### **TECHNICAL REPORT**

# **CLC/TR 50448**

## RAPPORT TECHNIQUE

## TECHNISCHER BERICHT

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English version

# Guide to levels of competence required in laser safety

Recommandations pour les niveaux de compétence requis pour la sécurité des lasers Leitfaden für die erforderlichen Ausbildungslevel auf dem Gebiet Lasersicherheit

This Technical Report was approved by CENELEC on 2005-01-08.

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

# CENELEC

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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#### Foreword

This Technical Report was prepared by the Technical Committee CENELEC TC 76, Optical radiation safety and laser equipment.

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a draft was The text of the draft was submitted to the vote and was approved by CENELEC as CLC/TR 50448 on 2005-01-08.

### 1 Scope and object

### 1.1 Scope

This Guide has been prepared in order to provide information and guidance to employers and employees in organisations in which lasers are used. It is supplementary to the safety requirements specified in the EN 60825 series of standards on laser safety. The Guide outlines procedures for the management of laser hazards and defines levels of competence for those who work with laser equipment or who have responsibility for laser safety.

#### 1.2 Object

The object of this Guide is to assist organisations in which lasers are used to adopt appropriate organisational arrangements covering the implementation and maintenance of effective control procedures as required by EN 60825-1 and by other standards in the EN 60825 series, and to ensure that persons using, controlling, or working with laser equipment, and those having responsibility for laser safety, have the necessary knowledge, understanding and ability to carry out their work without placing themselves or others at any undue health risk.

The Guide defines the employer's responsibility for laser safety, establishes a system of safety management to meet the practical needs of organisations using lasers, and sets out minimum standards of competence in order to help employers to determine the safety training needs of their employees.

#### 2 References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 60825-1	Safety of laser products – Part 1: Equipment classification, requirements and user's guide
EN 60825-2	Safety of laser products – Part 2: Safety of optical fibre communication systems
EN 60825-4	Safety of laser products – Part 4: Laser guards
IEC 60825-8	Safety of laser products – Part 8: Guidelines for the safe use of medical laser equipment
IEC 60825-10	Safety of laser products – Part 10: Laser safety application guidelines and explanatory notes
EN 60825-12	Safety of laser products – Part 12: Safety of free space optical communication systems used for transmission of information
IEC 60825-14	Safety of laser products – Part 14: A user's guide
EN 60601-2-22	Medical electrical equipment – Part 2: Particular requirements for the safety of diagnostic and therapeutic laser equipment