

**Overhead electrical lines exceeding AC 45 kV
Part 3-20: National Normative Aspects for Estonia**

**Elektriõhuliinid vahelduvpingega üle 45 kV
Osa 3-20: Eesti siseriiklikud erinõuded**

NATIONAL FOREWORD

This Estonian Standard:

- includes the National Normative Aspects for Estonia based on EN 50341-1:2001, which is published as part 20 of European standard EN 50341-3 "Overhead electrical lines exceeding AC 45 kV. Part 3: Set of National Normative Aspects";
- is the English version of EVS-EN 50341-3-20:2007;
- is implemented by a 28.02.2011 decree of Estonian Centre for Standardisation number 43;
- has become valid with a notice in the March 2011 issue of EVS Teataja.

Estonian standard EVS-EN 50341-3-20:2007 *Overhead electrical lines exceeding AC 45 kV. Part 3: Set of National Normative Aspects* has been prepared by Estonian technical committee EVS/TK 19 *High Voltage Technical Committee*. Standard has been translated into English by Peeter Raesaar and Tiit Metusala, edited by Tõnu Müürsepp. The standard has been approved by the EVS/TK 19 commission of experts:

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The text of EVS-EN 50341-3-20:2007 is identical to that in the EN 50341-3:2001 October 2006 corrigendum.

The National Normative Aspects (NNAs) reflect national practices. They generally include A-deviations, special national conditions and national complements.

A-deviations (A-dev):

A-deviations are required by existing national laws or regulations, which cannot be altered at the time of preparation of the standard.

Special national conditions (snc):

Special national conditions are national characteristics or practices that cannot be changed even over a long period, e.g. those due to climatic conditions, earth resistivity, etc.

National complements (NCPTs):

National complements reflect national practices, which are neither A-deviations, nor special national conditions. It has been agreed within CLC/TC 11 that NCPTs should be gradually adapted to the Main Body, aiming at the usual EN standard structure including only a Main Body, A-deviations and special national conditions.

In this standard, the boundary numerical values given with prepositions *from* or *up to* include always the boundary value itself, as in Estonian documents hitherto.

ICS 29.240.20 Power transmission and distribution lines

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National Normative Aspects (NNA)
for
ESTONIA

based on EN 50341-1:2001

Version circulated with corrigendum October 2006.

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FOREWORD

1. The Estonian National High Voltage Technical Committee of Estonian Centre for Standardisation (EVS/TC 19) is identified by the following address:

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2. EVS/TC 19 has prepared this Part 3-20 of EN 50341, listing the Estonian National Normative Aspects under its sole responsibility, and duly passed it through the CENELEC and CLC/TC 11 procedures.

NOTE EVS/TC 19 also takes sole responsibility for the technical correct coordination of this EN 50341-3-20 with EN 50341-1.

3. This EN 50341-3-20 is normative for Estonia and informative for other countries.
4. This EN 50341-3-20 has to be read in conjunction with EN 50341-1, hereafter referred to as Part 1. All clause numbers used in this Part 3-20 correspond to those of Part 1. Specific subclauses, which are prefixed "EE", are to be read as amendments to the relevant articles in Part 1. Any necessary clarification regarding the application of Part 3-20 in conjunction with Part 1 shall be referred to the EVS/TC 19 that will, in cooperation with CLC/TC 11 clarify the requirements.

When no reference is made in Part 3-20 to a specific subclause, then Part 1 applies.

5. In the case of "box values" defined in Part 1 amended values (if any) which are defined in Part 3-20 shall be taken into account in Estonia.

However any boxed value, whether in Part 1 or Part 3-20, shall not be amended in the direction of greater risk in the Project Specification.

6. The EVS/TC 19 declares in accordance with subclause 3.1 of Part 1 that this Part 3-20 follows the "General Approach" (subclause 4.2), and that consequently subclause 4.3 "Empirical Approach" is not applicable for Estonia.
7. The national Estonian standards/regulations related to overhead electrical lines exceeding 45 kV (AC) are identified/listed in the text of this Part 3-20.

NOTE All national standards referred to in this Part 3-20 will be replaced by the relevant European Standards as soon as they become available and are declared by the Estonian Centre for Standardisation to be applicable and thus reported to the secretary of CLC/TC 11.

| <u>Clause</u> | <u>National Regulation</u> |
|---------------|----------------------------|
|---------------|----------------------------|

1 SCOPE

- (ncpt) **EE.1 Application to existing overhead lines**

This Part 3-20 is applicable for new high voltage overhead transmission lines only, not for existing lines in Estonia. In other cases (i.e. major revisions of existing lines) the applicability of this Part 3-20 shall be determined case by case in each project by the line owner or the competent authority.

- (nspt) **EE.2 Application of covered conductors**

Requirements for the design and construction of overhead lines with application of covered conductors will be specified in the Project Specification.

- (ncpt) **EE.3 Application of cables for telecommunication**

This Part 3-20 is not valid for constructions of conductors or cables with integrated optical fibres independent from their function which do not have simultaneously the function of a conductor or an earth wire.

- (ncpt) **EE.4 Application to mounting of telecommunication equipment**

This Part 3-20 is not applicable for fixing of structural elements for telecommunication (e.g. dishes), if these are mounted on power line supports (towers).

Mounting of telecommunication equipment will be specified in the Project Specification and the requirements of EVS/TS 1993-3-1 (Towers and Masts) have to be taken into account, too.

2 DEFINITIONS, SYMBOLS AND REFERENCES

2.3 References

- (A-dev) **EE.1** Part 1 of the standard applies without change. References to Estonian national standards and regulations are given in the text of the Part 3-20.

3 BASIS OF DESIGN

3.1 General

- (ncpt) **EE.1** The EVS/TC 19 declares that this Part 3-20 follows the "General Approach" (subclause 4.2), and that consequently subclause 4.3 "Empirical Approach" is not applicable for Estonia.

- (A-dev) **EE.2** Choice of line route and construction or mounting of high voltage overhead line is regulated by following Estonian laws and Government regulations. (RT – Riigi Teataja, RTL – Riigi Teataja Lisa. The *Riigi Teataja* is the official publication of the Republic of Estonia):

Elektrohutusseadus (RT I 2002, 49,310)
Electrical Safety Act

Elektrituruseadus (RT I 2003, 25, 153)
Electricity Market Act

Ehitusseadus (RT I 2002, 47, 297)
Building Act

| <u>Clause</u> | <u>National Regulation</u> |
|--|----------------------------|
| Planeerimisseadus <i>Planning Act</i> | (RT I 2002, 99, 579) |
| Keskkonnamõju hindamise ja keskkonna auditeerimise seadus (RT I 2000, 54, 348) <i>Environmental Impact Assessment and Environmental Auditing Act</i> | |
| Keskkonnajärelvalve seadus <i>Environmental Supervision Act</i> | (RT I 2001, 56, 337) |
| Looduskaitse seadus <i>Nature Conservation Act</i> | (RT I 2004, 38, 258) |
| Veeseadus <i>Water Act</i> | (RT I 1994, 40, 655) |
| Asjaõigusseadus <i>Law of Property Act</i> | (RT I 1993, 39, 590) |
| Asjaõigusseaduse rakendamise seadus <i>Law of Property Act Implementation Act</i> | (RT I 1993, 72/73, 1021) |
| Muinsuskaitse seadus <i>Heritage Conservation Act</i> | (RT I 2002, 27, 153) |
| Telekommunikatsiooniseadus <i>Telecommunications Act</i> | (RT I 2004, 87, 593) |
| Lennundusseadus <i>Aviation Act</i> | (RT I 1999, 26, 376) |
| Tee seadus <i>Roads Act</i> | (RT I 1999, 26, 377) |
| Raudtee seadus <i>Railways Act</i> | (RT I 2003, 79, 530) |
| Meresõiduohutuse seadus <i>Maritime Safety Act</i> | (RT I 2002, 1, 1) |
| Jäätmeseadus <i>Waste Act</i> | (RT I 2004, 9, 52) |
| Vabariigi Valitsuse määrus „Elektripaigaldise kaitsevööndi ulatus” <i>Government of the Republic regulation “Safety zone of electrical installation”</i> | (RT I 2002, 58, 366) |
| Võlaõigusseadus <i>Law of Obligations Act</i> | (RT I 2001, 81, 487) |
| Sotsiaalministri määrus "Müra normtasemed elu- ja puhkeletaladel, elamutes ning ühiskasutusega hoonetes ja mürataseme mõõtmise meetodid" <i>Regulation of the Minister of Social Affairs "Audible noise limits in residential and recreational areas, residential and social buildings and noise level control methods"</i> | (RTL, 14.03.2002, 38, 511) |
| Other relevant normative regulatory documents should be taken in account as soon as they become available. | |