Draft for Public Comment

Form 36

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Responsible committee: CII/61 Explosives for civil uses

Interested committees:

Title: Draft BS EN 13763-16 Explosives for civil uses - Detonators and detonating cord relays. Part 16: Determination of delay accuracy.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

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iii) requires additional national guidance or information

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Responsible Committee Secretary: Committee Service Centre (BSI)
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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at **https://standardsdevelopment.bsigroup.com/**. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx

1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex **(e.g. 3.1)**	Paragraph/Figure/ Table/Note	**Type of comment**	**Commend (justification for change) by the MB**	**Proposed change by the MB**	**Secretariat observations on each comment submitted**
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 13763-16

April 2021

ICS 71.100.30

Will supersede EN 13763-16:2003

English Version

Explosives for civil uses - Detonators and detonating cord relays - Part 16: Determination of delay accuracy

Explosifs à usage civil - Détonateurs et relais pour cordeau détonant - Partie 16: Détermination de la précision du retard

Explosivstoffe für zivile Zwecke - Zünder und Sprengschnurverbinder - Teil 16: Bestimmung der Verzögerungsgenauigkeit

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 321.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 13763-16:2021) has been prepared by Technical Committee CEN/TC 321 "Explosives for civil uses", the secretariat of which is held by UNE.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 13763-16:2003.

In comparison with the previous edition, the following technical modifications have been made:

a) Clause 1, *Scope*, has been revised:

   1) it has been specified that this is a method for electric detonators, non-electric detonators, surface connectors and detonating cord relays with pyrotechnic delay elements;

   2) it has been added that the document applies to explosives for civil uses;

b) in Clause 3, *Terms and definitions*, the definition for term 3.2 has been updated;

c) Clause 4, *Principle*, has been added;

d) Clause 5, *Apparatus*, has been revised;

e) Clause 6, *Preparation and handling of test samples and test pieces*, has been revised;

f) in Clause 7, *Procedure*:

   1) magnetically coupled detonators have been removed;

   2) subclauses for each product type including an addition of detonating cord relays have been added;

g) Annex A, *Range of applicability of the test method*, has been removed;

h) Annex C, Guidance for theoretical verification, has been moved to prEN 13857-3;

i) Annex ZA has been updated.

This document has been prepared under a Standardization Request (M/562) annexed to the Commission Implementing Decision C(2019)6634 final as regards Explosives for civil uses given to CEN by the European Commission and the European Free Trade Association, and supports Essential Safety requirements of Directive 2014/28/EU.

For relationship with Directive 2014/28/EU, see informative Annex ZA, which is an integral part of this document.

EN 13763, *Explosives for civil uses — Detonators and detonating cord relays*, is currently composed with the following parts:

— *Part 1: Requirements*

— *Part 2: Verification of thermal stability*

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- *Part 3: Determination of sensitiveness to impact*
- *Part 4: Determination of resistance to abrasion of leading wires and shock tubes*
- *Part 5: Determination of resistance to cutting damage of leading wires and shock tubes*
- *Part 6: Determination of resistance to cracking in low temperatures of leading wires*
- *Part 7: Determination of the mechanical strength of leading wires, shock tubes, connections, crimps and closures*
- *Part 8: Determination of resistance to vibration*
- *Part 9: Determination of resistance to bending of detonators*
- *Part 11: Determination of drop resistance of detonators and relays*
- *Part 12: Determination of resistance to hydrostatic pressure*
- *Part 13: Determination of resistance of electric detonator to electrostatic discharge*
- *Part 15: Determination of equivalent initiating capability*
- *Part 16: Determination of delay accuracy*
- *Part 17: Determination of no-fire current of electric detonators*
- *Part 18: Determination of series firing current of electric detonators*
- *Part 19: Determination of firing pulse of electric detonators*
- *Part 20: Determination of total resistance of electric detonators*
- *Part 21: Determination of flash-over voltage of electric detonators*
- *Part 22: Determination of capacitance, insulation resistance and insulation breakdown of leading wires*
- *Part 23: Determination of the shock-wave velocity of shock tube*
- *Part 24: Determination of the non-conductivity of shock tube*
- *Part 25: Determination of transfer capacity of relay and coupling accessories*
- *Part 26: Definitions, methods and requirements for devices and accessories for reliable and safe function of detonators and relays*
- *Part 27: Definitions, methods and requirements for electronic initiation system*

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