



**NSAI**  
Standards

Standard Recommendation  
S.R. CEN/TR 16149:2011

# Guidance Document for drafting CEN/TC 158 Standards

## S.R. CEN/TR 16149:2011

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces:*

*This document is based on:*  
CEN/TR 16149:2011

*Published:*  
11 April, 2011

This document was published under the authority of the NSAI and comes into effect on: 11 April, 2011

ICS number:  
13.340.20

**NSAI**  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

**Sales:**  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

ICS 13.340.20

English Version

## Guidance Document for drafting CEN/TC 158 Standards

Document directeur pour la rédaction des normes CEN/TC  
158

Leitfaden für die Erarbeitung von Normen des CEN/TC 158

This Technical Report was approved by CEN on 27 December 2010. It has been drawn up by the Technical Committee CEN/TC 158.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

---

# Contents

Page

Foreword.....	4
Introduction .....	5
1 General.....	6
2 Type of injuries .....	6
3 Areas of coverage, areas to be protected and areas to be tested.....	6
4 Field of vision.....	7
5 Helmet sizes .....	8
6 Ventilation.....	8
7 Mass .....	8
8 Comfort.....	8
9 Skin irritation.....	9
10 Innocuousness of materials .....	9
11 Ignitability / Flame resistance.....	9
12 Corrosion.....	9
13 Combined and combination PPE and accessories .....	9
14 Compatibility with other headgear.....	10
15 Compatibility with other PPE.....	10
16 Shock absorption.....	10
17 Rotational effects.....	10
18 Penetration .....	11
19 Crush and rigidity .....	11
20 Retention system strength .....	12
21 Retention system effectiveness .....	12
22 Radiant heat .....	13
23 Electrical and electrostatic properties .....	13
24 Protection against molten metal .....	14
25 Testing scheme.....	14
26 Pre-conditioning .....	15
27 Conditioning.....	15
28 Pre-requisites for the testing.....	15
29 Sizes of headforms .....	15
30 Application of the uncertainty of measurement .....	16
31 Marking and labelling .....	16
32 Information to be supplied by the manufacturer for users .....	17

<b>33</b>	<b>Life of helmet .....</b>	<b>18</b>
<b>34</b>	<b>Terms and definitions .....</b>	<b>18</b>
<b>35</b>	<b>Annex ZA of the PPE Directive .....</b>	<b>19</b>
	<b>Annex A (informative) Combined and combination PPE and accessories .....</b>	<b>20</b>
	<b>Annex B (informative) Application of uncertainty of measurement .....</b>	<b>21</b>
	<b>Bibliography .....</b>	<b>23</b>

## **Foreword**

This document (CEN/TR 16149:2011) has been prepared by Technical Committee CEN/TC 158 “Head Protection”, the secretariat of which is held by BSI.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

## Introduction

This document has been produced by the convenors of CEN/TC158 working groups. It is intended to serve as a guide, to be consulted when drafting new EN standards for head protection and when revising or amending existing ones.

Whilst implementation of its contents is not mandatory, working groups are urged not to make deviations from this guidance document without good cause.

This is a living document – omissions will be covered in later issues.

In this document, reference is made to CEN/TR 16148, *Head and neck impact, burn and noise injury criteria — A Guide for CEN helmet standards committees*. This gives further guidance about the areas of the head which helmet standards should aim to protect, and about head and neck injuries.

The working group should assess the foreseeable risks against which the helmet should provide protection. Each of the helmet standards should provide for a helmet, which will offer optimum protection to the head against these foreseeable risks and should satisfy the Basic Health and Safety Requirements of EU Directive 89/686/EEC to the extent indicated in Annex ZA of the helmet standard.

Helmet standards should indicate, in an informative annex, how the level of performance requirements specified relates to the severity of injury to be tolerated. Working groups should refer to CEN/TR 16148 when drafting this annex.

Reference is also made to EN 13087 (all parts), *Protective helmets — Test methods*. This standard provides harmonized methods of test for many of the topics listed below. The various parts of EN 13087 are listed in the Bibliography.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-