

<b>STN</b>	<b>Vonkajšie elektrické vedenia so striedavým napätím nad 1 kV. Časť 2-7: Národné normatívne hľadiská (NNA) pre FÍNSKO (založené na EN 50341-1: 2012).</b>	<b>STN EN 50341-2-7</b>  33 3300
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Overhead electrical lines exceeding AC 1 kV - Part -2-7: National Normative Aspects (NNA) for FINLAND (based on EN 50341-1:2012)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 02/16

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EUROPEAN STANDARD

**EN 50341-2-7**

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Overhead electrical lines exceeding AC 1 kV -  
Part -2-7: National Normative Aspects (NNA) for FINLAND  
(based on EN 50341-1:2012)

This European Standard was approved by CENELEC on 2015-08-11.

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



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

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

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## Foreword

- 1 The Finnish National Committee (NC) is identified by the following address:

SESKO Standardization in Finland  
Standardization committee SK11, High Voltage Overhead Lines  
Addr. P.O. Box 134, 00211 Helsinki, Finland  
Tel. +358-9-696391  
Fax. +358-9-677059  
Email palaute@sesko.fi

- 2 The Finnish NC has prepared this Part 2-7 of EN 50341 listing the Finnish national normative aspects (NNA), under its sole responsibility, and duly passed it through the CENELEC and CLC/TC 11 procedures.

NOTE: The Finnish NC also takes sole responsibility for the technically correct co-ordination of this NNA with EN 50341-1. It has performed the necessary checks in the frame of quality assurance/control. However, it is noted that this quality control has been made in the framework of the general responsibility of a standards committee under the national laws/regulations.

- 3 This NNA is normative in Finland and informative for other countries.

- 4 This NNA has to be read in conjunction with Part 1 (EN 50341-1). All clause numbers used in this NNA correspond to those of Part 1. Specific sub-clauses, which are prefixed "FI", are to be read as amendments to the relevant text in Part 1. Any necessary clarification regarding the application of this combined NNA in conjunction with Part 1 shall be referred to the Finnish NC who will, in co-operation with CLC/TC 11, clarify the requirements.

When no reference is made in this NNA to a specific sub-clause, then Part 1 applies.

- 5 In the case of "boxed values" defined in Part 1, amended values (if any), which are defined in this NNA, shall be taken into account in Finland.

However, any boxed value, whether in Part 1 or in this NNA, shall not be amended in the direction of greater risk in a Project Specification.

- 6 The national Finnish standards/regulations related to overhead electrical lines exceeding 1 kV AC are listed in 2.1/FI.1-2.

NOTE: All national standards referred to in this NNA will be replaced by the relevant European Standards as soon as they become available and are declared by the Finnish NC to be applicable and thus reported to the secretary of CLC/TC 11.

## 1 Scope

### 1.1 General

#### (ncpt) **FI.1 Application of the standard in Finland**

In Finland the standard EN 50341-1 (Part 1) can only be applied using this NNA (EN 50341-2-7) containing National Normative Aspects for Finland.

The requirements of the standard are applied also for low voltage (below 1 kV AC) overhead lines. The requirements of the structural design are applicable also for DC overhead lines, where the electrical requirements are given in the Project Specification.

This standard is applicable for new overhead lines only.

#### (ncpt) **FI.2 Application for existing overhead lines**

Overhead lines complying with the mechanical and electrical requirements of its original date of construction can be operated and maintained, if they do not cause obvious danger.

The reparation and overhaul of lines can be done according to the previous requirements. Reparation means that a component which has been damaged is substituted with a similar new one. Overhaul means a wider improvement of the line for extending its lifetime. The basic structure remains same as before.

This standard should be used for all modification works on existing lines. In modification works earlier norms and standards may also be used. In that case it shall especially be verified that changes in actions do not have significant impact on the loads of lines. Modification work means e.g. relocation of some supports or an extension to a line when this supplement has been taken into account in the original design, e.g. addition of a circuit or changing of the conductors to existing supports.

### 1.2 Field of application

#### (ncpt) **FI.1 Application to covered conductors and aerial cables**

The standard includes requirements for the design and construction of overhead lines equipped with covered conductors and aerial cables. Additionally, the requirements of the equipment standards and manufacturers' instructions shall be followed.

#### (ncpt) **FI.2 Application to cables for telecommunication**

The standard includes requirements for the application of telecommunication cables installed on common supports with electrical lines.

#### (ncpt) **FI.3 Installation of other equipment**

Only equipment belonging to the line (electric or telecommunication line) can be installed on the overhead lines. However, equipment serving communal services or environmental protection like telecommunication equipment, road signs, warning signs or warning balls may also be installed with the permission of the owner of the line.

Other equipment than those mentioned above can also be installed on supports equipped with aerial cables with the permission of the owner of the line.

If other equipment is installed on the supports, the requirements of safe working practices shall be taken into account. The installation height of equipment meant to be installed and maintained by an ordinary person shall be such that the work can be done without climbing the support and the distances of safe electrical work can be followed (see standard SFS 6002).

The additional loads due to other equipment on the line supports shall be taken into account.

## 2 Normative references, definitions and symbols

### 2.1 Normative references

#### (A-dev) **FI.1 National normative laws, government regulations**

Sähköturvallisuuslaki (410/1996)

*Electrical Safety Act*

Sähköturvallisuusasetus (498/1996)

*Electrical Safety Decree*

Kauppa- ja teollisuusministeriön päätös sähkölaitteistojen turvallisuudesta (1193/1999)

*Decision of Ministry of Trade and Industry on Safety of electrical installations*

Viestintäviraston määräys M 43 tietoliikenneverkon sähköisestä suojaamisesta

*Decree nr M 43 of the Finnish Communications Regulatory Authority on the electrical protection of a telecommunication network*

Liikenteen turvallisuusviraston määräys AGA M3-6, Lentoesterajoitukset ja lentoesteiden merkitseminen. *Aviation regulation AGA M3-6 of the Finnish Transport Safety Agency on the Aviation obstacle limitations and marking of objects.*

Liikenneviraston ohje 23/2014 Ilmajohtojen sekä kaapeleiden ja putkijohtojen asettaminen ja merkitseminen vesialueella. *Publication 23/2014 of the Finnish Transport Agency: Installation and marking of overhead lines, cables and pipelines in waterways.*

(ncpt)

## **FI.2 National normative standards**

- SFS 2662 Ilmajohtotarvikkeet. Puupylväs  
*Overhead line materials. Wood pole*
- SFS 5717 Maakaasun siirtoputkiston sijoittaminen suurjännitejohdon tai kytkinlaitoksen läheisyyteen  
*Placing of the natural gas transmission pipeline close to a high-voltage line or substation*
- SFS 6000 Pienjännitesähköasennukset  
*Low voltage electrical installations*
- SFS 6001 Suurjännitesähköasennukset  
*High voltage electrical installations*
- SFS 6002 Sähkötyöturvallisuus (perustuu standardiin EN 50110-1/2)  
*Safety at electrical work (based on standard EN 50110-1/2)*
- RIL 202/by 61 Betonirakenteiden suunnitteluohje (perustuu standardiin SFS-EN 1992-1-1)  
*Design guide for concrete structures (based on standard SFS-EN 1992-1-1)*
- RIL 207 Geotekninen suunnittelu (perustuu standardiin SFS-EN 1997-1)  
*Geotechnical design (based on standard SFS-EN 1997-1)*
- RIL 254 Paalutusohje  
*Piling instructions*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**