



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 50341-3:2006**

ICS 29.240.20

**OVERHEAD ELECTRICAL LINES  
EXCEEDING AC 45 KV -- PART 3: SET OF  
NATIONAL NORMATIVE ASPECTS**

National Standards  
Authority of Ireland  
Glasnevin, Dublin 9  
Ireland

Tel: +353 1 807 3800  
Fax: +353 1 807 3838  
<http://www.nsai.ie>

**Sales**  
<http://www.standards.ie>

*This Irish Standard was  
published under the  
authority of the National  
Standards Authority of  
Ireland and comes into  
effect on:*

*24 November 2006*

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

© NSAI 2006

**Price Code XX**

Údarás um Chaighdeán Náisiúnta na hÉireann



EUROPEAN STANDARD

**EN 50341-3**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2001

ICS 29.240.20

Incorporates Corrigenda April 2006 and October 2006

English version

## **Overhead electrical lines exceeding AC 45 kV Part 3: Set of National Normative Aspects**

Lignes électriques aériennes dépassant  
AC 45 kV  
Partie 3: Aspects Normatifs Nationaux

Freileitungen über AC 45 kV  
Teil 3: Nationale Normative Festlegungen

This European Standard was approved by CENELEC on 2001-01-01. CENELEC 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 Central Secretariat or to any CENELEC member.

This European Standard exists in one official version (English). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

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

# **CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

## Foreword

The different parts of this European Standard EN 50341-3 were prepared by the respective CENELEC National Committees in cooperation with the Technical Committee CENELEC TC 11, Overhead electrical lines exceeding 1 kV AC (1,5 kV DC).

The text of the drafts were submitted to the Unique Acceptance Procedure and were approved by CENELEC as EN 50341-3 on 2001-01-01.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2002-05-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2004-01-01

The contents of the corrigenda of April 2006 and October 2006 have been included in this copy.

---

## Text of EN 50341-3

Please see the subparts specific to each National Committee.

NOTE This Part 3 of EN 50341 is published by CENELEC in English only.

# **National Normative Aspects (NNA) for AUSTRIA**

based on EN 50341-1:2001

| In this document, the paragraphs modified/added by the corrigendum April 2006 are identified by a vertical line in the left margin of the text.

## Contents

<b>Foreword .....</b>	<b>4</b>
<b>1 General scope – Field of application .....</b>	<b>5</b>
<b>2 Definitions, symbols and references .....</b>	<b>5</b>
2.1 Definitions .....	5
2.3 References .....	8
<b>3 Basis of design .....</b>	<b>9</b>
<b>4 Actions on lines .....</b>	<b>9</b>
4.3.2 Wind loads .....	10
4.3.3 Ice loads .....	11
4.3.4 Combined wind and ice loads .....	12
4.3.6 Construction and maintenance loads .....	12
4.3.7 Security loads .....	12
4.3.8 Short circuit-loads .....	12
4.3.10.3 Conductor tension load cases .....	13
4.3.10.4 Standard load cases .....	13
4.3.11 Partial factors for actions .....	19
<b>5 Electrical requirements .....</b>	<b>20</b>
5.4 Internal and external clearances .....	20
5.4.2.1 General considerations and underlying principles .....	20
5.4.2.2 Load cases for calculation of clearances .....	22
5.4.3 Clearances within the span and at the tower .....	22
5.4.4 Clearances to ground in areas remote from buildings, roads, railways and navigable waterways .....	25
5.4.5.2 Clearances to residential and other buildings .....	26
5.4.5.3.1 Clearances to Line crossing roads, railways, navigable waterways ..	28
5.4.5.3.2 Clearances to Line near roads, railways, navigable waterways .....	28
5.4.5.4 Clearances to other power lines or overhead telecom. lines .....	35
5.4.5.5 Clearances to recreational areas .....	38
5.6.1 Electric and magnetic fields under a line .....	39
<b>6 Earthing systems .....</b>	<b>39</b>
6.3 Construction of earthing systems .....	39
6.3.1 Installation of earthing electrodes .....	39
<b>7 Supports .....</b>	<b>39</b>
7.1 Initial design considerations .....	39
7.3.1 Lattice steel towers, General .....	39
7.4.4 Steel poles, serviceability limit states .....	40
7.5.1 Timber poles, General .....	40
7.5.2 Timber poles, Basis of design .....	40
7.5.3 Timber poles, Materials .....	41

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
-