

Official Journal of the European Union

L 24



English edition

Legislation

Volume 58

30 January 2015

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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.

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II

(Non-legislative acts)

REGULATIONS

COUNCIL REGULATION (EU) 2015/138

of 29 January 2015

amending Regulation (EU) No 208/2014 concerning restrictive measures directed against certain persons, entities and bodies in view of the situation in Ukraine

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 215 thereof,

Having regard to Council Decision 2014/119/CFSP of 5 March 2014 concerning restrictive measures directed against certain persons, entities and bodies in view of the situation in Ukraine ⁽¹⁾,

Having regard to the joint proposal of the High Representative of the Union for Foreign Affairs and Security Policy and of the European Commission,

Whereas:

- (1) Council Regulation (EU) No 208/2014 ⁽²⁾ gives effect to certain measures provided for in Decision 2014/119/CFSP and provides for the freezing of funds and economic resources of certain persons identified as responsible for the misappropriation of Ukrainian State funds and persons responsible for human rights violations in Ukraine, and natural or legal persons, entities or bodies associated with them.
- (2) On 29 January 2015, the Council adopted Decision (CFSP) 2015/143 ⁽³⁾ which amends Decision 2014/119/CFSP and clarifies the designation criteria for the freezing of funds targeting persons identified as responsible for the misappropriation of Ukrainian State funds.
- (3) That amendment falls within the scope of the Treaty on the Functioning of the European Union and, therefore, in particular with a view to ensuring its uniform application in all Member States, regulatory action at the level of the Union is necessary in order to implement it. Regulation (EU) No 208/2014 should therefore be amended accordingly,

HAS ADOPTED THIS REGULATION:

Article 1

In Article 3 of Regulation (EU) No 208/2014, the following paragraph is inserted:

‘1a. For the purposes of paragraph 1 persons identified as responsible for the misappropriation of Ukrainian State funds include persons subject to investigation by the Ukrainian authorities:

- (a) for the misappropriation of Ukrainian public funds or assets or being an accomplice thereto; or
- (b) for abuse of office as a public office-holder in order to procure an unjustified advantage for him- or herself or for a third party and thereby causing a loss to Ukrainian public funds or assets, or being an accomplice thereto.’

⁽¹⁾ OJ L 66, 6.3.2014, p. 26.

⁽²⁾ Council Regulation (EU) No 208/2014 of 5 March 2014 concerning restrictive measures directed against certain persons, entities and bodies in view of the situation in Ukraine (OJ L 66, 6.3.2014, p. 1).

⁽³⁾ See page 16 of this Official Journal.

Article 2

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

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

Done at Brussels, 29 January 2015.

For the Council

The President

F. MOGHERINI

COMMISSION IMPLEMENTING REGULATION (EU) 2015/139**of 27 January 2015****amending Regulation (EC) No 1484/95 as regards fixing representative prices in the poultrymeat and egg sectors and for egg albumin**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 ⁽¹⁾, and in particular Article 183(b) thereof,Having regard to Regulation (EU) No 510/2014 of the European Parliament and of the Council of 16 April 2014 laying down the trade arrangements applicable to certain goods resulting from the processing of agricultural products and repealing Council Regulations (EC) No 1216/2009 and (EC) No 614/2009 ⁽²⁾, and in particular Article 5(6)(a) thereof,

Whereas:

- (1) Commission Regulation (EC) No 1484/95 ⁽³⁾ lays down detailed rules for implementing the system of additional import duties and fixes representative prices in the poultrymeat and egg sectors and for egg albumin.
- (2) Regular monitoring of the data used to determine representative prices for poultrymeat and egg products and for egg albumin shows that the representative import prices for certain products should be amended to take account of variations in price according to origin.
- (3) Regulation (EC) No 1484/95 should be amended accordingly.
- (4) Given the need to ensure that this measure applies as soon as possible after the updated data have been made available, this Regulation should enter into force on the day of its publication,

HAS ADOPTED THIS REGULATION:

Article 1

Annex I to Regulation (EC) No 1484/95 is replaced by the text set out in the Annex to this Regulation.

*Article 2*This Regulation shall enter into force on the day of its publication in the *Official Journal of the European Union*.

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

Done at Brussels, 27 January 2015.

*For the Commission,**On behalf of the President,*

Jerzy PLEWA

Director-General for Agriculture and Rural Development⁽¹⁾ OJ L 347, 20.12.2013, p. 671.⁽²⁾ OJ L 150, 20.5.2014, p. 1.⁽³⁾ Commission Regulation (EC) No 1484/95 of 28 June 1995 laying down detailed rules for implementing the system of additional import duties and fixing representative prices in the poultrymeat and egg sectors and for egg albumin, and repealing Regulation (EEC) No 163/67 (OJ L 145, 29.6.1995, p. 47).

ANNEX

‘ANNEX I

CN code	Description of goods	Representative price (EUR/100 kg)	Security under Article 3 (EUR/100 kg)	Origin ⁽¹⁾
0207 12 10	Fowls of the species <i>Gallus domesticus</i> , not cut in pieces, presented as “70 % chickens”, frozen	125,5	0	AR
0207 12 90	Fowls of the species <i>Gallus domesticus</i> , not cut in pieces, presented as “65 % chickens”, frozen	150,6	0	AR
		146,2	0	BR
0207 14 10	Fowls of the species <i>Gallus domesticus</i> , boneless cuts, frozen	327,9	0	AR
		232,8	20	BR
		349,8	0	CL
		277,5	7	TH
0207 14 50	Fowls of the species <i>Gallus domesticus</i> , breasts, frozen	213,4	0	BR
0207 14 60	Fowls of the species <i>Gallus domesticus</i> , legs, frozen	134,5	3	BR
0207 27 10	Turkeys, boneless cuts, frozen	372,2	0	BR
		516,1	0	CL
1602 32 11	Preparations of fowls of the species <i>Gallus domesticus</i> , uncooked	254,6	10	BR

⁽¹⁾ Nomenclature of countries laid down by Commission Regulation (EU) No 1106/2012 of 27 November 2012 implementing Regulation (EC) No 471/2009 of the European Parliament and of the Council on Community statistics relating to external trade with non-member countries, as regards the update of the nomenclature of countries and territories (OJ L 328, 28.11.2012, p. 7). The code “ZZ” represents “other origins”.

COMMISSION REGULATION (EU) 2015/140**of 29 January 2015****amending Regulation (EU) No 965/2012 as regards sterile flight crew compartment and correcting that Regulation**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 216/2008 of the European Parliament and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency, and repealing Council Directive 91/670/EEC, Regulation (EC) No 1592/2002 and Directive 2004/36/EC ⁽¹⁾, and in particular Article 8(5) thereof,

Whereas:

- (1) Operators and personnel involved in the operation of certain aircraft have to comply with the relevant essential requirements set out in point 8.b of Annex IV to Regulation (EC) No 216/2008.
- (2) Commission Regulation (EU) No 965/2012 ⁽²⁾ establishes conditions for the safe operation of aircraft.
- (3) In order to address the risks linked to potential errors resulting from the disturbance or distraction of flight crew during certain phases of flight, operators should be required to ensure that crew members are not required to perform any activities during critical phases of flight other than those required for the safe operation of the aircraft.
- (4) Regulation (EU) No 965/2012 imposes a limit on the number of persons who may be carried on board during specialised operations. However, that limit is not justified by safety reasons. Article 5(7) should therefore be adapted.
- (5) Commission Regulation (EU) No 71/2014 ⁽³⁾ inserted an Article 9a into Regulation (EU) No 965/2012. Commission Regulation (EU) No 83/2014 ⁽⁴⁾ subsequently inserted a second Article 9a, which should actually have been numbered Article 9b. In the interests of clarity and legal certainty, that Article 9a as inserted by Regulation (EU) No 83/2014 should be replaced and correctly numbered.
- (6) For reasons of legal certainty, and to ensure coherence with the terms used in Regulation (EC) No 216/2008, it is necessary, in certain languages, to correct certain terms used in Regulation (EU) No 965/2012.
- (7) Regulation (EU) No 965/2012 should therefore be amended and corrected accordingly.
- (8) The measures provided for in this Regulation are based on the opinion ⁽⁵⁾ issued by the European Aviation Safety Agency in accordance with Article 17(2)(b) and Article 19(1) of Regulation (EC) No 216/2008.
- (9) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 65 of Regulation (EC) No 216/2008,

⁽¹⁾ OJ L 79, 19.3.2008, p. 1.

⁽²⁾ Commission Regulation (EU) No 965/2012 of 5 October 2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 296, 25.10.2012, p. 1).

⁽³⁾ Commission Regulation (EU) No 71/2014 of 27 January 2014 amending Regulation (EU) No 965/2012 laying down technical requirements and administrative procedures related to Air Operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 23, 28.1.2014, p. 27).

⁽⁴⁾ Commission Regulation (EU) No 83/2014 of 29 January 2014 amending Regulation (EU) No 965/2012 laying down technical requirements and administrative procedures related to air operations pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (OJ L 28, 31.1.2014, p. 17).

⁽⁵⁾ European Aviation Safety Agency Opinion No 05/2013 of 10 June 2013 for a Commission Regulation establishing the Implementing Rules for sterile flight deck procedures.

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EU) No 965/2012 is amended as follows:

(1) Article 5 is amended as follows:

(a) paragraph 4 is replaced by the following:

‘4. Operators of other-than complex motor-powered aeroplanes and helicopters, as well as balloons and sailplanes, involved in non-commercial operations, including non-commercial specialised operations, shall operate the aircraft in accordance with the provisions specified in Annex VII.’;

(b) in paragraph 5, point (b) is replaced by the following:

‘(b) other aeroplanes and helicopters as well as balloons and sailplanes in accordance with the provisions specified in Annex VII.’;

(c) in paragraph 7, the second sentence is replaced by the following:

‘Except for crew members, persons other than those indispensable to the mission shall not be carried on board.’.

(2) Article 6 is amended as follows:

(a) in paragraph 2, the first sentence is replaced by the following:

‘2. By way of derogation from Article 5(1), aircraft referred to in Article 4(5) of Regulation (EC) No 216/2008 shall, in the case of aeroplanes, be operated under the conditions set out in Commission Decision C(2009) 7633 of 14 October 2009 when used in CAT operations.’;

(b) in paragraph 4a, the introductory wording is replaced by the following:

‘4a. By way of derogation from Article 5(1) and (6), the following operations with other-than complex motor-powered aeroplanes and helicopters, balloons and sailplanes may be conducted in accordance with Annex VII.’.

(3) Article 9a as inserted by Regulation (EU) No 83/2014 is replaced by the following:

‘Article 9b

Review

The Agency shall conduct a continuous review of the effectiveness of the provisions concerning flight and duty time limitations and rest requirements contained in Annexes II and III. No later than 18 February 2019 the Agency shall produce a first report on the results of this review.

That review shall involve scientific expertise and shall be based on operational data gathered, with the assistance of Member States, on a long-term basis after the date of application of this Regulation.

The review shall assess the impact of at least the following on the alertness of aircrew:

- (a) duties of more than 13 hours at the most favourable times of the day;
- (b) duties of more than 10 hours at less favourable times of the day;
- (c) duties of more than 11 hours for crew members in an unknown state of acclimatisation;
- (d) duties including a high level of sectors (more than 6);

- (e) on-call duties such as standby or reserve followed by flight duties; and
- (f) disruptive schedules.’

(4) Annexes I, III, IV, VI and VIII are amended in accordance with the Annex I to this Regulation.

Article 2

Regulation (EU) No 965/2012 is corrected as follows:

(1) Article 6(7) is replaced by the following:

‘7. By way of derogation from SPA.PBN.100 PBN of Annex V non-commercial operations with other-than complex motor-powered aeroplanes in designated airspace, on routes or in accordance with procedures where performance-based navigation (PBN) specifications are established shall continue to be operated under the conditions set out in Member States’ national law until the related implementing rules are adopted and apply.’

(2) Annexes II, III, IV, VII and VIII are corrected as set out in Annex II to this Regulation.

Article 3

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

However point (3) of Article 1 shall apply from 18 February 2016.

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

Done at Brussels, 29 January 2015.

For the Commission

The President

Jean-Claude JUNCKER

ANNEX I

Annexes I, III, IV, VI and VIII to Regulation (EU) No 965/2012 are amended as follows:

(1) In Annex I the following point (109a) is inserted:

‘(109a) “Sterile flight crew compartment” means any period of time when the flight crew members are not disturbed or distracted, except for matters critical to the safe operation of the aircraft or the safety of the occupants;’.

(2) In Annex III (PART-ORO):

(a) in ORO.GEN.110, point (f) is replaced by the following:

‘(f) The operator shall establish procedures and instructions for the safe operation of each aircraft type, containing ground staff and crew member duties and responsibilities, for all types of operation on the ground and in flight. Those procedures and instructions shall not require crew members to perform any activities during critical phases of flight other than those required for the safe operation of the aircraft. Procedures and instructions for a sterile flight crew compartment shall also be included.’;

(b) in ORO.MLR.105, point (a) is replaced by the following:

‘(a) A minimum equipment list (MEL) shall be established as specified under point 8.a.3 of Annex IV to Regulation (EC) No 216/2008, based on the relevant master minimum equipment list (MMEL) as defined in the data established in accordance with Regulation (EU) No 748/2012. If an MMEL has not been established as part of the operational suitability data, the MEL may be based on the relevant MMEL accepted by the State of Operator or Registry as applicable.’.

(3) In Annex IV (PART-CAT) the following point is inserted:

‘CAT.GEN.MPA.124 Taxiing of aircraft

The operator shall establish procedures for taxiing of aircraft in order to ensure safe operation and in order to enhance runway safety.’.

(4) In Annex VI (PART-NCC) the following point is inserted:

‘NCC.GEN.119 Taxiing of aircraft

The operator shall establish procedures for taxiing to ensure safe operation and to enhance runway safety.’.

(5) In Annex VIII (PART-SPO) the following point is inserted:

‘SPO.GEN.119 Taxiing of aircraft

The operator shall establish procedures for taxiing of aircraft in order to ensure safe operation and in order to enhance runway safety.’.

ANNEX II

Annexes II, III, IV, VII and VIII to Regulation (EU) No 965/2012 are corrected as follows:

(1) In Annex II:

(a) point ARO.GEN.220(a)(8) is replaced by the following:

‘(8) oversight of operations of other-than complex motor-powered aircraft by non-commercial operators;’;

(b) point ARO.GEN.300(a)(3) is replaced by the following:

‘(3) continued compliance with the applicable requirements of non-commercial operators of other-than complex motor-powered aircraft; and’.

(2) In Annex III:

(a) point ORO.GEN.110(k)(ii) is replaced by the following:

‘(ii) other-than complex motor-powered helicopters, single-engined, with a MOPSC of 5 or less;’;

(b) point ORO.FC.005(b)(2) is replaced by the following:

‘(2) commercial air transport operations of passengers conducted under visual flight rules (VFR) by day, starting and ending at the same aerodrome or operating site and within a local area specified by the competent authority, with

— single-engined propeller-driven aeroplanes having a maximum certified take-off mass of 5 700 kg or less and a MOPSC of 5, or

— other-than complex motor-powered helicopters, single-engined, with a MOPSC of 5;’;

(c) point ORO.FC.105(d)(2) is replaced by the following:

‘(2) commercial air transport operations of passengers conducted under VFR by day, starting and ending at the same aerodrome or operating site or within a local area specified by the competent authority, with other-than complex motor-powered helicopters, single-engined, with a MOPSC of 5;’;

(d) point ORO.FC.230(b)(4) is replaced by the following:

‘(4) The flight crew member involved in operations by day and over routes navigated by reference to visual landmarks with an other-than complex motor-powered helicopter may complete the operator proficiency check in only one of the relevant types held. The operator proficiency check shall be performed each time on the type least recently used for the proficiency check. The relevant helicopter types that may be grouped for the purpose of the operator proficiency check shall be contained in the operations manual;’;

(e) point ORO.FC.230(b)(5) is replaced by the following:

‘(5) Notwithstanding ORO.FC.145(a)(2), for operations of other-than complex motor-powered helicopters by day and over routes navigated by reference to visual landmarks and performance class B aeroplanes, the check may be conducted by a suitably qualified commander nominated by the operator, trained in CRM concepts and the assessment of CRM skills. The operator shall inform the competent authority about the persons nominated.’.

(3) In Annex IV:

(a) in point CAT.GEN.MPA.180(b) the introductory wording is replaced by the following:

‘(b) Notwithstanding (a), for operations under visual flight rules (VFR) by day with other-than complex motor-powered aircraft taking off and landing at the same aerodrome or operating site within 24 hours, or remaining within a local area specified in the operations manual, the following documents and information may be retained at the aerodrome or operating site instead;’;

(b) point CAT.OP.MPA.100(b)(1) is replaced by the following:

‘(1) operations under VFR by day of other-than complex motor-powered aeroplanes;’;

(c) point CAT.OP.MPA.105(b)(1) is replaced by the following:

‘(1) other-than complex motor-powered aeroplanes; and’;

(d) point CAT.OP.MPA.130(a) is replaced by the following:

‘(a) Except for VFR operations of other-than complex motor-powered aeroplanes, the operator shall establish appropriate operating departure and arrival/approach procedures for each aeroplane type taking into account the need to minimise the effect of aircraft noise.’;

(e) point CAT.OP.MPA.135(c) is replaced by the following:

‘(c) point (a)(1) shall not apply to operations under VFR by day of other-than complex motor-powered aircraft on flights that depart from and arrive at the same aerodrome or operating site.’;

(f) point CAT.OP.MPA.175(c)(1) is replaced by the following:

‘(1) other-than complex motor-powered aeroplane taking off and landing at the same aerodrome or operating site; or’.

(4) In Annex VII:

(a) the title is replaced by the following:

‘NON-COMMERCIAL AIR OPERATIONS WITH OTHER-THAN COMPLEX MOTOR-POWERED AIRCRAFT’;

(b) point NCO.SPEC.100 is replaced by the following:

‘NCO.SPEC.100 Scope

This subpart establishes specific requirements to be followed by a pilot-in-command conducting non-commercial specialised operations with other-than complex motor-powered aircraft.’.

(5) In Annex VIII:

(a) point SPO.GEN.005(b) is replaced by the following:

‘(b) Notwithstanding (a), non-commercial specialised operations with other-than complex motor-powered aircraft shall comply with Annex VII (Part-NCO).’;

(b) in point SPO.GEN.005(c), the introductory wording is replaced by the following:

‘(c) Notwithstanding point (a), the following operations with other-than complex motor-powered aircraft may be conducted in accordance with Annex VII (Part-NCO).’;

(c) point SPO.IDE.A.160(c) is replaced by the following:

‘(c) for other-than complex motor-powered aeroplanes, a seat belt with upper torso restraint system on each flight crew seat, having a single point release.’;

(d) in point SPO.IDE.H.195, the title is replaced by the following:

‘Flight over water — other-than complex motor-powered helicopters’;

(e) in point SPO.IDE.H.203, the introductory wording is replaced by the following:

‘Complex motor-powered helicopters operated on a flight over water in a hostile environment at a distance from land corresponding to more than 10 minutes’ flying time at normal cruising speed and other-than complex motor-powered helicopters flying over water in a hostile environment beyond a distance of 50 NM from land shall be.’.

COMMISSION IMPLEMENTING REGULATION (EU) 2015/141**of 29 January 2015****amending Implementing Regulation (EU) No 367/2014 setting the net balance available for EAGF expenditure**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 1306/2013 of the European Parliament and of the Council of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations (EEC) No 352/78, (EC) No 165/94, (EC) No 2799/98, (EC) No 814/2000, (EC) No 1290/2005 and (EC) No 485/2008 ⁽¹⁾, and in particular Article 16(2) thereof,

Whereas:

- (1) Commission Implementing Regulation (EU) No 367/2014 ⁽²⁾ sets the net balance available for European Agricultural Guarantee Fund (EAGF) expenditure, as well as the amounts available for the budget years 2014 to 2020 for the European Agricultural Fund for Rural Development (EAFRD), pursuant to Articles 10c(2), 136, 136a and 136b of Council Regulation (EC) No 73/2009 ⁽³⁾ and to Articles 14 and 66(1) of Regulation (EU) No 1307/2013 of the European Parliament and of the Council ⁽⁴⁾.
- (2) In accordance with Article 7(2) of Regulation (EU) No 1307/2013, the estimated product of the reduction of payments notified by Member States and referred to in Article 11(6) of that Regulation is to be made available as Union support for measures under rural development programming financed under the EAFRD as specified in Regulation (EU) No 1305/2013 of the European Parliament and of the Council ⁽⁵⁾. The relevant national ceilings were adapted through Commission Delegated Regulation (EU) No 1378/2014 ⁽⁶⁾.
- (3) In accordance with the third subparagraph of Article 136a(1) of Regulation (EC) No 73/2009 and the third subparagraph of Article 14(1) of Regulation (EU) No 1307/2013, Belgium, the Czech Republic, Denmark, Germany, Estonia, Greece, the Netherlands and Romania notified the Commission by 1 August 2014 of their decision to transfer a certain percentage of their annual national ceilings of direct payments for calendar years 2015 to 2019 to rural development programming financed under the EAFRD as specified in Regulation (EU) No 1305/2013. The relevant national ceilings were adapted through Delegated Regulation (EU) No 1378/2014.
- (4) In accordance with the third subparagraph of Article 136a(2) of Regulation (EC) No 73/2009 and the third subparagraph of Article 14(2) of Regulation (EU) No 1307/2013, Hungary notified the Commission by 1 August 2014 of its decision to transfer to direct payments a certain percentage of the amount allocated to support for measures under rural development programming financed under the EAFRD in the period of 2016 to 2020 as specified in Regulation (EU) No 1305/2013. The relevant national ceilings were adapted through Delegated Regulation (EU) No 1378/2014.
- (5) In accordance with Article 3(1) of Council Regulation (EU, Euratom) No 1311/2013 ⁽⁷⁾, the sub-ceiling for market related expenditure and direct payments of the multiannual financial framework set out in Annex I to that Regulation shall be adjusted under the technical adjustment provided for in Article 6(1) of that Regulation following the transfers between the EAFRD and direct payments.

⁽¹⁾ OJ L 347, 20.12.2013, p. 549.

⁽²⁾ Commission Implementing Regulation (EU) No 367/2014 of 10 April 2014 setting the net balance available for EAGF expenditure (OJ L 108, 11.4.2014, p. 13).

⁽³⁾ Council Regulation (EC) No 73/2009 of 19 January 2009 establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers, amending Regulations (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003 (OJ L 30, 31.1.2009, p. 16).

⁽⁴⁾ Regulation (EU) No 1307/2013 of the European Parliament and of the Council of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation (EC) No 637/2008 and Council Regulation (EC) No 73/2009 (OJ L 347, 20.12.2013, p. 608).

⁽⁵⁾ Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005 (OJ L 347, 20.12.2013, p. 487).

⁽⁶⁾ Commission Delegated Regulation (EU) No 1378/2014 of 17 October 2014 amending Annex I to Regulation (EU) No 1305/2013 of the European Parliament and of the Council and Annexes II and III to Regulation (EU) No 1307/2013 of the European Parliament and of the Council (OJ L 367, 23.12.2014, p. 16).

⁽⁷⁾ Council Regulation (EU, Euratom) No 1311/2013 of 2 December 2013 laying down the multiannual financial framework for the years 2014-2020 (OJ L 347, 20.12.2013, p. 884).

- (6) Implementing Regulation (EU) No 367/2014 should therefore be amended accordingly,

HAS ADOPTED THIS REGULATION:

Article 1

Implementing Regulation (EU) No 367/2014 is amended as follows:

- (1) Article 1 is replaced by the following:

'Article 1

The net balance available for European Agricultural Guarantee Fund (EAGF) expenditure, pursuant to Articles 10c(2), 136, 136a and 136b of Regulation (EC) No 73/2009 and to Articles 7(2), 14 and 66(1) of Regulation (EU) No 1307/2013, is set out in the Annex to this Regulation.'

- (2) the Annex is replaced by the text in the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the seventh day following that of its publication in the *Official Journal of the European Union*.

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

Done at Brussels, 29 January 2015.

For the Commission

The President

Jean-Claude JUNKER

ANNEX

‘ANNEX

(EUR million — current prices)

Budget year	Amounts made available to EAFRD						Amounts transferred from EAFRD	Net balance available for EAGF expenditure
	Article 10b of Regulation (EC) No 73/2009	Article 136 of Regulation (EC) No 73/2009	Article 136b of Regulation (EC) No 73/2009	Article 66 of Regulation (EU) No 1307/2013	Article 136a(1) of Regulation (EC) No 73/2009 and Article 14(1) of Regulation (EU) No 1307/2013	Article 7(2) of Regulation (EU) No 1307/2013	Article 136a(2) of Regulation No 73/2009 and Article 14(2) of Regulation (EU) No 1307/2013	
2014	296,3	51,6		4,0				43 778,1
2015			51,600	4,000	621,999		499,384	44 189,785
2016				4,000	1 138,146	109,619	573,047	43 949,282
2017				4,000	1 174,732	111,975	572,440	44 144,733
2018				4,000	1 184,257	111,115	571,820	44 161,448
2019				4,000	1 131,292	112,152	571,158	44 239,714
2020				4,000	1 132,133	112,685	570,356	44 262,538*

COMMISSION IMPLEMENTING REGULATION (EU) 2015/142**of 29 January 2015****establishing the standard import values for determining the entry price of certain fruit and vegetables**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 ⁽¹⁾,

Having regard to Commission Implementing Regulation (EU) No 543/2011 of 7 June 2011 laying down detailed rules for the application of Council Regulation (EC) No 1234/2007 in respect of the fruit and vegetables and processed fruit and vegetables sectors ⁽²⁾, and in particular Article 136(1) thereof,

Whereas:

- (1) Implementing Regulation (EU) No 543/2011 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 Annex XVI, Part A thereto.
- (2) The standard import value is calculated each working day, in accordance with Article 136(1) of Implementing Regulation (EU) No 543/2011, taking into account variable daily data. Therefore this Regulation should enter into force on the day of its publication in the *Official Journal of the European Union*,

HAS ADOPTED THIS REGULATION:

Article 1

The standard import values referred to in Article 136 of Implementing Regulation (EU) No 543/2011 are fixed in the Annex to this Regulation.

Article 2

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

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

Done at Brussels, 29 January 2015.

For the Commission,

On behalf of the President,

Jerzy PLEWA

Director-General for Agriculture and Rural Development

⁽¹⁾ OJ L 347, 20.12.2013, p. 671.

⁽²⁾ OJ L 157, 15.6.2011, p. 1.

ANNEX

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	EG	362,8
	MA	89,9
	TR	133,5
	ZZ	195,4
0707 00 05	JO	229,9
	TR	203,2
	ZZ	216,6
0709 91 00	EG	107,0
	ZZ	107,0
0709 93 10	EG	165,4
	MA	225,0
	TR	222,2
	ZZ	204,2
0805 10 20	EG	47,9
	IL	78,7
	MA	68,5
	TN	62,6
	TR	76,4
	ZZ	66,8
0805 20 10	IL	148,1
	MA	91,9
	ZZ	120,0
0805 20 30, 0805 20 50, 0805 20 70, 0805 20 90	CN	54,3
	EG	74,4
	IL	125,6
	MA	130,8
	TR	80,6
	ZZ	93,1
	ZZ	93,1
0805 50 10	TR	42,1
	ZZ	42,1
0808 10 80	BR	58,5
	CL	89,9
	MK	26,7
	US	181,6
	ZZ	89,2
	ZZ	89,2
0808 30 90	CL	316,1
	US	243,1
	ZA	93,7
	ZZ	217,6

⁽¹⁾ Nomenclature of countries laid down by Commission Regulation (EU) No 1106/2012 of 27 November 2012 implementing Regulation (EC) No 471/2009 of the European Parliament and of the Council on Community statistics relating to external trade with non-member countries, as regards the update of the nomenclature of countries and territories (OJ L 328, 28.11.2012, p. 7). Code 'ZZ' stands for 'of other origin'.

DECISIONS

COUNCIL DECISION (CFSP) 2015/143

of 29 January 2015

amending Decision 2014/119/CFSP concerning restrictive measures directed against certain persons, entities and bodies in view of the situation in Ukraine

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on European Union, and in particular Article 29 thereof,

Having regard to Council Decision 2014/119/CFSP of 5 March 2014 concerning restrictive measures directed against certain persons, entities and bodies in view of the situation in Ukraine ⁽¹⁾,

Whereas:

- (1) On 5 March 2014, the Council adopted Decision 2014/119/CFSP.
- (2) The designation criteria for the freezing of funds targeting persons responsible for the misappropriation of Ukrainian State funds should be clarified.
- (3) Decision 2014/119/CFSP should therefore be amended accordingly,

HAS ADOPTED THIS DECISION:

Article 1

Article 1(1) of Decision 2014/119/CFSP is replaced by the following:

‘1. All funds and economic resources belonging to, owned, held or controlled by persons having been identified as responsible for the misappropriation of Ukrainian State funds and persons responsible for human rights violations in Ukraine, and natural or legal persons, entities or bodies associated with them, as listed in the Annex, shall be frozen.

For the purpose of this Decision, persons identified as responsible for the misappropriation of Ukrainian State funds include persons subject to investigation by the Ukrainian authorities:

- (a) for the misappropriation of Ukrainian public funds or assets, or being an accomplice thereto; or
- (b) for the abuse of office as a public office-holder in order to procure an unjustified advantage for him- or herself or for a third party, and thereby causing a loss to Ukrainian public funds or assets, or being an accomplice thereto.’.

Article 2

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

Done at Brussels, 29 January 2015.

For the Council

The President

F. MOGHERINI

⁽¹⁾ OJ L 66, 6.3.2014, p. 26.

COMMISSION IMPLEMENTING DECISION (EU) 2015/144**of 28 January 2015****laying down the procedures for the submission of applications for grants and requests for payment, and the information relating thereto, in respect of the emergency measures against animal diseases referred to in Regulation (EU) No 652/2014 of the European Parliament and of the Council***(notified under document C(2015) 250)*

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 652/2014 of the European Parliament and of the Council of 15 May 2014 laying down provisions for the management of expenditure relating to the food chain, animal health and animal welfare, and relating to plant health and plant reproductive material, amending Council Directives 98/56/EC, 2000/29/EC and 2008/90/EC, Regulations (EC) No 178/2002, (EC) No 882/2004 and (EC) No 396/2005 of the European Parliament and of the Council, Directive 2009/128/EC of the European Parliament and of the Council and Regulation (EC) No 1107/2009 of the European Parliament and of the Council and repealing Council Decisions 66/399/EEC, 76/894/EEC and 2009/470/EC ⁽¹⁾, and in particular Article 36(5) thereof,

Whereas:

- (1) In accordance with Article 6(1) of Regulation (EU) No 652/2014 grants may be awarded to Member States in respect of the emergency measures taken as a result of the confirmation that one of the animal diseases listed in Annex I to that Regulation has occurred.
- (2) In order to ensure sound financial management and to have rapid information on disease management, it is appropriate to set the dates by which Member States have to submit their applications for grants and requests for payment, and to specify the information that needs to be provided. In particular, first and updated estimates of the expenditure incurred by Member States should be provided.
- (3) It is necessary to specify the rate to be applied when converting estimates and requests for payment submitted by Member States not using the euro as their national currency.
- (4) The measures provided for in this Decision are in accordance with the opinion of the Standing Committee on Plants, Animals, Food and Feed,

HAS ADOPTED THIS DECISION:

*Article 1***Preliminary information**

Member States shall provide within 30 days of the official confirmation of the occurrence of a disease listed in Annex I to that Regulation a preliminary information on the categories of animals and products concerned and the market values for each of those categories, using an electronic file in accordance with the template set out in Annex I to this Decision.

At the same time, Member States shall provide a description of the ongoing and planned actions and the legislation for determining the values of the animals and products to be compensated.

⁽¹⁾ OJ L 189, 27.6.2014, p. 1.

*Article 2***Information on estimated costs**

No later than two months after the official confirmation of the occurrence of the disease, Member States shall submit to the Commission an application for a grant pursuant to Article 6(1) of Regulation (EU) No 652/2014 by means of an electronic file in accordance with the template 'Preliminary budget' set out in Annex II on the following:

- (a) the estimated costs of compensation to owners as referred to in Article 8(1)(a) and (c) of Regulation (EU) No 652/2014;
- (b) the estimated operational costs as referred to in Article 8(1)(b) and (d) to (g) of Regulation (EU) No 652/2014;
- (c) where applicable, the estimated other costs essential for the eradication of the disease as referred to in Article 8(1)(h) of Regulation (EU) No 652/2014, attaching an appropriate justification.

The description of actions referred to in Article 1 is deemed to be part of the application for a grant.

Every two months after the submission of the information referred to in the first paragraph, Member States shall submit updated information on the costs referred to in that paragraph.

*Article 3***Requests for payment**

Within six months after the end date fixed in the financing decision or the confirmation of the eradication of the disease, whichever is earlier, Member States shall submit to the Commission:

- (a) the request for payment for the eligible costs incurred, using an electronic file in accordance with the template set out in Annex III to this Decision;
- (b) the detailed costs supporting the request for payment with the detailed information on the costs made and paid for the different categories of eligible expenditure, by means of an electronic file, in accordance with the template set out in Annex IV to this Decision;
- (c) a technical report in accordance with Annex V to this Decision.

*Article 4***Conversion rate**

Where the amounts of the estimated costs or of the expenditure incurred by a Member State are in a currency other than the euro, the Member State concerned shall convert them into euro by applying the most recent exchange rate set by the European Central Bank prior to the first day of the month in which the application for a grant is submitted by the Member State.

*Article 5***Addressees**

This Implementing Decision is addressed to the Member States.

Done at Brussels, 28 January 2015.

For the Commission
Vytenis ANDRIUKAITIS
Member of the Commission

ANNEX I

**PRELIMINARY INFORMATION ON CATEGORIES OF ANIMALS OR PRODUCTS AS MENTIONED IN
ARTICLE 1**

PRELIMINARY INFORMATION

Information required within 30 days of the official confirmation of the occurrence of the disease

To be addressed to: SANCO-CONSULT-G5@ec.europa.eu

Date _____

DD/MM/YY

Outbreak reference

MS/Disease/Year

[illegible]

ANNEX II

PRELIMINARY BUDGET AS MENTIONED IN ARTICLE 2

PRELIMINARY BUDGET

No later than two months after the official confirmation of the occurrence of the disease and every two months thereafter

To be addressed to: SANCO-CONSULT-G5@ec.europa.eu

First submission

Update

For the period from

DD/MM/YY

to

DD/MM/YY

Outbreak reference

MS/Disease/Year

Contact person for
this budget:

Telephone:

E-mail address

Direct cost — Compensation —		Total amount (In euro, VAT excluded)
Type of animals/products	Quantity	
Sub-total:		EUR —

Direct cost — Operational costs —		Total amount (In euro, VAT excluded)
Slaughter/culling		
Cleaning, desinsectisation and disinfection		
Transport and destruction of feedingstuffs and equipment		
Purchase, storage, administration or distribution of vaccines		
Transport and disposal of carcasses		
Other essential costs (Article 8(1)(h) of Regulation (EU) No 652/2014)		
Sub-total:		EUR —

Indirect cost — Overhead 7 % —	Total amount (In euro, VAT excluded)
Overheads on direct costs, other than compensation	
Sub-total:	EUR —
TOTAL	EUR —

Date:

DD/MM/YY

Name of
responsible:

Signature:

ANNEX III

REQUEST FOR PAYMENT AS MENTIONED IN ARTICLE 3(a)

REQUEST FOR PAYMENT

Upon adoption of Financing Decision, 6 months after the end date or confirmation of eradication of the disease, whichever is earlier

To be addressed to: SANCO-CONSULT-G5@ec.europa.eu

For the period from

DD/MM/YY

to

DD/MM/YY

Outbreak reference

MS/Disease/Year

Contact person for this request for payment:

Telephone:

E-mail address

Direct cost — Compensation —		Total amount (In euro, VAT excluded)
Type of animals/products	Quantity	
Sub-total:		EUR —

Direct cost — Operational costs —		Total amount (In euro, VAT excluded)
Slaughter/culling		
Cleaning, desinsectisation and disinfection		
Transport and destruction of feedingstuffs and equipment		
Purchase, storage, administration or distribution of vaccines		
Transport and disposal of carcasses		
Other essential costs (Article 8(1)(h) of Regulation (EU) No 652/2014)		
Sub-total:		EUR —

Indirect cost — Overhead 7 % —	Total amount (In euro, VAT excluded)
Overheads on direct costs, other than compensation (7 %)	
Sub-total:	EUR —
TOTAL	EUR —

Statement by the beneficiary

this expenditure was actually incurred, accurately accounted for; the above costs correspond to the resources employed for the work and those resources were reasonable and necessary for the work; the costs were incurred and fall within the definition of eligible costs; all supporting documents relating to the expenditure are available for inspection; no other Union contribution was requested for this action and all revenue accruing from operations for this action is declared to the Commission; control procedures apply, in particular to verify the accuracy of the amounts declared, to prevent, detect and correct irregularities.

Date:

Signature:

Name of responsible:

ANNEX IV

DETAILED INFORMATION ON THE COSTS AS MENTIONED IN ARTICLE 3(b)

COMPENSATION - REQUEST FOR PAYMENT																											
Submission deadline:				Upon adoption of Financing Decision, 6 months after the end date or confirmation of eradication of the disease, whichever is earlier																							
Outbreak reference																											
PIGS																											
ADNS N°	Date of confirmation of suspicion	Holding identification number	Farmer	Holding location	Animal owner	Date of slaughter	Slaughter		Method of destruction			Weight on date of destruction	Number of animals per category				Amount paid for the value of the animal, by category				Average unit value by category				Total compensation (excluding VAT)	Date of payment	
			Name		Name		Farm	Slaughter-house	Rendering plant	On-site incineration	Other (specify)		Cows	Boars	Piglets	pigs	Sows	Boars	Piglets	pigs	Sows	Boars	Piglets	pigs			
Total																											
CATTLE																											
ADNS N°	Date of confirmation of suspicion	Holding identification number	Farmer	Holding location	Animal owner	Date of slaughter	Slaughter		Method of destruction			Weight on date of destruction	Number of animals per category				Amount paid for the value of the animal, by category				Average unit value by category				Total compensation (excluding VAT)	Date of payment	
			Name		Name		Farm	Slaughter-house	Rendering plant	On-site incineration	Other (specify)		Cows	Heifers	Calves	Bulls	Cows	Heifers	Calves	Bulls	Cows	Heifers	Calves	Bulls			
Total																											

[illegible][illegible]

PRODUCTS																			
ADNS N°	Date of confirmation of suspicion	Holding identification number	Farmer	Holding location	Product owner	Date of destruction	Method of destruction			Number of products per category				Amount paid by category				Total compensation (excluding VAT)	Date of payment
			Name		Name		Rendering plant	On-site (specify)	Other (specify)	Eggs	Milk	Semen	Embryos	Eggs	Milk	Semen	Embryos		
Total																			

OPERATIONAL — REQUEST FOR REIMBURSEMENT

Submission deadline:	Upon adoption of Financing Decision, 6 months after the end date or confirmation of eradication of the disease, whichever is earlier.
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Outbreak reference	MS/DISEASE/YEAR
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Slaughtering and culling				
ADNS N°	Holding No	Amount of invoice excluding VAT	Supplier's Name	Payment date
Total				

Cleaning desinsectisation and disinfection (holdings and equipment)				
ADNS N°	Holding No	Amount of invoice excluding VAT	Supplier's Name	Payment date
Total				

Transport and destruction of the contaminated feeding stuffs and equipment				
ADNS N°	Holding No	Amount of invoice excluding VAT	Supplier's Name	Payment date
Total				

Transport and disposal of carcasses				
ADNS N°	Holding No	Amount of invoice excluding VAT	Supplier's Name	Payment date
Total				

Other costs essential for the eradication of the disease				
ADNS N°	Holding No	Amount of invoice excluding VAT	Supplier's Name	Payment date
Total				

TOTAL	
Slaughtering and culling	
Cleaning desinsectisation and disinfection (holdings and equipment)	
Transport and destruction of the contaminated feeding stuffs and equipment	
Purchase, storage, administration or distribution of vaccines	
Transport and disposal of carcasses	
Other costs essential for the eradication of the disease (specify)	
Total	

ANNEX V

CONTENT OF THE TECHNICAL REPORT AS MENTIONED IN ARTICLE 3(c)

The final technical report shall at least, contain the following information:

1. the starting and end dates of implementation of the measures;
 2. a description of the technical measures implemented, with key figures;
 3. epidemiological maps;
 4. the level of achievement of the targets and technical difficulties;
 5. the results of epidemiological inquiries;
 6. other relevant epidemiological information: mortality, morbidity, age distribution of dead animals and positive reactors, lesions found, vectors presence, etc.
-

ACTS ADOPTED BY BODIES CREATED BY INTERNATIONAL AGREEMENTS

Only the original UN/ECE texts have legal effect under international public law. The status and date of entry into force of this Regulation should be checked in the latest version of the UN/ECE status document TRANS/WP.29/343, available at:

<http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29docstts.html>

Regulation No 78 of the Economic Commission for Europe of the United Nations (UNECE) — Uniform provisions concerning the approval of vehicles of categories L₁, L₂, L₃, L₄ and L₅ with regard to braking [2015/145]

Incorporating all valid text up to:

Corrigendum 2 to the 03 series of amendments — Date of entry into force: 23 June 2010

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REGULATION

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11. Production definitely discontinued
12. Names and addresses of Technical Services responsible for conducting approval tests and of Administrative Departments

ANNEXES

Annex 1 — Communication concerning the approval or extension or refusal or withdrawal of approval or production definitely discontinued of a type of vehicle of category L with regard to braking pursuant to Regulation No 78

Annex 2 — Arrangements of approval marks

Annex 3 — Test conditions, procedures and performance requirements

1. SCOPE

This Regulation applies to vehicles of categories L₁, L₂, L₃, L₄ and L₅ ⁽¹⁾.

These categories do not include:

- (a) Vehicles with a V_{max} of < 25 km/h;
- (b) Vehicles equipped for disabled riders.

2. DEFINITIONS

For the purposes of this Regulation:

- 2.1. 'Antilock brake system (ABS)' means a system which senses wheel slip and automatically modulates the pressure producing the braking forces at the wheel(s) to limit the degree of wheel slip.
- 2.2. 'Approval of a vehicle' means the approval of a vehicle type with regard to braking.
- 2.3. 'Baseline test' means a stop or a series of stops carried out in order to confirm the performance of the brake prior to subjecting it to a further test such as the heating procedure or wet brake stop.
- 2.4. 'Brake' means those parts of the brake system where the forces opposing the movement of the vehicle are developed.
- 2.5. 'Brake system' means the combination of parts consisting of the control, transmission, and brake, but excluding the engine, whose function it is to progressively reduce the speed of a moving vehicle, bring it to a halt, and keep it stationary when halted.
- 2.6. 'Combined brake system (CBS)' means:

For vehicle categories L₁ and L₃: a service brake system where at least two brakes on different wheels are operated by the actuation of a single control.

For vehicle categories L₂ and L₅: a service brake system where the brakes on all wheels are operated by the actuation of a single control.

For vehicle category L₄: a service brake system where the brakes on at least the front and rear wheels are operated by the actuation of a single control. (If the rear wheel and sidecar wheel are braked by the same brake system, this is regarded as the rear brake.)
- 2.7. 'Components of the braking system' means one of the individual parts which, when assembled, constitute the braking system.
- 2.8. 'Control' means the part actuated directly by the rider in order to supply or control the energy required for braking the vehicle to the transmission.
- 2.9. 'Different types of braking systems' means devices which differ in such essential respects as:
 - (a) Components having different characteristics;
 - (b) A component made of materials having different characteristics, or a component differing in shape or size;
 - (c) A different assembly of the components.
- 2.10. 'Driver mass' means the nominal mass of a driver that shall be 75 kg (subdivided into 68 kg occupant mass at the seat and 7 kg luggage mass).
- 2.11. 'Engine disconnected' means when the engine is no longer connected to the driving wheel(s).
- 2.12. 'Gross vehicle mass' or 'maximum mass' means the technically permissible maximum laden mass as declared by the manufacturer.

⁽¹⁾ As defined in the Consolidated resolution on the Construction of vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.2, para. 2.

- 2.13. 'Initial brake temperature' means the temperature of the hottest brake before any brake application.
- 2.14. 'Laden' means so loaded as to attain the gross vehicle mass as defined in paragraph 2.12.
- 2.15. 'Lightly loaded' means mass in running order plus 15 kg for test equipment, or the laden condition, whichever is less. In the case of ABS tests on a low friction surface (Annex 3, paragraphs 9.4 to 9.7), the mass for test equipment is increased to 30 kg to account for outriggers.
- 2.16. 'Mass in running order' means the sum of the unladen vehicle mass and driver mass.
- 2.17. 'Peak braking coefficient (PBC)' means the measure of tyre to road surface friction based on the maximum deceleration of a rolling tyre.
- 2.18. 'Power-assisted braking system' means a brake system in which the energy necessary to produce the braking force is supplied by the physical effort of the rider assisted by one or more energy supplying devices, for example vacuum assisted (with vacuum booster).
- 2.19. 'Secondary brake system' means the second service brake system on a vehicle equipped with a combined brake system.
- 2.20. 'Service brake system' means a brake system which is used for slowing the vehicle when in motion.
- 2.21. 'Single brake system' means a brake system which acts on only one axle.
- 2.22. 'Split service brake system (SSBS)' means a brake system that operates the brakes on all wheels, consisting of two or more subsystems actuated by a single control designed so that a single failure in any subsystem (such as a leakage type failure of a hydraulic subsystem) does not impair the operation of any other subsystem.
- 2.23. 'Stopping distance' means the distance travelled by the vehicle from the point the rider begins to actuate the brake control to the point at which the vehicle reaches a full stop. For tests where the simultaneous actuation of two controls is specified, the distance travelled is taken from the point the first control is actuated.
- 2.24. 'Test speed' means the vehicle speed measured the moment the driver begins to actuate the brake control(s). For tests where the simultaneous actuation of two controls is specified, the vehicle speed is taken from the point the first control is actuated.
- 2.25. 'Transmission' means the combination of components that provide the functional link between the control and the brake.
- 2.26. 'Unladen vehicle mass' means the nominal mass of the vehicle as indicated by the manufacturer(s) including all factory fitted equipment for normal operation of that vehicle (e.g. fire extinguisher, tools, spare wheel), plus coolant, oils, 90 per cent of fuel and 100 per cent of other gas or liquids, as specified by the manufacturer.
- 2.27. 'Vehicle type' means a sub-category of L-category vehicles which do not differ in such essential respects as:
- (a) The vehicle category, as defined in the Consolidated Resolution (R.E.3);
 - (b) The gross vehicle mass, as defined in paragraph 2.12;
 - (c) The distribution of the mass between the axles;
 - (d) V_{max};
 - (e) A different type of braking device;
 - (f) The number and arrangement of the axles;
 - (g) The engine type;
 - (h) The number and ratios of gears;
 - (i) The final drive ratios;
 - (j) The tyre dimensions.

2.28. 'Vmax' means either the speed attainable by accelerating at a maximum rate from a standing start for a distance of 1,6 km on a level surface, with the vehicle lightly loaded, or the speed measured in accordance with ISO 7117:1995.

2.29. 'Wheel lock' means the condition that occurs when there is a slip ratio of 1,00.

3. APPLICATION FOR APPROVAL

3.1. The application for approval of a vehicle type with regard to braking shall be submitted by the vehicle manufacturer or by his duly accredited representative.

3.2. It shall be accompanied by the under mentioned documents in triplicate and by the following particulars:

3.2.1. A description of the vehicle type with regard to the items specified in paragraph 2.27. The numbers and/or symbols identifying the vehicle type and the engine type shall be specified;

3.2.2. A list of components, duly identified, constituting the braking device;

3.2.3. A diagram of the assembled braking system and an indication of the position of its components on the vehicle;

3.2.4. Detailed drawings of each component to enable it to be easily located and identified.

3.3. A vehicle, representative of the vehicle type to be approved, shall be submitted to the technical service responsible for conducting the approval tests.

4. APPROVAL

4.1. If the vehicle type submitted for approval pursuant to this Regulation meets the requirements of paragraphs 5 and 6 below, approval of that vehicle type shall be granted.

4.2. An approval number shall be assigned to each type approved. Its first two digits (at present 03 corresponding to the 03 series of amendments) shall indicate the series of amendments incorporating the most recent major technical amendments made to the Regulation at the time of issue of the approval. The same Contracting Party shall not assign the same number to the same vehicle type equipped with another type of braking device, or to another vehicle type.

4.3. Notice of approval or refusal or extension or withdrawal of approval or production definitely discontinued of a vehicle type pursuant to this Regulation shall be communicated to the Parties to the Agreement which apply this Regulation by means of a form conforming to the model in Annex 1 to this Regulation.

4.4. There shall be affixed, conspicuously and in a readily accessible place specified on the approval form, to every vehicle conforming to a vehicle type approved under this Regulation an international approval mark consisting of:

4.4.1. A circle surrounding the letter 'E' followed by the distinguishing number of the country which has granted approval ⁽¹⁾;

4.4.2. The number of this Regulation, followed by the letter 'R', a dash and the approval number to the right of the circle prescribed in paragraph 4.4.1.

4.5. If the vehicle conforms to a vehicle type approved, under one or more other Regulations annexed to the Agreement, in the country which has granted approval under this Regulation, the symbol prescribed in paragraph 4.4.1 needs not be repeated; in such a case, the Regulation and approval numbers and the additional symbols of all the Regulations under which approval has been granted in the country which has granted approval under this Regulation shall be placed in vertical columns to the right of the symbol prescribed in paragraph 4.4.1.

4.6. The approval mark shall be clearly legible and be indelible.

⁽¹⁾ The distinguishing numbers of the Contracting Parties to the 1958 Agreement are reproduced in Annex 3 to the Consolidated Resolution on the Construction of Vehicles (R.E.3), document ECE/TRANS/WP.29/78/Rev.2/Amend.1.

4.7. The approval mark shall be placed close to or on the vehicle data plate affixed by the manufacturer.

4.8. Annex 2 to this Regulation gives examples of arrangements of approval marks.

5. SPECIFICATIONS

5.1. Brake system requirements

5.1.1. Each vehicle shall meet each of the tests specified for a vehicle of its category and for those brake features on the vehicle.

5.1.2. Service brake system control operation

Vehicles shall have configurations that enable a rider to actuate the service brake system control while seated in the normal driving position and with both hands on the steering control.

5.1.3. Secondary brake system control operation

Vehicles shall have configurations that enable a rider to actuate the secondary brake system control while seated in the normal driving position and with at least one hand on the steering control.

5.1.4. Parking brake system

If a parking brake system is fitted, it shall hold the vehicle stationary on the slope prescribed in paragraph 8.2 of Annex 3.

The parking brake system shall:

- (a) Have a control which is separate from the service brake system controls; and
- (b) Be held in the locked position by solely mechanical means.

Vehicles shall have configurations that enable a rider to be able to actuate the parking brake system while seated in the normal driving position.

5.1.5. Two-wheeled vehicles of categories L_1 and L_3 shall be equipped with either two separate service brake systems, or a split service brake system, with at least one brake operating on the front wheel and at least one brake operating on the rear wheel.

5.1.6. Three-wheeled vehicles of vehicles category L_4 shall comply with the brake system requirements set out in paragraph 5.1.5. A brake on the sidecar wheel is not required if the vehicle meets the performance requirements prescribed in Annex 3.

5.1.7. Three-wheeled vehicles of category L_2 shall be equipped with a parking brake system plus one of the following service brake systems:

- (a) Two separate service brake systems, except CBS, which, when applied together, operate the brakes on all wheels; or
- (b) A split service brake system; or
- (c) A CBS that operates the brakes on all wheels and a secondary brake system which may be the parking brake system.

5.1.8. Category L_5 vehicles shall be equipped with:

5.1.8.1. A parking brake system; and

5.1.8.2. A foot-actuated service brake system which operates on the brakes on all wheels, by way of either:

- (a) A split service brake system; or
- (b) A CBS that operates the brakes on all wheels and a secondary brake system, which may be the parking brake system.

- 5.1.9. In cases where two separate service brake systems are installed, the systems may share a common brake, if a failure in one system does not affect the performance of the other.
- 5.1.10. For vehicles that use hydraulic fluid for brake force transmission, the master cylinder shall:
- (a) Have a sealed, covered, separate reservoir for each brake system;
 - (b) Have a minimum reservoir capacity equivalent to 1,5 times the total fluid displacement required to satisfy the new to fully worn lining condition with the worst case brake adjustment condition; and
 - (c) Have a reservoir where the fluid level is visible for checking without removal of the cover.
- 5.1.11. All warning lamps shall be mounted in the rider's view.
- 5.1.12. Vehicles that are equipped with a split service brake system shall be fitted with a red warning lamp, which shall be activated:
- (a) When there is a hydraulic failure on the application of a force of ≤ 90 N on the control; or
 - (b) Without actuation of the brake control, when the brake fluid level in the master cylinder reservoir falls below the greater of:
 - (i) That which is specified by the manufacturer; and
 - (ii) That which is less than or equal to half of the fluid reservoir capacity.

To permit function checking, the warning lamp shall be illuminated by the activation of the ignition switch and shall be extinguished when the check has been completed. The warning lamp shall remain on while a failure condition exists whenever the ignition switch is in the 'on' position.

- 5.1.13. Vehicles that are equipped with an ABS system shall be fitted with a yellow warning lamp. The lamp shall be activated whenever there is a malfunction that affects the generation or transmission of signals in the vehicle's ABS system.

To permit function checking, the warning lamp shall be illuminated by the activation of the ignition switch and extinguished when the check has been completed.

The warning lamp shall remain on while a failure condition exists whenever the ignition switch is in the 'on' position.

5.2. Durability

- 5.2.1. Wear of the brakes shall be compensated for by means of a system of automatic or manual adjustment.
- 5.2.2. The friction material thickness shall either be visible without disassembly, or where the friction material is not visible, wear shall be assessed by means of a device designed for that purpose.
- 5.2.3. During all the tests in this Regulation and on their completion, there shall be no friction material detachment and no leakage of brake fluid.

5.3. Measurement of dynamic performance

The method used to measure performance is as specified in the respective tests in Annex 3. There are three ways in which the service brake system performance may be measured:

- 5.3.1. MFDD (Mean Fully Developed Deceleration):

Calculation of MFDD:

$$d_m = \frac{V_b^2 - V_e^2}{25,92 \cdot (S_e - S_b)} \text{ in m/s}^2$$

where:

d_m = mean fully developed deceleration

V_1 = vehicle speed when rider actuates the control

V_b = vehicle speed at $0,8 V_1$ in km/h

V_e = vehicle speed at $0,1 V_1$ in km/h

S_b = distance travelled between V_1 and V_b in metres

S_e = distance travelled between V_1 and V_e in metres

5.3.2. Stopping distance:

Based on the basic equations of motion:

$$S = 0,1 \cdot V + (X) \cdot V^2$$

where:

S = stopping distance in metres

V = vehicle speed in km/h

X = a variable based on the requirement for each test

To calculate the corrected stopping distance using the actual vehicle test speed, the following formula is used:

$$S_s = 0,1 \cdot V_s + (S_a - 0,1 \cdot V_a) \cdot V_s^2 / V_a^2$$

where:

S_s = corrected stopping distance in metres

V_s = specified vehicle test speed in km/h

S_a = actual stopping distance in metres

V_a = actual vehicle test speed in km/h

Note: This equation is only valid when the actual test speed (V_a) is within ± 5 km/h of the specified test speed (V_s).

5.3.3. Continuous deceleration recording:

For the burnishing procedure and tests such as the wet brake and heat fade — heating procedure, there is a continuous recording of the vehicle's instantaneous deceleration from the moment a force is applied to the brake control until the end of the stop.

5.4. Brake lining materials:

Brake linings shall not contain asbestos.

6. TESTS

The braking tests (test conditions and procedures) which vehicles submitted for approval are required to undergo, and the braking performance required, are prescribed in Annex 3 to this Regulation.

7. MODIFICATIONS OF VEHICLE TYPE OR BRAKING SYSTEM AND EXTENSION OF APPROVAL

7.1. Every modification of the vehicle type or of its braking system shall be communicated to the Administrative Department which approved the vehicle type. That department may then either:

7.1.1. Consider that the modifications made are unlikely to have an appreciable adverse effect and that in any case the vehicle still complies with the requirements; or

7.1.2. Require a further test report from the Technical Service responsible for conducting the tests.

7.2. Confirmation or refusal of approval, specifying the alterations, shall be communicated, by the procedure specified in paragraph 4.3, to the Parties to the Agreement which apply this Regulation.

- 7.3. The Competent Authority issuing the extension of approval shall assign a series number to each communication form drawn up for such an extension.

8. CONFORMITY OF PRODUCTION

- 8.1. Every vehicle (system) approved to this Regulation shall be so manufactured as to conform to the type approved by meeting the requirements set forth in paragraph 5.

- 8.2. In order to verify that the requirements of paragraph 8.1 are met, suitable controls of the production shall be carried out.

- 8.3. The holder of the approval shall in particular:

- 8.3.1. Ensure existence of procedures for the effective control of the quality of products;

- 8.3.2. Have access to the control equipment necessary for checking the conformity to each approved type;

- 8.3.3. Ensure that data of test results are recorded and that annexed documents shall remain available for a period to be determined in accordance with the Administrative Service;

- 8.3.4. Analyse the results of each type of test, in order to verify and ensure the stability of the product characteristics making allowance for variation of industrial production;

- 8.3.5. Ensure that for each type of product at least the tests prescribed in Annex 3 to this Regulation are carried out;

- 8.3.6. Ensure that any sampling of samples or test pieces giving evidence of non-conformity with the type of test considered shall give rise to another sampling and another test. All the necessary steps shall be taken to re-establish the conformity of the corresponding production.

- 8.4. The Competent Authority which has granted type approval may at any time verify the conformity control methods applicable to each production unit.

- 8.4.1. In every inspection, the test books and production survey records shall be presented to the visiting inspector.

- 8.4.2. The inspector may take samples at random which will be tested in the manufacturer's laboratory. The minimum number of samples may be determined according to the results of the manufacturer's own verification.

- 8.4.3. When the quality level appears unsatisfactory or when it seems necessary to verify the validity of the tests carried out in application of paragraph 8.4.2, the inspector shall select samples to be sent to the technical service which has conducted the type-approval tests.

- 8.4.4. The Competent Authority may carry out any test prescribed in this Regulation.

- 8.4.5. The normal frequency of inspections authorised by the competent authority shall be once every two years. In the case where negative results are recorded during one of these visits, the Competent Authority shall ensure that all necessary steps are taken to re-establish the conformity of production as rapidly as possible.

9. TRANSITIONAL PROVISIONS

- 9.1. As from the official date of entry into force of the 03 series of amendments to this Regulation, no Contracting Party applying this Regulation shall refuse an application for approval under this Regulation as amended by the 03 series of amendments. At the request of the manufacturer, Contracting Parties applying this Regulation may agree to the application of these amendments before the official date of their entry into force.

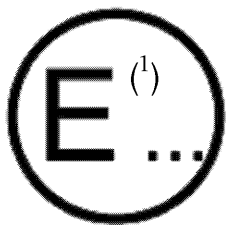
- 9.2. As from 24 months after the official date of entry into force mentioned in paragraph 9.1, Contracting Parties applying this Regulation shall grant approvals only if the type of vehicle corresponds to the requirements of the Regulation as amended by the 03 series of amendments.

- 9.3. Approvals granted before the end of the 24-month period following the official date of entry into force shall cease to be valid 48 months after the date of entry into force mentioned in paragraph 9.1, unless the Contracting Party which granted the approval notifies the other Contracting Parties applying this Regulation that the type-approved vehicle meets the requirements of this Regulation as amended by the 03 series of amendments.
- 9.4. Notwithstanding the transitional provisions above, Contracting Parties whose application of this Regulation comes into force after the date of entry into force of the most recent series of amendments are not obliged to accept approvals which were granted in accordance with any of the preceding series of amendments to this Regulation.
10. PENALTIES FOR NON-CONFORMITY OF PRODUCTION
- 10.1. The approval granted in respect of a vehicle type pursuant to this Regulation may be withdrawn if the requirements laid down in paragraph 8.1 are not complied with or if a vehicle of this type has failed to pass the checks prescribed in paragraph 8.3.
- 10.2. If a Party to the Agreement which applies this Regulation withdraws an approval it has previously granted, it shall forthwith so notify the other Contracting Parties applying this Regulation, by means of a copy of the approval form bearing at the end, in large letters, the signed and dated annotation 'APPROVAL WITHDRAWN'.
11. PRODUCTION DEFINITELY DISCONTINUED
- If the holder of the approval completely ceases to manufacture a type of vehicle approved in accordance with this Regulation, he shall so inform the authority which granted the approval. Upon receiving the relevant communication, that authority shall inform thereof the other Parties to the Agreement applying this Regulation by means of a copy of the approval form bearing at the end, in large letters, the signed and dated annotation 'PRODUCTION DISCONTINUED'.
12. NAMES AND ADDRESSES OF TECHNICAL SERVICES RESPONSIBLE FOR CONDUCTING APPROVAL TESTS AND OF ADMINISTRATIVE DEPARTMENTS
- The Parties to the Agreement applying this Regulation shall communicate to the United Nations Secretariat the names and addresses of the Technical Services responsible for conducting approval tests and of Administrative Departments which grant approval and to which forms certifying approval or extension or refusal or withdrawal of approval, issued in other countries, are to be sent.
-

ANNEX 1 (*)

COMMUNICATION

(maximum format: A4 (210 × 297 mm))



issued by: Name of administration

.....

.....

.....

Concerning ⁽²⁾:

Approval granted

Approval extended

Approval refused

Approval withdrawn

Production definitively discontinued

of a type of vehicle of category L with regard to braking pursuant to Regulation No 78

Approval No Extension No

1. Trade name or mark of the vehicle:
2. Vehicle type designation by the manufacturer:
3. Name and address of the manufacturer:
4. Name and address of the manufacturer's representative (if applicable):
5. Summarised description:
- 5.1. Vehicle:
 - Category of vehicle:
 - Gross vehicle mass of vehicle:
- 5.2. Engine:
- 5.3. Transmission:
 - Number and ratios of gears:
 - Final drive ratio:
 - Tyre dimensions:
- 5.4. Braking system:
 - Make(s) and type(s) of linings:
 - Service brake(s) (front, rear, combined) ⁽²⁾
 - Secondary braking, parking brake (if applicable) ⁽²⁾
 - Other systems (anti-lock brakes, etc.)
6. Technical service conducting approval tests:
7. Date of test report:
8. Number of test report:

9. Reason for extension of approval (if applicable):
10. Other remarks (if applicable), (right or left hand driven):
11. Place:
12. Date:
13. Signature:
14. Annexed the list of parts constituting the approval documents, which can be obtained on request, submitted to the Administrative Service which has delivered the approval.

(*) At the request of (an) applicant(s) for Regulation No 90 approval, the information shall be provided by the Type Approval Authority, as contained in the Appendix to this annex. However, this information shall not be provided for purposes other than Regulation No 90 approvals.

(¹) Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).

(²) Strike out what does not apply.

APPENDIX

LIST OF VEHICLE DATA FOR THE PURPOSE OF REGULATION No 90 APPROVALS

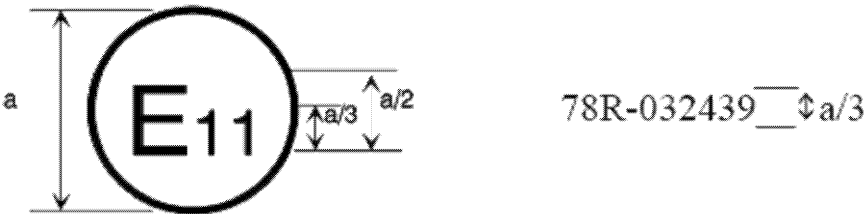
1. Description of the vehicle type:.....
- 1.1. Trade name or mark of the vehicle, if available:
- 1.2. Vehicle category:
- 1.3. Vehicle type according to Regulation No 78 approval:.....
- 1.4. Models or trade names of vehicles constituting the vehicle type, if available:.....
- 1.5. Manufacturer's name and address:
2. Make and type of brake linings:.....
3. Minimum mass of vehicle:
- 3.1. Distribution of mass of each axle (maximum value):.....
4. Gross vehicle mass of vehicle:
- 4.1. Distribution of mass of each axle (maximum value):.....
5. Vmax km/h
6. Tyre and wheel dimensions:
7. Configuration of the independent braking systems:
8. Specifications of brake valves (if applicable):
- 8.1. Adjustment specifications of the load sensing valve:.....
- 8.2. Setting of pressure valve:
9. Specification of brake:
- 9.1. Disc brake type (e.g. number of pistons with diameter(s), ventilated or solid disc):
- 9.2. Drum brake type (e.g. simplex, with piston size and drum dimensions):.....
10. Master cylinder type and size (if applicable):

ANNEX 2

ARRANGEMENTS OF APPROVAL MARKS

MODEL A

(see paragraph 4.4 of this Regulation)

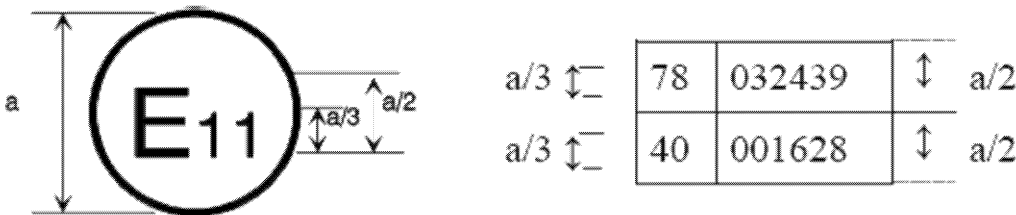


a = 8 mm min.

The above approval mark affixed to a vehicle shows that the vehicle type concerned has, with regard to braking, been approved in the United Kingdom (E11) pursuant to Regulation No 78 under approval number 032439. The first two digits of the approval number indicate that Regulation No 78 already included the 03 series of amendments when the approval was granted.

MODEL B

(see paragraph 4.5 of this Regulation)



a = 8 mm min.

The above approval mark affixed to a vehicle shows that the vehicle type concerned has been approved in the United Kingdom (E11) pursuant to Regulations Nos 78 and 40 (*). The first two digits of the approval numbers indicate that, at the dates when the respective approvals were granted, Regulation No 78 included the 03 series of amendments but Regulation No 40 was still in its original form.

(*) This latter number is given merely as an example.

ANNEX 3

TEST CONDITIONS, PROCEDURES AND PERFORMANCE REQUIREMENTS

1. GENERAL

1.1. Test surfaces

1.1.1. High friction surface:

- (a) Applicable to all dynamic brake tests excluding the ABS tests where a low-friction surface is specified;
- (b) The test area is a clean and level surface, with a gradient ≤ 1 per cent;
- (c) The surface has a nominal peak braking coefficient (PBC) of 0,9, unless otherwise specified.

1.1.2. Low friction surface:

- (a) Applicable to all dynamic brake tests where a low-friction surface is specified;
- (b) The test area is a clean, dry and level surface, with a gradient ≤ 1 per cent;
- (c) The surface has a PBC of $\leq 0,45$.

1.1.3. Measurement of PBC:

The PBC is measured as determined by the approval authority using either:

- (a) The American Society for Testing and Materials (ASTM) E1136 — 93 (Reapproved 2003) standard reference test tyre, in accordance with ASTM Method E1337-90 (Reapproved 2002), at a speed of 40 mph or
- (b) The method specified in the Appendix to this annex.

1.1.4. Parking brake system tests:

The specified test slope has a clean and dry surface that does not deform under the mass of the vehicle.

1.1.5. Test lane width:

For two-wheeled vehicles (vehicle categories L₁ and L₃) the test lane width is 2,5 m.

For three-wheeled vehicles (vehicle categories L₂, L₅ and L₄) the test lane width is 2,5 m plus the vehicle width.

1.2. Ambient temperature

The ambient temperature is between 4 °C and 45 °C.

1.3. Wind speed

The wind speed is not more than 5 m/s.

1.4. Test speed tolerance

The test speed tolerance is ± 5 km/h.

In the event of the actual test speed deviating from the specified test speed, the actual stopping distance is corrected using the formula in paragraph 5.3.2 of this Regulation.

1.5. Automatic transmission

Vehicles with automatic transmission shall complete all tests — whether they are for ‘engine connected’ or ‘engine disconnected’.

If an automatic transmission has a neutral position, the neutral position is selected for tests where ‘engine disconnected’ is specified.

- 1.6. Vehicle position and wheel lock:
- (a) The vehicle is positioned in the centre of the test lane for the beginning of each stop;

(b) Stops are made without the vehicle wheels passing outside the applicable test lane and without wheel lock.
- 1.7. Test sequence

Test order	Paragraph
1. Dry stop — single brake control actuated	3
2. Dry stop — all service brake controls actuated	4
3. High speed	5
4. Wet brake	6
5. Heat fade ⁽¹⁾	7
6. If fitted:	
6.1. Parking brake system	8
6.2. ABS	9
6.3. Partial failure, for split service brake systems	10
6.4. Power-assisted braking system failure	11

⁽¹⁾ Heat fade is always the last test to be carried out.

2. PREPARATION

2.1. Engine idle speed

The engine idle speed is set to the manufacturer's specification.

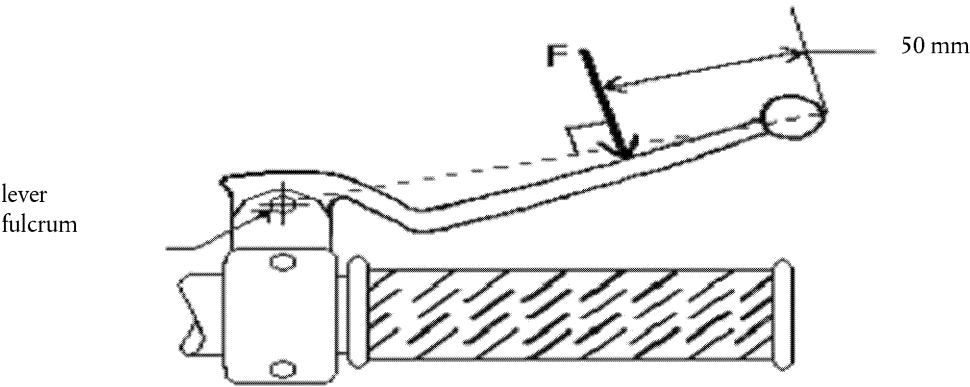
2.2. Tyre pressures

The tyres are inflated to the manufacturer's specification for the vehicle loading condition for the test.

2.3. Control application points and direction

For a hand control lever, the input force (F) is applied on the control lever's forward surface perpendicular to the axis of the lever fulcrum and its outermost point on the plane along which the control lever rotates (see figure below).

The input force is applied to a point located 50 mm from the outermost point of the control lever, measured along the axis between the central axis of the fulcrum of the lever and its outermost point.



For a foot control pedal, the input force is applied to the centre of, and at right angles to, the control pedal.

2.4. Brake temperature measurement

As determined by the approval authority, the brake temperature is measured on the approximate centre of the braking path of the disc or drum using:

- (a) A rubbing thermocouple that is in contact with the surface of the disc or drum; or
- (b) A thermocouple that is embedded in the friction material.

2.5. Burnishing procedure

The vehicle brakes are burnished prior to evaluating performance. This procedure may be completed by the manufacturer:

- (a) Vehicle lightly loaded;
- (b) Engine disconnected;
- (c) Test speed:
 - (i) Initial speed: 50 km/h or 0,8 V_{max}, whichever is lower;
 - (ii) Final speed = 5 to 10 km/h;
- (d) Brake application:

Each service brake system control actuated separately;
- (e) Vehicle deceleration:
 - (i) Single front brake system only:

3,0-3,5 m/s² for vehicle categories L₃ and L₄;
1,5-2,0 m/s² for vehicle categories L₁ and L₂;
 - (ii) Single rear brake system only: 1,5-2,0 m/s²;
 - (iii) CBS or split service brake system: 3,5-4,0 m/s²;
- (f) Number of decelerations: 100 per brake system;
- (g) Initial brake temperature before each brake application ≤ 100 °C;
- (h) For the first stop, accelerate the vehicle to the initial speed and then actuate the brake control under the conditions specified until the final speed is reached. Then reaccelerate to the initial speed and maintain that speed until the brake temperature falls to the specified initial value. When these conditions are met, reapply the brake as specified. Repeat this procedure for the number of specified decelerations. After burnishing, adjust the brakes in accordance with the manufacturer's recommendations.

3. DRY STOP TEST — SINGLE BRAKE CONTROL ACTUATED

3.1. Vehicle condition:

- (a) The test is applicable to all vehicle categories;
- (b) Laden:

For vehicles fitted with CBS and split service brake systems: the vehicle is tested in the lightly loaded condition in addition to the laden condition;
- (c) Engine disconnected.

3.2. Test conditions and procedure:

- (a) Initial brake temperature: ≥ 55 °C and ≤ 100 °C;

(b) Test speed:

- (i) Vehicle categories L₁ and L₂: 40 km/h or 0,9 V_{max}, whichever is lower;
- (ii) Vehicle categories L₃, L₅ and L₄: 60 km/h or 0,9 V_{max}, whichever is lower;

(c) Brake application:

Each service brake system control actuated separately;

(d) Brake actuation force:

- (i) Hand control: ≤ 200 N;
- (ii) Foot control: ≤ 350 N for vehicle categories L₁, L₂, L₃ and L₄;
≤ 500 N for vehicle category L₅;

(e) Number of stops: until the vehicle meets the performance requirements, with a maximum of 6 stops;

(f) For each stop, accelerate the vehicle to the test speed and then actuate the brake control under the conditions specified in this paragraph.

3.3. Performance requirements

When the brakes are tested in accordance with the test procedure set out in paragraph 3.2, the stopping distance shall be as specified in column 2 or the MFDD shall be as specified in column 3 of the following table:

Column 1	Column 2		Column 3
Vehicle Category	STOPPING DISTANCE (S) (Where V is the specified test speed in km/h and S is the required stopping distance in metres)		MFDD

Single brake system, front wheel(s) braking only:

L ₁	$S \leq 0,1 V + 0,0111 V^2$		$\geq 3,4 \text{ m/s}^2$
L ₂	$S \leq 0,1 V + 0,0143 V^2$		$\geq 2,7 \text{ m/s}^2$
L ₃	$S \leq 0,1 V + 0,0087 V^2$		$\geq 4,4 \text{ m/s}^2$
L ₅	Not applicable		Not applicable
L ₄	$S \leq 0,1 V + 0,0105 V^2$		$\geq 3,6 \text{ m/s}^2$

Single brake system, rear wheel(s) braking only:

L ₁	$S \leq 0,1 V + 0,0143 V^2$		$\geq 2,7 \text{ m/s}^2$
L ₂	$S \leq 0,1 V + 0,0143 V^2$		$\geq 2,7 \text{ m/s}^2$
L ₃	$S \leq 0,1 V + 0,0133 V^2$		$\geq 2,9 \text{ m/s}^2$
L ₅	Not applicable		Not applicable
L ₄	$S \leq 0,1 V + 0,0105 V^2$		$\geq 3,6 \text{ m/s}^2$

Column 1	Column 2	Column 3
Vehicle Category	STOPPING DISTANCE (S) (Where V is the specified test speed in km/h and S is the required stopping distance in metres)	MFDD

Vehicles with CBS or split service brake systems: for laden and lightly loaded conditions:

L ₁ and L ₂	$S \leq 0,1 V + 0,0087 V^2$	$\geq 4,4 \text{ m/s}^2$
L ₃	$S \leq 0,1 V + 0,0076 V^2$	$\geq 5,1 \text{ m/s}^2$
L ₅	$S \leq 0,1 V + 0,0077 V^2$	$\geq 5,0 \text{ m/s}^2$
L ₄	$S \leq 0,1 V + 0,0071 V^2$	$\geq 5,4 \text{ m/s}^2$

Vehicles with CBS — secondary service brake systems:

ALL	$S \leq 0,1 V + 0,0154 V^2$	$\geq 2,5 \text{ m/s}^2$
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4. DRY STOP TEST — ALL SERVICE BRAKE CONTROLS ACTUATED

4.1. Vehicle condition:

- (a) The test is applicable to vehicle categories L₃, L₅ and L₄;
- (b) Lightly loaded;
- (c) Engine disconnected.

4.2. Test conditions and procedure:

- (a) Initial brake temperature: $\geq 55 \text{ }^\circ\text{C}$ and $\leq 100 \text{ }^\circ\text{C}$;
- (b) Test speed: 100 km/h or 0,9 V_{max}, whichever is lower;
- (c) Brake application:
Simultaneous actuation of both service brake system controls, if so equipped, or of the single service brake system control in the case of a service brake system that operates on all wheels;
- (d) Brake actuation force:
Hand control: $\leq 250 \text{ N}$;
Foot control: $\leq 400 \text{ N}$ for vehicle categories L₃ and L₄;
 $\leq 500 \text{ N}$ for vehicle category L₅;
- (e) Number of stops: until the vehicle meets the performance requirements, with a maximum of 6 stops;
- (f) For each stop, accelerate the vehicle to the test speed and then actuate the brake controls under the conditions specified in this paragraph.

4.3. Performance requirements

When the brakes are tested in accordance with the test procedure set out in paragraph 4.2, the stopping distance (S) shall be $S \leq 0,0060 V^2$ (where V is the specified test speed in km/h and S is the required stopping distance in metres).

5. HIGH SPEED TEST

5.1. Vehicle condition:

- (a) The test is applicable to vehicle categories L₃, L₅ and L₄;
- (b) Test is not required for vehicles with $V_{\max} \leq 125$ km/h;
- (c) Lightly loaded;
- (d) Engine connected with the transmission in the highest gear.

5.2. Test conditions and procedure:

- (a) Initial brake temperature: ≥ 55 °C and ≤ 100 °C;
- (b) Test speed: 0,8 $V_{\max}$ for vehicles with $V_{\max} > 125$ km/h and < 200 km/h;
160 km/h for vehicles with $V_{\max} \geq 200$ km/h;
- (c) Brake application:
Simultaneous actuation of both service brake system controls, if so equipped, or of the single service brake system control in the case of a service brake system that operates on all wheels;
- (d) Brake actuation force:
Hand control: ≤ 200 N;
Foot control: ≤ 350 N for vehicle categories L₃ and L₄;
 ≤ 500 N for vehicle category L₅;
- (e) Number of stops: until the vehicle meets the performance requirements, with a maximum of 6 stops;
- (f) For each stop, accelerate the vehicle to the test speed and then actuate the brake control(s) under the conditions specified in this paragraph.

5.3. Performance requirements:

When the brakes are tested in accordance with the test procedure set out in paragraph 5.2:

- (a) The stopping distance (S) shall be $\leq 0,1 V + 0,0067 V^2$
(where V is the specified test speed in km/h and S is the required stopping distance in metres); or
- (b) The MFDD shall be $\geq 5,8$ m/s².

6. WET BRAKE TEST

6.1. General:

- (a) The test is comprised of two parts that are carried out consecutively for each brake system:
 - (i) A baseline test based on the dry stop test — single brake control actuated (section 3 of this annex);
 - (ii) A single wet brake stop using the same test parameters as in (i), but with the brake(s) being continuously sprayed with water while the test is conducted in order to measure the brakes' performance in wet conditions;
- (b) The test is not applicable to a parking brake system, unless it is the secondary brake;
- (c) Drum brakes or fully enclosed disc brakes are exempt from this test unless ventilation or open inspection ports are present;

- (d) This test requires the vehicle to be fitted with instrumentation that gives a continuous recording of brake control force and vehicle deceleration. The MFDD and the stopping distance measurements are not appropriate in this case.

6.2. Vehicle condition:

- (a) The test is applicable to all vehicle categories;

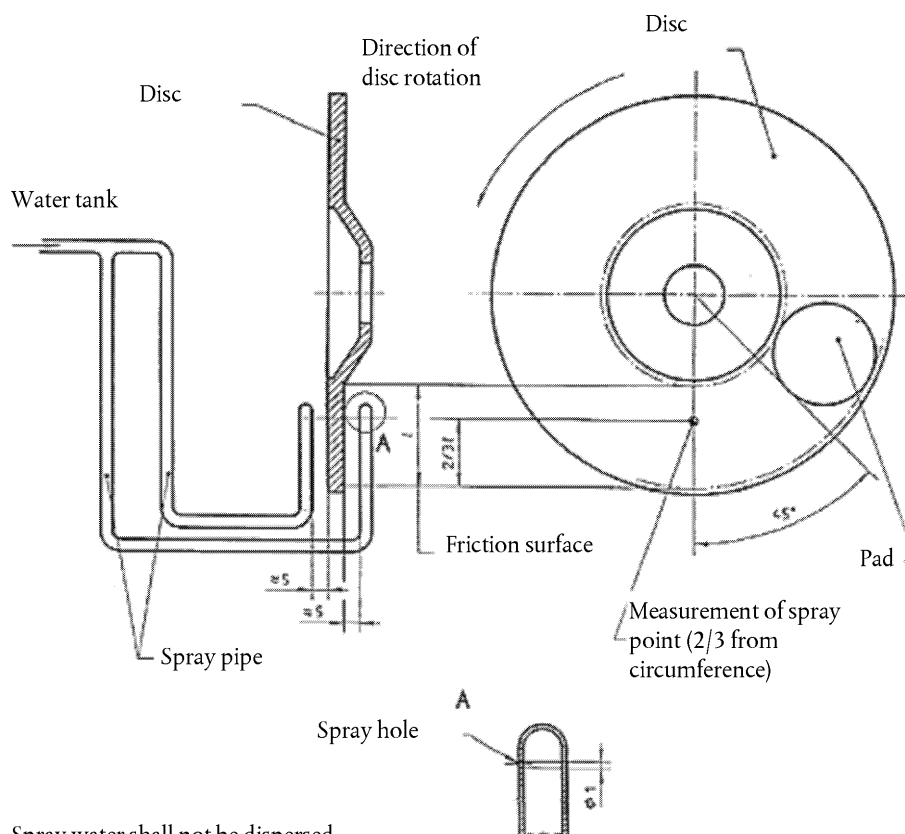
- (b) Laden:

For vehicles fitted with CBS and split service brake systems: the vehicle is tested in the lightly loaded condition in addition to the laden condition;

- (c) Engine disconnected;

- (d) Each brake is fitted with water spray equipment:

- (i) Disc brakes: Sketch of water spray equipment:



Spray water shall not be dispersed.

Dimensions in millimetres

The disc brake water spray equipment is installed as follows:

- Water is sprayed onto each brake with a flow rate of 15 litres/hr. The water is equally distributed on each side of the rotor;
- If the surface of the rotor has any shielding, the spray is applied 45° prior to the shield;
- If it is not possible to locate the spray in the position shown on the sketch, or if the spray coincides with a brake ventilation hole or similar, the spray nozzle may be advanced by an additional 90° maximum from the edge of the pad, using the same radius;

- (ii) Drum brakes with ventilation and open inspection ports:

The water spray equipment is installed as follows:

- (a) Water is sprayed equally onto both sides of the drum brake assembly (on the stationary back plate and on the rotating drum) with a flow rate of 15 litres/hr;
- (b) The spray nozzles are positioned two thirds of the distance from the outer circumference of the rotating drum to the wheel hub centre;
- (c) The nozzle position is $> 15^\circ$ from the edge of any opening in the drum back plate.

6.3. Baseline test

6.3.1. Test conditions and procedure:

- (a) The test in section 3 of this annex (dry stop test — single brake control actuated) is carried out for each brake system but with the brake control force that results in a vehicle deceleration of 2,5-3,0 m/s², and the following is determined:
 - (i) The average brake control force measured when the vehicle is travelling between 80 per cent and 10 per cent of the specified test speed;
 - (ii) The average vehicle deceleration in the period 0,5 to 1,0 seconds after the point of actuation of the brake control;
 - (iii) The maximum vehicle deceleration during the complete stop but excluding the final 0,5 seconds;
- (b) Conduct 3 baseline stops and average the values obtained in (i), (ii), and (iii).

6.4. Wet brake stop

6.4.1. Test conditions and procedure:

- (a) The vehicle is ridden at the test speed used in the baseline test set out in paragraph 6.3 with the water spray equipment operating on the brake(s) to be tested and with no application of the brake system;
- (b) After a distance of ≥ 500 m, apply the averaged brake control force determined in the baseline test for the brake system being tested;
- (c) Measure the average vehicle deceleration in the period 0,5 to 1,0 seconds after the point of actuation of the brake control;
- (d) Measure the maximum vehicle deceleration during the complete stop but excluding the final 0,5 seconds.

6.5. Performance requirements

When the brakes are tested in accordance with the test procedure set out in paragraph 6.4.1, the wet brake deceleration performance shall be:

- (a) The value measured in paragraph 6.4.1(c) ≥ 60 per cent of the averaged deceleration values recorded in the baseline test in paragraph 6.3.1(a)(ii), i.e. in the period 0,5 to 1,0 seconds after the point of application of the brake control; and
- (b) The value measured in 6.4.1(d) ≤ 120 per cent of the averaged deceleration values recorded in the baseline test 6.3.1(a)(iii), i.e. during the complete stop but excluding the final 0,5 seconds.

7. HEAT FADE TEST

7.1. General:

- (a) The test comprises three parts that are carried out consecutively for each brake system:
 - (i) A baseline test using the dry stop test — single brake control actuated (section 3 of this annex);

- (ii) A heating procedure which consists of a series of repeated stops in order to heat the brake(s);
 - (iii) A hot brake stop using the dry stop test — single brake control actuated (section 3 of this annex), to measure the brake's performance after the heating procedure;
- (b) The test is applicable to vehicle categories L₃, L₅ and L₄;
 - (c) The test is not applicable to parking brake systems and secondary service brake systems;
 - (d) All stops are carried out with the vehicle laden;
 - (e) The heating procedure requires the vehicle to be fitted with instrumentation that gives a continuous recording of brake control force and vehicle deceleration. The MFDD and stopping distance measurements are not appropriate for the heating procedure. The baseline test and the hot brake stop require the measurement of either MFDD or the stopping distance.

7.2. Baseline test

7.2.1. Vehicle condition:

Engine disconnected.

7.2.2. Test conditions and procedure:

- (a) Initial brake temperature: $\geq 55\text{ °C}$ and $\leq 100\text{ °C}$;
- (b) Test speed: 60 km/h or 0,9 V_{max}, whichever is lower;
- (c) Brake application:
Each service brake system control actuated separately;
- (d) Brake actuation force:
Hand control: $\leq 200\text{ N}$;
Foot control: $\leq 350\text{ N}$ for vehicle categories L₃ and L₄;
 $\leq 500\text{ N}$ for vehicle category L₅;
- (e) Accelerate the vehicle to the test speed, actuate the brake control under the conditions specified and record the control force required to achieve the vehicle braking performance specified in the table to paragraph 3.3 of this annex.

7.3. Heating procedure

7.3.1. Vehicle condition:

Engine transmission:

- (i) From the specified test speed to 50 per cent specified test speed: connected, with the highest appropriate gear selected such that the engine speed remains above the manufacturer's specified idle speed;
- (ii) From 50 per cent specified test speed to standstill: disconnected.

7.3.2. Test conditions and procedure:

- (a) Initial brake temperature prior to first stop only: $\geq 55\text{ °C}$ and $\leq 100\text{ °C}$;
- (b) Test speed:
Single brake system, front wheel braking only: 100 km/h or 0,7 V_{max}, whichever is lower;
Single brake system, rear wheel braking only: 80 km/h or 0,7 V_{max}, whichever is lower;
CBS or split service brake system: 100 km/h or 0,7 V_{max}, whichever is lower;

(c) Brake application:

Each service brake system control actuated separately;

(d) Brake actuation force:

(i) For the first stop:

The constant control force that achieves a vehicle deceleration rate of 3,0-3,5 m/s² while the vehicle is decelerating between 80 per cent and 10 per cent of the specified speed;

If the vehicle is unable to achieve the specified vehicle deceleration rate, this stop is carried out to meet the deceleration requirements in the table in paragraph 3.3 of this annex;

(ii) For the remaining stops:

(a) The same constant brake control force as used for the first stop;

(b) Number of stops: 10;

(c) Interval between stops: 1 000 m;

(e) Carry out a stop to the conditions specified in this paragraph and then immediately use maximum acceleration to reach the specified speed and maintain that speed until the next stop is made.

7.4. Hot brake stop

7.4.1. Test conditions and procedure:

Perform a single stop under the conditions used in the baseline test (paragraph 7.2) for the brake system that has been heated during the procedure in accordance with paragraph 7.3. This stop is carried out within one minute of the completion of the procedure set out in paragraph 7.3 with a brake control application force less than or equal to the force used during the test set out in paragraph 7.2.

7.5. Performance requirements

When the brakes are tested in accordance with the test procedure set out in paragraph 7.4.1:

(a) The stopping distance: $S_2 \leq 1,67 S_1 - 0,67 \times 0,1 V$

where:

S_1 = corrected stopping distance in metres achieved in the baseline test set out in paragraph 7.2.

S_2 = corrected stopping distance in metres achieved in the hot brake stop set out in paragraph 7.4.1.

V = specified test speed in km/h; or

(b) The MFDD $\geq$ 60 per cent of the MFDD recorded in the test set out in paragraph 7.2.

8. PARKING BRAKE SYSTEM TEST — FOR VEHICLES EQUIPPED WITH PARKING BRAKES

8.1. Vehicle condition:

(a) The test is applicable to vehicle categories L₂, L₅ and L₄;

(b) Laden;

(c) Engine disconnected.

8.2. Test conditions and procedure:

(a) Initial brake temperature: ≤ 100 °C;

(b) Test surface gradient = 18 per cent;

(c) Brake actuation force:

Hand control: ≤ 400 N;

Foot control: ≤ 500 N;

(d) For the first part of the test, park the vehicle on the test surface gradient facing up the slope by applying the parking brake system under the conditions specified in this paragraph. If the vehicle remains stationary, start the measurement of the test period;

(e) On completion of the test with vehicle facing up the gradient, repeat the same test procedure with the vehicle facing down the gradient.

8.3. Performance requirements:

When tested in accordance with the test procedure set out in paragraph 8.2, the parking brake system shall hold the vehicle stationary for 5 minutes when the vehicle is both facing up and facing down the gradient.

9. ABS TESTS

9.1. General:

(a) The tests are only applicable to the ABS fitted on vehicle categories L₁ and L₃;

(b) The tests are to confirm the performance of brake systems equipped with ABS and their performance in the event of ABS electrical failure;

(c) 'Fully cycling' means that the anti-lock system is repeatedly modulating the brake force to prevent the directly controlled wheels from locking;

(d) Wheel-lock is allowed as long as the stability of the vehicle is not affected to the extent that it requires the operator to release the control or causes a vehicle wheel to pass outside the test lane.

The test series comprises the following individual tests, which may be carried out in any order:

ABS TESTS	PARAGRAPH
(a) Stops on a high friction surface — as specified in paragraph 1.1.1.	9.3
(b) Stops on a low friction surface — as specified in paragraph 1.1.2.	9.4
(c) Wheel lock checks on high and low friction surfaces.	9.5
(d) Wheel lock check — high to low friction surface transition.	9.6
(e) Wheel lock check — low to high friction surface transition.	9.7
(f) Stops with an ABS electrical failure.	9.8

9.2. Vehicle condition:

(a) Lightly loaded;

(b) Engine disconnected.

9.3. Stops on a high friction surface:

9.3.1. Test conditions and procedure:

(a) Initial brake temperature: ≥ 55 °C and ≤ 100 °C;

(b) Test speed: 60 km/h or 0,9 V_{max}, which ever is lower;

(c) Brake application:

Simultaneous actuation of both service brake system controls, if so equipped, or of the single service brake control in the case of a service brake system that operates on all wheels;

(d) Brake actuation force:

The force applied is that which is necessary to ensure that the ABS will cycle fully throughout each stop, down to 10 km/h;

(e) If one wheel is not equipped with ABS, the control for the service brake on that wheel shall be actuated with a force that is lower than the force that will cause the wheel to lock;

(f) Number of stops: until the vehicle meets the performance requirements, with a maximum of 6 stops;

(g) For each stop, accelerate the vehicle to the test speed and then actuate the brake control under the conditions specified in this paragraph;

9.3.2. Performance requirements

When the brakes are tested in accordance with the test procedures referred to in paragraph 9.3.1:

(a) The stopping distance (S) shall be $\leq 0,0063 V^2$ (where V is the specified test speed in km/h and S is the required stopping distance in metres) or the MFDD shall be $\geq 6,17 \text{ m/s}^2$; and

(b) There shall be no wheel lock and the vehicle wheels shall stay within the test lane.

9.4. Stops on a low friction surface:

9.4.1. Test conditions and procedure:

As set out in paragraph 9.3.1, but using the low friction surface instead of the high friction one;

9.4.2. Performance requirements

When the brakes are tested in accordance with the test procedures set out in paragraph 9.4.1:

(a) The stopping distance (S) shall be $\leq 0,0056 V^2/P$ (where V is the specified test speed in km/h, P is the peak braking coefficient and S is the required stopping distance in metres) or the MFDD shall be $\geq 6,87 \times P$, in m/s^2 ; and

(b) There shall be no wheel lock and the vehicle wheels shall stay within the test lane.

9.5. Wheel lock checks on high and low friction surfaces:

9.5.1. Test conditions and procedure:

(a) Test surfaces:

(i) High friction; and

(ii) Low friction;

(b) Initial brake temperature: $\geq 55 \text{ }^\circ\text{C}$ and $\leq 100 \text{ }^\circ\text{C}$;

(c) Test speed:

(i) On the high friction surface: 80 km/h or 0,8 Vmax, whichever is lower;

(ii) On the low friction surface: 60 km/h or 0,8 Vmax, whichever is lower;

(d) Brake application:

(i) Each service brake system control actuated separately;

(ii) Where ABS is fitted to both brake systems, simultaneous actuation of both brake controls in addition to (i);

(e) Brake actuation force:

The force applied is that which is necessary to ensure that the ABS will cycle fully throughout each stop, down to 10 km/h;

(f) Brake application rate:

The brake control actuation force is applied in 0,2-0,5 seconds;

(g) Number of stops: until the vehicle meets the performance requirements, with a maximum of 3 stops;

(h) For each stop, accelerate the vehicle to the test speed and then actuate the brake control under the conditions specified in this paragraph;

9.5.2. Performance requirements:

When the brakes are tested in accordance with the test procedures set out in paragraph 9.5.1, there shall be no wheel lock and the vehicle wheels shall stay within the test lane.

9.6. Wheel lock check — high to low friction surface transition:

9.6.1. Test conditions and procedure:

(a) Test surfaces:

A high friction surface immediately followed by a low friction surface;

(b) Initial brake temperature: $\geq 55\text{ }^{\circ}\text{C}$ and $\leq 100\text{ }^{\circ}\text{C}$;

(c) Test speed:

The speed that will result in 50 km/h or 0,5 Vmax, whichever is lower, at the point where the vehicle passes from the high friction to the low friction surface;

(d) Brake application:

(i) Each service brake system control actuated separately;

(ii) Where ABS is fitted to both brake systems, simultaneous actuation of both brake controls in addition to (i);

(e) Brake actuation force:

The force applied is that which is necessary to ensure that the ABS will cycle fully throughout each stop, down to 10 km/h;

(f) Number of stops: until the vehicle meets the performance requirements, with a maximum of 3 stops;

(g) For each stop, accelerate the vehicle to the test speed and then actuate the brake control before the vehicle reaches the transition from one friction surface to the other;

9.6.2. Performance requirements:

When the brakes are tested in accordance with the test procedures set out in paragraph 9.6.1, there shall be no wheel lock and the vehicle wheels shall stay within the test lane.

9.7. Wheel lock check — low to high friction surface transition:

9.7.1. Test conditions and procedure:

(a) Test surfaces:

A low friction surface immediately followed by a high friction surface with a PBC $\geq 0,8$;

(b) Initial brake temperature: $\geq 55\text{ }^{\circ}\text{C}$ and $\leq 100\text{ }^{\circ}\text{C}$;

(c) Test speed:

The speed that will result in 50 km/h or 0,5 Vmax, whichever is lower, at the point where the vehicle passes from the low friction to the high friction surface;

- (d) Brake application:
 - (i) Each service brake system control applied separately;
 - (ii) Where ABS is fitted to both brake systems, simultaneous application of both brake controls in addition to (i);
- (e) Brake actuation force:

The force applied is that which is necessary to ensure that the ABS will cycle fully throughout each stop, down to 10 km/h;
- (f) Number of stops: until the vehicle meets the performance requirements, with a maximum of 3 stops;
- (g) For each stop, accelerate the vehicle to the test speed and then actuate the brake control before the vehicle reaches the transition from one friction surface to the other;
- (h) Record the vehicle's continuous deceleration;

9.7.2. Performance requirements:

- (a) When the brakes are tested in accordance with the test procedures set out in paragraph 9.7.1, there shall be no wheel lock and the vehicle wheels shall stay within the test lane;
- (b) Within 1 second of the rear wheel passing the transition point between the low and high friction surfaces, the vehicle deceleration shall increase.

9.8. Stops with an ABS electrical failure:

9.8.1. Test conditions and procedure:

With the ABS electrical system disabled, carry out the test set out in section 3 of this annex, (dry stop test — single brake control actuated) applying the conditions relevant to the brake system and vehicle being tested;

9.8.2. Performance requirements:

When the brakes are tested in accordance with the test procedure set out in paragraph 9.8.1:

- (a) The system shall comply with the failure warning requirements of paragraph 5.1.13 of this Regulation; and
- (b) The minimum requirements for stopping distance or MFDD shall be as specified in column 2 or 3, respectively, under the heading 'Single brake system, rear wheel(s) braking only' in the table to paragraph 3.3 of this annex.

10. PARTIAL FAILURE TEST — FOR SPLIT SERVICE BRAKE SYSTEMS

10.1. General information:

- (a) The test is only applicable to vehicles that are equipped with split service brake systems;
- (b) The test is to confirm the performance of the remaining subsystem in the event of a hydraulic system leakage failure.

10.2. Vehicle condition:

- (a) The test is applicable to vehicle categories L₃, L₅ and L₄;
- (b) Lightly loaded;
- (c) Engine disconnected.

10.3. Test conditions and procedure:

- (a) Initial brake temperature: $\geq 55\text{ °C}$ and $\leq 100\text{ °C}$;
- (b) Test speeds: 50 km/h and 100 km/h or 0,8 V_{max}, whichever is lower;
- (c) Brake actuation force:
 - Hand control: $\leq 250\text{ N}$;
 - Foot control: $\leq 400\text{ N}$;

- (d) Number of stops: until the vehicle meets the performance requirements, with a maximum of 6 stops for each test speed;
- (e) Alter the service brake system to induce a complete loss of braking in any one subsystem. Then, for each stop, accelerate the vehicle to the test speed and then actuate the brake control under the conditions specified in this paragraph;
- (f) Repeat the test for each subsystem.

10.4. Performance requirements:

When the brakes are tested in accordance with the test procedure set out in paragraph 10.3:

- (a) the system shall comply with the failure warning requirements set out in paragraph 5.1.11 of this Regulation; and
- (b) the stopping distance (S) shall be $\leq 0,1 V + 0,0117 V^2$ (where V is the specified test speed in km/h and S is the required stopping distance in metres) or the MFDD shall be $\geq 3,3 \text{ m/s}^2$.

11. POWER-ASSISTED BRAKING SYSTEM FAILURE TEST

11.1. General information:

- (a) The test is not conducted when the vehicle is equipped with another separate service brake system;
- (b) The test is to confirm the performance of the service brake system in the event of failure of the power assistance.

11.2. Test conditions and procedure:

Carry out the test set out in section 3 of this annex (dry stop test — single brake control actuated) for each service brake system with the power assistance disabled.

11.3. Performance requirements

When the brakes are tested in accordance with the test procedure set out in paragraph 11.2, the stopping distance shall be as specified in column 2 or the MFDD shall be as specified in column 3 of the following table:

Column 1	Column 2		Column 3
Vehicle Category	STOPPING DISTANCE(S) (Where V is the specified test speed in km/h and S is the required stopping distance in metres)		MFDD
Single brake system			
L ₁	$S \leq 0,1 V + 0,0143 V^2$		$\geq 2,7 \text{ m/s}^2$
L ₂	$S \leq 0,1 V + 0,0143 V^2$		$\geq 2,7 \text{ m/s}^2$
L ₃	$S \leq 0,1 V + 0,0133 V^2$		$\geq 2,9 \text{ m/s}^2$
L ₄	$S \leq 0,1 V + 0,0105 V^2$		$\geq 3,6 \text{ m/s}^2$
Vehicles with CBS or SSBS			
ALL	$S \leq 0,1 V + 0,0154 V^2$		$\geq 2,5 \text{ m/s}^2$

Note that if the power assistance may be activated by more than one control, the above performance shall be achieved when each control is actuated separately.

APPENDIX

ALTERNATIVE METHOD FOR THE DETERMINATION OF PEAK BRAKING COEFFICIENT (PBC)

(see paragraph 1.1.3 to this annex)

1.1. General:

- (a) The test is to establish a PBC for the vehicle type when being braked on the test surfaces described in Annex 3, paragraphs 1.1.1 and 1.1.2.
- (b) The test comprises a number of stops with varying brake control forces. Both wheels shall be braked simultaneously up to the point reached before wheel lock, in order to achieve the maximum vehicle deceleration rate on the given test surface.
- (c) The maximum vehicle deceleration rate is the highest value recorded during all the test stops.
- (d) The Peak Braking Coefficient (PBC) is calculated from the test stop that generates the maximum vehicle deceleration rate, as follows:

$$PBC = \frac{0,566}{t}$$

where:

t = time taken for the vehicle speed to reduce from 40 km/h to 20 km/h in seconds.

Note: For vehicles unable to achieve a test speed of 50 km/h, PBC shall be measured as follows:

$$PBC = \frac{0,566}{t}$$

where:

t = time taken, in seconds, for the speed of the vehicle to reduce from 0,8 V_{max} to (0,8 V_{max} – 20), where V_{max} is measured in km/h.

- (e) The value of PBC shall be rounded to three decimal places.

1.2. Vehicle condition:

- (a) The test is applicable to vehicle categories L₁ and L₃.
- (b) The anti-lock system shall be either disconnected or inoperative, between 40 km/h and 20 km/h.
- (c) Lightly loaded.
- (d) Engine disconnected.

1.3. Test conditions and procedure:

- (a) Initial brake temperature: ≥ 55 °C and ≤ 100 °C.
- (b) Test speed: 60 km/h or 0,9 V_{max}, whichever is lower.
- (c) Brake application:

Simultaneous actuation of both service brake system controls, if so equipped, or of the single service brake system control in the case of a service brake system that operates on all wheels.

For vehicles equipped with a single service brake system control, it may be necessary to modify the brake system if one of the wheels is not approaching maximum deceleration.

(d) Brake actuation force:

The control force that achieves the maximum vehicle deceleration rate as defined in paragraph 1.1(c).

The application of the control force must be constant during braking.

(e) Number of stops: until the vehicle meets its maximum deceleration rate.

(f) For each stop, accelerate the vehicle to the test speed and then actuate the brake control(s) under the conditions specified in this paragraph.

