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## Elektriska friledningar över 1 kV (AC) – Del 2-7: Normativ bilaga för Finland

*Overhead electrical lines exceeding AC 1 kV –*

*Part -2-7: National Normative Aspects (NNA) for FINLAND (based on EN 50341-1:2012)*

Som svensk standard gäller europastandarden EN 50341-2-7:2023. Den svenska standarden innehåller den officiella engelska språkversionen av EN 50341-2-7:2023.

### Nationellt förord

Den europeiska standarden EN 50341 består av två delar:

- EN 50341-1:2012, som innehåller avsnitt gemensamma för hela CENELEC
- EN 50341-2, som innehåller nationella normativa bilagor, vilka ger de fordringar som i respektive land gäller utöver eller istället för fordringarna i motsvarande avsnitt i del 1.

Denna utgåva av standarden SS-EN 50341-2-7 innehåller den officiella engelska språkversionen av EN 50341-2-7:2023. Den gäller i Sverige tillsammans med SS-EN 50341-1, utgåva 2, 2017.

ANM – För användning tillsammans med den nationella normativa bilagan för något annat land kan den tidigare utgåvan av SS-EN 50341-1 fortsätta att gälla, enligt vad som angivits för det landet.

Tidigare fastställd svensk standard SS-EN 50341-2-7, utg 1:2022 med eventuella tillägg, ändringar och rättelser gäller ej fr o m 2026-08-30.

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ICS 29.240.20

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Denna standard är fastställd av SEK Svensk Elstandard, som också kan lämna upplysningar om **sakinnehållet** i standarden.  
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### *Standarder underlättar utvecklingen och höjer elsäkerheten*

Det finns många fördelar med att ha gemensamma tekniska regler för bl a mätning, säkerhet och provning och för utförande, skötsel och dokumentation av elprodukter och elanläggningar.

Genom att utforma sådana standarder blir säkerhetsfordringar tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

### *SEK är Sveriges röst i standardiseringsarbetet inom elområdet*

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

### *Stora delar av arbetet sker internationellt*

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

### *Var med och påverka!*

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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EUROPEAN STANDARD

**EN 50341-2-7**

NORME EUROPÉENNE

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English Version

**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 2023-08-30.

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



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

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SS-EN 50341-2-7, utg 2:2024

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## European foreword

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

SESKO Electrotechnical Standardization in Finland  
Standardization committee SK 11, High Voltage Overhead Lines  
Addr. Takomotie 8, 00380 Helsinki, Finland  
Tel. +358 50 571 6048  
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- 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 the modification works, earlier norms and standards may also be used, if allowed by the valid Electrical Safety Act. In that case it shall especially be verified that changes in actions do not cause significant increase in the loads of the line. Modification work means e.g. relocation of some supports or an extension to a line by 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 considered.

#### (ncpt) **FI.2 Installation of other equipment**

Only equipment belonging to the line (electric or telecommunication line) can be installed on the overhead line supports. 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.

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

If other equipment is installed on the supports, the requirements of safe working practices shall be considered. 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 to the line shall be considered.

## 2 Normative references, definitions and symbols

### 2.1 Normative references

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

Sähköturvallisuuslaki (1135/2016)

*Electrical Safety Act*

Valtioneuvoston asetus sähkölaitteistoista (1434/2016)

*Governmental Degree on electrical installations*

Traficomın määräys M 43 tietoliikenneverkon sähköisestä suojaamisesta

*Decree nr M 43 of Traficom on the electrical protection of a telecommunication network*

Traficomın määräys AGA M3-6, Lentoesterajoitukset ja lentoesteiden merkitseminen. *Aviation regulation AGA M3-6 of Traficom on the Aviation obstacle limitations and marking of objects.*

Traficomın ohje 23/2014 Ilmajohdojen sekä kaapeleiden ja putkijohtojen asettaminen ja merkitseminen vesialueella.

*Publication 23/2014 of Traficom: 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 Sähköturvallisuus (perustuu standardiin EN 50110-1/2)  
*Safety at electrical work (based on standard EN 50110-1/2)*