



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 13781:2002

ICS 13.340.20

**PROTECTIVE HELMETS FOR DRIVERS AND  
PASSENGERS OF SNOWMOBILES AND  
BOBSLEIGHS**

National Standards  
Authority of Ireland  
Dublin 9  
Ireland

Tel (01) 807 3800  
Tel (01) 807 3838

*This Irish Standard was  
published under the  
authority of the National  
Standards Authority of  
Ireland  
and comes into effect on  
January 12, 2002*

**NO COPYING WITHOUT NSAI  
PERMISSION EXCEPT AS  
PERMITTED BY COPYRIGHT  
LAW**

© NSAI 2002

**Price Code J**

Údarás um Chaighdeán Náisiúnta na hÉireann



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 13781**

November 2001

ICS 13.340.20

English version

## Protective helmets for drivers and passengers of snowmobiles and bobsleighs

Casques de protection pour conducteurs et passagers de  
motoneiges et bobsleighs

Schutzhelme für Fahrer und Mitfahrer von Schneemobilen  
und Bobs

This European Standard was approved by CEN on 14 October 2001.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

**EN 13781:2001 (E)**

## **Contents**

	<b>page</b>
Foreword .....	3
Introduction.....	3
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions .....	4
4 Requirements .....	6
5 Testing.....	10
6 Marking.....	15
7 Information supplied by the manufacturer .....	15
Annex A (normative) Test results – Uncertainty of measurement.....	24
Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directive 89/686/EEC .....	25
Bibliography.....	26

## **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 158 "Head protection", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2002, and conflicting national standards shall be withdrawn at the latest by May 2002.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

Annex A is normative.

This standard includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## **Introduction**

The intention of helmets is to reduce the risk of injury to the skull and part of the head surrounded by the helmet.

The protection given by a helmet depends on the circumstances of the accident and wearing a helmet cannot always prevent death or long term disability.

A proportion of the energy of an impact is absorbed by the helmet, thereby reducing the force of the blow sustained by the head. The structure of the helmet may be damaged in absorbing this energy and any helmet that sustains a severe blow should be replaced even if damage is not apparent.

To achieve the performance of which it is capable, and to ensure stability on the head, a helmet should be as closely fitting as possible consistent with comfort. In use it is essential that the helmet is securely fastened, with any chin strap under proper tension at all times.

## **EN 13781:2001 (E)**

### **1 Scope**

This European Standard specifies requirements and test methods for protective helmets for drivers and passengers of snowmobiles and bobsleighs.

Additional requirements for eye protectors and face shields are specified in EN 13178.

### **2 Normative references**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 352-1, *Hearing protectors - Safety requirements and testing - Part 1: Ear muffs.*

EN 960, *Headforms for use in the testing of protective helmets.*

EN 13087-6: 2000, *Protective helmets - Test methods - Part 6: Field of vision.*

EN 13178, *Personal eye-protection - Eye protectors for snowmobile users.*

ISO 6487: 2000, *Road vehicles - Measurement techniques in impact tests - Instrumentation.*

### **3 Terms and definitions**

For the purposes of this European Standard the following terms and definitions apply.

#### **3.1**

**protective helmet for user of snowmobile and of bobsleigh (abbreviated to "helmet" below)**

helmet primarily intended to protect the wearer's head against impact, which may provide additional protection like protection against cold and noise

#### **3.2**

**shell**

hard part of the helmet that gives it its general shape

#### **3.3**

**protective padding**

material used to absorb impact energy

#### **3.4**

**comfort padding**

material provided for the wearer's comfort

#### **3.5**

**retention system**

complete assembly by means of which the helmet is maintained in position on the head, including any devices for adjustment of the system or to enhance the wearer's comfort

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](#)
-