ISSN 0378-6978

Official Journal

of the European Communities

L 107

Volume 44

18 April 2001

English edition

Legislation

Contents

[1] Text with EEA relevance

(Continued overleaf)

EN

Acts whose titles are printed in light type are those relating to day-to-day management of agricultural matters, and are generally valid for a limited period.

The titles of all other acts are printed in bold type and preceded by an asterisk.

II *Acts whose publication is not obligatory*

[1] Text with EEA relevance

I

(Acts whose publication is obligatory)

COMMISSION REGULATION (EC) No 742/2001

of 17 April 2001

establishing the standard import values for determining the entry price of certain fruit and vegetables

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Commission Regulation (EC) No 3223/94 of 21 December 1994 on detailed rules for the application of the import arrangements for fruit and vegetables [1], as last amended by Regulation (EC) No 1498/98 [2], and in particular Article 4(1) thereof,

Whereas:

(1) Regulation (EC) No 3223/94 lays down, pursuant to the outcome of the Uruguay Round multilateral trade negotiations, the criteria whereby the Commission fixes the standard values for imports from third countries, in respect of the products and periods stipulated in the Annex thereto.

(2) In compliance with the above criteria, the standard import values must be fixed at the levels set out in the Annex to this Regulation,

HAS ADOPTED THIS REGULATION:

Article 1

The standard import values referred to in Article 4 of Regulation (EC) No 3223/94 shall be fixed as indicated in the Annex hereto.

Article 2

This Regulation shall enter into force on 18 April 2001.

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

Done at Brussels, 17 April 2001.

For the Commission

Franz FISCHLER

Member of the Commission

[1] OJ L 337, 24.12.1994, p. 66.
[2] OJ L 198, 15.7.1998, p. 4.

ANNEX

to the Commission Regulation of 17 April 2001 establishing the standard import values for determining the entry price of certain fruit and vegetables

(EUR/100 kg)

CN code	Third country code (1)	Standard import value
0702 00 00	052	113,0
	204	95,1
	212	63,2
	999	90,4
0707 00 05	052	106,4
	999	106,4
0709 90 70	052	96,1
	204	46,2
	999	71,2
0805 10 10, 0805 10 30, 0805 10 50	052	82,8
	204	48,6
	212	45,9
	600	54,7
	624	55,4
	999	57,5
0808 10 20, 0808 10 50, 0808 10 90	039	94,9
	388	95,7
	400	89,7
	404	84,5
	508	82,2
	512	87,9
	528	86,6
	720	135,9
	804	103,0
	999	95,6
0808 20 50	388	69,9
	512	82,9
	528	71,7
	999	74,8

(1) Country nomenclature as fixed by Commission Regulation (EC) No 2032/2000 (OJ L 243, 28.9.2000, p. 14). Code '999' stands for 'of other origin'.

COMMISSION REGULATION (EC) No 743/2001
of 11 April 2001
prohibiting fishing for whiting by vessels flying the flag of Sweden

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 2847/93 of 12 October 1993 establishing a control system applicable to the common fisheries policy [1], as last amended by Regulation (EC) No 2846/98 [2], and in particular Article 21(3) thereof,

Whereas:

(1) Council Regulation (EC) No 2848/2000 of 15 December 2000 fixing for 2001 the fishing opportunities and associated conditions for certain fish stocks and groups of fish stocks, applicable in Community waters and, for Community vessels, in waters where limitations in catch are required [3], lays down quotas for whiting for 2001.

(2) In order to ensure compliance with the provisions relating to the quantity limits on catches of stocks subject to quotas, the Commission must fix the date by which catches made by vessels flying the flag of a Member State are deemed to have exhausted the quota allocated.

(3) According to the information received by the Commission, catches of whiting in the waters of Skagerrak and Kattegat by vessels flying the flag of Sweden or registered in Sweden have exhausted the quota allocated for 2001. Sweden has prohibited fishing for this stock from 19 March 2001. This date should be adopted in this Regulation also,

HAS ADOPTED THIS REGULATION:

Article 1

Catches of whiting in the waters of Skagerrak and Kattegat by vessels flying the flag of Sweden or registered in Sweden are hereby deemed to have exhausted the quota allocated to Sweden for 2001.

Fishing for whiting in the waters of Skagerrak and Kattegat by vessels flying the flag of Sweden or registered in Sweden is hereby prohibited, as are the retention on board, transhipment and landing of this stock caught by the above vessels after the date of application of this Regulation.

Article 2

This Regulation shall enter into force on the day following its publication in the *Official Journal of the European Communities*

It shall apply from 19 March 2001.

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

Done at Brussels, 11 April 2001.

For the Commission
Franz FISCHLER
Member of the Commission

[1] OJ L 261, 20.10.1993, p. 1.
[2] OJ L 358, 31.12.1998, p. 5.
[3] OJ L 334, 30.12.2000, p. 1.

COMMISSION REGULATION (EC) No 744/2001

of 17 April 2001

on the issuing of import licences for bananas under the tariff quotas and for traditional ACP bananas for the second quarter of 2001 (second period)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 404/93 of 13 February 1993 on the common organisation of the market in bananas [1], as last amended by Regulation (EC) No 216/2001 [2],

Having regard to Commission Regulation (EC) No 2362/98 of 28 October 1998 laying down detailed rules for the implementation of Council Regulation (EEC) No 404/93 regarding imports of bananas into the Community [3], as last amended by Regulation (EC) No 1632/2000 [4], and in particular Article 17 and Article 18(2) thereof,

Whereas:

(1) Article 2 of, and the Annex to, Commission Regulation (EC) No 535/2001 [5] fix the quantities available for the second quarter of 2001 under the second period for the submission of applications provided for in Article 18 of Regulation (EC) No 2362/98.

(2) Pursuant to Article 18(2) of Regulation (EC) No 2362/98, on the basis of applications submitted during the second period, the quantities for which licences may be issued for the origins concerned should be determined forthwith.

(3) This Regulation should apply immediately to permit licences to be issued as quickly as possible,

HAS ADOPTED THIS REGULATION:

Article 1

Import licences shall be issued under the arrangements for the importation of bananas, tariff quotas arrangements and arrangements for traditional ACP bananas for the second quarter of 2001 (second period) in respect of new applications as referred to in Article 18 of Regulation (EC) No 2362/98:

1. for the quantity indicated in the licence application multiplied, for the origin 'Panama', by the reduction coefficient 0,5047;
2. for the quantity indicated in the licence application for an origin other than that mentioned in point 1.

Article 2

This Regulation shall enter into force on 18 April 2001.

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

Done at Brussels, 17 April 2001.

For the Commission

Franz FISCHLER

Member of the Commission

[1] OJ L 47, 25.2.1993, p. 1.
[2] OJ L 31, 2.2.2001, p. 2.
[3] OJ L 293, 31.10.1998, p. 32.
[4] OJ L 187, 26.7.2000, p. 27.
[5] OJ L 80, 20.3.2001, p. 3.

COMMISSION REGULATION (EC) No 745/2001

of 17 April 2001

amending Regulation (EC) No 1555/96 on rules of application for additional import duties on fruit and vegetables

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 2200/96 of 28 October 1996 on the common organisation of the market in fruit and vegetables [1], as last amended by Regulation (EC) No 718/2001 [2], and in particular Article 33(4) thereof,

Whereas:

(1) Commission Regulation (EC) No 1555/96 [3], as last amended by Regulation (EC) No 2883/2000 [4], provides for surveillance of imports of the products listed in the Annex thereto. That surveillance is to be carried out in accordance with the rules on the surveillance of preferential imports laid down in Article 308d of Commission Regulation (EEC) No 2454/93 [5], as last amended by Regulation (EC) No 2787/2000 [6].

(2) For the purposes of Article 5(4) of the Agreement on Agriculture [7] concluded during the Uruguay Round of multilateral trade negotiations and in the light of the latest data available for 1997, 1998 and 1999, the trigger levels for additional duties on tomatoes, cucumbers and cherries other than sour cherries should be amended.

(3) The measures provided for in this Regulation are in accordance with the opinion of the Management Committee for Fresh Fruit and Vegetables,

HAS ADOPTED THIS REGULATION:

Article 1

The Annex to Regulation (EC) No 1555/96 is replaced by the Annex hereto.

Article 2

This Regulation shall enter into force on 1 May 2001.

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

Done at Brussels, 17 April 2001.

For the Commission

Franz FISCHLER

Member of the Commission

---

[1] OJ L 297, 21.11.1996, p. 1.
[2] OJ L 100, 11.4.2001, p. 12.
[3] OJ L 193, 3.8.1996, p. 1.
[4] OJ L 333, 29.12.2000, p. 74.
[5] OJ L 253, 11.10.1993, p. 1.
[6] OJ L 330, 27.12.2000, p. 1.
[7] OJ L 336, 23.12.1994, p. 22.

ANNEX

'*ANNEX*

Without prejudice to the rules for the interpretation of the Combined Nomenclature, the description of the products is deemed to be indicative only. The scope of the additional duties for the purposes of this Annex is determined by the scope of the CN codes as they exist at the time of the adoption of this Regulation. Where "ex" appears before the CN code, the scope of the additional duties is determined both by the scope of the CN code and the corresponding trigger period.

Serial No	CN code	Description	Trigger period	Trigger level (tonnes)
78.0015	ex 0702 00 00	Tomatoes	— 1 October to 31 March	718 828
78.0020			— 1 April to 30 September	1 174 823
78.0065	ex 0707 00 05	Cucumbers	— 1 May to 31 October	11 881
78.0075			— 1 November to 30 April	6 621
78.0085	ex 0709 10 00	Artichokes	— 1 November to 30 June	661
78.0100	0709 90 70	Courgettes	— 1 January to 31 December	9 867
78.0110	ex 0805 10 10 ex 0805 10 30 ex 0805 10 50	Oranges	— 1 December to 31 May	372 855
78.0120	ex 0805 20 10	Clementines	— 1 November to end of February	289 518
78.0130	ex 0805 20 30 ex 0805 20 50 ex 0805 20 70 ex 0805 20 90	Mandarins (including tangerines and satsumas); wilkings and similar citrus hybrids	— 1 November to end of February	117 200
78.0155	ex 0805 30 10	Lemons	— 1 June to 31 December	290 151
78.0160			— 1 January to 31 May	14 586
78.0170	ex 0806 10 10	Table grapes	— 21 July to 20 November	256 320
78.0175	ex 0808 10 20 ex 0808 10 50 ex 0808 10 90	Apples	— 1 January to 31 August	1 052 182
78.0180			— 1 September to 31 December	588 285
78.0220	ex 0808 20 50	Pears	— 1 January to 30 April	269 823
78.0235			— 1 July to 31 December	96 939
78.0250	ex 0809 10 00	Apricots	— 1 June to 31 July	2 236
78.0265	ex 0809 20 95	Cherries, other than sour cherries	— 21 May to 10 August	153 116
78.0270	ex 0809 30	Peaches, including nectarines	— 11 June to 30 September	349 940
78.0280	ex 0809 40 05	Plums	— 11 June to 30 September	41 539'

COMMISSION REGULATION (EC) No 746/2001
of 17 April 2001
amending the import duties in the cereals sector

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EEC) No 1766/92 of 30 June 1992 on the common organisation of the market in cereals [1], as last amended by Regulation (EC) No 1666/2000 [2],

Having regard to Commission Regulation (EC) No 1249/96 of 28 June 1996 laying down detailed rules for the application of Council Regulation (EEC) No 1766/92 as regards import duties in the cereals sector [3], as last amended by Regulation (EC) No 2235/2000 [4], and in particular Article 2(1) thereof,

Whereas:

(1) The import duties in the cereals sector are fixed by Commission Regulation (EC) No 741/2001 [5].

(2) Article 2(1) of Regulation (EC) No 1249/96 provides that if during the period of application, the average import duty calculated differs by EUR 5 per tonne from the duty fixed, a corresponding adjustment is to be made. Such a difference has arisen. It is therefore necessary to adjust the import duties fixed in Regulation (EC) No 741/2001,

HAS ADOPTED THIS REGULATION:

Article 1

Annexes I and II to Regulation (EC) No 741/2001 are hereby replaced by Annexes I and II to this Regulation.

Article 2

This Regulation shall enter into force on 18 April 2001.

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

Done at Brussels, 17 April 2001.

For the Commission
Franz FISCHLER
Member of the Commission

[1] OJ L 181, 1.7.1992, p. 21.
[2] OJ L 193, 29.7.2000, p. 1.
[3] OJ L 161, 29.6.1996, p. 125.
[4] OJ L 256, 10.10.2000, p. 13.
[5] OJ L 102, 12.4.2001, p. 55.

ANNEX I

'ANNEX I

Import duties for the products listed in Article 10(2) of Regulation (EEC) No 1766/92

CN code	Description	Import duty by land, inland waterway or sea from Mediterranean, the Black Sea or Baltic Sea ports (EUR/tonne)	Import duty by air or by sea from other ports (2) (EUR/tonne)
1001 10 00	Durum wheat — high quality	0,00	0,00
	Durum wheat — medium quality (1)	0,00	0,00
1001 90 91	Common wheat seed	1,59	0,00
1001 90 99	Common high quality wheat other than for sowing (3)	1,59	0,00
	medium quality	22,36	12,36
	low quality	57,73	47,73
1002 00 00	Rye	42,88	32,88
1003 00 10	Barley, seed	42,88	32,88
1003 00 90	Barley, other (3)	42,88	32,88
1005 10 90	Maize seed other than hybrid	68,43	58,43
1005 90 00	Maize other than seed (3)	68,43	58,43
1007 00 90	Grain sorghum other than hybrids for sowing	42,88	32,88

(1) In the case of durum wheat not meeting the minimum quality requirements for medium quality durum wheat referred to in Annex I to Regulation (EC) No 1249/96, the duty applicable is that fixed for low-quality common wheat.

(2) For goods arriving in the Community via the Atlantic Ocean or via the Suez Canal (Article 2 (4) of Regulation (EC) No 1249/96), the importer may benefit from a reduction in the duty of:

— EUR 3 per tonne, where the port of unloading is on the Mediterranean Sea, or

— EUR 2 per tonne, where the port of unloading is in Ireland, the United Kingdom, Denmark, Sweden, Finland or the Atlantic Coasts of the Iberian Peninsula.

(3) The importer may benefit from a flat-rate reduction of EUR 24 or 8 per tonne, where the conditions laid down in Article 2 (5) of Regulation (EC) No 1249/96 are met.'

ANNEX II

Factors for calculating duties

(period from 11 April to 16 April 2001)

1. Averages over the two-week period preceding the day of fixing:

Exchange quotations	Minneapolis	Kansas City	Chicago	Chicago	Minneapolis	Minneapolis	Minneapolis
Product (% proteins at 12 % humidity)	HRS2. 14 %	HRW2. 11,5 %	SRW2	YC3	HAD2	Medium quality (*)	US barley 2
Quotation (EUR/t)	129,72	130,04	107,30	92,34	215,02 (**)	205,02 (**)	125,32 (**)
Gulf premium (EUR/t)	—	17,73	5,67	9,93	—	—	—
Great Lakes premium (EUR/t)	38,21	—	—	—	—	—	—

(*) A discount of 10 EUR/t (Article 4(1) of Regulation (EC) No 1249/96).
(**) Fob Duluth.

2. Freight/cost: Gulf of Mexico — Rotterdam: 20,07 EUR/t; Great Lakes — Rotterdam: 29,94 EUR/t.

3. Subsidy within the meaning of the third paragraph of Article 4(2) of Regulation (EC) No 1249/96: 0,00 EUR/t (HRW2)
0,00 EUR/t (SRW2).

COMMISSION DIRECTIVE 2001/27/EC

of 10 April 2001

adapting to technical progress Council Directive 88/77/EEC on the approximation of the laws of the Member States relating to measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive-ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles

(Text with EEA relevance)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 88/77/EEC of 3 December 1987 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of gaseous and particulate pollutants from compression-ignition engines for use in vehicles, and the emission of gaseous pollutants from positive-ignition engines fuelled with natural gas or liquefied petroleum gas for use in vehicles [1], as last amended by Directive 1999/96/EC of the European Parliament and of the Council [2], and in particular Article 4 thereof,

Whereas:

(1) Directive 88/77/EEC is one of the separate directives under the type-approval procedure laid down by Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers [3], as last amended by Directive 2000/40/EC of the European Parliament and of the Council [4].

(2) Directive 1999/96/EC provided for new emission test cycles and prescriptions to prevent the use of defeat device and/or irrational emissions control strategy. It is now appropriate to strengthen those requirements and to provide a tool for authorities to determine whether engines are using defeat devices and/or irrational emissions control strategies under normal conditions of use to manipulate engine performance at the expense of emissions control.

(3) It is accepted that gas vehicles can provide a realistic and environmentally beneficial alternative to diesel vehicles in terms of air pollutant emissions. While they are able to achieve the emission limits mandated in Directive 1999/96/EC, certain gas engines, by virtue of their design, have difficulty complying with the test cycle validity criteria with respect to the accuracy of the gas engine response to the changes in speed, torque and power demanded by the European Transient Cycle (ETC). To avoid setting a gas engine design requirement by respecting the design freedom philosophy of the type-approval system and to help stimulate the development of the market for gas-fuelled vehicles, it is appropriate to allow, for gas engines only, a modification of the statistical criteria which assesses the validity of the type-approval test. The development of gas engine technology should be reviewed in the future to confirm or modify this allowance for gas engines.

(4) The reference fuels necessary for testing engines that use natural gas should be re-defined to provide for the broadest coverage with regard to the λ-shift factor (S_λ) of gas fuels of various compositions which are available on the market. The reference fuels necessary for testing engines that use liquefied petroleum gas should also be reviewed to similarly provide for the broadest coverage of fuels available in the market place.

(5) It is appropriate to make technical modifications to the existing measurement and sampling procedures to enable the European type-approval of vehicles and engines using ethanol.

(6) The measures provided for in this Directive are in accordance with the opinion of the Committee for Adaptation to Technical Progress established by Directive 70/156/EEC,

HAS ADOPTED THIS DIRECTIVE:

Article 1

The Annexes to Directive 88/77/EEC are amended in accordance with the Annex to this Directive.

Article 2

1. With effect from 1 October 2001, no Member State may:

(a) refuse to grant EC type-approval, or to issue the document provided for in the last indent of Article 10(1) of Directive 70/156/EEC or to grant national type-approval for a type of vehicle propelled by a compression-ignition or gas engine; or

(b) prohibit the registration, sale, entry into service or use of such new vehicles; or

[1] OJ L 36, 9.2.1988, p. 33.
[2] OJ L 44, 16.2.2000, p. 1.
[3] OJ L 42, 23.2.1970, p. 1.
[4] OJ L 203, 10.8.2000, p. 9.

(c) refuse to grant EC type-approval for a type of compression-ignition or gas engine; or

(d) prohibit the sale or use of new compression-ignition or gas engines,

if the appropriate requirements of Directive 88/77/EEC, as amended by this Directive, are satisfied.

2. With effect from 1 October 2001, Member States:

(a) may no longer grant EC type-approval or issue the document provided for in the last indent of Article 10(1) of Directive 70/156/EEC, and

(b) shall refuse national type-approval

for types of compression-ignition or gas engines and types of vehicle propelled by a compression-ignition or gas engine where the requirements of Directive 88/77/EEC, as amended by this Directive, are not met.

3. With effect from 1 October 2001 and except for vehicles and engines intended for export to non-member countries and except for replacement engines for in-service vehicles, Member States shall:

(a) consider certificates of conformity which accompany new vehicles or new engines pursuant to Directive 70/156/EEC as no longer valid for the purpose of Article 7(1) of that Directive, and

(b) prohibit the registration, sale or entry into service or use of new vehicles and the sale and use of new engines

for types of compression-ignition engines and types of vehicle propelled by a compression-ignition engine where the requirements of Directive 88/77/EEC, as amended by this Directive, are not met.

4. With effect from 1 October 2003 and except for vehicles and engines intended for export to non-member countries and except for replacement engines for in-service vehicles, Member States shall:

(a) consider certificates of conformity which accompany new vehicles or new engines pursuant to Directive 70/156/EEC as no longer valid for the purpose of Article 7(1) of that Directive, and

(b) prohibit the registration, sale or entry into service or use of new vehicles and the sale and use of new engines

for types of gas engines and types of vehicle propelled by a gas engine where the requirements of Directive 88/77/EEC, as amended by this Directive, are not met.

5. Member States shall consider compliance with the requirements of this Directive as an extension of the type-approval only in the case of a new compression-ignition engine or a new vehicle propelled by a compression-ignition engine where a type-approval has previously been granted to the requirements of Directive 88/77/EEC, as amended by Directive 1999/96/EC. With respect to these vehicles, the requirements of Article 2(3) are applicable from 1 April 2002.

Article 3

1. Member States shall adopt and publish, before 1 October 2001, the provisions necessary to comply with this Directive. They shall forthwith inform the Commission thereof.

They shall apply those provisions from 1 October 2001.

When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

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

Article 4

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

Article 5

This Directive is addressed to the Member States.

Done at Brussels, 10 April 2001.

For the Commission

Erkki LIIKANEN

Member of the Commission

ANNEX

AMENDMENTS TO ANNEX I TO DIRECTIVE 88/77/EEC

1. Sections 2.7 and 2.28 are replaced by the following:

'2.7. *"gaseous pollutants"* means carbon monoxide, hydrocarbons (assuming a ratio of $CH_{1,85}$ for diesel, $CH_{2,525}$ for LPG and $CH_{2,93}$ for NG (NMHC), and an assumed molecule $CH_3O_{0,5}$ for ethanol-fuelled diesel engines), methane (assuming a ratio of CH_4 for NG) and oxides of nitrogen, the last named being expressed in nitrogen dioxide (NO_2) equivalent:

"particulate pollutants" means any material collected on a specified filter medium after diluting the exhaust with clean filtered air so that the temperature does not exceed 325 K (52 °C);'.

'2.28. *"defeat device"* means a device which measures, senses or responds to operating variables (e.g. vehicle speed, engine speed, gear used, temperature, intake pressure or any other parameter) for the purpose of activating, modulating, delaying or deactivating the operation of any component or function of the emission control system such that the effectiveness of the emission control system is reduced under conditions encountered during normal vehicle use unless the use of such a device is substantially included in the applied emission certification test procedures.'

2. Sections 2.29 and 2.30 are introduced as follows:

'2.29. *"auxiliary control device"* means a system, function or control strategy installed to an engine or on a vehicle, that is used to protect the engine and/or its ancillary equipment against operating conditions that could result in damage or failure, or is used to facilitate engine starting. An auxiliary control device may also be a strategy or measure that has been satisfactorily demonstrated not to be a defeat device.

2.30. *"irrational emission control strategy"* means any strategy or measure that, when the vehicle is operated under normal conditions of use, reduces the effectiveness of the emission control system to a level below that expected on the applicable emission test procedures.'

3. Section 2.29 is renumbered as 2.31. The table in section 2.31.2 is replaced by the following table:

'2.31.2. Symbols for chemical components

CH_4	Methane
C_2H_6	Ethane
C_2H_5OH	Ethanol
C_3H_8	Propane
CO	Carbon monoxide
DOP	Di-octylphtalate
CO_2	Carbon dioxide
HC	Hydrocarbons
NMHC	Non-methane hydrocarbons
NOx	Oxides of nitrogen
NO	Nitric oxide
NO_2	Nitrogen dioxide
PT	Particulates.'

4. Section 4 is replaced by the following:

'4. EC TYPE-APPROVAL

4.1. **Granting of a universal fuel EC type-approval**

A universal fuel EC type-approval is granted subject to the following requirements.

4.1.1. In the case of diesel fuel the parent engine meets the requirements of this Directive on the reference fuel specified in Annex IV.

4.1.2. In the case of natural gas the parent engine should demonstrate its capability to adapt to any fuel composition that may occur across the market. In the case of natural gas there are generally two types of fuel, high calorific fuel (H-gas) and low calorific fuel (L-gas), but with a significant spread within both ranges; they differ significantly in their energy content expressed by the Wobbe Index and in their λ-shift factor (S_λ). The formulae for the calculation of the Wobbe index and S_λ are given in sections 2.25 and 2.26. Natural gases with a λ-shift factor between 0,89 and 1,08 ($0,89 \leq S_\lambda \leq 1,08$) are considered to belong to H-range, while natural gases with a λ-shift factor between 1,08 and 1,19 ($1,08 \leq S_\lambda \leq 1,19$) are considered to belong to L-range. The composition of the reference fuels reflects the extreme variations of S_λ.

The parent engine shall meet the requirements of this Directive on the reference fuels G_R (fuel 1) and G_{25} (fuel 2), as specified in Annex IV, without any readjustment to the fuelling between the two tests. However, one adaptation run over one ETC cycle without measurement is permitted after the change of the fuel. Before testing, the parent engine shall be run-in using the procedure given in paragraph 3 of Appendix 2 to Annex III.

4.1.2.1. On the manufacturer's request the engine may be tested on a third fuel (fuel 3) if the λ-shift factor (S_λ) lies between 0,89 (i.e. the lower range of G_R) and 1,19 (i.e. the upper range of G_{25}), for example when fuel 3 is a market fuel. The results of this test may be used as a basis for the evaluation of the conformity of the production.

4.1.3. In the case of an engine fuelled with natural gas which is self-adaptive for the range of H-gases on the one hand and the range of L-gases on the other hand, and which switches between the H-range and the L-range by means of a switch, the parent engine shall be tested on the relevant reference fuel as specified in Annex IV for each range, at each position of the switch. The fuels are G_R (fuel 1) and G_{23} (fuel 3) for the H-range of gases and G_{25} (fuel 2) and G_{23} (fuel 3) for the L-range of gases. The parent engine shall meet the requirements of this Directive at both positions of the switch without any readjustment to the fuelling between the two tests at each position of the switch. However, one adaptation run over one ETC cycle without measurement is permitted after the change of the fuel. Before testing the parent engine shall be run-in using the procedure given in paragraph 3 of Appendix 2 to Annex III.

4.1.3.1. At the manufacturer's request the engine may be tested on a third fuel instead of G_{23} (fuel 3) if the λ-shift factor (S_λ) lies between 0,89 (i.e. the lower range of G_R) and 1,19 (i.e. the upper range of G_{25}), for example when fuel 3 is a market fuel. The results of this test may be used as a basis for the evaluation of the conformity of the production.

4.1.4. In the case of natural gas engines, the ratio of the emission results "r" shall be determined for each pollutant as follows:

$$r = \frac{\text{emission result on reference fuel 2}}{\text{emission result on reference fuel 1}}$$

or,

$$ra = \frac{\text{emission result on reference fuel 2}}{\text{emission result on reference fuel 3}}$$

and,

$$rb = \frac{\text{emission result on reference fuel 1}}{\text{emission result on reference fuel 3}}$$

4.1.5. In the case of LPG the parent engine should demonstrate its capability to adapt to any fuel composition that may occur across the market. In the case of LPG there are variations in C_3/C_4 composition. These variations are reflected in the reference fuels. The parent engine should meet the emission requirements on the reference fuels A and B as specified in Annex IV without any readjustment to the fuelling between the two tests. However, one adaptation run over one ETC cycle without measurement is permitted after the change of the fuel. Before testing, the parent engine shall be run-in using the procedure defined in paragraph 3 of Appendix 2 to Annex III.

4.1.5.1. The ratio of emission results "r" shall be determined for each pollutant as follows:

$$r = \frac{\text{emission result on reference fuel B}}{\text{emission result on reference fuel A}}$$

4.2. **Granting of a fuel range restricted EC type-approval**

Fuel range restricted EC type-approval is granted subject to the following requirements.

4.2.1. Exhaust emissions approval of an engine running on natural gas and laid out for operation on either the range of H-gases or on the range of L-gases

The parent engine shall be tested on the relevant reference fuel, as specified in Annex IV, for the relevant range. The fuels are G_R (fuel 1) and G_{23} (fuel 3) for the H-range of gases and G_{25} (fuel 2) and G_{23} (fuel 3) for the L-range of gases. The parent engine shall meet the requirements of this Directive without any readjustment to the fuelling between the two tests. However, one adaptation run over one ETC cycle without measurement is permitted after the change of the fuel. Before testing the parent engine shall be run-in using the procedure defined in paragraph 3 of Appendix 2 to Annex III.

4.2.1.1. At the manufacturer's request the engine may be tested on a third fuel instead of G_{23} (fuel 3) if the λ-shift factor (S_λ) lies between 0,89 (i.e. the lower range of G_R) and 1,19 (i.e. the upper range of G_{25}), for example when fuel 3 is a market fuel. The results of this test may be used as a basis for the evaluation of the conformity of the production.

4.2.1.2. The ratio of emission results "r" shall be determined for each pollutant as follows:

$$r = \frac{\text{emission result on reference fuel 2}}{\text{emission result on reference fuel 1}}$$

or,

$$ra = \frac{\text{emission result on reference fuel 2}}{\text{emission result on reference fuel 3}}$$

and,

$$rb = \frac{\text{emission result on reference fuel 1}}{\text{emission result on reference fuel 3}}$$

4.2.1.3. On delivery to the customer the engine shall bear a label (see paragraph 5.1.5) stating for which range of gases the engine is approved.

4.2.2. Exhaust emissions approval of an engine running on natural gas or LPG and laid out for operation on one specific fuel composition

4.2.2.1. The parent engine shall meet the emission requirements on the reference fuels G_R and G_{25} in the case of natural gas, or the reference fuels A and B in the case of LPG, as specified in Annex IV. Between the tests fine-tuning of the fuelling system is allowed. This fine-tuning will consist of a recalibration of the fuelling database, without any alteration to either the basic control strategy or the basic structure of the database. If necessary the exchange of parts that are directly related to the amount of fuel flow (such as injector nozzles) is allowed.

4.2.2.2. At the manufacturer's request the engine may be tested on the reference fuels G_R and G_{23}, or on the reference fuels G_{25} and G_{23}, in which case the type-approval is only valid for the H-range or the L-range of gases respectively.

4.2.2.3. On delivery to the customer the engine shall bear a label (see paragraph 5.1.5) stating for which fuel composition the engine has been calibrated.

4.3. **Exhaust emissions approval of a member of a family**

4.3.1. With the exception of the case mentioned in paragraph 4.3.2, the approval of a parent engine shall be extended to all family members without further testing, for any fuel composition within the range for which the parent engine has been approved (in the case of engines described in paragraph 4.2.2) or the same range of fuels (in the case of engines described in either paragraphs 4.1 or 4.2) for which the parent engine has been approved.

4.3.2. Secondary test engine

In case of an application for type-approval of an engine, or a vehicle in respect of its engine, that engine belonging to an engine family, if the technical service determines that, with regard to the selected parent engine the submitted application does not fully represent the engine family defined in Annex I, Apppendix 1, an alternative and if necessary an additional reference test engine may be selected by the technical service and tested.

4.4. **Type-approval certificate**

A certificate conforming to the model specified in Annex VI shall be issued for approval referred to under sections 3.1, 3.2 and 3.3.'

5. Section 6 is replaced by the following:

'6. SPECIFICATIONS AND TESTS

6.1. **General**

6.1.1. Emission control equipment

6.1.1.1. The components liable to affect the emission of gaseous and particulate pollutants from diesel engines and the emission of gaseous pollutants from gas engines shall be so designed, constructed, assembled and installed as to enable the engine, in normal use, to comply with the provisions of this Directive.

6.1.2. Functions of emission control equipment

6.1.2.1. The use of a defeat device and/or an irrational emission control strategy is forbidden.

6.1.2.2. An auxiliary control device may be installed to an engine, or on a vehicle, provided that the device:

— operates only outside the conditions specified in paragraph 6.1.2.4, or

— is activated only temporarily under the conditions specified in paragraph 6.1.2.4 for such purposes as engine damage protection, air-handling device protection [1], smoke management [1], cold start or warming-up, or

— is activated only by on-board signals for purposes such as operational safety and limp-home strategies.

6.1.2.3. An engine control device, function, system or measure that operates during the conditions specified in section 6.1.2.4 and which results in the use of a different or modified engine control strategy to that normally employed during the applicable emission test cycles will be permitted if, in complying with the requirements of sections 6.1.3 and/or 6.1.4, it is fully demonstrated that the measure does not reduce the effectiveness of the emission control system. In all other cases, such devices shall be considered to be a defeat device.

6.1.2.4. For the purposes of point 6.1.2.2, the defined conditions of use under steady state and transient conditions [1] are:

— an altitude not exceeding 1 000 metres (or equivalent atmospheric pressure of 90 kPa),

— an ambient temperature within the range 283 to 303 K (10 to 30 °C),

— engine coolant temperature within the range 343 to 368 K (70 to 95 °C).

6.1.3. Special requirements for electronic emission control systems

6.1.3.1. Documentation requirements

The manufacturer shall provide a documentation package that gives access to the basic design of the system and the means by which it controls its output variables, whether that control is direct or indirect.

The documentation shall be made available in two parts:

(a) the formal documentation package, which shall be supplied to the technical service at the time of submission of the type-approval application, shall include a full description of the system. This documentation may be brief, provided that it exhibits evidence that all outputs permitted by a matrix obtained from the range of control of the individual unit inputs have been indentified. This information shall be attached to the documentation required in Annex I, section 3;

(b) additional material that shows the parameters that are modified by any auxiliary control device and the boundary conditions under which the device operates. The additional material shall include a description of the fuel system control logic, timing strategies and switch points during all modes of operation.

The additional material shall also contain a justification for the use of any auxiliary control device and include additional material and test data to demonstrate the effect on exhaust emissions of any auxiliary control device installed to the engine or on the vehicle.

This additional material shall remain strictly confidential and be retained by the manufacturer, but be made open for inspection at the time of type-approval or at any time during the validity of the type-approval.

6.1.4. To verify whether any strategy or measure should be considered a defeat device or an irrational emission control strategy according to the definitions given in sections 2.28 and 2.30, the type-approval authority and/or the technical service may additionally request a NO_x screening test using the ETC which may be carried out in combination with either the type-approval test or the procedures for checking the conformity of production

[1] To be subject to further evaluation by the Commission before 31 December 2001.

6.1.4.1. As an alternative to the requirements of Appendix 4 to Annex III to Directive 88/77/EEC, the emissions of NO_x during the ETC screening test may be sampled using the raw exhaust gas and the technical prescriptions of ISO DIS 16183, dated 15 October 2000, shall be followed.

6.1.4.2. In verifying whether any strategy or measure should be considered a defeat device or an irrational emission control strategy according to the definitions given in sections 2.28 and 2.30, an additional margin of 10 %, related to the appropriate NO_x limit value, shall be accepted.

6.1.5. Transitional provisions for extension of type-approval

6.1.5.1. This section shall only be applicable to new compression-ignition engines and new vehicles propelled by a compression-ignition engine that have been type-approved to the requirements of row A of the tables in section 6.2.1 of Annex I to Directive 88/77/EEC.

6.1.5.2. As an alternative to sections 6.1.3 and 6.1.4, the manufacturer may present to the technical service the results of a NO_x screening test using the ETC on the engine conforming to the characteristics of the parent engine described in Annex II, and taking into account the provisions of sections 6.1.4.1 and 6.1.4.2. The manufacturer shall also provide a written statement that the engine does not employ any defeat device or irrational emission control strategy as defined in section 2 of this Annex.

6.1.5.3. The manufacturer shall also provide a written statement that the results of the NO_x screening test and the declaration for the parent engine, as referred to in section 6.1.4, are also applicable to all engine types within the engine family described in Annex II.'

6. Section 9.1.1.2.4 and section 9.1.1.2.5 are replaced by the following:

'9.1.1.2.4. For NG fuelled engines, all these tests may be conducted with commercial fuel in the following way:

— for H marked engines with a commercial fuel within the H-range ($0{,}89 \leq S\lambda \leq 1{,}00$),

— for L marked engines with a commercial fuel within the L-range ($1{,}00 \leq S\lambda \leq 1{,}19$),

— for HL marked engines with a commercial fuel within the extreme range of the λ-shift factor ($0{,}89 \leq S\lambda \leq 1{,}19$).

However, at the manufacturer's request, the reference fuels described in Annex IV may be used. This implies tests, as described in section 4 of this Annex.

9.1.1.2.5. In the case of dispute caused by the non-compliance of gas fuelled engines when using a commercial fuel, the tests shall be performed with a reference fuel on which the parent engine has been tested, or whith the possible additional fuel 3 as referred to in paragraphs 4.1.3.1 and 4.2.1.1 on which the parent engine may have been tested. Then, the result has to be converted by a calculation applying the relevant factor(s) "r", "ra" or "rb" as described in paragraphs 4.1.4, 4.1.5.1 and 4.2.1.2. If r, ra or rb are less than 1 no correction shall take place. The measured results and the calculated results must demonstrate that the engine meets the limit values with all relevant fuels (fuels 1, 2 and, if applicable, fuel 3 in the case of natural gas engines and fuels A and B in the case of LPG engines).'

AMENDMENTS TO ANNEX II TO DIRECTIVE 88/77/EEC

7. — Section 0.5 is amended to read:

'0.5. Category of engine: diesel/NG fuelled/LPG fuelled/ethanol fuelled [1]:',

— Section 1.14 of Appendix 1 to Annex II is amended to read:

'1.14. *Fuel*: diesel/LPG/NG-H/NG-L/NG-HL/ethanol [2]',

— Section 1.14 of Appendix 3 to Annex II is amended to read:

'1.14. *Fuel*: diesel/LPG/NG-H/NG-L/NG-HL/ethanol [2]'.

AMENDMENTS TO APPENDIX 2 OF ANNEX III TO DIRECTIVE 88/77/EEC

8. Table 6 in section 3.9.3 is modified as follows:

'Table 6. Regression line tolerances

	Speed	Torque	Power
Standard error of estimate (SE) of Y on X	Max 100 min^{-1}	Max 13 % (15 %) (*) of power map maximum engine torque	Max 8 % (15 %) (*) of power map maximum engine power
Slope of the regression line, m	0,95 to 1,03	0,83-1,03	0,89-1,03 (0,83-1,03) (*)
Coefficient of determination, r^2	min 0,9700 (min 0,9500) (*)	min 0,8800 (min 0,7500) (*)	min 0,9100 (min 0,7500) (*)
Y intercept of the regression line, b	± 50 min^{-1}	± 20 Nm or ± 2 % (± 20 Nm or ± 3 %) (*) of max torque whichever is greater	± 4 kW or ± 2 % (± 4 kW or ± 3 %) (*) of max power whichever is greater

(*) Until 1 October 2005, the figures shown in brackets may be used for the type-approval testing of gas engines. (Before 1 October 2004, the Commission shall report on the development of gas engine technology to confirm or modify the regression line tolerances applicable to gas engines given in this table.)'

AMENDMENTS TO ANNEX IV TO DIRECTIVE 88/77/EEC

9. — Section 1 is renumbered to be section 1.1,

— a new section 1.2 is added, as follows:

'1.2. **Ethanol for diesel engines** (1)

Parameter	Unit	Limits (2)		Test method (3)
		Minimum	Maximum	
Alcohol, mass	% m/m	92,4	—	ASTM D 5501
Other alcohol than ethanol contained in total alcohol, mass	% m/m	—	2	ADTM D 5501
Density at 15 °C	kg/m^3	795	815	ASTM D 4052
Ash content	% m/m		0,001	ISO 6245
Flash point	°C	10		ISO 2719
Acidity, calculated as acetic acid	% m/m	—	0,0025	ISO 1388-2

Parameter	Unit	Limits (2)		Test method (3)
		Minimum	Maximum	
Neutralisation (strong acid) number	KOH mg/1	—	1	
Colour	According to scale	—	10	ASTM D 1209
Dry residue at 100 °C	mg/kg		15	ISO 759
Water content	% m/m		6,5	ISO 760
Aldehydes calculated as acetic acid	% m/m		0,0025	ISO 1388-4
Sulphur content	mg/kg	—	10	ASTM D 5453
Esters, calculated as ethyl-acetate	% m/m	—	0,1	ASSTM D 1617

(1) Cetane improver, as specified by the engine manufacturer, may be added to the ethanol fuel. The maximum allowed amount is 10 % m/m.
(2) The values quoted in the specification are "true values". In establishment of their limit values the terms of ISO 4259, *Petroleum products — Determination and application of precision data in relation to methods of test*, have been applied and in fixing a minimum value, a minimum difference of 2R above zero has been taken into account; in fixing a maximum and minimum value, the minimum difference is 4R (R — reproducibility). Notwithstanding this measure, which is necessary for statistical reasons, the manufacturer of a fuel should nevertheless aim at a zero value where the stipulated maximum value is 2R and at the mean value in the case of quotations of maximum and minimum limits. Should it be necessary to clarify the question as to whether a fuel meets the requirements of the specification, the terms of ISO 4259 should be applied.
(3) Equivalent ISO methods will be adopted when issued for all properties listed above.'

10. Sections 2 and 3 are replaced by the following:

'2. NATURAL GAS (NG)

European market fuels are available in two ranges:

— the H-range, whose extreme reference fuels are G_R and G_{23},

— the L-range, whose extreme reference fuels are G_{23} and G_{25}.

The characteristics of G_R, G_{23} and G_{25} reference fuels are summarised below:

Reference fuel G_R

Characteristics	Units	Basis	Limits		Test method
			Minimum	Maximum	
Composition:					
Methane		87	84	89	
Ethane		13	11	15	
Balance (*)	%-mole	—	—	1	ISO 6974
Sulphur content	mg/m^3 (**)	—	—	10	ISO 6326-5

(*) Inerts $+C_{2+}$.
(**) Value to be determined at standard conditions (293,2 K (20 °C) and 101,3 kPa).

Reference fuel G_{23}

Characteristics	Units	Basis	Limits		Test method
			Minimum	Maximum	
Composition:					
Methane		92,5	91,5	93,5	
Balance (*)	%-mole	—	—	1	ISO 6974
N_2		7,5	6,5	8,5	
Sulphur content	mg/m³ (**)	—	—	10	ISO 6326-5

(*) Inerts (different from N_2) + C_2 + C_{2+}.
(**) Value to be determined at standard conditions (293,2 K (20 °C) and 101,3 kPa).

Reference fuel G_{25}

Characteristics	Units	Basis	Limits		Test method
			Minimum	Maximum	
Composition					
Methane		86	84	88	
Balance (*)	%-mole	—	—	1	ISO 6974
N_2		14	12	16	
Sulphur content	mg/m³ (**)	—	—	10	ISO 6326-5

(*) Inerts (different from N_2) + C_2 + C_{2+}.
(**) Value to be determined at standard conditions (293,2 K (20 °C) and 101,3 kPa).

3. LIQUEFIED PETROLEUM GAS (LPG)

Parameter	Unit	Limits fuel A		Limits fuel B		Test method
		Minimum	Maximum	Minimum	Maximum	
Motor octane number		92,5 [1]		92,5		EN 589 Annex B
Composition						
C_3 content	% vol	48	52	83	87	
C_4 content	% vol	48	52	13	17	ISO 7941
Olefins	% vol		12		14	
Evaporation residue	mg/kg		50		50	NFM 41015

Parameter	Unit	Limits fuel A		Limits fuel B		Test method
		Minimum	Maximum	Minimum	Maximum	
Total sulphur content	ppm weight (1)		50		50	EN 24260
Hydrogen sulphide	—		None		None	ISO 8819
Copper strip corrosion	Rating		Class 1		Class 1	ISO 6251 (2)
Water at 0 °C			Free		Free	Visual inspection

(1) Value to be determined at standard conditions 293,2 K (20 °C) and 101,3 kPa.
(2) This method may not accurately determine the presence of corrosive materials if the sample contains corrosion inhibitors or other chemicals which diminish the corrosivity of the sample to the copper strip. Therefore, the addition of such compounds for the sole purpose of biasing the test method is prohibited.'

AMENDMENTS TO ANNEX VI TO DIRECTIVE 88/77/EEC

11. — Section 0.5 is amended to read:

'0.5. Category of engine: diesel/NG fuelled/LPG fuelled/ethanol fuelled (1):',

— Section 1.1.5 of the Appendix to Annex VI is amended to read:

'1.1.5. Category of engine: diesel/NG fuelled/LPG fuelled/ethanol fuelled (8):'.

AMENDMENTS TO ANNEX VII TO DIRECTIVE 88/77/EEC

12. In section 4.2, the title line of example 2 is replaced by the following:

'**Example 2**: G_R: CH_4 = 87 %, C_2H_6 = 13 % (by vol)'.

13. A new Annex VIII is added as follows:

'*ANNEX VIII*

SPECIFIC TECHNICAL REQUIREMENTS RELATING TO ETHANOL-FUELLED DIESEL ENGINES

In the case of ethanol-fuelled diesel engines, the following specific modifications to the appropriate paragraphs, equations and factors will apply to the test procedures defined in Annex III to this Directive.

In Annex III, Appendix 1:

4.2. Dry/wet correction

$$F_{FH} = \frac{1{,}877}{\left(1 + 2{,}577 \times \frac{G_{FUEL}}{G_{AIRW}}\right)}$$

4.3. NO_x correction for humidity and temperature

$$K_{H,D} = \frac{1}{1 + A \times (H_a - 10{,}71) + B \times (T_a - 298)}$$

with,

A = $0{,}181\ G_{FUEL}/G_{AIRD} - 0{,}0266$

B = $-0{,}123\ G_{FUEL}/G_{AIRD} + 0{,}00954$

T_a = temperature of the air, K

H_a = humidity of the intake air, g water per kg dry air

4.4. Calculation of the emission mass flow rates

The emission mass flow rates (g/h) for each mode shall be calculated as follows, assuming the exhaust gas density to be 1,272 kg/m³ at 273 K (0 °C) and 101,3 kPa:

(1) $NO_{x\,mass} = 0{,}001613 * No_{x\,conc} * K_{H,D} * G_{EXHW}$

(2) $CO_{mass} = 0{,}000982 * CO_{conc} * G_{EXHW}$

(3) $HC_{mass} = 0{,}000809 * HC_{conc} * K_{H,D} * G_{EXHW}$

where

$NO_{x\,conc}$, CO_{conc}, HC_{conc} [5] are the average concentrations (ppm) in the raw exhaust gas, as determined in section 4.1.

If, optionally, the gaseous emissions are determined with a full flow dilution system, the following formulae shall be applied:

(1) $NO_{x\,mass} = 0{,}001587 * No_{x\,conc} * K_{H,D} * G_{TOTW}$

(2) $CO_{mass} = 0{,}000966 * CO_{conc} * G_{TOTW}$

(3) $HC_{mass} = 0{,}000795 * HC_{conc} * G_{TOTW}$

where

$NO_{x\,conc}$, CO_{conc}, HC_{conc} [5] are the average background corrected concentrations (ppm) of each mode in the diluted exhaust gas, as determined in Annex III, Appendix 2, section 4.3.1.1.

[5] Based on C1 equivalent.

In Annex III, Appendix 2:

Sections 3.1, 3.4, 3.8.3 and 5 of Appendix 2 do not apply solely to diesel engines. They also apply to ethanol-fuelled diesel engines.

4.2. The conditions for the test should be arranged so that the air temperature and the humidity measured at the engine intake is set to standard conditions during the test run. The standard should be 6 ± 0,5 g water per kg dry air at a temperature interval of 298 ± 3 K. Within these limits no further NO_x correction should be made. The test is void if these conditions are not met.

4.3. Calculation of the emission mass flow

4.3.1. Systems with constant mass flow

For systems with heat exchanger, the mass of the pollutants (g/test) shall be determined from the following equations:

(1) $NO_{x\,mass} = 0{,}001587 * No_{x\,conc} * K_{H,D} * M_{TOTW}$ (ethanol fuelled engines)

(2) $CO_{mass} = 0{,}000966 * CO_{conc}\ M_{MTOTW}$ (ethanol fuelled engines)

(3) $HC_{mass} = 0{,}000794 * HC_{conc} * M_{TOTW}$ (ethanol fuelled engines)

where,

$NO_{x\,conc}$, CO_{conc}, HC_{conc} [1], $NMHC_{conc}$ = average background corrected concentrations over the cycle from integration (mandatory for NO_x and HC) or bag measurement, ppm;

M_{TOTW} = total mass of diluted exhaust gas over the cycle as determined in section 4.1, kg.

4.3.1.1. Determination of the background corrected concentrations

The average background concentration of the gaseous pollutants in the dilution air shall be subtracted from measured concentrations to get the net concentrations of the pollutants. The average values of the background concentrations can be determined by the sample bag method or by continuous measurement with integration. The following formula shall be used.

$$conc = conc_e - conc_d * (1 - (1/DF))$$

where,

conc = concentration of the respective pollutant in the diluted exhaust gas, corrected by the amount of the respective pollutant contained in the dilution air, ppm;

$conc_e$ = concentration of the respective pollutant measured in the diluted exhaust gas, ppm;

$conc_d$ = concentration of the respective pollutant measured in the dilution air, ppm;

DF = dilution factor.

The dilution factor shall be calculated as follows:

$$DF = \frac{F_S}{CO_{2\ conce} + (HC_{conce} + CO_{conce}) \times 10^{-4}}$$

where,

$CO_{2,conce}$ = concentration of CO_2 in the diluted exhaust gas, % vol

HC_{conce} = concentration of HC in the diluted exhaust gas, ppm C1

CO_{conce} = concentration of CO in the diluted exhaust gas, ppm

F_S = stoichiometric factor

Concentrations measured on dry basis shall be converted to a wet basis in accordance with Annex III, Appendix 1, section 4.2.

The stoichiometric factor shall, for the general fuel composition $CH_\alpha O_\beta N_\gamma$, be calculated as follows:

$$F_s = 100 \times \frac{1}{1 + \frac{\alpha}{2} + 3{,}76 \times \left(1 + \frac{\alpha}{4} - \frac{\beta}{2}\right) + \frac{\gamma}{2}}$$

Alternatively, if the fuel composition is not known, the following stoichiometric factors may be used:

F_S (ethanol) = 12,3

4.3.2. Systems with flow compensation

For systems without heat exchanger, the mass of the pollutants (g/test) shall be determined by calculating the instantaneous mass emissions and integrating the instantaneous values over the cycle. Also, the background correction shall be applied directly to the instantaneous concentration value. The following formulae shall be applied:

(1) NO_{xmas} =

$$\sum_{i=1}^{n} (M_{TOTW,i} \times NO_{Xconce,i} \times 0{,}001587) - (M_{TOTW} \times NO_{Xconcd} \times (1-1/DF) \times 0{,}001587)$$

(2) CO_{mass} =

$$\sum_{i=1}^{n} (M_{TOTW,i} \times CO_{conce,i} \times 0{,}000966) - (M_{TOTW} \times CO_{concd} \times (1-1/DF) \times 0{,}000966)$$

(3) HC_{mass} =

$$\sum_{i=1}^{n} (M_{TOTW,i} \times HC_{conce,i} \times 0{,}000749) - (M_{TOTW} \times HC_{concd} \times (1-1/DF) \times 0{,}000749)$$

where,

$conc_e$ = concentration of the respective pollutant measured in the diluted exhaust gas, ppm;

$conc_d$ = concentration of the respective pollutant measured in the dilution air, ppm;

$M_{TOTW,i}$ = instantaneous mass of the diluted exhaust gas (see section 4.1), kg;

M_{TOTW} = total mass of diluted exhaust gas over the cycle (see section 4.1), kg;

DF = dilution factor as dertermined in section 4.3.1.1.

4.4. Calculation of the specific emissions

The emissions (g/kWh) shall be calculated for all individual components in the following way:

$$\overline{NO_x} = NO_{X\,mass}/W_{act}$$

$$\overline{CO} = CO_{mass}/W_{act}$$

$$\overline{HC} = HC_{mass}/W_{act}$$

where,

W_{act} = actual cycle work as determined in section 3.9.2, kWh.'

II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DECISION
of 9 April 2001
appointing a Dutch alternate member of the Committee of the Regions

(2001/307/EC)

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 263 thereof,

Having regard to the Council Decision of 26 January 1998 [1] appointing the members and alternate members of the Committee of the Regions,

Whereas a seat as an alternate member of the Committee of the Regions has become vacant following the resignation of Mr D.C. DEKKER, notified to the Council on 28 November 2000;

Having regard to the proposal from the Netherlands Government,

HAS DECIDED AS FOLLOWS:

Sole Article

Mr L.E. VAN DER SAR is hereby appointed an alternate member of the Committee of the Regions in place of Mr D.C. DEKKER for the remainder of his term of office, which runs until 25 January 2002.

Done at Luxembourg, 9 April 2001.

For the Council
The President
A. LINDH

[1] OJ L 28, 4.2.1998, p. 19.

COMMISSION

COMMISSION DECISION

of 31 January 2001

on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards vetures

(notified under document number C(2000) 4359)

(Text with EEA relevance)

(2001/308/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products [1], as amended by Directive 93/68/EEC [2], and in particular Article 13(4) thereof,

Whereas:

(1) The Commission is required to select, as between the two procedures under Article 13(3) of Directive 89/106/EEC for attesting the conformity of a product, the least onerous possible procedure consistent with safety. This means that it is necessary to decide whether, for a given product or family of products, the existence of a factory production control system under the responsibility of the manufacturer is a necessary and sufficient condition for an attestation of conformity, or whether, for reasons related to compliance with the criteria mentioned in Article 13(4), the intervention of an approved certification body is required.

(2) Article 13(4) requires the procedure thus determined to be indicated in the mandates and in the technical specifications. It is therefore desirable to identify the products or family of products referred to in the technical specifications.

(3) The two procedures provided for in Article 13(3) are described in detail in Annex III to Directive 89/106/EEC. It is necessary therefore to specify clearly the methods by which the two procedures are to be implemented, by reference to Annex III, for each product or family of products, since Annex III gives preference to certain systems.

(4) The procedure referred to in point (a) of Article 13(3) corresponds to the systems set out in the first possibility, without continuous surveillance, and the second and third possibilities of point (ii) of Section 2 of Annex III. The procedure referred to in point (b) of Article 13(3) corresponds to the systems set out in point (i) of Section 2 of Annex III, and in the first possibility, with continuous surveillance, of point (ii) of Section 2 of Annex III.

(5) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on Construction,

HAS ADOPTED THIS DECISION:

Article 1

The products and families of products set out in Annex I shall have their conformity attested by a procedure whereby the manufacturer has under its sole responsibility a factory production control system ensuring that the product is in conformity with the relevant technical specifications.

Article 2

The products and families of products set out in Annex II shall have their conformity attested by a procedure whereby, in addition to a factory production control system operated by the manufacturer, an approved certification body is involved in assessment and surveillance of the production control or of the product itself.

[1] OJ L 40, 11.2.1989, p. 12.
[2] OJ L 220, 30.8.1993, p. 1.

Article 3

The procedure for attesting conformity as set out in Annex III shall be indicated in the mandates for Guidelines for European technical approvals.

Article 4

This Decision is addressed to the Member States.

Done at Brussels, 31 January 2001.

For the Commission

Erkki LIIKANEN

Member of the Commission

ANNEX I

Vetures:

For use in buildings, except those covered in Annex II.

ANNEX II

Vetures:

For use in buildings, subject to reaction to fire regulations for products made of materials falling into classes A1 (*), A2 (*), B (*), C (*).

(*) Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material).

ANNEX III

Note: *For products having more than one of the intended uses specified in the following families, the tasks for the approved body, derived from the relevant systems of attestation of conformity, are cumulative.*

Product family: vetures (1/2)

Systems of attestation of conformity

For the product(s) and intended use(s) listed below, EOTA is requested to specify the following system(s) of attestation of conformity in the relevant Guideline for European technical approvals:

Product(s)	Intended use(s)	Level(s) or class(es)	Attestation of conformity system(s)
Vetures	In buildings	—	3

System 3: See Directive 89/106/EEC, Annex III.2.(ii), second possibility.

The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic (see Article 2(1) of Directive 89/106/EEC and, where applicable, clause 1.2.3 of the interpretative documents). In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.

Product family: vetures (2/2)

Systems of attestation of conformity

For the product(s) and intended use(s) listed below, EOTA is requested to specify the following system(s) of attestation of conformity in the relevant guideline for European technical approvals:

Product(s)	Intended use(s)	Level(s) or class(es) (reaction to fire)	Attestation of conformity system(s)
Vetures	for uses subject to regulations on reaction to fire	A1 (*), A2 (*), B (*), C (*)	1
		A1 (**), A2 (**), B (**), C (**), D, E	3
		A1 to E (***), F	4

System 1: See Directive 89/106/EEC, Annex III.2.(i), without audit-testing of samples.

System 3: See Directive 89/106/EEC, Annex III.2.(ii), second possibility.

System 4: See Directive 89/106/EEC, Annex III.2.(ii), third possibility.

(*) Products/materials for which a clearly identifiable stage in the production process results in an improvement of the reaction to fire classification (e.g. an addition of fire retardants or a limiting of organic material).

(**) Products/materials not covered by footnote (*).

(***) Products/materials that do not require to be tested for reaction to fire (e.g. products/materials of class A1 according to Decision 96/603/EC, as amended).

The specification for the system should be such that it can be implemented even where performance does not need to be determined for a certain characteristic, because at least one Member State has no legal requirement at all for such characteristic (see Article 2(1) of Directive 89/106/EEC and, where applicable, clause 1.2.3 of the interpretative documents). In those cases the verification of such a characteristic must not be imposed on the manufacturer if he does not wish to declare the performance of the product in that respect.