Ref. Ares(2013)2266673 - 06/18/2013

EUROPEAN COMMISSION
ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Sustainable Growth and EU 2020
Standards for Boosting Competitiveness

Brussels, June 18, 2013

A Notification under Article 12 of Regulation (EU) No 1025/20121

Subject matter related to

☐	Annual Union Work Program for European standardization (Art. 12, point a)
☐	Possible future standardization requests to European standardization organizations (Art. 12, point b)
☒	Formal objections to harmonized standards (Art. 12, point c)
☐	Identifications of ICT technical specifications (Art. 12, point d)
☐	Delegated acts to modify Annexes I or III of Regulation (EU) No 1025/2012 (Art. 12, point e)

Title of the initiative

Formal Objection against EN 1621-4:2013 Motorcyclists' protective clothing against mechanical impact – Part 4: Motorcyclists' inflatable protectors – Requirements and test methods

Additional information

Legislative reference(s)	Directive 89/686/EEC on the approximation of the laws of the Member States relating to personal protective equipment
IN reference(s)	EN 1621-4:2013
Status	
Other information	This is a formal objection launched by France on 23 May 2013 against EN 1621-4:2013 Motorcyclists' protective clothing against mechanical impact – Part 4: Motorcyclists' inflatable protectors – Requirements and test methods prior to the publication of this harmonized standard in the OJEU.

Commission contact point for this notification

ENTR-ENGINEERING-INDUSTRIES@ec.europa.eu

[1] OJ L 316, 14.11.2012, p. 12

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

REPRESENTATION PERMANENTE
DE LA FRANCE
AUPRES DE L'UNION EUROPEENNE

Le Conseiller pour les Affaires Industrielles

Bruxelles, le 22 mai 2013

JPL/ mg / 1152
MICA / 2013/ 251

Objet : Objection formelle à l'encontre de la norme EN 1621-4 en application de l'article 6 de la directive 89/686/CEE relative aux équipements de protection individuelle

P.J. : Note des autorités françaises

Madame le Secrétaire Général,

J'ai l'honneur de vous faire parvenir, ci-joint, une note des autorités francaises relative à l'objet cité en référence.

Je vous prie d'agréer, Madame le Secrétaire Général, l'expression de ma haute considération

Jean-Pierre LABE

Madame Catherine Day
Secrétaire Général
Secrétariat Général de la
Commission européenne
B-1049 Bruxelles

Copie par mail :
- M. L. F. Girao – DG ENTR F 5

NOTE FROM THE FRENCH AUTHORITIES

Formal objection to standard EN 1621-4 pursuant to Article 6 of Directive 89/686/EEC on personal protective equipment

I. Reference of the directive concerned

Directive 89/686/EEC, as amended, of 21 December 1989 on the design and placing on the market of personal protective equipment (PPE).

Article 6 of the PPE Directive deals with the provisions that may be taken against a harmonised standard where it does not fully satisfy the essential requirements thereof.
concerning.

II. Type of product concerned

The standard to which the formal objection relates concerns inflatable protectors ("airbags") for motorcyclists incorporated into clothing. These protectors inflate following the ejection of the motorcyclist in order to provide protection to the motorcyclist against shock upon impact with the ground or an obstacle.

III. References of the relevant standard

Standard number	**Year of publication in the OJEU** Not	**Title**
EN 1621-4	published to date. The CEN addressed to the Commission requests harmonisation of standard under PPE Directive	Protective clothing against mechanical impact for motorcyclists - Part 4 : Inflatable protectors for motorcyclists - Requirements and test methods

IV. Essential requirements of the PPE Directive not covered by the standard

The following essential requirements of the PPE Directive are not covered by the standard EN 1621-4 in its current wording due to the shortcomings set out in point V:

1.2.1 Absence of risk and other “autogenic” nuisance factors

PPE must be designed and manufactured in such a way as not to create risks or other nuisance factors, under foreseeable conditions of use.

3.1.1 Shocks resulting from falling or projecting objects, and impacts of a part of the body against an obstacle

PPE appropriate to this type of risk must be able to absorb the effects of an impact by preventing any injury, in particular by crushing or penetration of the protected part, at least up to a level of impact energy beyond which the excessive dimensions or mass of the shock-absorbing device would prevent the effective use of the PPE for the foreseeable necessary duration of wearing.

V. Detailed supporting documents for the dispute

The shortcomings of the standard are as follows:

- The method chosen for checking the airbag inflation time is a visual method (high-speed camera) which does not allow the internal pressure of the bag to be measured and therefore does not allow the moment when its effectiveness is reached to be detected (pressure above a threshold determined by the manufacturer). The reproducibility and repeatability of this type of examination are questionable in the case where the examination of the film is carried out visually by a human operator. Furthermore, the standard does not provide for any pressure test to ensure that the effectiveness pressure of the bag is reached at the time of impact (requirement 3.1.1 not met).

- No multi-directional airbag triggering test is provided. Products that would not trigger in certain ejection configurations (ejection on the side of the motorcycle for example) could therefore be compliant with the standard, without ensuring the protection expected by the user (requirement 3.1.1 not met).

- The thickness of the airbag is not taken into account in the definition of the protection zones. This could cause risks for the user. For example, an airbag whose inflation zone stops at the lumbar region could cause hyperflexion of the spine in the event of an impact on the inflated zone. This hyperflexion would be limited in the case of an airbag also covering the upper pelvis (requirement 1.2.1 not met).

- The impact test provided for in the standard is the same as that provided for the standards relating to rigid protectors for motorcyclists' clothing. The objective of this test is to verify the puncture resistance of rigid protectors. This test is not relevant for verifying the shock absorption which is the objective of inflatable protectors. "Surface" impact tests aimed at characterizing shock absorption should be introduced in the standard (requirement 3.1.1 not met).

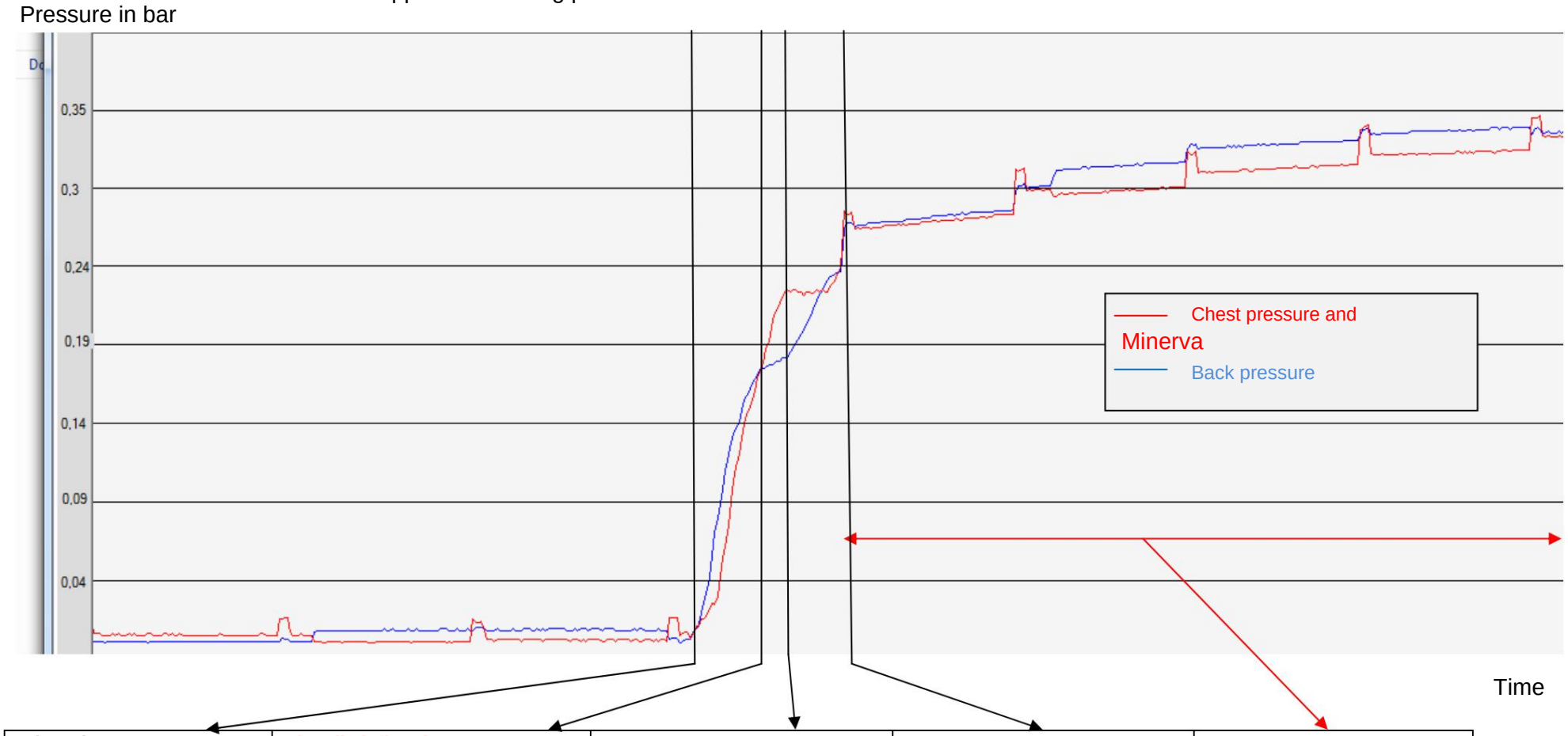
The appendix provides an illustration of the fact that viewing a film of airbag deployment by a human operator does not allow one to determine after how long the airbag has reached the inflation pressure allowing adequate protection of the wearer. In the example, the effective pressure set by the manufacturer is 0.2 bar.

VI. Measures requested

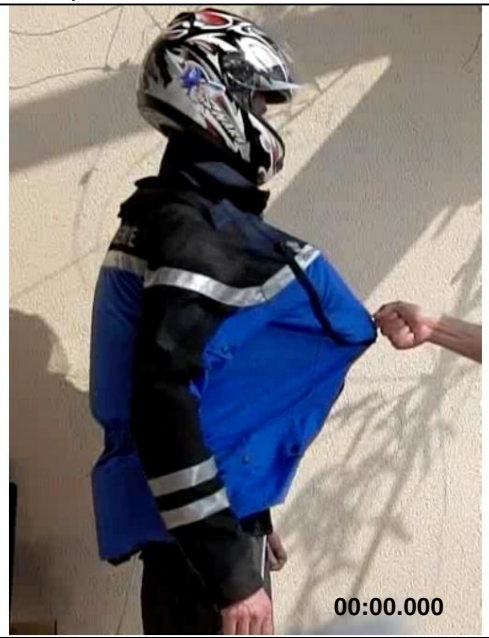
EN 1621-4 cannot be harmonised under the PPE Directive because it does not meet the essential requirements for inflatable protectors for motorcyclists incorporated into clothing.

It should be revised as soon as possible in order to meet the essential requirements of the PPE Directive.

Appendix – Airbag pressure and inflation as a function of time



Triggering	Visually inflated air chambers	Inflation of the neck brace and complete thorax	Effectiveness on all points covered by the airbag (effectiveness pressure = 0.2 bar)	Gas heating
Time: 0	Time: 60ms	Time: 90ms	Time: 120ms	
Image B	Image D	Image E	Image F	Image G

Image A	Image B	Image C	Image D
	Triggering Time: 0	Start filling Time: 30ms	**Inflated inner tubes** **Time: 60ms**
	Minerva pressure: 0 Back pressure: 0	Neck pressure: 0.1 bar Back pressure: 0.09 bar	Neck pressure: 0.17 bar Back pressure: 0.17 bar
			

Visually the air chambers are full, but they are not pressurized enough to be effective.

Image E	**Image F**	**Image G**
Inner tubes inflated but not all points have reached the 0.20 bar required for effectiveness Time: 90ms Neck brace	**Efficiency achieved (efficiency pressure = 0.2 bar)** **Time: 120ms**	Gas heating Time: 150ms
pressure: 0.23 bar Back pressure: 0.18 bar	Neck pressure: 0.23 bar Back pressure: 0.23 bar	Neck pressure: 0.27 bar Back pressure: 0.27 bar
		

Efficiency occurs after 120 ms, roughly double the time it takes to fill the air chambers