article 14(3):

- A. Data identifying the aircraft operator, including:
- name of the aircraft operator,
 - its administering Member State,
 - its address, including postcode and country and, where different, its contact address in the administering Member State,
 - the aircraft registration numbers and types of aircraft used in the period covered by the report to perform the aviation activities listed in Annex I for which it is the aircraft operator,
 - the number and issuing authority of the air operator certificate and operating licence under which the aviation activities listed in Annex I for which it is the aircraft operator were performed,

▼ M2

- address, telephone, fax and e-mail details for a contact person, and
 - name of the aircraft owner.
- B. For each type of fuel for which emissions are calculated:
- fuel consumption,
 - emission factor,
 - total aggregated emissions from all flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator,
 - aggregated emissions from:
 - all flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator and which departed from an aerodrome situated in the territory of a Member State and arrived at an aerodrome situated in the territory of the same Member State,
 - all other flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator,
 - aggregated emissions from all flights performed during the period covered by the report which fall within the aviation activities listed in Annex I for which it is the aircraft operator and which:
 - departed from each Member State, and
 - arrived in each Member State from a third country,
 - uncertainty.

Monitoring of tonne-kilometre data for the purpose of Articles 3e and 3f

For the purpose of applying for an allocation of allowances in accordance with Article 3e(1) or Article 3f(2), the amount of aviation activity shall be calculated in tonne-kilometres using the following formula:

$$\text{tonne-kilometres} = \text{distance} \times \text{payload}$$

where:

‘distance’ means the great circle distance between the aerodrome of departure and the aerodrome of arrival plus an additional fixed factor of 95 km; and

‘payload’ means the total mass of freight, mail and passengers carried.

For the purposes of calculating the payload:

- the number of passengers shall be the number of persons on-board excluding crew members,
- an aircraft operator may choose to apply either the actual or standard mass for passengers and checked baggage contained in its mass and balance documentation for the relevant flights or a default value of 100 kg for each passenger and his checked baggage.

Reporting of tonne-kilometre data for the purpose of Articles 3e and 3f

Each aircraft operator shall include the following information in its application under Article 3e(1) or Article 3f(2):

- A. Data identifying the aircraft operator, including:
- name of the aircraft operator,
 - its administering Member State,
 - its address, including postcode and country and, where different, its contact address in the administering Member State,
 - the aircraft registration numbers and types of aircraft used during the year covered by the application to perform the aviation activities listed in Annex I for which it is the aircraft operator,
 - the number and issuing authority of the air operator certificate and operating licence under which the aviation activities listed in Annex I for which it is the aircraft operator were performed,

▼ M2

- address, telephone, fax and e-mail details for a contact person, and
- name of the aircraft owner.

B. Tonne-kilometre data:

- number of flights by aerodrome pair,
- number of passenger-kilometres by aerodrome pair,
- number of tonne-kilometres by aerodrome pair,
- chosen method for calculation of mass for passengers and checked baggage,
- total number of tonne-kilometres for all flights performed during the year to which the report relates falling within the aviation activities listed in Annex I for which it is the aircraft operator.

▼ B*ANNEX V***CRITERIA FOR VERIFICATION REFERRED TO IN ARTICLE 15****▼ M2****PART A — Verification of emissions from stationary installations****▼ B****General Principles**

1. Emissions from each activity listed in Annex I shall be subject to verification.
2. The verification process shall include consideration of the report pursuant to Article 14(3) and of monitoring during the preceding year. It shall address the reliability, credibility and accuracy of monitoring systems and the reported data and information relating to emissions, in particular:
 - (a) the reported activity data and related measurements and calculations;
 - (b) the choice and the employment of emission factors;
 - (c) the calculations leading to the determination of the overall emissions; and
 - (d) if measurement is used, the appropriateness of the choice and the employment of measuring methods.
3. Reported emissions may only be validated if reliable and credible data and information allow the emissions to be determined with a high degree of certainty. A high degree of certainty requires the operator to show that:
 - (a) the reported data is free of inconsistencies;
 - (b) the collection of the data has been carried out in accordance with the applicable scientific standards; and
 - (c) the relevant records of the installation are complete and consistent.
4. The verifier shall be given access to all sites and information in relation to the subject of the verification.
5. The verifier shall take into account whether the installation is registered under the Community eco-management and audit scheme (EMAS).

Methodology**Strategic analysis**

6. The verification shall be based on a strategic analysis of all the activities carried out in the installation. This requires the verifier to have an overview of all the activities and their significance for emissions.

Process analysis

7. The verification of the information submitted shall, where appropriate, be carried out on the site of the installation. The verifier shall use spot-checks to determine the reliability of the reported data and information.

Risk analysis

8. The verifier shall submit all the sources of emissions in the installation to an evaluation with regard to the reliability of the data of each source contributing to the overall emissions of the installation.
9. On the basis of this analysis the verifier shall explicitly identify those sources with a high risk of error and other aspects of the monitoring and reporting procedure which are likely to contribute to errors in the determination of the overall emissions. This especially involves the choice of the emission factors and the calculations necessary to determine the level of the emissions from individual sources. Particular attention shall be given to those sources with a high risk of error and the abovementioned aspects of the monitoring procedure.
10. The verifier shall take into consideration any effective risk control methods applied by the operator with a view to minimising the degree of uncertainty.

▼B**Report**

11. The verifier shall prepare a report on the validation process stating whether the report pursuant to Article 14(3) is satisfactory. This report shall specify all issues relevant to the work carried out. A statement that the report pursuant to Article 14(3) is satisfactory may be made if, in the opinion of the verifier, the total emissions are not materially misstated.

Minimum competency requirements for the verifier

12. The verifier shall be independent of the operator, carry out his activities in a sound and objective professional manner, and understand:
- (a) the provisions of this Directive, as well as relevant standards and guidance adopted by the Commission pursuant to Article 14(1);
 - (b) the legislative, regulatory, and administrative requirements relevant to the activities being verified; and
 - (c) the generation of all information related to each source of emissions in the installation, in particular, relating to the collection, measurement, calculation and reporting of data.

▼M2**PART B — Verification of emissions from aviation activities**

13. The general principles and methodology set out in this Annex shall apply to the verification of reports of emissions from flights falling within an aviation activity listed in Annex I.

For this purpose:

- (a) in paragraph 3, the reference to operator shall be read as if it were a reference to an aircraft operator, and in point (c) of that paragraph the reference to installation shall be read as if it were a reference to the aircraft used to perform the aviation activities covered by the report;
- (b) in paragraph 5, the reference to installation shall be read as if it were a reference to the aircraft operator;
- (c) in paragraph 6 the reference to activities carried out in the installation shall be read as a reference to aviation activities covered by the report carried out by the aircraft operator;
- (d) in paragraph 7 the reference to the site of the installation shall be read as if it were a reference to the sites used by the aircraft operator to perform the aviation activities covered by the report;
- (e) in paragraphs 8 and 9 the references to sources of emissions in the installation shall be read as if they were a reference to the aircraft for which the aircraft operator is responsible; and
- (f) in paragraphs 10 and 12 the references to operator shall be read as if they were a reference to an aircraft operator.

Additional provisions for the verification of aviation emission reports

14. The verifier shall in particular ascertain that:
- (a) all flights falling within an aviation activity listed in Annex I have been taken into account. In this task the verifier shall be assisted by timetable data and other data on the aircraft operator's traffic including data from Eurocontrol requested by that operator;
 - (b) there is overall consistency between aggregated fuel consumption data and data on fuel purchased or otherwise supplied to the aircraft performing the aviation activity.

Additional provisions for the verification of tonne-kilometre data submitted for the purposes of Articles 3e and 3f

15. The general principles and methodology for verifying emissions reports under Article 14(3) as set out in this Annex shall, where applicable, also apply correspondingly to the verification of aviation tonne-kilometre data.
16. The verifier shall in particular ascertain that only flights actually performed and falling within an aviation activity listed in Annex I for which the aircraft operator is responsible have been taken into account in that operator's application under Articles 3e(1) and 3f(2). In this task the

▼ M2

verifier shall be assisted by data on the aircraft operator's traffic including data from Eurocontrol requested by that operator. In addition, the verifier shall ascertain that the payload reported by the aircraft operator corresponds to records on payloads kept by that operator for safety purposes.