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# **EVS TEATAJA**

- Uued Eesti standardid
- Standardikavandite arvamusküsitlus
- Asendatud või tühistatud Eesti standardid
- Algupäraste standardite koostamine ja ülevaatus
- Standardite tõlked kommenteerimisel
- Uued harmoneeritud standardid
- Standardipealkirjade muutmine
- Uued eestikeelsed standardid

## **SISUKORD**

UUED STANDARDID JA STANDARDILAADSED DOKUMENDID .....	3
ASENDATUD VÕI TÜHISTATUD EESTI STANDARDID JA STANDARDILAADSED DOKUMENDID.....	39
STANDARDIKAVANDITE ARVAMUSKÜSITLUS .....	51
TÖLKED KOMMENTEERIMISEL .....	65
ALGUPÄRASTE STANDARDITE JA STANDARDILAADSETE DOKUMENTIDE KOOSTAMINE .....	67
ALGUPÄRASTE STANDARDITE KEHTIVUSE PIKENDAMINE.....	68
TÜHISTAMISKÜSITLUS .....	69
TEADE EUROOPA STANDARDI OLEMASOLUST .....	71
UUED EESTIKEELSED STANDARDID JA STANDARDILAADSED DOKUMENDID .....	72
STANDARDIPEALKIRJADE MUUTMINE.....	73
UUED HARMONEERITUD STANDARDID .....	74

# UUED STANDARDID JA STANDARDI LAADSED DOKUMENDID

## 01 ÜLDKÜSIMUSED. TERMINOOGIA. STANDARDIMINE. DOKUMENTATSIOON

### EVS-EN ISO 20484:2017

#### Non-destructive testing - Leak testing - Vocabulary (ISO 20484:2017)

ISO 20484:2017 defines the terms used in leak testing.

Keel: en

Alusdokumendid: ISO 20484:2017; EN ISO 20484:2017

Asendab dokumenti: EVS-EN 1330-8:1999

## 03 TEENUSED. ETTEVÖTTE ORGANISEERIMINE, JUHTIMINE JA KVALITEET. HALDUS. TRANSPORT. SOTSILOOGIA

### CEN ISO/TS 17429:2017

#### Intelligent transport systems - Cooperative ITS - ITS station facilities for the transfer of information between ITS stations (ISO/TS 17429:2017)

ISO/TS 17429:2017 specifies generic mechanisms enabling the exchange of information between ITS stations for applications related to Intelligent Transport Systems. It complies with the ITS station reference architecture (ISO 21217) and defines the following ITS station facilities layer functionalities: - Communication Profile Handler (CPH); - Content Subscription Handler (CSH); - Facilities Services Handler (FSH). These functionalities are used by ITS-S application processes (ITS-S-AP) to communicate with other ITS-S application processes and share information. These functionalities describe - how lower-layer communication services assigned to a given data flow are applied to the service data units at the various layers in the communication protocol stack (CPH, see 6.2.3), - how content from data dictionaries can be published and subscribed to by ITS-S application processes (CSH, see 6.2.5), - how well-known ITS station facilities layer and management services can be applied to application process data units (FSH, see 6.2.4), relieving (ITS-S) application processes from having to implement these services on their own, - how service access points (SAP) primitives specified in ISO 24102- 3 are used, - service primitives for the exchange of information between ITS-S application processes and the ITS station facilities layer (FA-SAP), and - a set of communication requirements and objectives (profiles) using the methods defined in ISO/TS 17423 to select the level of performance (best effort or real-time, etc.), confidence and security (authentication, encryption, etc.) for information exchange between ITS stations, such as data provision, event notification, roadside configuration, map update.

Keel: en

Alusdokumendid: ISO/TS 17429:2017; CEN ISO/TS 17429:2017

## 07 LOODUS- JA RAKENDUSTEADUSED

### EVS-EN ISO 10273:2017

#### Microbiology of the food chain - Horizontal method for the detection of pathogenic Yersinia enterocolitica (ISO 10273:2017)

ISO 10273:2017 specifies a horizontal method for the detection of *Y. enterocolitica* associated with human disease. It is applicable to - products intended for human consumption and the feeding of animals, and - environmental samples in the area of food production and food handling.

Keel: en

Alusdokumendid: ISO 10273:2017; EN ISO 10273:2017

Asendab dokumenti: EVS-EN ISO 10273:2004

### EVS-EN ISO 16654:2003/A1:2017

#### Microbiology of food and animal feeding stuffs - Horizontal method for the detection of *Escherichia coli* O157 - Amendment 1: Annex B: Result of interlaboratory studies (ISO 16654:2001/Amd 1:2017)

Amendment 1 for EN ISO 16654:2001

Keel: en

Alusdokumendid: ISO 16654:2001/Amd 1:2017; EN ISO 16654:2001/A1:2017

Muudab dokumenti: EVS-EN ISO 16654:2003

### EVS-EN ISO 22964:2017

#### Microbiology of the food chain - Horizontal method for the detection of *Cronobacter* spp. (ISO 22964:2017)

ISO 22964:2017 specifies a horizontal method for the detection of *Cronobacter* spp. Subject to the limitations discussed in the introduction, this document is applicable to - food products and ingredients intended for human consumption and the feeding of animals, and - environmental samples in the area of food production and food handling.

Keel: en

## 13 KESKKONNA- JA TERVISEKAITSE. OHUTUS

### EVS-EN 61800-5-2:2017

#### Reguleeritava kiirusega elektriajamisüsteemid. Osa 5-2: Ohutusnõuded. Funktsionaalsus Adjustable speed electrical power drive systems - Part 5-2: Safety requirements - Functional

IEC 61800-5-2:2016 specifies requirements and makes recommendations for the design and development, integration and validation of safety related power drive systems (PDS(SR)) in terms of their functional safety considerations. It applies to adjustable speed electrical power drive systems covered by the other parts of the IEC 61800 series of standards as referred in IEC 61800-2. IEC 61800-5-2, which is a product standard, sets out safety-related considerations of PDS(SR)s in terms of the framework of IEC 61508, and introduces requirements for PDS(SR)s as subsystems of a safety-related system. It is intended to facilitate the realisation of the electrical/ electronic/programmable electronic (E/E/PE) parts of a PDS(SR) in relation to the safety performance of safety sub-function(s) of a PDS. This edition includes the following significant technical changes with respect to the previous edition: a) rational added in the scope why low demand mode is not covered by this standard, b) definition added for: "category" and "safety function", c) "Other sub-functions" sorted into "Monitoring sub-functions" and "Output functions", d) deleted "proof test" throughout the document because for PDS(SR) a proof test is not applicable, e) replaced the term "safety function" by "safety sub-function" throughout the document, f) Updated references to IEC 61508 series Ed.2010, g) Added the principle rules of ISO 13849-1 and reference to tables of ISO 13849-2, h) 6.1.6 Text replaced by Table 2, i) 6.1.7 Integrated circuits with on-chip redundancy matched to changed requirement in IEC 61508-2: 2010, Annex E, j) 6.2.8 Design requirements for thermal immunity of a PDS(SR) k) 6.2.9 Design requirements for mechanical immunity of a PDS(SR), l) 6.1.6 SIL for multiple safety sub-functions within one PDS(SR), m) 6.1.7 Integrated circuits with on-chip redundancy, n) 6.2.1 Basic and well-tried safety principles, o) 6.2.2.1.4 Diagnostic test interval when the hardware fault tolerance is greater than zero, p) 6.2.5.2.7 PDS(SR) parameterization, q) 9 Test requirements, r) 9.3 Electromagnetic (EM) immunity testing, s) 9.4 Thermal immunity testing, t) 9.5 Mechanical immunity testing, u) Annex A Sequential task table, v) Annex D, D.3.16, Motion and position feedback sensors updated, w) Annex E Electromagnetic immunity (EM) requirement for PDS(SR), x) Annex F Estimation of PFDavg value for low demand with given PFH value.

Keel: en

Alusdokumendid: IEC 61800-5-2:2016; EN 61800-5-2:2017

Asendab dokumenti: EVS-EN 61800-5-2:2007

### EVS-EN ISO 27500:2017

#### The human-centred organization - Rationale and general principles (ISO 27500:2016)

ISO 27500:2016 is intended for executive board members and policy makers of all types of organizations (whether large or small) in the private, public and non-profit sectors. It describes the values and beliefs that make an organization human-centred, the significant business benefits that can be achieved, and explains the risks for the organization of not being human-centred. It provides recommendations for the policies that executive board members need to implement to achieve this. It sets out high-level human-centred principles for executive board members to endorse in order to optimize performance, minimize risks to organizations and individuals, maximize well-being in their organization, and enhance their relationships with the customers. The importance of organizational policy to address human-centredness is emphasized. ISO 27500:2016 is not a management system standard. It is not intended or appropriate for certification purposes or regulatory or contractual use. ISO 27500:2016 is not intended to prevent the development of national standards that are more specific or demanding.

Keel: en

Alusdokumendid: ISO 27500:2016; EN ISO 27500:2017

## 17 METROLOOGIA JA MÖÖTMINE. FÜÜSIKALISED NÄHTUSED

### EVS-EN 60051-1:2017

#### Otsetoimelised elektrilised analoog-näitmõõteriistad ja nende lisatarvikud. Osa 1: Määratlused ja kõigi osade ühtsed üldnõuded. Ettepanav horisontaalstandard

#### Direct acting indicating analogue electrical measuring instruments and their accessories - Part 1: Definitions and general requirements common to all parts

IEC 60051-1:2016 specifies definitions and general requirements for direct acting indicating analogue electrical measuring instruments and their accessories. This sixth edition cancels and replaces the fifth edition published in 1997. This edition constitutes a technical revision.

Keel: en

Alusdokumendid: IEC 60051-1:2016; EN 60051-1:2017

Asendab dokumenti: EVS-EN 60051-1:2001

### EVS-EN ISO 11819-2:2017

#### Acoustics - Measurement of the influence of road surfaces on traffic noise - Part 2: The close-proximity method (ISO 11819-2:2017)

ISO 11819-2:2017 specifies a method of evaluating different road surfaces with respect to their influence on traffic noise, under conditions when tyre/road noise dominates. The interpretation of the results applies to free-flowing traffic travelling on essentially level roads at constant speeds of 40 km/h and upwards, in which cases tyre/road noise is assumed to dominate (although in some countries it is possible that tyre/road noise does not dominate at 40 km/h when the proportion of heavy vehicles is high). For other driving conditions where traffic is not free-flowing, such as at junctions or under heavy acceleration, and where the traffic is

congested, the influence of the road surface on noise emission is more complex. This is also the case for roads with high longitudinal gradients and a high proportion of heavy vehicles. A standard method for comparing noise characteristics of road surfaces gives road and environment authorities a tool for establishing common practices or limits as to the use of surfacings meeting certain noise criteria. However, it is not within the scope of this document to suggest such criteria. ISO 11819-1 defines another method: the statistical pass-by (SPB) method. The close-proximity (CPX) method specified in the present document has the same main objectives as the SPB method, but is intended to be used specifically in applications that are complementary to it, such as: - noise characterization of road surfaces at almost any arbitrary site, with the main purpose of checking compliance with a surface specification (an example for conformity of production is suggested in Reference [1]); - checking the acoustic effect of maintenance and condition, e.g. wear of and damage to surfaces, as well as clogging and the effect of cleaning of porous surfaces; - checking the longitudinal and lateral homogeneity of a road section; - the development of quieter road surfaces and research on tyre/road interaction. NOTE This document does not describe the conditions of application for formal purposes of the measurement with the CPX method. Such conditions may be defined in other standards or legal texts. However, suggestions for the applicability of ISO 11819-1 and this document are provided in Annex D. Measurements with the CPX method are faster and more practical than with the SPB method, but are more limited in the sense that it is relevant only in cases where tyre/road noise dominates and power unit noise can be neglected. Furthermore, it cannot take heavy vehicle tyre/road noise into account as fully as the SPB method can, since it uses a light truck tyre as a proxy for heavy vehicle tyres and does not take power unit noise into account. The CPX method specified in this document is intended to measure the properties of road surfaces, not the properties of tyres. If the method is used for research purposes, to provide an indication of differences between tyres, the loads and inflations would normally be adjusted to other values than specified in this document.

Keel: en

Alusdokumendid: ISO 11819-2:2017; EN ISO 11819-2:2017

## 19 KATSETAMINE

### EVS-EN 61010-2-020:2017

**Ohutusnõuded elektrilistele mõõtmis-, juhtimis- ja laboratooriumiseadmetele. Osa 2-020:**

**Erinõuded laboratoorsetele tsentrifuuigidele**

**Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-020: Particular requirements for laboratory centrifuges**

IEC 61010-2-020:2016 is applicable to electrically powered LABORATORY CENTRIFUGES. This third edition cancels and replaces the second edition published in 2006. It constitutes a technical revision and includes the following significant changes from the second edition: a) This Part 2 is established on the basis of the third edition (2010) of IEC 61010-1. The changes listed in its foreword affect this Part 2, too. b) The language has been updated to reflect current terminology for LABORATORY CENTRIFUGES used in the industry today. It has the status of a group safety publication in accordance with IEC Guide 104. This publication is to be read in conjunction with IEC 61010-1:2010

Keel: en

Alusdokumendid: IEC 61010-2-020:2016; EN 61010-2-020:2017

Asendab dokumenti: EVS-EN 61010-2-020:2006

### EVS-EN ISO 20339:2017

**Non-destructive testing - Equipment for eddy current examination - Array probe characteristics and verification (ISO 20339:2017)**

ISO 20339:2017 identifies the functional characteristics of eddy current array probes and their interconnecting elements and provides methods for their measurement and verification. The evaluation of these characteristics permits a well-defined description and comparability of eddy current array probes. Where relevant, this document gives recommendations for acceptance criteria for the characteristics.

Keel: en

Alusdokumendid: ISO 20339:2017; EN ISO 20339:2017

### EVS-EN ISO 20484:2017

**Non-destructive testing - Leak testing - Vocabulary (ISO 20484:2017)**

ISO 20484:2017 defines the terms used in leak testing.

Keel: en

Alusdokumendid: ISO 20484:2017; EN ISO 20484:2017

Asendab dokumenti: EVS-EN 1330-8:1999

## 23 ÜLDKASUTATAVAD HÜDRO- JA PNEUMOSÜSTEEMID JA NENDE OSAD

### EVS-EN 13480-4:2016/A4:2017

**Metallist tööstutorustik. Osa 4: Valmistamine ja paigaldamine**

**Metallic industrial piping - Part 4: Fabrication and installation**

This Part of this European standard EN 13480 describes the requirements for fabrication and installation of piping systems, including supports, designed in accordance with EN 13480-3.

Keel: en

Alusdokumendid: EN 13480-4:2012/A4:2017

Muudab dokumenti: EVS-EN 13480-4:2016

## **EVS-EN 752:2017**

### **Drain and sewer systems outside buildings - Sewer system management**

This European Standard specifies the objectives for drain and sewer systems outside buildings. It specifies the functional requirements for achieving these objectives and the principles for strategic and policy activities relating to planning, design, installation, operation, maintenance and rehabilitation. It is applicable to drain and sewer systems from the point where wastewater leaves a building, roof drainage system, or paved area, to the point where it is discharged into a wastewater treatment plant or receiving water body. Drains and sewers below buildings are included provided that they do not form part of the drainage system for the building.

Keel: en

Alusdokumendid: EN 752:2017

Asendab dokumenti: EVS-EN 752:2008

## **EVS-EN ISO 10297:2014/A1:2017**

### **Gas cylinders - Cylinder valves - Specification and type testing - Amendment 1: Pressure drums and tubes (ISO 10297:2014/Amd 1:2017)**

Amendment for EN ISO 10297:2014

Keel: en

Alusdokumendid: ISO 10297:2014/Amd 1:2017; EN ISO 10297:2014/A1:2017

Muudab dokumenti: EVS-EN ISO 10297:2014

## **EVS-EN ISO 11114-4:2017**

### **Transportable gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 4: Test methods for selecting steels resistant to hydrogen embrittlement (ISO 11114-4:2017)**

ISO 11114-4: 2017 specifies test methods and the evaluation of results from these tests in order to qualify steels suitable for use in the manufacture of gas cylinders (up to 3 000 l) for hydrogen and hydrogen bearing embrittling gases. This document only applies to seamless steel gas cylinders. The requirements of this document are not applicable if at least one of the following conditions for the intended gas service is fulfilled: - the working pressure of the filled embrittling gas is less than 20 % of the test pressure of the cylinder; - the partial pressure of the filled embrittling gas of a gas mixture is less than 5 MPa (50 bar) in the case of hydrogen and other embrittling gases, with the exception of hydrogen sulphide and methyl mercaptan; in such cases, the partial pressure shall not exceed 0,25 MPa (2,5 bar). NOTE In such cases, it is possible to design the cylinder as for ordinary (non-embrittling) gases.

Keel: en

Alusdokumendid: ISO 11114-4:2017; EN ISO 11114-4:2017

Asendab dokumenti: EVS-EN ISO 11114-4:2005

## **EVS-EN ISO 5210:2017**

### **Industrial valves - Multi-turn valve actuator attachments (ISO 5210:2017)**

ISO 5210:2017 specifies the requirements for the attachment of multi-turn actuators to valves. Throughout this document, "actuator" may be understood as "actuator and/or gearbox" providing a multi-turn and/or linear output. ISO 5210:2017 specifies:  
- flange dimensions necessary for the attachment of actuators to industrial valves [see Figure 1 a)] or to intermediate supports [see Figure 1 b)]; - those driving component dimensions of actuators which are necessary to attach them to the driven components;  
- reference values for torque and thrust for flanges having the dimensions specified in this document.

Keel: en

Alusdokumendid: ISO 5210:2017; EN ISO 5210:2017

Asendab dokumenti: EVS-EN ISO 5210:1999

## **EVS-EN ISO 5211:2017**

### **Industrial valves - Part-turn actuator attachments (ISO 5211:2017)**

ISO 5211:2017 specifies requirements for the attachment of part-turn actuators, with or without gearboxes, to industrial valves. The attachment of part-turn actuators to control valves in accordance with the requirements of this document is subject to an agreement between the supplier and the purchaser. ISO 5211:2017 specifies: - flange dimensions necessary for the attachment of part-turn actuators to industrial valves [see Figures 1 a) and 1 c)] or to intermediate supports [see Figures 1 b) and 1 d)]; - driving component dimensions of part-turn actuators necessary to attach them to the driven components; - reference values for torques for interfaces and for couplings having the dimensions specified in this document. The attachment of the intermediate support to the valve is out of the scope of this document.

Keel: en

Alusdokumendid: ISO 5211:2017; EN ISO 5211:2017

Asendab dokumenti: EVS-EN ISO 5211:2001

## 25 TOOTMISTEHOOLIOOGIA

### EVS-EN ISO 14232-1:2017

#### Thermal spraying - Powders - Part 1: Characterization and technical supply conditions (ISO 14232-1:2017)

ISO 14232-1:2017 specifies measuring methods for the characterization of powders and their technical supply conditions. It is applicable to powders that are used in thermal spraying on the basis of their physical and chemical properties.

Keel: en

Alusdokumendid: ISO 14232-1:2017; EN ISO 14232-1:2017

Asendab dokumenti: EVS-EN 1274:2005

### EVS-EN ISO 14343:2017

#### Welding consumables - Wire electrodes, strip electrodes, wires and rods for arc welding of stainless and heat resisting steels - Classification (ISO 14343:2017)

ISO 14343:2017 specifies requirements for classification of wire electrodes, strip electrodes, wires and rods for gas-shielded metal arc welding, gas tungsten arc welding, plasma arc welding, submerged arc welding, electroslag welding and laser beam welding of stainless and heat-resisting steels. The classification of the wire electrodes, strip electrodes, wires and rods is based upon their chemical composition. This document is a combined specification providing for classification utilizing a system based upon nominal composition (system A), or utilizing a system based upon alloy type (system B). a) Paragraphs which carry the label "classification according to nominal composition" and the suffix letter "A", or "ISO 14343-A", are applicable only to products classified according to system A; b) Paragraphs which carry the label "classification according to alloy type" and the suffix letter "B", or "ISO 14343-B", are applicable only to products classified according to system B. c) Paragraphs which carry neither label nor suffix letter are applicable to products that can be classified according to either system A or B or both.

Keel: en

Alusdokumendid: ISO 14343:2017; EN ISO 14343:2017

Asendab dokumenti: EVS-EN ISO 14343:2010

## 27 ELEKTRI- JA SOOJUSENERGEETIKA

### CEN/TR 15316-6-6:2017

#### Energy performance of buildings - Method for calculation of system energy performance and system efficiencies - Part 6-6: Explanation and justification of EN 15316-4-3, Module M3-8-3, M8-8-3

This Technical Report refers to EN 15316 4 3, Modules 3-8 and 8-8. It contains information to support the correct understanding, use and national adaptation of EN 15316 4 3. This Technical Report does not contain any normative provision.

Keel: en

Alusdokumendid: CEN/TR 15316-6-6:2017

### CEN/TR 15316-6-9:2017

#### Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 6-9: Explanation and justification of EN 15316-4-8, Module M3-8-8

This Technical Report refers to EN 15316-4-8:2017, module M3-8-8. It contains information to support the correct understanding, use and national adaptation of EN 15316-4-8:2017. This Technical Report does not contain any normative provision. The scope of EN 15316-4-8:2017 includes three categories of products: - air heating systems means a system with one or more warm air generators for heating purpose. The hot air may be diffused in the installation space from the generator or distributed via a ductwork. - overhead radiant heating systems, means systems using gas and designed to provide heat into the installation room. Radiation may be generated directly by the flame (overhead radiant luminous heaters) or by circulation of flue gas in a ductwork installed near the ceiling (overhead radiant tube heaters). - stoves and local heaters means local devices that provide heat by transferring the heat generated by combustion into the surrounding environment. The typical devices are shown in Figures 1 to 4. (...)

Keel: en

Alusdokumendid: CEN/TR 15316-6-9:2017

### EVS-EN 15316-4-3:2017

#### Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-3: Heat generation systems, thermal solar and photovoltaic systems, Module M3-8-3, M8-8-3, M11-8-3

This European Standard specifies the: - required inputs; - calculation method; - required and resulting outputs, for heat generation systems, thermal solar systems (for space heating, domestic hot water production and the combination of both) and for photovoltaic systems applied in buildings. Within this standard, 6 methods are specified each method has its own range of applicability. - Method 1, is applicable for solar domestic hot water systems characterized by the EN 12976 series (factory made) or EN 12977-2 (custom built). The main output of the method is the solar heat and back up heat contribution to the requested heat use. - Method 2, is applicable for systems for domestic hot water and / or space heating with components characterized by EN ISO 9806 and EN 12977-3 or EN 12977-4 with a monthly calculation time step. The main output of the method is the solar heat and back up heat contribution to the requested heat use. - Method 3, is applicable for systems for domestic hot water and / or

space heating with components characterized by EN ISO 9806 with an hourly calculation time step. The main output of the method is collector loop heat supplied to the heat storage. - Method 4, is applicable for photovoltaic systems with components characterized by standards and with an annual calculation time step. The output of the method is the produced electricity. - Method 5, is applicable for photovoltaic systems with components characterized by standards and with a monthly calculation time step. The output of the method is the produced electricity. - Method 6, is applicable for photovoltaic systems with components characterized by standards and with a calculation time step. The output of the method is the produced electricity. These three last calculation methods do not take into account: - electrical storage; - PV/thermal photovoltaic systems. Primary energy savings and CO<sub>2</sub> savings, which can be achieved by photovoltaic systems compared to other systems, are calculated according to EN ISO 52000 1. NOTE 1 Standards linked to the methods are listed in Annex E. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in EN ISO 52000 1. NOTE 2 In CEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 3 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en

Alusdokumendid: EN 15316-4-3:2017

Asendab dokumenti: EVS-EN 15316-4-3:2007

Asendab dokumenti: EVS-EN 15316-4-6:2007

### EVS-EN 61215-1-2:2017

#### **Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-2: Special requirements for testing of thin-film Cadmium Telluride (CdTe) based photovoltaic (PV) modules**

IEC 61215-1-2:2016 lays down requirements for the design qualification and type approval of terrestrial photovoltaic modules suitable for long-term operation in general open-air climates, as defined in IEC 60721-2-1. This document is intended to apply to all thin-film CdTe based terrestrial flat plate modules. As such, it addresses special requirements for testing of this technology supplementing IEC 61215-1:2016 and IEC 61215-2:2016 requirements for testing.

Keel: en

Alusdokumendid: IEC 61215-1-2:2016; EN 61215-1-2:2017

Asendab dokumenti: EVS-EN 61646:2008

### EVS-EN 61215-1-3:2017

#### **Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-3: Special requirements for testing of thin-film amorphous silicon based photovoltaic (PV) modules**

IEC 61215-1-3:2016 lays down requirements for the design qualification and type approval of terrestrial photovoltaic modules suitable for long-term operation in general open-air climates, as defined in IEC 60721-2-1. This document is intended to apply to all thin-film amorphous silicon (a-Si; a-Si/ $\mu$ c-Si) based terrestrial flat plate modules. As such, it addresses special requirements for testing of this technology supplementing IEC 61215-1:2016 and IEC 61215-2:2016 requirements for testing.

Keel: en

Alusdokumendid: IEC 61215-1-3:2016; EN 61215-1-3:2017

Asendab dokumenti: EVS-EN 61646:2008

### EVS-EN 61215-1-4:2017

#### **Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-4: Special requirements for testing of thin-film Cu(In,Ga)(S,Se)2 based photovoltaic (PV) modules**

IEC 61215-1-4:2016 lays down requirements for the design qualification and type approval of terrestrial photovoltaic modules suitable for long-term operation in general open-air climates, as defined in IEC 60721-2-1. This document is intended to apply to all thin-film Cu(In,Ga)(S,Se)2 based terrestrial flat plate modules. As such it addresses special requirements for testing of this technology supplementing IEC 61215-1:2016 and IEC 61215-2:2016 requirements for testing.

Keel: en

Alusdokumendid: IEC 61215-1-4:2016; EN 61215-1-4:2017

Asendab dokumenti: EVS-EN 61646:2008

### EVS-EN 62788-1-6:2017

#### **Measurement procedures for materials used in photovoltaic modules - Part 1-6: Encapsulants - Test methods for determining the degree of cure in Ethylene-Vinyl Acetate**

IEC 62788-1-6:2017 defines the terminology, test equipment, test environment, specimen preparation, test procedures, and test report for measuring the degree of cure of Ethylene-Vinyl Acetate (EVA) encapsulation sheet used in photovoltaic (PV) modules. The differential scanning calorimetry (both residual enthalpy and melt/freeze protocols) and gel content methods are included herein. This procedure can be used by material- or module-manufacturers to verify that the cross-linking additive is present and is active. The procedure can also be used to verify the module manufacturing (lamination) process for the purposes of quality- and process-control. The procedure can also be used to assess the uniformity of the EVA formulation within a roll as well as to compare variation of the EVA formulation from roll to roll.

Keel: en

Alusdokumendid: IEC 62788-1-6:2017; EN 62788-1-6:2017

## EVS-EN 62925:2017

### Concentrator photovoltaic (CPV) modules - Thermal cycling test to differentiate increased thermal fatigue durability

IEC 62108:2016 defines a test sequence that will quickly uncover CPV module failures that have been associated with field exposure to thermal cycling for many years. This document was specifically developed to relate to thermal fatigue failure of the HCPV die-attach, however, it also applies, to some extent, to all thermal fatigue related failure mechanisms for the assemblies submitted to test.

Keel: en

Alusdokumendid: IEC 62925:2016; EN 62925:2017

## 29 ELEKTROTEHNIKA

### EVS-EN 50341-2-9:2017

### Overhead electrical lines exceeding AC 1 kV - Part 2-9: National Normative Aspects (NNA) for Great Britain and Northern Ireland (based on EN 50341-1:2012)

This NNA is only applicable to all new overhead lines above A.C. 1kV. This Euronorm is only applicable to new overhead lines and shall not be applied to maintenance, reconductoring, tee-offs, extensions or diversions to existing overhead lines unless specifically required by the Project Specification. For details of the application of this standard for overhead lines constructed with covered conductor refer to the Project Specification. For details of the application of this standard to telecommunication systems involving optical fibres either incorporated in or wrapped around earthwires or conductors or suspended from overhead line supports, reference should be made to the Project Specification.

Keel: en

Alusdokumendid: EN 50341-2-9:2017

Asendab dokumenti: EVS-EN 50341-2-9:2016

### EVS-EN 60623:2017

### Secondary cells and batteries containing alkaline or other non-acid electrolytes - Vented nickel-cadmium prismatic rechargeable single cells

IEC 60623:2017 specifies marking, designation, dimensions, tests and requirements for vented nickel-cadmium prismatic secondary single cells. When there exists an IEC standard specifying test conditions and requirements for cells used in special applications and which is in conflict with this document, the former takes precedence. This edition includes the following significant technical changes with respect to the previous edition: - optional characterization of cells designed for performances at very low and/or very high temperature; - optional characterization of cells tested with CCCV charge; - optional characterization of cells designed for rapid charge; - optional characterization of cells designed for high cycling.

Keel: en

Alusdokumendid: IEC 60623:2017; EN 60623:2017

Asendab dokumenti: EVS-EN 60623:2002

### EVS-EN 60838-1:2017

### Mitmesugused lambipesad. Osa 1: Üldnõuded ja katsetused Miscellaneous lampholders - Part 1: General requirements and tests

IEC 60838-1:2016 applies to lampholders of miscellaneous types intended for building-in (to be used with general purpose light sources, projection lamps, floodlighting lamps and street-lighting lamps with caps as listed in Annex A) and the methods of test to be used in determining the safe use of lamps in lampholders. This fifth edition cancels and replaces the fourth edition published in 2004, Amendment 1:2008 and Amendment 2:2011. This edition constitutes a technical revision. The significant technical changes in this edition with respect to the previous edition include the introduction of new or revised requirements for single and dual contact ignition voltages, steel test caps and brass test caps and an Annex E listing amended requirements/clauses which require products to be retested.

Keel: en

Alusdokumendid: IEC 60838-1:2016; EN 60838-1:2017

Asendab dokumenti: EVS-EN 60838-1:2004

Asendab dokumenti: EVS-EN 60838-1:2004/A1:2008

Asendab dokumenti: EVS-EN 60838-1:2004/A2:2011

### EVS-EN 60838-2-3:2017

### Mitmesugused lambipesad. Osa 2-3: Erinõuded. Lambipesad kahesoklilistele sirg-leedlampidele Miscellaneous lampholders - Part 2-3: Particular requirements - Lampholders for double-capped linear LED lamps

IEC 60838-2-3:2016 applies to lampholders for double-capped linear LED lamps intended for building-in (to be used for general lighting service and with caps as listed in Annex A). Lampholders within the scope of this standard do not include heat management. Double-capped linear LED lamps can also be used with lampholders originally been designated for other technologies. The requirements for these lampholders are covered by separate standards. This publication is to be read in conjunction with IEC 60838-1:2004.

Keel: en

### **EVS-EN 61347-2-13:2014/A1:2017**

**Lampide juhtimisseadised. Osa 2-13: Erinõuded valgusdioodmoodulite alalis- või vahelduvvoolutoitelistele juhtimisseadistele**

**Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules**

This part of IEC 61347 specifies particular safety requirements for electronic controlgear for use on d.c. supplies up to 250 V and a.c. supplies up to 1 000 V at 50 Hz or 60 Hz and at an output frequency which can deviate from the supply frequency, associated with LED modules.

Keel: en

Alusdokumendid: IEC 61347-2-13:2014/A1:2016; EN 61347-2-13:2014/A1:2017

Muudab dokumenti: EVS-EN 61347-2-13:2014

### **EVS-EN 61347-2-3:2011/A1:2017**

**Lampide juhtimisseadised. Osa 2-3: Erinõuded lumenoofoorlampide vahelduvvoolu- ja/või alalisvoolutoitega elektron-juhtimisseadistele**

**Lamp control gear - Part 2-3: Particular requirements for a.c. and/or d.c. supplied electronic control gear for fluorescent lamps**

IEC 61347-2-3:2011 specifies particular safety requirements for electronic control gear for use on a.c. and d.c. supplies up to 1 000 V at 50 Hz or 60 Hz with operating frequencies deviating from the supply frequency, associated with fluorescent lamps as specified in IEC 60081 and IEC 60901, and other fluorescent lamps for high-frequency operation. This second edition cancels and replaces the first edition published in 2000, its Amendment 1 (2004) and its Amendment 2 (2006), IEC 61347-2-4 published in 2000, IEC 61347-2-5 published in 2000 and IEC 61347-2-6 published in 2000. This second edition constitutes a technical revision. The significant revisions with respect to the first edition are: - rectifying test conditions when dimming; - construction requirements; - measurement circuits and limits for HF leakage currents; - modification of the structure to become a standard exclusively for a.c. and d.c. central supplied electronic control gear for general lighting and Annex J cover centrally-supplied emergency control gear. This publication is to be read in conjunction with IEC 61347-1:2007. The contents of the corrigendum of September 2011 have been included in this copy.

Keel: en

Alusdokumendid: IEC 61347-2-3:2011/A1:2016; EN 61347-2-3:2011/A1:2017

Muudab dokumenti: EVS-EN 61347-2-3:2011

### **EVS-EN 61800-5-1:2007/A1:2017**

**Reguleeritava kiirusega elektriajamisüsteemid. Osa 5-1: Ohutusnõuded. Elektrilised, soojuslikud ja energеetilised nõuded**

**Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy**

Muudatus standardile EN 61800-5-1:2007

Keel: en

Alusdokumendid: IEC 61800-5-1:2007/A1:2016; EN 61800-5-1:2007/A1:2017

Muudab dokumenti: EVS-EN 61800-5-1:2007

### **EVS-EN 61800-5-2:2017**

**Reguleeritava kiirusega elektriajamisüsteemid. Osa 5-2: Ohutusnõuded. Funktsionaalsus**

**Adjustable speed electrical power drive systems - Part 5-2: Safety requirements - Functional**

IEC 61800-5-2:2016 specifies requirements and makes recommendations for the design and development, integration and validation of safety related power drive systems (PDS(SR)) in terms of their functional safety considerations. It applies to adjustable speed electrical power drive systems covered by the other parts of the IEC 61800 series of standards as referred in IEC 61800-2. IEC 61800-5-2, which is a product standard, sets out safety-related considerations of PDS(SR)s in terms of the framework of IEC 61508, and introduces requirements for PDS(SR)s as subsystems of a safety-related system. It is intended to facilitate the realisation of the electrical/ electronic/programmable electronic (E/E/PE) parts of a PDS(SR) in relation to the safety performance of safety sub-function(s) of a PDS. This edition includes the following significant technical changes with respect to the previous edition: a) rational added in the scope why low demand mode is not covered by this standard, b) definition added for: "category" and "safety function", c) "Other sub-functions" sorted into "Monitoring sub-functions" and "Output functions", d) deleted "proof test" throughout the document because for PDS(SR) a proof test is not applicable, e) replaced the term "safety function" by "safety sub-function" throughout the document, f) Updated references to IEC 61508 series Ed.2010, g) Added the principle rules of ISO 13849-1 and reference to tables of ISO 13849-2, h) 6.1.6 Text replaced by Table 2, i) 6.1.7 Integrated circuits with on-chip redundancy matched to changed requirement in IEC 61508-2: 2010, Annex E, j) 6.2.8 Design requirements for thermal immunity of a PDS(SR) k) 6.2.9 Design requirements for mechanical immunity of a PDS(SR), l) 6.1.6 SIL for multiple safety sub-functions within one PDS(SR), m) 6.1.7 Integrated circuits with on-chip redundancy, n) 6.2.1 Basic and well-tried safety principles, o) 6.2.2.1.4 Diagnostic test interval when the hardware fault tolerance is greater than zero, p) 6.2.5.2.7 PDS(SR) parameterization, q) 9 Test requirements, r) 9.3 Electromagnetic (EM) immunity testing, s) 9.4 Thermal immunity testing, t) 9.5 Mechanical immunity testing, u) Annex A Sequential task table, v) Annex D, D.3.16, Motion and position feedback sensors updated, w) Annex E Electromagnetic immunity (EM) requirement for PDS(SR), x) Annex F Estimation of PFDAvg value for low demand with given PFH value.

Keel: en  
Alusdokumendid: IEC 61800-5-2:2016; EN 61800-5-2:2017  
Asendab dokumenti: EVS-EN 61800-5-2:2007

### **EVS-EN 62196-2:2017**

**Pistikud, pistikupesad, sõiduki-pistikühendused ja sõidukisisandid. Elektrisõidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

IEC 62196-2:2016 applies to plugs, socket-outlets, vehicle connectors and vehicle inlets with pins and contact-tubes of standardized configurations, herein referred to as accessories. They have a nominal rated operating voltage not exceeding 480 V a.c., 50 Hz to 60 Hz, and a rated current not exceeding 63 A three-phase or 70 A single phase, for use in conductive charging of electric vehicles. This second edition cancels and replaces the first edition published in 2011 and constitutes a technical revision. This second edition includes the following significant technical changes with respect to the previous edition. a) Standard sheets for configurations type 2 and type 3 have been updated. b) Configuration type 2 is now available with optional shutter. This publication is to be read in conjunction with IEC 62196-1:2014.

Keel: en  
Alusdokumendid: IEC 62196-2:2016; EN 62196-2:2017  
Asendab dokumenti: EVS-EN 62196-2:2012  
Asendab dokumenti: EVS-EN 62196-2:2012/A11:2013  
Asendab dokumenti: EVS-EN 62196-2:2012/A12:2014  
Asendab dokumenti: EVS-EN 62196-2:2012/A12:2014/AC:2014

### **EVS-EN 62532:2011/A1:2017**

**Luminofoor-induktsioonlambid. Ohutusjuhised  
Fluorescent induction lamps - Safety specifications**

Muudatus standardile EN 62532:2011

Keel: en  
Alusdokumendid: IEC 62532:2011/A1:2016; EN 62532:2011/A1:2017  
Muudab dokumenti: EVS-EN 62532:2011

### **EVS-EN 63044-1:2017**

**Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 1: General requirements**

IEC 63044-1:2017 applies to all Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) and specifies the general requirements for these systems and products. This document is applicable (but not limited) to - operator stations and other human system interface devices, - devices for management functions, - control devices, automation stations and application specific controllers, - field devices and their interfaces, and - cabling and interconnection of devices used within a dedicated HBES/BACS network. This document provides an overview of the IEC 63044 series. To enable integration of a wide spectrum of applications, the IEC 63044 series covers - electrical safety, - functional safety, - environmental conditions, - EMC requirements, and - installation and cabling rules and topologies. IEC 63044 is a series of product family standards.

Keel: en  
Alusdokumendid: IEC 63044-1:2017; EN 63044-1:2017  
Asendab dokumenti: EVS-EN 50491-1:2014

## **31 ELEKTROONIKA**

### **EVS-EN 62435-1:2017**

**Electronic components - Long-term storage of electronic semiconductor devices - Part 1: General**

IEC 62435-1:2017 on long-term-storage covers the terms, definitions and principles of long-term-storage that can be used in as an obsolescence mitigation strategy. Long-term storage refers to a duration that can be more than 12 months for products scheduled for long duration storage. Philosophy, good working practice, and general means to facilitate the successful long-term-storage of electronic components are also addressed. This standard cancels and replaces IEC/PAS 62435 published in 2005. This first edition constitutes a technical revision.

Keel: en  
Alusdokumendid: IEC 62435-1:2017; EN 62435-1:2017

### **EVS-EN 62435-2:2017**

**Electronic components - Long-term storage of electronic semiconductor devices - Part 2: Deterioration mechanisms**

IEC 62435-2:2017 is related to deterioration mechanisms and is concerned with the way that components degrade over time depending on the storage conditions applied. This part also includes guidance on test methods that may be used to assess generic

deterioration mechanisms. Typically, this part is used in conjunction with IEC 62435-1:2017 for any device long-term storage whose duration may be more than 12 months for product scheduled for long duration storage.

Keel: en

Alusdokumendid: IEC 62435-2:2017; EN 62435-2:2017

### 33 SIDETEHNika

#### EVS-EN 300 328 V2.1.1:2017

**Lairiba edastussüsteemid; 2,4 GHz ISM raadiosagedusalas töötavad andmeedastusseadmed, mis kasutavad lairibamodulatsiooni tehnoloogiat; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU**

The present document applies to Wide Band Data Transmission equipment. The present document also describes spectrum access requirements to facilitate spectrum sharing with other equipment. Wide Band Data Transmission equipment covered by the present document is operated in accordance with the ERC Recommendation 70-03 [i.6], annex 3 or Commission Decision 2006/771/EC [i.7] (and its amendments). This radio equipment is capable of operating in the band provided in table 1. Table 1: Service frequency bands Service frequency bands Transmit 2 400 MHz to 2 483,5 MHz Receive 2 400 MHz to 2 483,5 MHz Equipment using Ultra Wide Band (UWB) technology is not covered by the present document. The present document contains requirements to demonstrate that radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

Keel: en

Alusdokumendid: EN 300 328 V2.1.1

#### EVS-EN 392-7 V3.4.1:2017

**Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 7: Security**

The present document defines the Terrestrial Trunked Radio system (TETRA) supporting Voice plus Data (V+D). It specifies the air interface, the inter-working between TETRA systems and to other systems via gateways, the terminal equipment interface on the mobile station, the connection of line stations to the infrastructure, the security aspects in TETRA networks, the management services offered to the operator, the performance objectives, and the supplementary services that come in addition to the basic and teleservices. The present part describes the security mechanisms in TETRA V+D. It provides mechanisms for confidentiality of control signalling and user speech and data at the air interface, authentication and key management mechanisms for the air interface and for the Inter-System Interface (ISI). Clause 4 describes the authentication and key management mechanisms for the TETRA air interface. The following two authentication services have been specified for the air-interface in ETSI ETR 086-3 [i.3], based on a threat analysis: • authentication of an MS by the TETRA infrastructure; • authentication of the TETRA infrastructure by an MS. Clause 5 describes the mechanisms and protocol for enable and disable of both the mobile station equipment and the mobile station user's subscription. Air interface encryption may be provided as an option in TETRA. Where employed, clause 6 describes the confidentiality mechanisms using encryption on the air interface, for circuit mode speech, circuit mode data, packet data and control information. Clause 6 describes both encryption mechanisms and mobility procedures. It also details the protocol concerning control of encryption at the air interface. The present document does not address the detail handling of protocol errors or any protocol mechanisms when TETRA is operating in a degraded mode. These issues are implementation specific and therefore fall outside the scope of the TETRA standardization effort. The detail description of the Authentication Centre is outside the scope of the present document.

Keel: en

Alusdokumendid: EN 300 392-7 V3.4.1

#### EVS-EN 300 401 V2.1.1:2017

**Radio Broadcasting Systems; Digital Audio Broadcasting (DAB) to mobile, portable and fixed receivers**

The present document establishes a broadcasting standard for the Digital Audio Broadcasting (DAB) system designed for delivery of high-quality digital audio and video programmes and data services for mobile, portable and fixed reception from terrestrial transmitters in the Very High Frequency (VHF) frequency bands as well as for distribution through cable networks. The DAB system is designed to provide spectrum and power efficient techniques in terrestrial transmitter network planning, known as the Single Frequency Network (SFN) and the gap-filling technique. The DAB system meets the required sharing criteria with other radiocommunication services. The present document defines the DAB transmission signal. It includes the coding algorithms for multiplexing of audio and video programmes and data services, channel coding and modulation. Provision is also made for transmission of additional data services which may be programme related or not, within the limit of the total system capacity. The present document provides information on the system configuration which includes information about the ensembles, services, service components and linking of them. The present document describes the nominal characteristics of the emitted DAB signal. The aspects related to the receiver design are outside the scope of the present document.

Keel: en

Alusdokumendid: EN 300 401 V2.1.1

#### EVS-EN 300 422-1 V2.1.2:2017

**Raadiomikrofonid; Audio PMSE kuni 3 GHz; Osa 2: Klass A vastuvõtjad; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

## **Wireless Microphones; Audio PMSE up to 3 GHz; Part 1: Class A Receivers; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU**

The present document covers the minimum characteristics considered necessary in order to make the best use of the available frequency spectrum for audio PMSE and ALDs. The present document specifies the minimum performance requirements and the methods of measurement of Assistive Listening Devices, radio microphones and in-ear monitoring systems. It does not necessarily include all the characteristics that may be required by a user, nor does it necessarily represent the optimum performance achievable. The present document applies to equipment operating on radio frequencies up to 3 GHz (as shown in table 1) using analogue, digital and hybrid (using both analogue and digital) modulation. The maximum power recommended for equipment covered by the present document is 250 mW for radio microphones and 10 mW for ALDs. An exception to this are the Public Hearing Aids defined in the CEPT Report 004 [i.8] and subsequent ECC [i.10] and EC Decisions [i.9] on the ex ERMES band (169,4 MHz to 169,8125 MHz) where 500 mW is defined. The present document also covers radio microphones used in the 863 MHz to 865 MHz band, with a maximum power of 10 mW. Electromagnetic Compatibility (EMC) requirements are covered by ETSI EN 301 489-9 [i.4]. National regulations on: 1) maximum power output; 2) licensing status; will take precedence or those detailed in the latest version of: • EC Decision 2005/928/EC [i.10]; • ECC/DEC/(05)02 [i.11]; • the EC SRD Decision [i.9]; or • CEPT/ERC/REC 70-03 [i.7], annex 10 (see <http://www.erodocdb.dk/>); • EC Decision 2014/641/EU [i.13]. Unless otherwise stated in the EC SRD Decision, ECC Decision or National Interfaces, Radio Microphones can be subject to individual licence. The types of equipment covered by the present document are as follows: • in ear monitoring systems; • radio microphones; • WMAS (Wireless Multichannel Audio Systems); • tour guide systems. Table 1: Radiocommunications service frequency bands Radiocommunications service frequency bands Transmit up to 3 000 MHz Receive up to 3 000 MHz

Keel: en

Alusdokumendid: EN 300 422-1 V2.1.2

### **EVS-EN 300 674-2-2 V2.1.1:2017**

**Transpordi ja liikluse telematika (TTT); Raadiosagedusalas 5795 MHz kuni 5815 MHz töötavad sihtotstarbelise lähitoimeside (DSRC) edastusseadmed (500 kbit/s/250 kbit/s); Osa 2:**

**Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel; Osa 2-2: Pardaseadmed (OBU)**

**Transport and Traffic Telematics (TTT); Dedicated Short Range Communication (DSRC) transmission equipment (500 kbit/s / 250 kbit/s) operating in the 5 795 MHz to 5 815 MHz frequency band; Part 2: Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Sub-part 2: On-Board Units (OBU)**

The present document applies to Transport and Traffic Telematics (TTT) systems: - with a Radio Frequency (RF) output connection and specified antenna or with an integral antenna; - for data transmission only; - operating on radio frequencies in the 5 725 MHz to 5 875 MHz Short Range Devices frequency band. The applicability of the present document covers only the On Board Units (OBU). The present document does not necessarily include all the characteristics which may be required by a user, nor does it necessarily represent the optimum performance achievable. The present document complies with the Commission Implementing Decision 2013/752/EU [1] and CEPT/ERC Recommendation 70-03 [2]. It is a specific standard covering various TTT applications. The present document applies to the following radio equipment types operating in all or in part of the following service frequency bands given in table 1. Table 1: Frequency bands and centre frequencies fTx allocated for DSRC Pan European Service Frequencies National Service Frequencies Channel 1 5,795 GHz to 5,800 GHz, fTx = 5,7975 GHz Channel 2 5,800 GHz to 5,805 GHz, fTx = 5,8025 GHz Channel 3 5,805 GHz to 5,810 GHz, fTx = 5,8075 GHz Channel 4 5,810 GHz to 5,815 GHz, fTx = 5,8125 GHz The present document contains requirements to demonstrate that radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

Keel: en

Alusdokumendid: EN 300 674-2-2 V2.1.1

### **EVS-EN 300 720 V2.1.1:2017**

**Ultrakõrgsagedusel (UHF) töötavad pardasidesüsteemid ja seadmed; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Ultra-High Frequency (UHF) on-board vessels communications systems and equipment; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document specifies the minimum technical characteristics required for UHF on board vessels radio equipment and systems operating on frequencies allocated to the maritime mobile services by the ITU Radio Regulations [i.1]. The present document contains requirements to demonstrate that "... Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference" [i.3]. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Directive 2014/53/EU [i.3] may apply to equipment within the scope of the present Document.

Keel: en

Alusdokumendid: EN 300 720 V2.1.1

### **EVS-EN 301 091-1 V2.1.1:2017**

**Lähitoimeseadmed; Transpordi ja liikluse telematika (TTT); Raadiosagedusvahemikus 76 GHz kuni 77 GHz töötavad radarseadmed; Harmoneeritud standard direktiivi 2014/53/EL artikli 3 lõike 2 põhinõuete alusel: Osa 1: Maapealne sõidukiradar**

## **Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 1: Ground based vehicular radar**

The present document specifies technical characteristics and methods of measurements for radar equipment for ground based vehicle applications in the frequency range from 76 GHz to 77 GHz. It covers integrated transceivers and separate transmit/receive modules. Also the present document specifies the requirements for Short Range Devices (SRD) intended for the use in ground based vehicles. Example applications are: Adaptive Cruise Control (ACC), Collision Warning, Anti-Collision (AC) systems, obstacle detection, Stop and Go, blind spot detection, parking aid, backup aid and other future applications. NOTE 1: The definition of "ground based vehicle" includes but is not limited to passenger cars, busses, trucks, rail engines, ships, aircraft while taxing. NOTE 2: High safety ratings (e.g. Euro NCAP) can only be obtained if such radar based safety applications are installed in a vehicle. NOTE 3: Euro NCAP organizes crash-tests and provides motoring consumers with a realistic and independent assessment of the safety performance of some of the most popular cars sold in Europe. Established in 1997, Euro NCAP is composed of seven European Governments as well as motoring and consumer organizations in every European country. The present document contains the technical characteristics and test methods for ground based vehicle radar equipment fitted with integral antennas operating in the frequency range from 76 GHz to 77 GHz and references CEPT/ERC/ECC Recommendation 70-03 [i.1] and EC DEC 2013/752/EU [i.2]. The present document does not necessarily include all the characteristics which may be required by a user, nor does it necessarily represent the optimum performance achievable. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 303 396 [1], the provisions of the present document take precedence. These radio equipment types are capable of operating in all or part of the frequency bands given in table 1. Table 1: Permitted range of operation [i.2] Permitted range of operation Transmit 76 GHz to 77 GHz Receive 76 GHz to 77 GHz The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU [i.3] under the conditions identified in annex A.

Keel: en

Alusdokumendid: EN 301 091-1 V2.1.1

### **EVS-EN 301 091-2 V2.1.1:2017**

**Lähtoimeseadmed; Transpordi ja liikluse telematika (TTT); Raadiosagedusvahemikus 76 GHz kuni 77 GHz töötavad radarseadmed; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel: Osa 2: Kohtkindla taristu radarseadmed**

**Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 2: Fixed infrastructure radar equipment**

The present document specifies technical characteristics and methods of measurements for radar equipment for fixed infrastructure Transport and Traffic Telematic (TTT) applications in the frequency range from 76 GHz to 77 GHz. It covers integrated transceivers and separate transmit/receive modules. The present document does not necessarily include all the characteristics which may be required by a user, nor does it necessarily represent the optimum performance achievable. These radio equipment types are capable of operating in all or part of the frequency bands given in table 1. Table 1: Permitted range of operation [i.1] Permitted range of operation Transmit 76 GHz to 77 GHz Receive 76 GHz to 77 GHz The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU [i.2] under the conditions identified in annex A. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 303 396 [1], the provisions of the present document take precedence.

Keel: en

Alusdokumendid: EN 301 091-2 V2.1.1

### **EVS-EN 301 489-1 V2.1.1:2017**

**Elektromagnetilise ühilduvuse (EMC) standard raadioseadmetele ja teenustele; Osa 1: Üldised tehnilised nõuded; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) ja direktiivi 2014/30/EL artikli 6 oluliste nõuete alusel**

**ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU**

The present document covers the essential requirements of article 3.1(b) of Directive 2014/53/EU [i.1] and article 6 of Directive 2014/30/EU [i.2] for radio equipment and associated ancillary equipment, excluding broadcast receivers, in respect of ElectroMagnetic Compatibility (EMC). Where the present document is being used to evaluate the EMC performance of "combined radio and non-radio equipment", ETSI EG 203 367 [i.3] provides guidance upon the application of the various harmonised standards, including the present document, that could potentially apply to such equipment. Product dependent arrangements necessary to perform the EMC tests on dedicated types of radio communications equipment, and the assessment of test results, are detailed in the appropriate relevant radio technology parts of ETSI EN 301 489 series [i.13]. The present document, together with the relevant radio technology part, where required, specifies the applicable EMC tests, the methods of measurement, the limits and the performance criteria for radio equipment and associated ancillary equipment. In case of differences (for instance concerning special conditions, definitions, abbreviations) between part 1 of ETSI EN 301 489 series [i.13] and the relevant radio technology part of ETSI EN 301 489 series [i.13], the relevant radio technology part takes precedence. Technical specifications related to the antenna port of radio equipment and radiated emissions from the enclosure port of radio equipment and combinations of radio and associated ancillary equipment are not included in the present document. Such technical specifications are normally found in the relevant product standards for the effective use of the radio spectrum. The environment classification used in the present document refers to the environment classification used in: • CENELEC EN 61000-6-3 [i.4] and CENELEC EN 61000-6-1 [i.5] for the residential, commercial and light industrial environment; or • CENELEC EN 61000-6-2 [i.15] and CENELEC

EN 61000-6-4 [i.14] for the industrial environment; or • ETSI TR 101 651 [i.6] for the telecommunication centre environment; or • ISO 7637-2 [8] for the vehicular environment. The EMC requirements have been selected to ensure an adequate level of compatibility for equipment intended to be used in the environments mentioned above. The levels, however, do not cover extreme cases which may occur in any location but with low probability of occurrence. The present document may not cover those cases where a potential source of interference which is producing individually repeated transient phenomena or a continuous phenomenon is permanently present, e.g. a radar or broadcast site in the near vicinity. In such a case it may be necessary to use special protection applied to either the source of interference or the interfered part or both. Where none of the existing specific relevant radio technology radio parts covers the required conditions for a particular radio equipment/service e.g. in case of the initial introduction of a new radio service or a special application, the present document can be used for the purposes of testing to the EMC requirements set out in the present document. In all cases where a radio product falls within the scope of a specific relevant radio technology radio part of the standard, the relevant radio technology part takes precedence. Compliance of radio equipment to the requirements of the present document does not signify compliance to any requirements related to spectrum management or to the use of the equipment (licensing requirements). Compliance to the requirements of the present document does not signify compliance to any safety requirements. However, it is the responsibility of the assessor of the equipment to record in the test report any observations regarding the test sample becoming dangerous or unsafe as a result of the application of the tests called for in the present document. NOTE 1: The present document does not yet fully address the industrial environment and industrial equipment, including ISM equipment. These will be addressed in a future edition. ETSI 10 ETSI EN 301 489-1 V2.1.1 (2017-02) NOTE 2: The immunity requirements in the present document may not reflect the severity of electromagnetic phenomena present in the industrial locations, in such cases different requirements may be more appropriate, see for example CENELEC EN 61000-6-2 [i.15].

Keel: en

Alusdokumendid: EN 301 489-1 V2.1.1

### **EVS-EN 301 489-15 V2.1.1:2017**

**Elektromagnetilise ühilduvuse (EMC) standard raadioseadmetele ja teenustele; Osa 15: Eritingimused kaubandusest kättesaadavatele amatöör-raadioseadmetele; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) oluliste nõuete alusel**

**ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 15: Specific conditions for commercially available amateur radio equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of the Directive 2014/53/EU**

The present document, together with ETSI EN 301 489-1 [1], covers the assessment of commercially available amateur radio equipment, and associated ancillary equipment, in respect of ElectroMagnetic Compatibility (EMC). Technical specifications related to the antenna port and emissions from the enclosure port of commercially available amateur radio equipment are not included in the present document. Such technical specifications are found in the relevant product standard ETSI EN 301 783 [i.2] for the effective use of the radio spectrum. The present document specifies the applicable EMC tests, the methods of measurement, the limits and the performance criteria for radio equipment intended for use by radio amateurs within the meaning of article 1, definition 53 of the Radio Regulations [i.3] and associated ancillary equipment, which is commercially available. Examples of amateur radio equipment covered by the present document are given in annex B. The provisions of the present document apply to amateur radio equipment manufactured commercially either as ready-to-use equipment, modules, or components having an intrinsic functionality for the customer. The expression "amateur radio equipment" in the context of the present document is taken to mean "commercially available amateur radio equipment" only. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environment classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document. The applicable environments referred to in ETSI EN 301 489-1 [1] where equipment covered by the scope of the present document may be used, are to be declared by the manufacturer.

Keel: en

Alusdokumendid: EN 301 489-15 V2.1.1

### **EVS-EN 301 489-17 V3.1.1:2017**

**Elektromagnetilise ühilduvuse (EMC) standard raadioseadmetele ja teenustele; Eritingimused lairiba andmeedastussüsteemidele; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) oluliste nõuete alusel**

**ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for Broadband Data Transmission Systems; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU**

The present document, together with ETSI EN 301 489-1 [1], specifies technical characteristics and methods of measurements for Broadband Data Transmission System equipment, as detailed in annex B. Technical specifications related to the antenna port and emissions from the enclosure port of the radio equipment are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. The present document specifies the applicable test conditions, performance assessment and performance criteria for wideband data communication systems. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document. The present document covers the essential requirements of article 3.1(b) of Directive 2014/53/EU [i.1] under the conditions identified in annex A.

Keel: en

Alusdokumendid: EN 301 489-17 V3.1.1

## **EVS-EN 301 489-31 V2.1.1:2017**

**Elektromagnetilise ühilduvuse (EMC) standard raadioseadmetele ja teenustele; Osa 31:  
Eritingimused raadiosagedusalas 9 kHz kuni 315 kHz töötavatele väga väikese võimsusega  
aktiivsetele meditsiinilistele implantaatidele (ULP-AMI) ja nende lisatarvikutele (ULP-AMI-P);  
Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) oluliste nõuete alusel  
ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 31:  
Specific conditions for equipment in the 9 kHz to 315 kHz band for Ultra Low Power Active  
Medical Implants (ULP-AMI) and related peripheral devices (ULP-AMI-P); Harmonised Standard  
covering the essential requirements of article 3.1(b) of the Directive 2014/53/EU**

The present document together with ETSI EN 301 489-1 [1] covers the assessment of all radio transceivers associated with inductive Ultra Low Power Active Medical Implant (ULP-AMI) transmitters and receivers operating in the range from 9 kHz to 315 kHz and any associated external radio apparatus (ULP-AMI-Ps) transmitting in the frequency range of 9 kHz to 315 kHz including external programmers and patient related telecommunication devices in respect of ElectroMagnetic Compatibility (EMC). Non-radio parts of the above equipment may be covered by other directives and/or standards when applicable. Technical specifications related to the antenna port and emissions from the enclosure port of the radio systems of these devices are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. The present document specifies the applicable test conditions, performance assessment, and performance criteria for assessment of the radio communications link for ULP-AMI and ULP-AMI-Ps. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environmental classification and the emission and immunity requirements used in the present document are as stated in the ETSI EN 301 489-1 [1], except for any special conditions included in the present document. The present document, together with ETSI EN 301 489-1 [1], contains requirements to demonstrate an adequate level of electromagnetic compatibility as set out in Directive 2014/53/EU [i.1].

Keel: en

Alusdokumendid: EN 301 489-31 V2.1.1

## **EVS-EN 301 489-33 V2.1.1:2017**

**Elektromagnetilise ühilduvuse (EMC) standard raadioseadmetele ja teenustele; Osa 33:  
Eritingimused ultralairiba (UWB) seadmetele; Harmoneeritud standard direktiivi 2014/53/EL  
artikli 3.1(b) oluliste nõuete alusel  
ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 33:  
Specific conditions for Ultra-WideBand (UWB) devices; Harmonised Standard covering the  
essential requirements of article 3.1(b) of Directive 2014/53/EU**

The present document, together with ETSI EN 301 489-1 [1], specifies technical characteristics and methods of measurements for radio devices based on UWB technology in respect of ElectroMagnetic Compatibility (EMC). The present document applies to fixed, mobile or portable UWB devices, e.g.: • stand alone radio equipment with or without its own control provisions; • plug-in radio devices intended for use with, or within, a variety of host systems, e.g. personal computers, hand-held terminals, etc.; • plug-in radio devices intended for use within combined equipment, e.g. cable modems, set-top boxes, access points, etc.; • combined equipment or a combination of a plug-in radio device and a specific type of host equipment; • equipment for use in road and rail vehicles; • ground and wall probing radar equipment; • (tank) level probing radar equipment; • material sensing devices. NOTE: If a system includes transponders, these are measured together with the transmitter and examples of Ultra-WideBand equipment are given in the related harmonised standards of article 3.2 of Directive 2014/53/EU [i.1]. Technical specifications related to the antenna port and emissions from the enclosure port of Ultra-WideBand (UWB) equipment are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. The present document specifies the applicable test conditions, performance assessment and performance criteria for Ultra-WideBand (UWB) equipment and associated ancillary equipment. Examples of Ultra-WideBand equipment are given in the related harmonised standards. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document. The present document covers the essential requirements of article 3.1b of Directive 2014/53/EU [i.1] under the conditions identified in annex A.

Keel: en

Alusdokumendid: EN 301 489-33 V2.1.1

## **EVS-EN 301 489-4 V3.1.1:2017**

**Elektromagnetilise ühilduvuse (EMC) standard raadioseadmetele ja teenustele; Osa 4:  
Eritingimused paiksetele radiolinkidele ja lisaseadmetele; Harmoneeritud standard direktiivi  
2014/53/EL artikli 3.1(b) oluliste nõuete alusel  
ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 4:  
Specific conditions for fixed radio links and ancillary equipment; Harmonised Standard  
covering the essential requirements of article 3.1(b) of Directive 2014/53/EU**

The present document specifies technical characteristics and methods of measurement for Analogue and Digital Fixed Radio Links operating as fixed Point-to-Point, and Point-to-Multipoint systems as defined in annex B, including the associated ancillary equipment. NOTE: Technical specifications related to the antenna port of the radio equipment are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The processing and protection switch,

(de)modulator, transmitter, receiver, RF filters, branching networks, feeders are covered by the present document. The multiplexing and/or de-multiplexing elements are covered if they form part of the transmitter, receiver and/or transceiver. The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document. The present document covers the essential requirements of article 3.1(b) of Directive 2014/53/EU under the conditions identified in annex A.

Keel: en

Alusdokumendid: EN 301 489-4 V3.1.1

### EVS-EN 301 489-5 V2.1.1:2017

**Elektromagnetilise ühilduvuse (EMC) standard raadioseadmetele ja teenustele; Osa 5: Eritingimused ametkondlikule liikuvalle raadiosidesüsteemile (PMR) ja lisaseadmetele (kõne- ja andmeedastus) ja TETRA seadmetele; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) oluliste nõuete alusel**

**ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 5: Specific conditions for Private land Mobile Radio (PMR) and ancillary equipment (speech and non-speech) and Terrestrial Trunked Radio (TETRA) Harmonised Standard covering the essential requirements of article 3.1(b) of the Directive 2014/53/EU**

The present document, together with ETSI EN 301 489-1 [1], covers the assessment of Private land Mobile Radio (PMR) and associated ancillary equipment, in respect of ElectroMagnetic Compatibility (EMC). The present document covers both analogue and digital Private land Mobile Radio (PMR) equipment. Technical specifications related to the antenna port and emissions from the enclosure port of Private land Mobile Radio (PMR) equipment are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. The present document specifies the applicable test conditions, performance assessment and performance criteria for Private land Mobile Radio (PMR) equipment and associated ancillary equipment. Examples of Private Mobile Radio equipment are given in annex B. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document.

Keel: en

Alusdokumendid: EN 301 489-5 V2.1.1

### EVS-EN 301 489-50 V2.1.1:2017

**Raadioseadmete ja raadiosideteenistuste elektromagnetilise ühilduvuse (EMC) standard; Osa 50: Eritingimused kärgside tugijaamale (BS), repiiterile ja lisaseadmetele; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) oluliste nõuete alusel**

**ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 50: Specific conditions for Cellular Communication Base Station (BS), repeater and ancillary equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU**

The present document specifies technical characteristics and methods of measurements for equipment the following equipment types: 1) digital cellular base station equipment; 2) repeaters; 3) associated ancillary equipment. Including individually and combinations of: • UTRA, WCDMA (IMT-2000 Direct Spread, W-CDMA, UMTS) • E-UTRA, LTE (IMT-2000 and IMT advanced) • GSM (IMT-2000 SC, Technology GSM/EDGE) • MSR (IMT-2000 and IMT advanced, combination of technologies above) • OFDMA WMAN (IMT-2000 OFDMA, OFDMA WMAN) • CDMA (CDMA2000 - IMT MC, CDMA2000 1X) Technical specifications related to the antenna port and emissions from the enclosure port of radio equipment (base station (BS), and repeaters) are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. Examples of base station equipment covered by the present document are given in annex A. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document. The present document covers the essential requirements of article 3.1(b) of Directive 2014/53/EU under the conditions identified in annex A. Technical specifications related to the antenna port of radio equipment and radiated emissions from the enclosure port of radio equipment and combinations of radio and associated ancillary equipment are given in the harmonised product standards ETSI EN 301 908-1 [28] or ETSI EN 301 502 [8] for the effective and efficient use of the radio spectrum.

Keel: en

Alusdokumendid: EN 301 489-50 V2.1.1

### EVS-EN 301 489-51 V1.1.1:2017

**Raadioseadmete ja raadiosideteenistuste elektromagnetilise ühilduvuse (EMC) standard; Osa 51: Eritingimused raadiosagedusalades 24,05 GHz kuni 24,25 GHz, 24,05 GHz kuni 24,5 GHz, 76 GHz kuni 77 GHz ja 77 GHz kuni 81 GHz töötavatele maapealsete sõiduki- ja ohutusradaritele; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) oluliste nõuete alusel**

**ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 51: Specific conditions for Automotive, Ground based Vehicles and Surveillance Radar Devices using 24,05 GHz to 24,25 GHz, 24,05 GHz to 24,5 GHz, 76 GHz to 77 GHz and 77 GHz to 81 GHz;**

## **Harmonised Standard covering the essential requirements of article 3.1b of Directive 2014/53/EU**

The present document, together with ETSI EN 301 489-1 [1], covers the assessment of automotive, ground based vehicles and surveillance radar devices using 24,05 GHz to 24,25 GHz, 24,05 GHz to 24,5 GHz, 76 GHz to 77 GHz and 77 GHz to 81 GHz in respect of ElectroMagnetic Compatibility (EMC). Technical specifications related to the antenna port and emissions from the enclosure port of radar equipment are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. The present document specifies the applicable test conditions, performance assessment and performance criteria for automotive and surveillance radar devices and associated ancillary equipment. Automotive and surveillance radar equipments are low power millimetre wave devices that are able to detect and characterize targets in their environment. The following use cases are included (but are not limited to): • automotive Advanced Driver Assistance Systems (ADAS) applications, such as Adaptive Cruise Control (ACC), Blind Spot Detection (BSD), parking aid, backup aid, autonomous braking and pre-crash systems (PCS); • surveillance radars for other kind of ground based vehicles, such as trains, trams, aircrafts while taxiing; • fixed infrastructure radars for traffic monitoring; • railway/road crossings obstacle detection radars; • helicopter obstacle detection radars. Examples of automotive and surveillance radar devices are given in the related harmonised standards. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document.

Keel: en

Alusdokumendid: EN 301 489-51 V1.1.1

### **EVS-EN 301 489-6 V2.1.1:2017**

**Raadioseadmete ja raadiosideteenistuste elektromagnetilise ühilduvuse (EMC) standard; Osa 6: Eritigimused raadiotelefonisüsteemi (DECT) seadmetele; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.1(b) oluliste nõuete aluse**

**ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 6: Specific conditions for Digital Enhanced Cordless Telecommunications (DECT) equipment; Harmonised Standard covering the essential requirements of article 3.1(b) of the Directive 2014/53/EU**

The present document, together with ETSI EN 301 489-1 [1], covers the assessment of Digital Enhanced Cordless Telecommunications (DECT) equipment, and associated ancillary equipment, in respect of ElectroMagnetic Compatibility (EMC). Technical specifications related to the antenna port and emissions from the enclosure port of the radio equipment are not included in the present document. Such technical specifications are found in the relevant product standards for the effective use of the radio spectrum. The present document specifies the applicable test conditions, performance assessment and performance criteria for Digital Enhanced Cordless Telecommunications (DECT) equipment, and associated ancillary equipment. Definitions of types of cordless telecommunications equipment covered by the present document are given in annex B. In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 301 489-1 [1], the provisions of the present document take precedence. The environmental classification and the emission and immunity requirements used in the present document are as stated in ETSI EN 301 489-1 [1], except for any special conditions included in the present document.

Keel: en

Alusdokumendid: EN 301 489-6 V2.1.1

### **EVS-EN 301 908-11 V11.1.2:2017**

**IMT Kärgvõrgud; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel; Osa 11: CDMA otsese hajutamisega (UTRA FDD) repiiterid**

**IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 11: CDMA Direct Spread (UTRA FDD) Repeaters**

The present document applies to the following equipment types: 1) Repeaters for IMT-2000 CDMA Direct Spread (UTRA FDD). This radio equipment type is capable of operating in all or any part of the frequency bands given in table 1-1. Table 1-1: UTRA Repeater operating bands UTRA FDD Band // Direction of transmission // UTRA Repeater operating bands I Downlink 2 110 MHz to 2 170 MHz Uplink 1 920 MHz to 1 980 MHz III Downlink 1 805 MHz to 1 880 MHz Uplink 1 710 MHz to 1 785 MHz VII Downlink 2 620 MHz to 2 690 MHz Uplink 2 500 MHz to 2 570 MHz VIII Downlink 925 MHz to 960 MHz Uplink 880 MHz to 915 MHz XV Downlink 2 600 MHz to 2 620 MHz Uplink 1 900 MHz to 1 920 MHz XVI Downlink 2 585 MHz to 2 600 MHz Uplink 2 010 MHz to 2 025 MHz XX Downlink 791 MHz to 821 MHz Uplink 832 MHz to 862 MHz XXII Downlink 3 510 MHz to 3 590 MHz Uplink 3 410 MHz to 3 490 MHz XXXII (note 1) (note 2) Downlink 1 452 MHz to 1 496 MHz Uplink N/A NOTE 1: The down link frequency(ies) of this band are paired with the uplink frequency(ies) of the other FDD band (external) of the dual band configuration. NOTE 2: Radio equipment in band XXXII is only allowed to operate between 1 452 MHz and 1 492 MHz. The present document covers requirements for UTRA FDD Repeater for Releases 4, 5, 6, 7, 8, 9, 10 and 11. This includes the requirements for Repeater operating bands from 3GPP Release 12. In addition, the present document covers requirements for UTRA Repeater in the operating bands specified in ETSI TS 102 735 [i.9]. The present document contains requirements to demonstrate that Radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

Keel: en

Alusdokumendid: EN 301 908-11 V11.1.2

## EVS-EN 301 908-15 V11.1.2:2017

**IMT kärvõrgud; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel;  
Osa 15: E-UTRA FDD repiiterid**

**IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2  
of Directive 2014/53/EU; Part 15: Evolved Universal Terrestrial Radio Access (E-UTRA FDD)  
Repeaters**

The present document applies to the following equipment types: 1) Repeaters for Evolved Universal Terrestrial Radio Access (E-UTRA) (FDD). This radio equipment type is capable of operating in all or any part of the frequency bands given in table 1-1. Table 1-1: E-UTRA Repeater operating bands E-UTRA FDD band Direction of transmission E-UTRA Repeater operating bands 1 Downlink 2 110 MHz to 2 170 MHz Uplink 1 920 MHz to 1 980 MHz 3 Downlink 1 805 MHz to 1 880 MHz Uplink 1 710 MHz to 1 785 MHz 7 Downlink 2 620 MHz to 2 690 MHz Uplink 2 500 MHz to 2 570 MHz 8 Downlink 925 MHz to 960 MHz Uplink 880 MHz to 915 MHz 20 Downlink 791 MHz to 821 MHz Uplink 832 MHz to 862 MHz 22 Downlink 3 510 MHz to 3 590 MHz Uplink 3 410 MHz to 3 490 MHz 28 Downlink 758 MHz to 803 MHz Uplink 703 MHz to 748 MHz 32 (note 1) (note 2) Downlink 1 452 MHz to 1 496 MHz Uplink N/A NOTE 1: Restricted to E-UTRA operation when carrier aggregation is configured. The downlink operating band is paired with the uplink operating band (external) of the carrier aggregation configuration that is supporting the configured Pcell. NOTE 2: Radio equipment in band XXXII is only allowed to operate between 1 452 MHz and 1 492 MHz. The present document covers requirements for E-UTRA Repeaters for Release 8, 9, 10 and 11. This includes the requirements for E-UTRA Repeater operating bands and E-UTRA CA operating bands from 3GPP Release 12. The present document contains requirements to demonstrate that Radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

Keel: en

Alusdokumendid: EN 301 908-15 V11.1.2

## EVS-EN 301 908-3 V11.1.3:2017

**IMT kärvõrgud; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel;  
Osa 3: CDMA otse hajutamisega (UTRA FDD) baasjaamat (BS)**

**IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2  
of the Directive 2014/53/EU; Part 3: CDMA Direct Spread (UTRA FDD) Base Stations (BS)**

The present document applies to the following equipment types: 1) Stations for IMT 2000 CDMA Direct Spread (UTRA FDD). This radio equipment type is capable of operating in all or any part of the frequency bands given in table 1-1. Table 1-1: UTRA FDD Base Station operating bands UTRA FDD band Direction of transmission UTRA FDD Base Station operating bands I Transmit 2 110 MHz to 2 170 MHz Receive 1 920 MHz to 1 980 MHz III Transmit 1 805 MHz to 1 880 MHz Receive 1 710 MHz to 1 785 MHz VII Transmit 2 620 MHz to 2 690 MHz Receive 2 500 MHz to 2 570 MHz VIII Transmit 925 MHz to 960 MHz Receive 880 MHz to 915 MHz XV Transmit 2 600 MHz to 2 620 MHz Receive 1 900 MHz to 1 920 MHz XVI Transmit 2 585 MHz to 2 600 MHz Receive 2 010 MHz to 2 025 MHz XX Transmit 791 MHz to 821 MHz Receive 832 MHz to 862 MHz XXII Transmit 3 510 MHz to 3 590 MHz Receive 3 410 MHz to 3 490 MHz XXXII (see note) Transmit 1 452 MHz to 1 496 MHz Receive - NOTE: The down link frequenc(ies) of this band are paired with the uplink frequenc(ies) of the other FDD band (external) of the dual band configuration. The present document covers requirements for UTRA FDD Base Stations for 3GPP Releases 99, 4, 5, 6, 7, 8, 9, 10 and 11. This includes the requirements for BS operating bands from 3GPP Release 12. In addition, the present document covers requirements for UTRA FDD Base Stations in the operating bands specified in ETSI TS 102 735 [i.4]. The present document contains requirements to demonstrate that Radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

Keel: en

Alusdokumendid: EN 301 908-3 V11.1.3

## EVS-EN 302 066 V2.1.1:2017

**Lähitoimeseadmed (SRD); Pinnase ja seina sondeerimisradarite rakenduste (GPR/WPR)  
pilditehnika süsteemid; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete  
alusel**

**Short Range Devices (SRD); Ground- and Wall- Probing Radar applications (GPR/WPR)  
imaging systems; Harmonised Standard covering the essential requirements of article 3.2 of  
the Directive 2014/53/EU**

The present document specifies the requirements for Ground- and Wall- Probing Radar imaging systems applications. Ground Probing Radars (GPR) and Wall Probing Radars (WPR) are used in survey and detection applications. The scope is limited to GPR and WPR radars, in which the system is in close proximity to the materials being investigated. It does not include radars operated from aircraft or spacecraft. The GPR/WPR applications in the present document are not intended for communications purposes, and the intended signal is not radiated into free space. NOTE: Equipment covered by the present document is intended to be used by competent professional personnel. The present document applies to: 1) Ground Probing Radars (GPR) operating in the frequency range 30 MHz to 12,4 GHz radiating directly downwards into the ground. 2) Wall Probing Radars (WPR) operating in the frequency range 30 MHz to 12,4 GHz radiating directly into a "wall". The "wall" is a building material structure, the side of a bridge, the wall of a mine or another physical structure that absorbs a significant part of the signal transmitted by the radar. These equipment can either: 1) be fitted with integral antennas and without antenna connector; or 2) use different imaging heads (antennas) with an antenna connector, to allow operation at different operating bandwidths frequencies. Equipment covered by the present document operates in accordance with ECC/DEC(06)08 "ECC Decision of 1 December 2006 on the conditions for use of the radio spectrum by Ground- and Wall- Probing Radar (GPR/WPR) imaging systems" [i.2]. These radio equipment types are capable of operating in all or part of the frequency bands given in table 1. Table 1: Permitted ranges of operation Permitted range of operation Transmit 30 MHz to 12,4 GHz Receive 30 MHz to 12,4 GHz NOTE 1: Limits in table 2, clause 4.3.4 are to be met. NOTE 2: The frequency usage conditions for GPR/WPR are not fully harmonised in the EU and CEPT. Some National

Regulatory Authorities (NRAs) may not have a general frequency allocation for GPR/WPT and may have established individual licensing requirements (e.g. registration of the user). Annex 2 of [i.2] gives some guidance to administrations.

Keel: en

Alusdokumendid: EN 302 066 V2.1.1

### **EVS-EN 302 186 V2.1.1:2017**

**Satelliiside maajaamad ja süsteemid (SES); Sagedusalades 11/12/14 GHz töötavate liikuvate satelliitside öhusöiduki maajaamade (AES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Satellite Earth Stations and Systems (SES); Harmonised Standard for satellite mobile Aircraft Earth Stations (AESs) operating in the 11/12/14 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document specifies certain minimum technical performance requirements of Aircraft Earth Station (AES) equipment with both transmit and receive capabilities for provision of aeronautical mobile satellite service, in the frequency bands given in table 1. Table 1: Frequency bands for the AES equipment specified in the present document Mode of Operation Frequency Band AES transmit 14,00 GHz to 14,50 GHz AES receive 10,70 GHz to 11,70 GHz AES receive 12,50 GHz to 12,75 GHz NOTE: The AESs are operating in one or more frequency ranges of the Fixed and Mobile-Satellite Services. The AES has the following characteristics:

- These AESs are equipment for installation on aircraft.
- The AES could consist of a number of modules from the antenna subsystem to the user interfaces.
- The AES uses linear polarization.
- The AES system uses digital modulation.
- The AES operates through a GSO satellite at least 3° away from any other geostationary satellite operating in the same frequency band and covering the same area.
- The antenna of the AES is directional, with means of tracking the satellites, which can be achieved by using either an active phase array or reflective type configuration.
- These AESs are operating as part of a satellite network used for the distribution and/or exchange of information between users.
- These AESs are controlled and monitored by a Network Control Facility (NCF). The NCF is outside the scope of the present document.
- When on the ground, the AES does not transmit at elevation angles below 70 with respect to the local horizontal plane, except at locations where transmissions below 70 are permitted by the local Administration; (the minimum elevation angle is also limited as per clause 4.2).

The technical requirements in the present document are in two major categories:

- emission limits: to protect other radio services and systems from harmful interference generated by the AES in normal use;
- AES Control and Monitoring Functions (CMF): to protect other radio services and systems from unwanted transmissions from the AES. The CMF in each AES is capable of answering to commands from the Network Control Facility (NCF) for its supporting satellite network.

The present document applies to the AESs with their ancillary equipment and its various ports, and when operated within the boundary limits of the operational environmental profile declared by the manufacturer. The technical requirements for the AES in regard to the Power Flux Density (PFD) limits to protect Fixed Service (FS) and Radio Astronomy Service (RAS) are based on annexes B and C of Recommendation ITU-R M.1643 [5] and ECC Report 26 [i.4]. Furthermore, in relation to the protection of the Fixed Satellite Service (FSS) the technical requirements of the AES take into account annex A of Recommendation ITU-R M.1643 [5]. The present document is intended to cover the provisions of Directive 2014/53/EU [6] (RE Directive) article 3.2, which states that "... radio equipment shall be so constructed that it both effectively and supports the use of radio spectrum allocated in order to avoid harmful interference". ETSI 10 ETSI EN 302 186 V2.1.1 (2016-05) In addition to the present document, other ENs that specify technical requirements in respect of essential requirements of other parts of article 3 of the RE Directive [6] may apply to equipment within the scope of the present document. NOTE: A list of such ENs is included on the web site at: <http://www.newapproach.org>. The present document does not cover equipment compliance with relevant civil aviation regulations. In this respect, an AES, for its installation and operation on board an aircraft is subject to additional national or international civil aviation airworthiness certification requirements, for example to EUROCAE ED-14D [4].

Keel: en

Alusdokumendid: EN 302 186 V2.1.1

### **EVS-EN 302 248 V2.1.1:2017**

**Navigatsiooniradarid SOLAS konventsiooniga hõlmamata laevadel; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Navigation radar for use on non-SOLAS vessels; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to non-SOLAS radar equipment. The applicable frequencies of operation of this type of radio equipment are given in table 1. These frequencies are allocated to the radio navigation service, as defined in article 5 of the ITU Radio Regulations [i.2]. Table 1: Radio navigation service frequencies Radio navigation service frequencies Transmit 2 900 MHz to 3 100 MHz Receive 2 900 MHz to 3 100 MHz Transmit 9 300 MHz to 9 500 MHz Receive 9 300 MHz to 9 500 MHz The present document contains requirements to demonstrate that radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of Article 3 of the of Directive 2014/53/EU [i.1] may apply to equipment within the scope of the present document.

Keel: en

Alusdokumendid: EN 302 248 V2.1.1

### **EVS-EN 302 340 V2.1.1:2017**

**Satelliitside maajaamad ja süsteemid (SES); Sagedusalades 11/12/14 GHz töötavate veesöiduki pardal asuvate maajaamade (AES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Satellite Earth Stations and Systems (SES); Harmonised Standard for satellite Earth Stations on board Vessels (ESVs) operating in the 11/12/14 GHz frequency bands allocated to the Fixed**

## **Satellite Service (FSS) covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to Earth Stations located on board Vessels (ESVs) which have the following characteristics:

- The ESV is comprised of all the equipment, electrical and mechanical, from the antenna itself to the interface with other communications equipment on board (usually referred to as the terrestrial interface).
- The ESV transmits in the frequency range from 14,00 GHz to 14,50 GHz allocated to the Fixed Satellite Services (FSS) (earth-to-space).
- The ESV receives in one or more frequencies within the range from 10,70 GHz to 12,75 GHz in the bands allocated to the Fixed Satellite Services (FSS) (space-to-earth), depending on the ITU Region where the ESV is located.
- The ESV uses linear polarization.
- The ESV operates through a geostationary satellite at least 2° to 3° away from any other geostationary satellite operating in the same frequency band and covering the same area.

NOTE 1: The satellite spacing is mainly equal to 3° in ITU Regions 1 and 3 and 2° in ITU Region 2. The ESV transmits at elevations greater or equal to the minimum elevation angle declared by the applicant.

- The ESV antenna diameter is not smaller than 0,6 m.
- NOTE 2: Operation within 125 km of non-CEPT countries with antenna diameter smaller than 1,2 m may be subject to specific agreement with concerned administrations as stated in ITU-R Resolution 902 (WRC-03).
- The ESV is designed for transmission and reception of radio-communications signals in accordance with any of the frequency bands specified above.
- The ESV is usually designed for unattended operation.
- The ESV is operating as part of a satellite network (e.g. star, mesh or point-to-point) used for the distribution and/or exchange of information between users.
- The ESV is controlled and monitored by a Network Control Facility (NCF). The NCF is outside the scope of the present document.

The present document applies to the ESV with its ancillary equipment and its various telecommunication ports, and when operated within the boundary limits of the operational environmental profile declared by the applicant and when installed as required by the applicant by declaration or in the user documentation.

The present document is intended to cover the provisions of Directive 2014/53/EU [9] (RE Directive) article 3.2, which states that "... radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference". The present document incorporates the technical limitations listed in annex 2 of ITU-R Resolution 902 (WRC-03) [i.2].

NOTE 3: According to ITU-R Resolution 902 (WRC-03), any transmission from ESVs within the 125 km minimum distance of each country where the ESV transmit frequency band is used by the Fixed Service will be subject to the prior agreement of the concerned administration(s) or to the relevant ECC Decision and may specify additional operational requirements. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Directive 2014/53 [9] (RE Directive) may apply to equipment within the scope of the present document.

NOTE 4: A list of such ENs is included on the web site <http://www.newapproach.org/>.

Keel: en

Alusdokumendid: EN 302 340 V2.1.1

## **EVS-EN 302 448 V2.1.1:2017**

**Satelliitside maajaamad ja süsteemid (SES); Raadiosagedusalades 14/12 GHz töötavate rongidel asuvate asukoha jälgimise maajaamade (EST) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Satellite Earth Stations and Systems (SES); Harmonised Standard for tracking Earth Stations on Trains (ESTs) operating in the 14/12 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to Earth Stations located on board Trains, which have the following characteristics. External Mounted Equipment, EME Internal Mounted Equipment, IME On -Train Services Interface Radio Modem Internal CMF Antenna Control Stabilization & Tracking Mechanism Enclosure / Radome Antenna LNB HPA Figure 1: EST System Overview

- The EST may transmit and receive data when the train is in motion and also when the train is stationary.
- The EST operates in a railway environment and, therefore, may be subject to occasional disturbances and interruptions in the satellite link.
- The EST is operating as part of a satellite network (e.g. star, mesh or point-to-point) used for the distribution and/or exchange of information.
- The EST is comprised of all the equipment, electrical and mechanical, from the antenna itself to the interface with other communications equipment on a train (usually referred to as the terrestrial interface).
- The EST transmits on single carrier in the frequency range 14,00 GHz to 14,25 GHz, which is a portion of a band allocated to the Fixed Satellite Services (FSS) (Earth-to-space).
- The EST receives in one or more frequencies within the range from 10,70 GHz to 12,75 GHz in bands allocated to the Fixed Satellite Services (FSS) (space-to-Earth) or the Broadcast Satellite Service (BSS) (space-to-Earth), depending on the ITU Region where the EST is located.
- The EST uses linear or circular polarization.
- The EST is designed to operate through a geostationary satellite (or a cluster of co-located geostationary satellites) that is at least 3° away from any other geostationary satellite operating in the same frequencies and over the same coverage area.
- The EST transmits at elevations greater than or equal to 7° relative to the local horizon.
- The EST is designed for unattended operation.
- The EST is controlled and monitored by a Network Control Facility (NCF). The NCF is outside the scope of the present document.

The present document applies to the EST with its ancillary equipment and its various telecommunication ports, and when operated within the boundary limits of the operational environmental profile as declared by the applicant and when installed as required by the applicant's declaration or in the user documentation.

The present document is intended to cover the provisions of Directive 2014/53/EU [4] (RE Directive) article 3.2, which states that "... radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference".

NOTE 1: Operational requirements are defined by national administrations and by relevant ECC Decisions. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Directive 2014/53 [4] (RE Directive) may apply to equipment within the scope of the present document.

NOTE 2: A list of such ENs is included on the web site <http://www.newapproach.org/>.

Keel: en

Alusdokumendid: EN 302 448 V2.1.1

## **EVS-EN 302 480 V2.1.1:2017**

**Süsteemid mobiilsidele lennuki pardal (MCOBA); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

## **Mobile Communication On Board Aircraft (MCOBA) systems; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to the following equipment types: 1) An Onboard Base Transceiver System (OBTS) supporting GSM, UMTS or LTE communication protocols including specific functions for restricting the transmit power of the MSs or UEs, respectively associated with the OBTS. 2) Network Control Unit (NCU) preventing direct connection of the onboard mobile terminals with mobile networks on the ground by raising the noise floor in the cabin. These Base stations are capable of operating in all or any part of the frequency bands given in table 1-1. Table 1-1: Base station operating bands Band designation Direction of transmission Base Station operating bands UTRA I BS Transmit 2 110 MHz to 2 170 MHz (UMTS) BS Receive 1 920 MHz to 1 980 MHz (UMTS) E-UTRA 3 BS Transmit 1 805 MHz to 1 880 MHz (LTE) BS Receive 1 710 MHz to 1 785 MHz (LTE) DCS 1800 BS Transmit 1 805 MHz to 1 880 MHz (GSM) BS Receive 1 710 MHz to 1 785 MHz (GSM) These NCU is capable of operating in all of the frequency bands given in table 1-2. Table 1-2: NCU operating bands NCU operating bands Comment 460 MHz to 470 MHz 791 MHz to 821 MHz LTE 921 MHz to 960 MHz GSM 1 805 MHz to 1 880 MHz GSM / LTE 2 110 MHz to 2 170 MHz UMTS 2 570 MHz to 2 620 MHz LTE 2 620 MHz to 2 690 MHz LTE It applies to equipment for continuous and discontinuous transmission of data and digital speech. The present document applies only to radio equipment using a dedicated transmitting antenna that is designed as an indispensable part of the system for usage on board an aircraft. The system covered by the present document operates in accordance with the operational requirements as outlined in the Commission Decision 2013/654/EU [i.3]. The present document contain requirements to demonstrate that Radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference. In addition to the present document, other ENs that specific technical requirements in respect of essential requirements under other parts of Article 3 of the Radio Equipment Directive may apply to equipment within the scope of the present document. NOTE: A list of such ENs is included on the web site <http://www.newapproach.org>. The present document does not cover equipment compliance with relevant civil aviation regulations. In this respect, a MCOBA system, for its installation and operation on board an aircraft is subject to additional national or international civil aviation airworthiness certification requirements, for example to EUROCAE ED-14E [i.6].

Keel: en

Alusdokumendid: EN 302 480 V2.1.1

### **EVS-EN 302 480 V2.1.2:2017**

### **Süsteemid mobiilsidele lennuki pardal (MCOBA); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

### **Mobile Communication On Board Aircraft (MCOBA) systems; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU**

The present document applies to the following equipment types: 1) An Onboard Base Transceiver System (OBTS) supporting GSM, UMTS or LTE communication protocols including specific functions for restricting the transmit power of the MSs or UEs, respectively associated with the OBTS. 2) Network Control Unit (NCU) preventing direct connection of the onboard mobile terminals with mobile networks on the ground by raising the noise floor in the cabin. These Base stations are capable of operating in all or any part of the frequency bands given in table 1-1. Table 1-1: Base station operating bands Band designation Direction of transmission Base Station operating bands UTRA I BS Transmit 2 110 MHz to 2 170 MHz (UMTS) BS Receive 1 920 MHz to 1 980 MHz (UMTS) E-UTRA 3 BS Transmit 1 805 MHz to 1 880 MHz (LTE) BS Receive 1 710 MHz to 1 785 MHz (LTE) DCS 1800 BS Transmit 1 805 MHz to 1 880 MHz (GSM) BS Receive 1 710 MHz to 1 785 MHz (GSM) These NCU is capable of operating in all of the frequency bands given in table 1-2. Table 1-2: NCU operating bands NCU operating bands Comment 460 MHz to 470 MHz 791 MHz to 821 MHz LTE 921 MHz to 960 MHz GSM 1 805 MHz to 1 880 MHz GSM / LTE 2 110 MHz to 2 170 MHz UMTS 2 570 MHz to 2 620 MHz LTE 2 620 MHz to 2 690 MHz LTE It applies to equipment for continuous and discontinuous transmission of data and digital speech. The present document applies only to radio equipment using a dedicated transmitting antenna that is designed as an indispensable part of the system for usage on board an aircraft. Within the European Union, the system covered by the present document operates in accordance with the operational requirements as outlined in the Commission Decision 2013/654/EU [i.3]. The present document contain requirements to demonstrate that Radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference. In addition to the present document, other ENs that specific technical requirements in respect of essential requirements under other parts of Article 3 of the Radio Equipment Directive may apply to equipment within the scope of the present document. The present document does not cover equipment compliance with relevant civil aviation regulations. In this respect, a MCOBA system, for its installation and operation on board an aircraft is subject to additional national or international civil aviation airworthiness certification requirements, for example to EUROCAE ED-14G [i.6].

Keel: en

Alusdokumendid: EN 302 480 V2.1.2

### **EVS-EN 302 510 V2.1.1:2017**

### **Lähitoimeseadmed (SRD); Raadiosagedusalas 30 MHz kuni 37,5 MHz töötavad väga väikese võimsusega aktiivsed meditsiinilised membraanimplantaadid (ULP-AMI-M) ja nende välised lisatarvikud (ULP-AMI-M-P); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

### **Short Range Devices (SRD); Ultra Low Power Active Medical Membrane Implants (ULP-AMI-M) and Peripherals (ULP-AMI-M-P) operating in the frequency range 30 MHz to 37,5 MHz; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to Ultra Low Power-Active Medical Membrane Implants and Membrane Implant Peripherals as described in Directive 90/385/EEC [i.4], covering all active medical implants, that operate in a Medical Implant Communications System in the frequency band 30 MHz to 37,5 MHz. Table 1: Ultra Low Power Active Medical Membrane Implants and Peripherals operating in the frequency band 30 MHz to 37,5 MHz Ultra Low Power Active Medical Membrane Implants and Peripherals service frequency bands Transmitters - Ultra Low Power Active Medical Membrane Implants and peripherals 30 MHz to 37,5 MHz

Receivers - Ultra Low Power Active Medical Membrane Implants and peripherals 30 MHz to 37,5 MHz The present document contains the technical requirements for characteristics of ULP-AMI-M and ULP-AMI-M-P radio equipment which are aligned with annex 12 Sub-band (d) of CEPT/ERC Recommendation 70-03 [i.6]. The frequency usage conditions for the band 30 MHz to 37,5 MHz are EU wide harmonised for the SRD category "active medical implant devices" according to 2013/752/EU [i.10] with the following usage restrictions: • "This set of usage conditions is only available to ultra-low power medical membrane implants for blood pressure measurements within the definition of active implantable medical devices in Directive 90/385/EEC." The present document contains requirements to demonstrate that Ultra Low Power Active Medical Membrane Implants and peripherals used in a medical membrane implant communications system "... shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference" (article 3.2 of the Directive 2014/53/EU [i.1]). It does not necessarily include all the characteristics, which may be required by a user, nor does it necessarily represent the optimum performance achievable.

Keel: en

Alusdokumendid: EN 302 510 V2.1.1

### **EVS-EN 302 574-1 V2.1.1:2017**

**Satelliitside maajaamad ja süsteemid (SES); Sagedusalades 1980 MHz kuni 2010 MHz (suunal Maa-kosmos) ja 2170 MHz kuni 2200 MHz (suunal kosmos-Maa) töötavate liikuvate satelliitside maajaamade (MES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel; Osa 1: Komplementaarne maakomponent (CGC) lairibasüsteemidele**  
**Satellite Earth Stations and Systems (SES); Harmonised Standard for Mobile Earth Stations (MES) operating in the 1 980 MHz to 2 010 MHz (earth-to-space) and 2 170 MHz to 2 200 MHz (space-to-earth) frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 1: Complementary Ground Component (CGC) for wideband systems**

The present document applies to Complementary Ground Components (CGC) operating as part of a satellite network. The present document covers two types of CGC: • Conventional CGC: - Clauses 4 and 5 according to ETSI EN 301 908-18 [16] for W\_CDMA - Clauses 8 and 9 according to ETSI EN 301 908-14 [10] for E-UTRA • Aeronautical CGC These Complementary Ground Components (CGC) transmit only to the User Equipment/ Aeronautical Terminal or transmit and receive to/from the User Equipment/ Aeronautical Terminal in the frequency bands allocated to the Mobile Satellite Service (MSS) on a primary basis as defined in table 1. NOTE 1: The CGC may include various types of interfaces, to terrestrial and/or satellite networks, but their specifications are out of the scope of the present document. The present document applies to Complementary Ground Component (CGC) radio equipment type deployed in Mobile Satellite Services systems which have the following characteristics: • These CGCs may have both transmit and receive capabilities and are part of a hybrid Satellite/terrestrial network. • These CGCs operate with an assigned channel signal bandwidth (CBw) of 1 MHz or greater. • The conventional CGCs may be local coverage, medium coverage or wide coverage ground components. • The aeronautical CGCs may transmit/receive toward/from terminal mounted on aircraft (Aeronautical Terminal). • These CGCs may be an element in a multi-mode base station. It may consist of a number of modules with associated connections, or may be a self-contained single unit. If the CGC is an element in a multi-mode base station, unless otherwise stated in the present document, its requirements apply only to the CGC element of the terminal operating in the Mobile Satellite Service (MSS) frequency bands given in table 1. The present document applies to the following terminal equipment types: 1) Complementary Ground Components for Wideband Satellite Systems. This radio equipment type is capable of operating in all or any part of the frequency bands given in table 1. Table 1: Mobile Satellite Service Complementary Ground Component frequency bands Operating band Direction of transmission CGC frequency bands I Transmit 2 170 MHz to 2 200 MHz Receive 1 980 MHz to 2 010 MHz The present document only applies to the radio interface between the conventional CGC and the User Equipment or between aeronautical CGC and Aeronautical Terminal. The present document is intended to cover the provisions of Directive 2014/53/EU [13] (RE Directive) article 3.2 which states, which states that "Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference". NOTE 2: In addition to the unwanted emission limits defined in clauses 4.2.2 and 5.2.2 of the present document, additional operational constraints may be required to prevent harmful interference into services operating in the neighbouring bands outside the operational band defined in table 1. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Directive 2014/53/EU [13] may apply to equipment within the scope of the present document. NOTE 3: A list of such ENs is included on the web site <http://www.newapproach.org>.

Keel: en

Alusdokumendid: EN 302 574-1 V2.1.1

### **EVS-EN 302 574-2 V2.1.1:2017**

**Satelliitside maajaamad ja süsteemid (SES); Sagedusalades 1980 MHz kuni 2010 MHz (suunal Maa-kosmos) ja 2170 MHz kuni 2200 MHz (suunal kosmos-Maa) töötavate liikuvate satelliitside maajaamade (MES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel; Osa 1: Lairibasüsteemide kasutajaseadmed (UE)**  
**Satellite Earth Stations and Systems (SES); Harmonised Standard for Mobile Earth Stations (MES) operating in the 1 980 MHz to 2 010 MHz (earth-to-space) and 2 170 MHz to 2 200 MHz (space-to-earth) frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 2: User Equipment (UE) for wideband systems**

The present document applies to User Equipment (UE) radio equipment type which has the following characteristics: • these UEs have both transmit and receive capabilities and operate in an hybrid Satellite/terrestrial network i.e. a satellite and/or Complementary Ground Component (CGC) network; • the satellite component is based on GSO; • these UEs operate with an assigned channel signal bandwidth (CBw) of 1 MHz or greater; • these UEs may be handset, handheld, portable, vehicle-mounted, aircraft mounted device (in this case the present document refers to Aeronautical Terminal - AT) host connected, semi-fixed or fixed equipment, or may be an element in a multi-mode terminal. It may consist of a number of modules with associated connections and user interface, or may be a self contained single unit; • if the UE is an element in a multi-mode terminal, unless

otherwise stated in the present document, its requirements apply only to the UE element of the terminal operating in the Mobile Satellite Service (MSS) frequency bands given in Table 1; • the present document applies for several class of UEs: - UE for terrestrial use Power Class 1 - clauses 4 and 5; - UE for terrestrial use Power Class 1bis - clauses 4 and 5; - UE for terrestrial use Power Class 2 - clauses 4 and 5; - UE for terrestrial use Power Class 3 - clauses 4 and 5; - UE for aeronautical use (Aeronautical Terminal - AT) - clauses 6 and 7; - UE for terrestrial use (non-aeronautical UE E-UTRA) - clauses 8 and 9; • the Aeronautical Terminals (AT) operates at altitude of 1 000 m and higher above ground level. This radio equipment type is capable of operating in all or any part of the frequency bands given in Table 1. Table 1: Mobile Satellite Service UE frequency bands Operating band Direction of transmission UE frequency bands I Transmit 1 980 MHz to 2 010 MHz Receive 2 170 MHz to 2 200 MHz The present document is intended to cover the provisions of Directive 2014/53/EU [9] (RE Directive) article 3.2, which states that "Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference". NOTE 1: In addition to the unwanted emission limits defined in clauses 4.2.4 and 4.2.5 of the present document, additional operational constraints may be required to prevent harmful interference into services operating in the neighbouring bands outside the operational band defined in Table 1. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the RE Directive [9] may apply to equipment within the scope of the present document. NOTE 2: A list of such ENs is included on the web site <http://www.newapproach.org>.

Keel: en

Alusdokumendid: EN 302 574-2 V2.1.1

### **EVS-EN 302 977 V2.1.1:2017**

**Satelliitside maajaamad ja süsteemid (SES); Raadiosagedusalades 14/12 GHz töötavate liiklusvahenile kinnitatud maajaamade (VMES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Satellite Earth Stations and Systems (SES); Harmonised Standard for Vehicle-Mounted Earth Stations (VMES) operating in the 14/12 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to Earth Stations located on board Vehicles, which have the following characteristics. In-vehicle Services Interface Stabilization & Tracking mechanism Antenna Enclosure / Radome Control and Monitoring Function Antenna Controller Modem External mounted equipment (EME) Internally mounted equipment (IME) Externally or internally mounted equipment LNA BDC HPA BUC Radio Antenna Control Facility Interface Figure 1: VMES System Overview • The VMES may transmit and receive data when the vehicle is in motion and also when the vehicle is stationary. • The VMES operates on wheeled or tracked vehicles and, therefore, may be subject to occasional disturbances and interruptions in the satellite link. • The VMES is operating as part of a satellite network (e.g. star, mesh or point-to-point) used for the distribution and/or exchange of information. • The VMES is comprised of all the equipment, electrical and mechanical, from the antenna itself to the interface with other communications equipment on a vehicle (usually referred to as the terrestrial interface). • The VMES transmits on single carrier in the frequency range 14,00 GHz to 14,50 GHz, which is a band allocated to the Fixed Satellite Services (FSS) (Earth-to-space) among other services. However, operation of the VMES is intended to be restricted to the lower half of the band in and near those countries that have allocated Fixed Service (FS) to the upper half. Local regulation may permit operation in the upper half of the band. NOTE 1: For the purposes of the present specification, OFDM modulation is considered as a single carrier. • The VMES receives in one or more frequencies within the range from 10,70 GHz to 12,75 GHz in bands allocated to the Fixed Satellite Services (FSS) (space-to-Earth) or the Broadcast Satellite Service (BSS) (space-to-Earth), depending on the ITU Region where the VMES is located. • The VMES uses linear or circular polarization. • The VMES is designed to operate through a geostationary satellite (or a cluster of co-located geostationary satellites) that is at least 3° away from any other geostationary satellite operating in the same frequencies and over the same coverage area. NOTE 2: Satellites may be spaced closer than 3°. In such cases, the satellite operator will inform the VMES client of the requirements of the system coordination agreements. • The VMES transmits at elevations greater than or equal to 7° relative to the local horizon. • The VMES is designed for unattended operation. • The VMES is designed for both mobile and stationary operation. In the case of stationary operation, the VMES should not be accessible to the general public and operated safely. • The VMES is controlled and monitored by an Antenna Control Facility (ACF). This function may be performed centrally (e.g. for a network of VMESs with a central hub) or it could be performed within the VMES for autonomous control. The ACF is outside the scope of the present document. The present document applies to the VMES with its ancillary equipment and its various telecommunication ports, and when operated within the boundary limits of the operational environmental profile as declared by the applicant and when installed as required by the applicant's declaration or in the user documentation. The present document is intended to cover the provisions of Directive 2014/53/EU [9] (RE Directive) article 3.2, which states that "... radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference". NOTE 3: Operational requirements are defined by national administrations and by relevant ECC Decisions. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Directive 2014/53/EU [9] (RE Directive) may apply to equipment within the scope of the present document. NOTE 4: A list of such ENs is included on the web site <http://www.newapproach.org/>.

Keel: en

Alusdokumendid: EN 302 977 V2.1.1

### **EVS-EN 303 098 V2.1.1:2017**

**Madala võimsusega töötav isikliku kasutusega asukoha määramise mereseade, mis kasutab automaatset identifitseerimissüsteemi (AIS); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Maritime low power personal locating devices employing AIS; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document lays down the minimum requirements for low power maritime personal locating devices employing AIS. The present document does not cover requirements for the integrated GNSS receiver providing locating function. The present document incorporates the relevant provisions of the International Telecommunication Union (ITU) radio regulations [i.4] included

in Recommendation ITU-R M.1371-5 [1]. For this application, both the radiated power and the length of time of operation are limited to enable the equipment to be sufficiently small and light to be worn comfortably at all times and to limit the operating range to a local area. The present document also specifies technical characteristics, methods of measurement and required test results. The present document contains requirements to demonstrate that "... Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference" [i.1].

Keel: en

Alusdokumendid: EN 303 098 V2.1.1

### **EVS-EN 303 135 V2.1.1:2017**

**Elektromagnetilise ühilduvuse ja raadiospektri küsimused (ERM); Ranniku seire, veesõiduki liikluse teenused ja sadamaradarid (CS/VTS/HR); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Electromagnetic compatibility and Radio spectrum Matters (ERM); Coastal Surveillance, Vessel Traffic Services and Harbour Radars (CS/VTS/HR); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

Surveillance (CS) or Harbour Radar Systems with the following characteristics: • Utilizing modulated or unmodulated pulses. • Transmitter Peak Envelope Power up to 100 kW. • The transceiver-antenna connection is using a hollow metallic rectangular waveguide. • The antenna is rotating, waveguide-based and passive. • At the transceiver output an RF-circulator is used. NOTE 1: Since transceiver and antenna are hollow metallic rectangular waveguide based, the frequency range for measurements that needs to be addressed covers 6,56 GHz to 26 GHz. The lower limit of this frequency range is obtained as cut-off frequency of the combination of WR112/R84 taper section and a WR90/R100 Waveguide as defined by IEC 60153-2 [i.2]. The upper limit corresponds to the upper limit stated in ERC/Recommendation 74-01 [i.4]. Other types of waveguide may be used by the same principles to obtain complete measurement coverage of the frequency range of the output flange of the equipment under test. NOTE 2: Since at the transceiver output an RF circulator is used, it is assumed that the transceiver characteristics remain independent from the antenna. NOTE 3: According to article 5 of the ITU Radio Regulations [i.5] there are a number of bands between 8,5 GHz and 10 GHz that are allocated to Radiolocation service. There are national deviations to the detailed band usages, but the basic spectrum usage regulation is the same. Table 1: Radiolocation service frequency bands [GHz] 8 500 - 8 550 8 550 - 8 650 8 650 - 8 750 8 750 - 8 850 8 850 - 9 000 9 000 - 9 200 9 200 - 9 300 9 300 - 9 500 9 500 - 9 800 9 800 - 9 900 9 900 - 10 000 The present document contains requirements to demonstrate that "...radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference" [i.1]. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Radio Equipment Directive [i.1] may apply to equipment within the scope of the present document.

Keel: en

Alusdokumendid: EN 303 135 V2.1.1

### **EVS-EN 303 213-6-1 V2.1.1:2017**

**Lennuvälja maapealse liikluse juhtimise täiustatud süsteem (A-SMGCS); Osa 6: Harmoneeritud standard direktiivi 2014/53/EL artikli 3 lõike 2 põhinõuete alusel süsteemi juures kasutatava maapealse liikluse seireradarite (SMR) jaoks; Alaosa 1: X-riba impulss-seireseadmed saatjavõimsusega kuni 100 kW**

**Advanced Surface Movement Guidance and Control System (A-SMGCS); Part 6: Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU for deployed surface movement radar sensors; Sub-part 1: X-band sensors using pulsed signals and transmitting power up to 100 kW**

The present document applies to X-band radar sensors intended for the surveillance of airport surface movement traffic with the following characteristics: • Operating in one or both of the following frequency ranges: - 9 000 MHz to 9 200 MHz and 9 300 MHz to 9 500 MHz utilizing modulated or unmodulated pulses. • Transmitter Peak Envelope Power up to 100 kW. • The transceiver-antenna connection is using a hollow metallic rectangular waveguide. • The antenna is rotating, waveguide-based and passive. • At the transceiver output an RF-circulator is used. NOTE 1: Since transceiver and antenna are hollow metallic rectangular waveguide based the frequency range for measurements that needs to be addressed covers 6,56 GHz to 26 GHz. The lower limit of this frequency range is obtained as cut-off frequency of the combination of WR112/R84 taper section and a WR90/R100 Waveguide IEC 60153-2 [i.3]. The upper limit corresponds to the upper limit stated in ERC/Recommendation 74-01 [i.5]. NOTE 2: Since at the transceiver output an RF circulator is used, it is assumed that the transceiver characteristics remain independent from the antenna. NOTE 3: Aeronautical Surface Movement Radars covered by the present document are expected to use the bands 9 000 MHz to 9 200 MHz and/or 9 300 MHz to 9 500 MHz. According article 5 of the ITU Radio Regulations [i.6] the band 9 000 MHz to 9 200 MHz is allocated to the Aeronautical Radionavigation Service on a primary basis and the band 9 300 MHz to 9 500 MHz is allocated to the Radionavigation Service on a primary basis. The present document contains requirements to demonstrate that "... Radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference" [i.1]. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Radio Equipment Directive 2014/53/EU [i.1] as well as essential requirements under the SES Interoperability Regulation 552/2004 [i.9] and related implementing rules and/or essential requirements under the EASA basic regulation 216/2008 [i.12] may apply to equipment within the scope of the present document.

Keel: en

Alusdokumendid: EN 303 213-6-1 V2.1.1

## **EVS-EN 303 340 V1.1.1:2017**

**Digitaalsed maapealsed TV ringhäälinguvastuvõtjad; Harmoneeritud EN direktiivi 2014/53/EU artikli 3.2 oluliste nõuete alusel**

**Digital Terrestrial TV Broadcast Receivers; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU**

The present document applies to digital terrestrial television broadcast receivers fitted with an external antenna input (tuner port) capable of receiving DVB-T and/or DVB-T2 signals. Receivers without external antenna connectors, receivers with diversity, and receivers intended for mobile or automotive reception are not covered by the present document. The present document contains the requirements for digital terrestrial television broadcast receivers to meet the essential requirements of article 3.2 of Directive 2014/53/EU [i.3] that radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference. The present document includes considerations of interference from LTE transmissions in the 700 MHz and 800 MHz bands and DTT transmissions in UHF band IV. The requirements of the installation system (antenna, feeder cable, amplifiers, etc.) are not addressed. Table 1: Broadcast frequency bands Broadcast frequency bands VHF III UHF IV and V There are country specific variations of frequency usage for digital terrestrial television reception and other users such as mobile broadband. The tests in the present document only apply if the DTT broadcast receiver supports the wanted signal configuration used by the test in question. The applicable tests are summarized in annex E, table E.1.

Keel: en

Alusdokumendid: EN 303 340 V1.1.1

## **EVS-EN 303 978 V2.1.1:2017**

**Satelliitsideside maajaamad ja süsteemid (SES). Saatesagedusega 27,5 GHz kuni 30 GHz geostatsionaarorbiidil mobiilsel platvormil töötavate maajaamade (ESOMP) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel**

**Satellite Earth Stations and Systems (SES); Harmonised Standard for Earth Stations on Mobile Platforms (ESOMP) transmitting towards satellites in geostationary orbit, operating in the 27,5 GHz to 30,0 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to Earth Stations on Mobile Platforms (ESOMP), which have the following characteristics. Service Interface Stabilization & Tracking mechanism Antenna Enclosure / Radome Control and Monitoring Function Antenna Controller Modem LNA BDC HPA BUC Radio Antenna Control Facility Interface Figure 1: ESOMP System Overview • The ESOMP is designed for both mobile and stationary operation. • The ESOMP operates on various mobile platforms such as trains, maritime vessels, aircraft and other vehicles and, therefore, may be subject to occasional disturbances and interruptions in the satellite link. • The ESOMP is operating as part of a satellite network (e.g. star, mesh or point-to-point) used for the distribution and/or exchange of information. • The ESOMP is comprised of all the equipment, electrical and mechanical, from the antenna itself to the interface with other communications equipment on a mobile platform (usually referred to as the terrestrial interface). • The transmit and receive frequencies are shown in table 1. Table 1: Frequency bands Frequency Bands/frequencies (GHz) Transmit (Earth-to-space) 27,50 to 30,00 Receive (space-to-Earth) 17,30 to 20,20 • The ESOMP transmits within the frequency range from 27,50 GHz to 30,00 GHz, which is a band allocated to the Fixed Satellite Services (FSS) (Earth-to-space) among other services. However, operation of the ESOMP is intended to be restricted to the frequency range 29,50 GHz to 30,00 GHz in and near those countries that have allocated Fixed Service (FS) to the other frequency ranges. Local regulation may permit operation in these frequency ranges. • The ESOMP receives in one or more frequencies within the range from 17,30 GHz to 20,20 GHz (FSS). • The ESOMP uses linear or circular polarization. • The ESOMP operates through a geostationary satellite (or a cluster of co-located geostationary satellites) that is at least 2° away from any other geostationary satellite operating in the same frequencies and over the same coverage area. NOTE 1: ESOMPs may operate with satellites that are more closely spaced than 2° with additional operational constraints that are beyond the scope of the present document. • The ESOMP is designed for unattended operation. • The ESOMP is controlled and monitored by a Network Control Facility (NCF). This function may be performed centrally (e.g. for a network of ESOMPs with a central hub) or it could be performed within the ESOMP for autonomous control. The NCF is outside the scope of the present document. The present document applies to the ESOMP with its ancillary equipment and its various telecommunication ports, and when operated within the boundary limits of the operational environmental profile as declared by the applicant and when installed as required by the applicant's declaration or in the user documentation. The present document is intended to cover the provisions of Directive 2014/53/EU [6] (RE Directive) article 3.2, which states that "... radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference". NOTE 2: Operational requirements are defined by national administrations and by relevant ECC Decisions. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Directive 2014/53/EU [6] may apply to equipment within the scope of the present document. NOTE 3: A list of such ENs is included on the web site <http://www.newapproach.org/>.

Keel: en

Alusdokumendid: EN 303 978 V2.1.1

## **EVS-EN 303 979 V2.1.1:2017**

**Kosmoseside maajaamad ja süsteemid (SES). Saatesagedusega 27,5 GHz kuni 29,1 GHz ja 29,5 GHz kuni 30,0 GHz geostatsionaarorbiidil mobiilsel platvormil töötavate maajaamade (ESOMP) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 põhinõuete alusel**

**Satellite Earth Stations and Systems (SES); Harmonised Standard for Earth Stations on Mobile Platforms (ESOMP) transmitting towards satellites in non-geostationary orbit, operating in the 27,5 GHz to 29,1 GHz and 29,5 GHz to 30,0 GHz frequency bands covering the essential requirements of article 3.2 of the Directive 2014/53/EU**

The present document applies to Earth Stations on Mobile Platforms (ESOMP), which have the following characteristics. Service Interface Stabilization & Tracking mechanism Antenna Enclosure / Radome Control and Monitoring Function Antenna Controller Modem LNA BDC HPA BUC Radio Antenna Control Facility Interface Figure 1: ESOMP System Overview • The ESOMP is designed for both mobile and stationary operation. • The ESOMP operates on various mobile platforms such as trains, maritime vessels, aircraft and other vehicles and, therefore, may be subject to occasional disturbances and interruptions in the satellite link. • The ESOMP is operating as part of a satellite network (e.g. star, mesh or point-to-point) used for the distribution and/or exchange of information. • The ESOMP is comprised of all the equipment, electrical and mechanical, from the antenna itself to the interface with other communications equipment on a mobile platform (usually referred to as the terrestrial interface). • The ESOMP comprises of one or more emitters and the system overview given in figure 1 should be interpreted accordingly. • The transmit and receive frequencies are shown in table 1. Table 1: Frequency bands Frequency Bands/frequencies Transmit (Earth-to-space) 27,5 GHz to 29,1 GHz and 29,5 GHz to 30,0 GHz Receive (space-to-Earth) 17,30 GHz to 20,20 GHz • The ESOMP transmits within the frequency range from 27,5 GHz to 29,1 GHz and 29,5 GHz to 30,0 GHz, which is a band allocated to the Fixed Satellite Services (FSS) (Earth-to-space) among other services. National regulations will specify the bands available for the operation of the ESOMP. Such regulations may designate some parts of the frequency range 27,5 GHz to 29,1 GHz to terrestrial services such as the Fixed Service. However, the operation of the ESOMP may be permitted under national regulations in the 29,50 GHz to 30,00 GHz band since this band is allocated on a primary basis to the Fixed Satellite Service. • The ESOMP receives in one or more frequencies within the range from 17,30 GHz to 20,20 GHz (FSS). • The ESOMP uses linear or circular polarization. • The ESOMP operates through non-geostationary satellites. • The ESOMP is designed for unattended operation. • The ESOMP is controlled and monitored by a Network Control Facility (NCF). This function may be performed centrally (e.g. for a network of ESOMPs with a central hub) or it could be performed within the ESOMP for autonomous control. The NCF is outside the scope of the present document. • The ESOMP operating in the 27,5 GHz to 28,6 GHz and 29,5 GHz to 30 GHz bands: epfd limits given in article 22 of the ITU Radio Regulations [i.4] apply for the ESOMPs operating with the NGSO system for the protection of the GSO networks (see No 22.5D of the ITU RR [i.4]). • ESOMP operating in the 28,6 GHz to 29,1 GHz band: No 9.11A of the ITU RR [i.4] applies to the NGSO network of the ESOMP, meaning that the NGSO will be required to coordinate with earlier filed GSO networks or NGSO systems (See No. 5.523A of the ITU RR [i.4]). The present document applies to the ESOMP with its ancillary equipment and its various telecommunication ports, and when operated within the boundary limits of the operational environmental profile as declared by the applicant and when installed as required by the applicant's declaration or in the user documentation. The present document is intended to cover the provisions of Directive 2014/53/EU [6] (RE Directive) article 3.2, which states that "... radio equipment shall be so constructed that it both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference". NOTE 1: Operational requirements are defined by national administrations and by relevant ECC Decisions. In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the Directive 2014/53/EU [6] may apply to equipment within the scope of the present document. NOTE 2: A list of such ENs is included on the web site <http://www.newapproach.org/>.

Keel: en

Alusdokumendid: EN 303 979 V2.1.1

## **EVS-EN 55014-1:2017**

**Elektromagnetiline ühilduvus. Nõuded majapidamismasinatele, elektrilistele tööriistadele ja nendesarnastele seadmetele. Osa 1: Emissioon**  
**Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission**

This part of CISPR 14 specifies the requirements that apply to the emission of radiofrequency disturbances in the frequency range 9 kHz to 400 GHz from appliances, electric tools and similar apparatus as defined below, whether powered by AC or DC (including a battery). Within this standard wherever the term "equipment" is used it includes the more specific terms "appliance", "household or similar appliances", "electric tool", "toys" and "apparatus". This International Standard is applicable to the following equipment:

- household appliances or similar equipment; NOTE 1 Examples are equipment used: – for typical housekeeping functions in the household environment, which includes the dwelling and its associated buildings, the garden, etc.; – for typical housekeeping functions in shops, offices, commercial and other similar working environments; – in farms; – by clients in hotels and other residential type environments; – for induction cooking, either in residential or commercial environments.
- electric tools; NOTE 2 Examples of electric tools include electric motor-operated or electromagnetically driven hand-held tools, transportable tools, lawn and garden machinery.
- similar apparatus. NOTE 3 Examples are external power controllers using semiconductor devices, motor-driven electro-medical apparatus, electric/electronic toys, automatic goods-dispensing machines, entertainment machines, cine or slide projectors, as well as battery chargers and external power supplies for use with products under the scope of this standard.

Also included in the scope of this standard are separate parts of the above mentioned equipment such as motors and switching devices (e.g. power or protective relays); however, no emission requirements apply to such separate parts, unless otherwise stated in this standard.

Keel: en

Alusdokumendid: CISPR 14-1:2016; CISPR 14-1:2016/COR1:2016; EN 55014-1:2017

Asendab dokumenti: EVS-EN 55014-1:2007

Asendab dokumenti: EVS-EN 55014-1:2007/A1:2009

Asendab dokumenti: EVS-EN 55014-1:2007/A2:2011

## **EVS-EN 55016-2-3:2017**

**Raadiohäiringute ja häiringutaluvuse mõõteseadmed ja -meetodid. Osa 2-3: Häiringute ja häiringutaluvuse mõõtmeetodid. Kiirgushäiringute mõõtmine**  
**Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements**

This part of CISPR 16 specifies the methods of measurement of radiated disturbance phenomena in the frequency range of 9 kHz to 18 GHz. The aspects of measurement uncertainty are specified in CISPR 16-4-1 and CISPR 16-4-2. NOTE In accordance with IEC Guide 107 [13]1, CISPR 16-2-3 is a basic EMC publication for use by product committees of the IEC. As stated in Guide 107,

product committees are responsible for determining the applicability of the EMC standard. CISPR and its subcommittees are prepared to co-operate with product committees in the evaluation of the value of particular EMC tests for specific products.

Keel: en

Alusdokumendid: CISPR 16-2-3:2016; EN 55016-2-3:2017

Asendab dokumenti: EVS-EN 55016-2-3:2010

Asendab dokumenti: EVS-EN 55016-2-3:2010/A1:2011

Asendab dokumenti: EVS-EN 55016-2-3:2010/A2:2014

Asendab dokumenti: EVS-EN 55016-2-3:2010/AC:2013

## 35 INFOTEHNOLOGIA

### CEN ISO/TS 17429:2017

#### Intelligent transport systems - Cooperative ITS - ITS station facilities for the transfer of information between ITS stations (ISO/TS 17429:2017)

ISO/TS 17429:2017 specifies generic mechanisms enabling the exchange of information between ITS stations for applications related to Intelligent Transport Systems. It complies with the ITS station reference architecture (ISO 21217) and defines the following ITS station facilities layer functionalities: - Communication Profile Handler (CPH); - Content Subscription Handler (CSH); - Facilities Services Handler (FSH). These functionalities are used by ITS-S application processes (ITS-S-AP) to communicate with other ITS-S application processes and share information. These functionalities describe - how lower-layer communication services assigned to a given data flow are applied to the service data units at the various layers in the communication protocol stack (CPH, see 6.2.3), - how content from data dictionaries can be published and subscribed to by ITS-S application processes (CSH, see 6.2.5), - how well-known ITS station facilities layer and management services can be applied to application process data units (FSH, see 6.2.4), relieving (ITS-S) application processes from having to implement these services on their own, - how service access points (SAP) primitives specified in ISO 24102- 3 are used, - service primitives for the exchange of information between ITS-S application processes and the ITS station facilities layer (FA-SAP), and - a set of communication requirements and objectives (profiles) using the methods defined in ISO/TS 17423 to select the level of performance (best effort or real-time, etc.), confidence and security (authentication, encryption, etc.) for information exchange between ITS stations, such as data provision, event notification, roadside configuration, map update.

Keel: en

Alusdokumendid: ISO/TS 17429:2017; CEN ISO/TS 17429:2017

### CLC/TR 50600-99-1:2017

#### Information technology - Data centre facilities and infrastructures - Part 99-1: Recommended practices for energy management

This Technical Report is a compilation of recommended Practices for improving the energy management (i.e. reduction of energy consumption and/or increases in energy efficiency) of data centres. It is aligned with the EU Code of Conduct for Data Centre Energy Efficiency (CoC) scheme operated by the Directorate-General Joint Research Centre (DG JRC) of the European Commission (EC). It is recognized that the Practices included might not be universally applicable to all scales and business models of data centres or be undertaken by all parties involved in data centre operation, ownership or use.

Keel: en

Alusdokumendid: CLC/TR 50600-99-1:2017

Asendab dokumenti: CLC/TR 50600-99-1:2016

## 43 MAANTEESÖIDUKITE EHITUS

### EVS-EN 62196-2:2017

#### Pistikud, pistikupesad, sõiduki-pistikühendused ja sõidukisisendid. Elektrisöidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded

#### Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories

IEC 62196-2:2016 applies to plugs, socket-outlets, vehicle connectors and vehicle inlets with pins and contact-tubes of standardized configurations, herein referred to as accessories. They have a nominal rated operating voltage not exceeding 480 V a.c., 50 Hz to 60 Hz, and a rated current not exceeding 63 A three-phase or 70 A single phase, for use in conductive charging of electric vehicles. This second edition cancels and replaces the first edition published in 2011 and constitutes a technical revision. This second edition includes the following significant technical changes with respect to the previous edition. a) Standard sheets for configurations type 2 and type 3 have been updated. b) Configuration type 2 is now available with optional shutter. This publication is to be read in conjunction with IEC 62196-1:2014.

Keel: en

Alusdokumendid: IEC 62196-2:2016; EN 62196-2:2017

Asendab dokumenti: EVS-EN 62196-2:2012

Asendab dokumenti: EVS-EN 62196-2:2012/A11:2013

Asendab dokumenti: EVS-EN 62196-2:2012/A12:2014

Asendab dokumenti: EVS-EN 62196-2:2012/A12:2014/AC:2014

## 45 RAUDTEETEHNIKA

### EVS-EN 13796-1:2017

**Ohutusnõuded inimeste transportimiseks mõeldud köisteeplatvormidele. Kandurid. Osa 1: Haaratsid, veermikud, pidurid, kabiinid, toolid, vagunid, hooldusplatvormid, puksiirid**  
**Safety requirements for cableway installations designed to carry persons - Carriers - Part 1: Grips, carrier trucks, on-board brakes, cabins, chairs, carriages, maintenance carriers, tow-hangers**

This European Standard specifies the safety requirements applicable to carriers for cableway installations designed to carry persons. It is applicable to the various types of installations and takes into account their environment. It includes requirements relating to the prevention of accidents and the protection of workers. It does not apply to installations for the transportation of goods or to inclined lifts.

Keel: en

Alusdokumendid: EN 13796-1:2017

Asendab dokumenti: EVS-EN 13796-1:2005

### EVS-EN 15273-1:2013+A1:2017

**Raudteealased rakendused. Gabariigid. Osa 1: Üldist. Üldreeglid taristule ja raudteeveeremile**  
**Railway applications - Gauges - Part 1: General - Common rules for infrastructure and rolling stock**

This European Standard is applicable to authorities involved in railway operation and may also be applied for light vehicles (e.g. trams, metros, etc. running on two rails) and their associated infrastructure, but not for systems such as rail-guided buses. It allows rolling stock and infrastructures to be dimensioned and their compliance to be checked relative to applicable gauging rules. For rolling stock and infrastructure, this standard is applicable to new designs, to modifications and to the checking of vehicles and infrastructures already in use. This document EN 15273-1 covers: the general principles; the various elements and phenomena affecting the determination of gauges; the various calculation methods applicable to the elements shared by the infrastructure and by the rolling stock; the sharing rules for elements taken into account in calculations specific to the infrastructure and to the rolling stock; a catalogue of European gauges. This document does not cover: conditions to be met to ensure safety of passengers on platforms and of persons required to walk along the tracks; conditions to be met by the fixed equipment maintenance machines in active position; the space to be cleared for the running track of rubber-tyred metros and other vehicles; rules applicable to extraordinary transportation, however some formulae may be used; rules applicable to the design of the overhead contact line system; rules applicable to the design of the current collection system on a third rail; simulation methods for the running of vehicles, however, it does not confirm the validity of existing simulations; verification rules of wagon loadings; coding methods for combined transportation; infrastructure gauges for very small curve radii (e.g. R < 150 m for gauge G1).

Keel: en

Alusdokumendid: EN 15273-1:2013+A1:2016

Asendab dokumenti: EVS-EN 15273-1:2013

## 49 LENNUNDUS JA KOSMOSETEHNIKA

### EVS-EN 2285:2017

**Aerospace series - Bushes, plain, aluminium alloy, with self-lubricating liner - Dimensions and loads**

This document specifies the characteristics of plain bushes in aluminium alloy with self lubricating liner and the design recommendation of shafts and housings. The bushes are intended for operation within the temperature range of -55 °C to 121 °C and assembly with an interference fit into fixed and moving aerospace parts.

Keel: en

Alusdokumendid: EN 2285:2017

Asendab dokumenti: EVS-EN 2285:2000

### EVS-EN 2286:2017

**Aerospace series - Bushes, flanged aluminium alloy, with self-lubricating liner - Dimensions and loads**

This document specifies the characteristics of flanged bushes in aluminium alloy with self lubricating liner and the design recommendation of shafts and housings. The bushes are intended for operation within the temperature range of -55 °C to 121 °C and assembly with an interference fit into fixed and moving aerospace parts.

Keel: en

Alusdokumendid: EN 2286:2017

Asendab dokumenti: EVS-EN 2286:2000

### EVS-EN 4810:2017

**Aerospace series - Flange couplings - Gasket seal with nickel alloy C seal on heat resisting steel plate with 3 fastening holes - Inch series**

This standard specifies the characteristics of gasket seal with nickel alloy C seal on heat resisting steel, 3 holes, for pipe couplings for inch series aerospace applications. Nominal pressure: up to 21 000 kPa; depends on the associated tube material and tube

wall thickness in the assembly (see EN 4814). Temperature range: -55 °C to 600 °C. NOTE Assembly in accordance with TR 4815. This part should not be reused after disassembling.

Keel: en

Alusdokumendid: EN 4810:2017

### EVS-EN 6075:2017

#### **Aerospace series - Static seal elements O-Ring ethylene-propylene, moulded, phosphate ester resistant (- 55 °C to 107 °C) - Inch series**

This European Standard specifies the characteristics of configuration, dimensions, tolerances and mass for moulded O-Ring seal elements, phosphate ester fluid resistant, for use as static seals in hydraulic systems for aerospace application. Application temperature range: -55 °C to 107 °C of continuous operation.

Keel: en

Alusdokumendid: EN 6075:2017

### EVS-EN 6076:2017

#### **Aerospace series - Static seal elements O-Ring for straight thread tube fitting boss, ethylene-propylene, moulded, phosphate ester resistant (-55 °C to 107 °C) - Inch series**

This European Standard specifies the characteristics of configuration, dimensions, tolerances and mass for moulded O Ring seal elements, phosphate ester fluid resistant, for straight thread tube fitting boss for use as static seals in hydraulic systems for aerospace application. Application temperature range: 55 °C to 107 °C of continuous operation.

Keel: en

Alusdokumendid: EN 6076:2017

## 67 TOIDUAINETE TEHNOLOGIA

### EVS-EN 16857:2017

#### **Foodstuffs - Determination of benzene in soft drinks, other beverages and vegetable-based infant foods by headspace gas chromatography mass spectrometry (HS-GC-MS)**

This European Standard specifies a method for the determination of benzene in soft drinks, other beverages and vegetable-based infant foods, by headspace gas chromatography mass spectrometry (HS-GC-MS). The method has been validated in an interlaboratory study via the analysis of spiked samples of carbonated soft drink, still fruit-based drink, carbonated fruit-based drink, vegetable and fruit juice containing carrot, infant food vegetable based and infant food containing meat, ranging from 1,9 µg/kg to 18,6 µg/kg. However, linearity of the instrument response was proven for the concentration range from 0,5 µg/kg to 20 µg/kg. The limit of quantification (LOQ) depends on the instrument but can generally be expected to be in the range from 0,5 µg/kg to 1,0 µg/kg.

Keel: en

Alusdokumendid: EN 16857:2017

### EVS-EN ISO 12966-2:2017

#### **Animal and vegetable fats and oils - Gas chromatography of fatty acid methyl esters - Part 2: Preparation of methyl esters of fatty acids (ISO 12966-2:2017)**

ISO 12966-2:2017 specifies methods of preparing the methyl esters of fatty acids. It includes methods for preparing fatty acid methyl esters from animal and vegetable fats and oils, fatty acids and soaps. To cover different requirements, four methylation methods are specified, namely: a) a "rapid" transmethylation procedure under alkaline conditions; b) a "general" transmethylation/methylation procedure under sequential alkaline and acid conditions; c) a BF3 transmethylation procedure; d) an alternative procedure using acid-catalysed transmethylation of glycerides. Methyl esters so produced are used in various analytical procedures requiring such derivatives, e.g. gas-liquid chromatography (GLC), thin-layer chromatography (TLC) and infrared spectrometry (IR). Milk and milk products (or fat coming from milk and milk products) are excluded from the scope of this document.

Keel: en

Alusdokumendid: ISO 12966-2:2017; EN ISO 12966-2:2017

Asendab dokumenti: EVS-EN ISO 12966-2:2011

### EVS-EN ISO 15302:2017

#### **Animal and vegetable fats and oils - Determination of benzo[a]pyrene - Reverse-phase high performance liquid chromatography method (ISO 15302:2017)**

ISO 15302:2017 specifies a method for the determination of benzo[a]pyrene in crude or refined edible oils and fats by reverse-phase high performance liquid chromatography (HPLC) using fluorimetric detection in the range 0,1 µg/kg to 50 µg/kg. Milk and milk products (or fat coming from milk and milk products) are excluded from the scope of this document.

Keel: en

Alusdokumendid: ISO 15302:2017; EN ISO 15302:2017

Asendab dokumenti: EVS-EN ISO 15302:2010

## EVS-EN ISO 22964:2017

### Microbiology of the food chain - Horizontal method for the detection of Cronobacter spp. (ISO 22964:2017)

ISO 22964:2017 specifies a horizontal method for the detection of Cronobacter spp. Subject to the limitations discussed in the introduction, this document is applicable to - food products and ingredients intended for human consumption and the feeding of animals, and - environmental samples in the area of food production and food handling.

Keel: en

Alusdokumendid: ISO 22964:2017; EN ISO 22964:2017

## 71 KEEMILINE TEHNOLOOGIA

### EVS-EN 61010-2-020:2017

#### Ohutusnõuded elektrilistele mõõtmis-, juhtimis- ja laboratooriumiseadmetele. Osa 2-020:

#### Erinõuded laboratoorsele tsentrifuuugidele

#### Safety requirements for electrical equipment for measurement, control, and laboratory use -

#### Part 2-020: Particular requirements for laboratory centrifuges

IEC 61010-2-020:2016 is applicable to electrically powered LABORATORY CENTRIFUGES. This third edition cancels and replaces the second edition published in 2006. It constitutes a technical revision and includes the following significant changes from the second edition: a) This Part 2 is established on the basis of the third edition (2010) of IEC 61010-1. The changes listed in its foreword affect this Part 2, too. b) The language has been updated to reflect current terminology for LABORATORY CENTRIFUGES used in the industry today. It has the status of a group safety publication in accordance with IEC Guide 104. This publication is to be read in conjunction with IEC 61010-1:2010

Keel: en

Alusdokumendid: IEC 61010-2-020:2016; EN 61010-2-020:2017

Asendab dokumenti: EVS-EN 61010-2-020:2006

## 75 NAFTA JA NAFTATEHNOLOGIA

### EVS-EN ISO 18135:2017

#### Solid Biofuels - Sampling (ISO 18135:2017)

ISO 18135:2017 describes methods for preparing sampling plans and certificates, as well as taking samples of solid biofuels, for example, from the place where the raw materials grow, from production plant, from deliveries, e.g. lorry loads, or from stock. It includes both manual and mechanical methods, and is applicable to solid biofuels that are either: - fine (particle sizes up to about 10 mm) and regularly shaped particulate materials that can be sampled using a scoop or pipe, for example, sawdust, olive stones and wood pellets; - coarse or irregularly shaped particulate materials (particle sizes up to about 200 mm) that can be sampled using a fork or shovel, for example, wood chips and nut shells, forest residue chips, and straw; - baled materials, for example, baled straw or grass; - large pieces (particle sizes above 200 mm) that are either picked manually or automatically; - vegetable waste, fibrous waste from virgin pulp production and from production of paper from pulp that has been dewatered; - thermally treated and densified biomass materials; - roundwood. ISO 18135:2017 is not applicable to airborne dust from solid biofuels. It may be possible to use this document for other solid biofuels. The methods described in this document may be used, for example, when the samples are to be tested for moisture content, ash content, calorific value, bulk density, durability, particle size distribution, ash melting behaviour and chemical composition.

Keel: en

Alusdokumendid: ISO 18135:2017; EN ISO 18135:2017

Asendab dokumenti: EVS-EN 14778:2011

## 83 KUMMI- JA PLASTITÖÖSTUS

### EVS-EN ISO 15023-1:2017

#### Plastics - Poly(vinyl alcohol) (PVAL) materials - Part 1: Designation system and basis for specifications (ISO 15023-1:2017)

ISO 15023-1:2017 establishes a system of designation for poly(vinyl alcohol) (PVAL) materials which may be used as the basis for specifications. The types of poly(vinyl alcohol) (PVAL) materials are differentiated from each other by a classification system based on the designatory properties: a) degree of hydrolysis, b) viscosity of aqueous solution under defined conditions and on information about basic polymer parameters, intended application and/or method of processing, important properties, additives, colorants, fillers and reinforcing materials. ISO 15023-1:2017 is applicable to all poly(vinyl alcohol) (PVAL) materials with a degree of hydrolysis not less than 70 mol%. It applies to materials ready for normal use in the form of powder, granules or pellets and to materials unmodified or modified by colorants, additives, fillers, etc. It is not intended to imply that materials having the same designation give necessarily the same performance. This document does not provide engineering data, performance data or data on processing conditions which may be required to specify a material. If such additional properties are required, they are intended to be determined in accordance with the test methods specified in ISO 15023-2, if suitable. In order to designate a thermoplastic material to meet particular specifications, the requirements are given in data block 5 (see 4.1).

Keel: en

Alusdokumendid: ISO 15023-1:2017; EN ISO 15023-1:2017

Asendab dokumenti: EVS-EN ISO 15023-1:2006

## 91 EHITUSMATERJALID JA EHITUS

### CEN/TR 12831-4:2017

#### **Energy performance of buildings - Method for calculation of the design heat load - Part 4: Explanation and justification of EN 12831-3, Module M8-2, M8-3**

This technical report refers to standard EN 12831-3, module M8-2, M8-3. It contains information to support the correct understanding, use and national adaptation of standard FprEN 12831-3.

Keel: en

Alusdokumendid: CEN/TR 12831-4:2017

### CEN/TR 15316-6-10:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 6-10: Explanation and justification of EN 15316-5, Module M3-7, M8-7**

This Technical Report refers to EN 15316 5, covering module M3-7 and M8-7. It contains information to support the correct understanding, use and national adaptation of EN 15316 5.

Keel: en

Alusdokumendid: CEN/TR 15316-6-10:2017

### CEN/TR 15316-6-2:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 6-2: Explanation and justification of EN 15316-2, Module M3-5, M4-5**

This Technical Report refers to standard EN 15316-2. It contains information to support the correct understanding and use of EN 15316-2. The scope of this specific part is to standardize the required inputs, the outputs and the links (structure) of the calculation method in order to achieve a common European calculation method. This standard covers energy performance calculation of heating systems and water based cooling space emission sub-systems.

Keel: en

Alusdokumendid: CEN/TR 15316-6-2:2017

### CEN/TR 15316-6-5:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 6-5: Explanation and justification of EN 15316-4-2, Module M3-8**

This Technical Report refers to EN 15316-4-2, covering module M3-8. It contains information to support the correct understanding, use and national adaptation of EN 15316-4-2. This Technical Report does not contain any normative provision.

Keel: en

Alusdokumendid: CEN/TR 15316-6-5:2017

### CEN/TR 15316-6-6:2017

#### **Energy performance of buildings - Method for calculation of system energy performance and system efficiencies - Part 6-6: Explanation and justification of EN 15316-4-3, Module M3-8-3, M8-8-3**

This Technical Report refers to EN 15316 4 3, Modules 3-8 and 8-8. It contains information to support the correct understanding, use and national adaptation of EN 15316 4 3. This Technical Report does not contain any normative provision.

Keel: en

Alusdokumendid: CEN/TR 15316-6-6:2017

### CEN/TR 15316-6-8:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 6-8: Explanation and justification of EN 15316-4-5 (District heating and cooling), Module M3-8-5, M4-8-5, M8-8-5, M11-8-5**

This Technical Report refers to standard FprEN 15316-4-5:2016. It contains information to support the correct understanding, use and national adaptation of FprEN 15316-4-5:2016

Keel: en

Alusdokumendid: CEN/TR 15316-6-8:2017

### CEN/TR 15316-6-9:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 6-9: Explanation and justification of EN 15316-4-8, Module M3-8-8**

This Technical Report refers to EN 15316-4-8:2017, module M3-8-8. It contains information to support the correct understanding, use and national adaptation of EN 15316-4-8:2017. This Technical Report does not contain any normative provision. The scope of EN 15316-4-8:2017 includes three categories of products: - air heating systems means a system with one or more warm air generators for heating purpose. The hot air may be diffused in the installation space from the generator or distributed via a ductwork. - overhead radiant heating systems, means systems using gas and designed to provide heat into the installation room.

Radiation may be generated directly by the flame (overhead radiant luminous heaters) or by circulation of flue gas in a ductwork installed near the ceiling (overhead radiant tube heaters). - stoves and local heaters means local devices that provide heat by transferring the heat generated by combustion into the surrounding environment. The typical devices are shown in Figures 1 to 4. (...)

Keel: en

Alusdokumendid: CEN/TR 15316-6-9:2017

### CEN/TR 15378-4:2017

#### **Energy performance of buildings - Heating systems and DHW in buildings - Part 4: Explanation and justification of EN 15378-3, Module M3-10, M8-10**

This Technical Report refers to EN 15378-3:2017, Energy performance of buildings - Heating and DHW systems in buildings - Part 3: Measured energy performance, Module M3-10, M8-10. It contains information to support the correct understanding, use and national adaptation of EN 15378-3:2017.

Keel: en

Alusdokumendid: CEN/TR 15378-4:2017

### CEN/TR 15459-2:2017

#### **Energy performance of buildings - Economic evaluation procedure for energy systems in buildings - Part 2: Explanation and justification of EN 15459-1, Module M1-14**

This technical report refers to standard EN 15459-1, module M1-14. It contains information to support the correct understanding, use and national adaptation of standard EN 15459-1.

Keel: en

Alusdokumendid: CEN/TR 15459-2:2017

### EVS 932:2017

#### **Ehitusprojekt**

#### **Construction design documents**

Selles Eesti standardis antakse juhisid hoone, tehnovõrkude, tee, teerajatiste, haljastuse ja välisruumi kujunduslike rajatiste ehitusprojekti koostamiseks. Standardis kirjeldatud põhimõtted on kasutataavad ka muude ehitiste ehitusprojekti koostamiseks. Erisusena ei käsitle standard avalikult kasutatava tee ja avalikkusele ligipääsetava eratee ehitusprojekti koostamist. Standard käsitleb ehitusprojekti staadiumites ehk arengujärkudes tehtavat projekteerimistööd, esitatavat infot ja selle detailsust. Lisaks annab standard ülevaate projekteerimise ja ehitusprojekti koostamise kohast ehituse tervikprojektis ning seostest muude ehituse tervikprojekti konsultatsiooniteenustega. Ehitusprojekti ja projektdokumentide vormistuse ja esitusviisi (näiteks kas paberil või digitaalselt, seletuskirjad-joonised või ehitise infomodel vms) määraavad õigusakte ei käsitleta selles standardis. Ka ei anna standard juhiseid projektlahenduste kohta ega lammutsprojekti kohta. Nõuded lammutsprojektile on esitatud õigusaktides. Standardit kasutatakse koos ehitusprojekti ja selle koostamist reglementeerivate õigusaktidega. Skeem 1 illustreerib standardi kohta projektlahenduste kavandamist ja ehitusprojekti koostamist käsitelevate õigusaktide, standardite ja juhendmaterjalide struktuuris. Erinevuste korral määratlustes ja juhistes, mis on ehitusprojekti staadiumite, staadiumites tehtava projekteerimistöö, esitatava info ja detailsuse kohta esitatud selles standardis ning muudes, teisi teemasid käsitelevates Eesti standardites, järgitakse selle standardi määratlusi ja juhiseid. Standard, tulenevalt kavandatavate ehitiste mitmekesisusest, ei ole ette nähtud kasutamiseks ehitusprojekti tellimise ja koostamise tüüplähteülesandena.

Keel: et

Asendab dokumenti: EVS 811:2012

Asendab dokumenti: EVS 907:2010

### EVS-EN 12098-1:2017

#### **Energy Performance of Buildings - Controls for heating systems - Part 1: Control equipment for hot water heating systems - Modules M3-5, 6, 7, 8**

This European Standard applies to electronic control equipment for heating systems with water as the heating medium and a supply water temperature up to 120 °C. This control equipment controls the distribution and/or the generation of heat in relation to the outside temperature and time and other reference variables. This standard covers also controllers that contain an integrated optimum start or an optimum start-stop control function. Safety requirements on heating systems remain unaffected by this standard. The dynamic behaviour of the valves and actuators are not covered in this standard. A multi-distribution and/or multi-generation system needs a coordinated solution to prevent undesired interaction and is not part of this standard. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1. NOTE 1 In prCEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively.

Keel: en

Alusdokumendid: EN 12098-1:2017

Asendab dokumenti: EVS-EN 12098-1:2013

### EVS-EN 13200-8:2017

#### **Spectator facilities - Part 8: Safety Management**

This European Standard specifies general characteristics of safety management in spectator facilities. It specifies the layout and the planning of the management, the criteria to maintain this planning before, during and after any event. It covers the following:  
- the safety personnel; - safety policy; - safety procedures. This European Standard does not apply for the roles and responsibilities of those who are part of the security system (police and security companies).

Keel: en

Alusdokumendid: EN 13200-8:2017

### EVS-EN 15316-1:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 1: General and Energy performance expression, Module M3-1, M3-4, M3-9, M8-1, M8-4**

This European Standard is the general frame for the calculation of the energy use and the energy performance of heating and domestic hot water systems. This standard is only dealing with the heat, provided by water based systems, needed for heating, domestic hot water and cooling (e.g. absorption chiller). It specifies how to perform the calculation of the entire installation using the calculation modules (see Table 2) corresponding to the methods defined in the respective standards. It deals with common issues like operating conditions calculation and energy performance indicators. It standardises the inputs and outputs in order to achieve a common European calculation method. It allows the energy analysis of the heating and Domestic hot water systems and sub-systems including control (emission, distribution, storage, generation) by comparing the system losses and by defining energy performance indicators. The performance analysis allows the comparison between systems and sub-systems and makes possible to evaluate the impact of each sub-system on the energy performance of a building. The calculation of the system losses of each part of the heating sub-systems is defined in subsequent standards. Ventilation systems are not included in this standard (e.g. balanced systems with heat recovery), but if the air is preheated or an air heating system is installed, the systems providing the heat to the AHU (Air Handling Unit) are covered by this standard. Table 2 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000-1. NOTE 1 In prCEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en

Alusdokumendid: EN 15316-1:2017

Asendab dokumenti: EVS-EN 15316-1:2007

### EVS-EN 15316-2:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 2: Space emission systems (heating and cooling), Module M3-5, M4-5**

This European Standard's scope is to standardize the required inputs, the outputs and the links (structure) of the calculation method in order to achieve a common European calculation method. This standard covers energy performance calculation of heating systems and water based cooling space emission sub-systems. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1. NOTE 1 In prCEN ISO/TR 52000 2, the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en

Alusdokumendid: EN 15316-2:2017

Asendab dokumenti: EVS-EN 15316-2-1:2007

### EVS-EN 15316-3:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 3: Space distribution systems (DHW, heating and cooling), Module M3-6, M4-6, M8-6**

This European Standard covers energy performance calculation of water based distribution systems for space heating, space cooling and domestic hot water. This standard deals with the heat flux from the distributed water to the space and the auxiliary energy of the related pumps. The heat flux and the auxiliary energy for pumps can be calculated at any time-step (hour, month and year). The input and output data are mean values of the time step.

Keel: en

Alusdokumendid: EN 15316-3:2017

Asendab dokumenti: EVS-EN 15316-2-3:2007

Asendab dokumenti: EVS-EN 15316-3-2:2007

### EVS-EN 15316-4-2:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-2: Space heating generation systems, heat pump systems, Module M3-8-2, M8-8-2**

This European Standard covers heat pumps for space heating, heat pump water heaters (HPWH) and heat pumps with combined space heating and domestic hot water production in alternate or simultaneous operation, where the same heat pump delivers the heat to cover the space heating and domestic hot water heat requirement. The standard provides a calculation method under

steady conditions that corresponds to one calculation step. The results of this calculation are incorporated in larger building models and take in account the influence of the external conditions and building control that influence the energy requirements for heating supplied by the heat pump system. The scope of this part is to standardize the: - required inputs; - calculation methods; - required outputs Generation for space heating and domestic hot water production of the following heat pump systems, including control of: - electrically-driven vapour compression cycle (VCC) heat pumps; - combustion engine-driven vapour compression cycle heat pumps; - thermally-driven vapour absorption cycle (VAC) heat pumps, using combinations of heat source and heat distribution listed in Table 1. This standard does not cover sizing or inspection of heat pumps. This standard deals with heat generators for heating or for combined domestic hot water and heating service. Generators for domestic hot water only are taken into account into module M8-8. NOTE 1 Heat pumps for cooling systems are taken into account into module M4-8. NOTE 2 Heat pumps for space heating using air (distribution) are taken into account in module M5-8. Other generation systems such as boilers are covered in other sub modules of part M3-8. This is the revision of EN 15316 4 2:2008. The revision covers the adaptation of the standard to hourly and monthly energy calculation. Table 2 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1. NOTE 1 In prCEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en

Alusdokumendid: EN 15316-4-2:2017

Asendab dokumenti: EVS-EN 15316-4-2:2008

### EVS-EN 15316-4-3:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-3: Heat generation systems, thermal solar and photovoltaic systems, Module M3-8-3, M8-8-3, M11-8-3**

This European Standard specifies the: - required inputs; - calculation method; - required and resulting outputs, for heat generation systems, thermal solar systems (for space heating, domestic hot water production and the combination of both) and for photovoltaic systems applied in buildings. Within this standard, 6 methods are specified each method has its own range of applicability. - Method 1, is applicable for solar domestic hot water systems characterized by the EN 12976 series (factory made) or EN 12977-2 (custom built). The main output of the method is the solar heat and back up heat contribution to the requested heat use. - Method 2, is applicable for systems for domestic hot water and / or space heating with components characterized by EN ISO 9806 and EN 12977-3 or EN 12977-4 with a monthly calculation time step. The main output of the method is the solar heat and back up heat contribution to the requested heat use. - Method 3, is applicable for systems for domestic hot water and / or space heating with components characterized by EN ISO 9806 with an hourly calculation time step. The main output of the method is collector loop heat supplied to the heat storage. - Method 4, is applicable for photovoltaic systems with components characterized by standards and with an annual calculation time step. The output of the method is the produced electricity. - Method 5, is applicable for photovoltaic systems with components characterized by standards and with a monthly calculation time step. The output of the method is the produced electricity. - Method 6, is applicable for photovoltaic systems with components characterized by standards and with a calculation time step. The output of the method is the produced electricity. These three last calculation methods do not take into account: - electrical storage; - PV/thermal photovoltaic systems. Primary energy savings and CO<sub>2</sub> savings, which can be achieved by photovoltaic systems compared to other systems, are calculated according to EN ISO 52000 1. NOTE 1 Standards linked to the methods are listed in Annex E. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in EN ISO 52000 1. NOTE 2 In CEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 3 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en

Alusdokumendid: EN 15316-4-3:2017

Asendab dokumenti: EVS-EN 15316-4-3:2007

Asendab dokumenti: EVS-EN 15316-4-6:2007

### EVS-EN 15316-4-4:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-4: Heat generation systems, building-integrated cogeneration systems, Module M8-3-4, M8-8-4, M8-11-4**

This European standard defines a method for the performance assessment of building-integrated cogeneration units by the calculation of the electricity production, useful heat output and recoverable losses. Such units are commonly known as micro or small scale cogeneration, or micro or small scale CHP. A building-integrated cogeneration, is a cogeneration unit installed to supply space heating, domestic hot water and possibly cooling within a building. It could operate as the only heating/cooling appliance of the building or in combination with other heat generators, such as boilers or electrical chillers. Unlike district heating systems, where heat and electricity are generated at central plants and transmitted through networks to a number of remote buildings, a building-integrated cogeneration unit produces useful heat for uses within the building. The electricity produced by the integrated cogeneration unit may be used within the building or may be exported. This standard deals with heat generators for heating or for combined domestic hot water and heating services. The calculation is based on the performance characteristics of the units, defined in product standards, and on operation conditions such the needed heat output. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1. NOTE 1 In prCEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en  
Alusdokumendid: EN 15316-4-4:2017  
Asendab dokumenti: EVS-EN 15316-4-4:2007

### EVS-EN 15316-4-8:2017

#### **Energy performance of buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-8: Space heating generation systems, air heating and overhead radiant heating systems, including stoves (local), Module M3-8-8**

This European Standard is part of a series of standards on the method for calculation of system energy requirements and system efficiencies. The scope of this specific part is to standardize the: - required inputs; - calculation method; - resulting outputs, for space heating generation by: - air heating systems, including control; - overhead radiant heating systems for non-domestic use, including control; and - stoves and local heaters for residential use. This standard does not apply to heating systems that utilize water as a heat transfer medium. Other heat generation systems such as boilers, heat pumps and others are covered in other sub modules of M3-8. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000-1. NOTE 1 In prCEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en  
Alusdokumendid: EN 15316-4-8:2017  
Asendab dokumenti: EVS-EN 15316-4-8:2011

### EVS-EN 15378-1:2017

#### **Energy performance of buildings - Heating systems and DHW in buildings - Part 1: Inspection of boilers, heating systems and DHW, Module M3-11, M8-11**

This document specifies inspection procedures for the assessment of energy performance of existing boilers and heating systems. Heat generators types covered by this standard are: - boilers for heating, domestic hot water or both; - gas, liquid, solid fuel fired combustion boilers; - electrically driven and gas driven heat pumps; - thermal solar systems for domestic hot water, heating or both; - other heat generators types, such as cogeneration units. Parts of heating systems covered by this standard are: - heat generators, including generation control; - heating distribution network, including associated components and controls; - heating emitters, including components and controls; - space heating control system; - heat storage and associated components; - domestic hot water production system. This standard covers issues related to energy conservation and environmental performance. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1. NOTE 1 In prCEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. See also Clause 2 and Tables A.1 and B.1.

Keel: en  
Alusdokumendid: EN 15378-1:2017  
Asendab dokumenti: EVS-EN 15378:2007

### EVS-EN 16947-1:2017

#### **Hoonete energiatõhusus. Hoonehalduse süsteem. Osa 1: Moodulid M10-12 Energy Performance of Buildings - Building Management System - Part 1: Module M10-12**

This European Standard specifies operational activities, overall alarming, fault detection and diagnostics, reporting, monitoring, energy management functions, functional interlocks and optimizations to set and maintain energy performance of buildings. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1:2015. NOTE 1 In FprCEN ISO/TR 52000 2:2014 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying Technical Reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. Table 1 - Position of this standard (in casu M10-12), within the modular structure of the set of EPB standards ...

Keel: en  
Alusdokumendid: EN 16947-1:2017

### EVS-EN 451-1:2017

#### **Method of testing fly ash - Part 1: Determination of free calcium oxide content**

This European Standard specifies the procedure for the determination of free calcium oxide content in fly ash. The European Standard specifies the reference procedure. If other methods are used it needs to be shown that they give results equivalent to those obtained by the reference method.

Keel: en  
Alusdokumendid: EN 451-1:2017  
Asendab dokumenti: EVS-EN 451-1:2004

## EVS-EN 451-2:2017

### Method of testing fly ash - Part 2: Determination of fineness by wet sieving

This European Standard specifies the method for the determination of fly ash fineness by wet sieving on a 0,045 mm sieve (ISO 565). The European Standard specifies the reference procedure. If other methods are used it needs to be shown that they give results equivalent to those obtained by the reference method. In case of a dispute, only the reference method is used.

Keel: en

Alusdokumendid: EN 451-2:2017

Asendab dokumenti: EVS-EN 451-2:2000

## 93 RAJATISED

## EVS-EN 13803:2017

### Raudteealased rakendused. Rööbastee. 1435 mm ja laiemale rööpmevahega rööbastee projekteerimine

### Railway applications - Track - Track alignment design parameters - Track gauges 1 435 mm and wider

The purpose of this European Standard is to specify rules and limits for track alignment design parameters, including alignments within switches and crossings. Several of these limits are functions of speed. Alternatively, for a given track alignment, it specifies rules and limits that determine permissible speed. This European Standard applies to nominal track gauges 1 435 mm and wider with speeds up to 360 km/h. Normative Annex A describes the conversion rules which shall be applied for tracks with nominal gauges wider than 1 435 mm. Normative Annex B is applied for nominal track gauges 1 520 mm, 1 524 mm and 1 668 mm. This European Standard is also applicable where track alignment takes into account vehicles that have been approved for high cant deficiencies (including tilting trains). More restrictive requirements of Technical specifications for interoperability relating to the 'infrastructure' subsystem of the rail system in the European Union (TSI INF) and other (national, company, etc.) rules will apply. This European Standard need not be applicable to lines, or dedicated parts of railway infrastructure that are not interoperable with railway vehicles tested and approved according to EN 14363.

Keel: en

Alusdokumendid: EN 13803:2017

Asendab dokumenti: EVS-EN 13803-1:2010

Asendab dokumenti: EVS-EN 13803-2:2006+A1:2010

## EVS-EN 752:2017

### Drain and sewer systems outside buildings - Sewer system management

This European Standard specifies the objectives for drain and sewer systems outside buildings. It specifies the functional requirements for achieving these objectives and the principles for strategic and policy activities relating to planning, design, installation, operation, maintenance and rehabilitation. It is applicable to drain and sewer systems from the point where wastewater leaves a building, roof drainage system, or paved area, to the point where it is discharged into a wastewater treatment plant or receiving water body. Drains and sewers below buildings are included provided that they do not form part of the drainage system for the building.

Keel: en

Alusdokumendid: EN 752:2017

Asendab dokumenti: EVS-EN 752:2008

## 97 OLME. MEELELAHUTUS. SPORT

## EVS-EN 12098-1:2017

### Energy Performance of Buildings - Controls for heating systems - Part 1: Control equipment for hot water heating systems - Modules M3-5, 6, 7, 8

This European Standard applies to electronic control equipment for heating systems with water as the heating medium and a supply water temperature up to 120 °C. This control equipment controls the distribution and/or the generation of heat in relation to the outside temperature and time and other reference variables. This standard covers also controllers that contain an integrated optimum start or an optimum start-stop control function. Safety requirements on heating systems remain unaffected by this standard. The dynamic behaviour of the valves and actuators are not covered in this standard. A multi-distribution and/or multi-generation system needs a coordinated solution to prevent undesired interaction and is not part of this standard. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1. NOTE 1 In prCEN ISO/TR 52000 2 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying technical reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively.

Keel: en

Alusdokumendid: EN 12098-1:2017

Asendab dokumenti: EVS-EN 12098-1:2013

## **EVS-EN 13200-8:2017**

### **Spectator facilities - Part 8: Safety Management**

This European Standard specifies general characteristics of safety management in spectator facilities. It specifies the layout and the planning of the management, the criteria to maintain this planning before, during and after any event. It covers the following:  
- the safety personnel; - safety policy; - safety procedures. This European Standard does not apply for the roles and responsibilities of those who are part of the security system (police and security companies).

Keel: en

Alusdokumendid: EN 13200-8:2017

## **EVS-EN 16853:2017**

### **Conservation of cultural heritage - Conservation process - Decision making, planning and implementation**

This European Standard specifies the process of decision-making, planning and implementing the conservation of tangible cultural heritage. It applies to material expressions of tangible cultural heritage such as individual objects, collections, the built environment, historic sites, archaeological sites and cultural landscapes. NOTE This European Standard does not cover how to identify cultural heritage nor who or what competences are required to undertake decisions or other parts of the process.

Keel: en

Alusdokumendid: EN 16853:2017

## **EVS-EN 16890:2017**

### **Children's furniture - Mattresses for cots and cribs - Safety requirements and test methods**

This draft European Standard specifies safety requirements and test methods for mattresses including mattress bases and mattress toppers, used in children's cots, travel cots, cribs and suspended baby beds, for domestic and non-domestic use. This draft European Standard does not apply to mattresses for carry cots and pram bodies, inflatable mattresses, water mattresses and mattresses used for medical purposes.

Keel: en

Alusdokumendid: EN 16890:2017

## **EVS-EN 16947-1:2017**

### **Hoonete energiatõhusus. Hoonehalduse süsteem. Osa 1: Moodulid M10-12**

### **Energy Performance of Buildings - Building Management System - Part 1: Module M10-12**

This European Standard specifies operational activities, overall alarming, fault detection and diagnostics, reporting, monitoring, energy management functions, functional interlocks and optimizations to set and maintain energy performance of buildings. Table 1 shows the relative position of this standard within the set of EPB standards in the context of the modular structure as set out in prEN ISO 52000 1:2015. NOTE 1 In FprCEN ISO/TR 52000 2:2014 the same table can be found, with, for each module, the numbers of the relevant EPB standards and accompanying Technical Reports that are published or in preparation. NOTE 2 The modules represent EPB standards, although one EPB standard may cover more than one module and one module may be covered by more than one EPB standard, for instance a simplified and a detailed method respectively. Table 1 - Position of this standard (in casu M10-12), within the modular structure of the set of EPB standards ...

Keel: en

Alusdokumendid: EN 16947-1:2017

# ASENDATUD VÕI TÜHISTATUD EESTI STANDARDID JA STANDARDILAADSED DOKUMENDID

## 01 ÜLDKÜSIMUSED. TERMINOOGIA. STANDARDIMINE. DOKUMENTATSIOON

### EVS 907:2010

Rajatise ehitusprojekt  
Infrastructure/civil engineering project

Keel: et  
Asendatud järgmiste dokumendiga: EVS 932:2017  
Standardi staatus: Kehtetu

### EVS-EN 1330-8:1999

Mittepurustav katsetamine. Oskussõnad. Osa 8: Lekkekindluse katsetamisel kasutatavad terminid

Non-destructive testing - Terminology - Part 8: Terms used in leak tightness testing

Keel: en  
Alusdokumendid: EN 1330-8:1998  
Asendatud järgmiste dokumendiga: EVS-EN ISO 20484:2017  
Standardi staatus: Kehtetu

## 07 LOODUS- JA RAKENDUSTEADUSED

### EVS-EN ISO 10273:2004

Microbiology of food and animal feedings stuffs - Horizontal method for the detection of presumptive pathogenic Yersinia enterocolitica

Keel: en  
Alusdokumendid: ISO 10273:2003; EN ISO 10273:2003  
Asendatud järgmiste dokumendiga: EVS-EN ISO 10273:2017  
Standardi staatus: Kehtetu

## 13 KESKKONNA- JA TERVISEKAITSE. OHUTUS

### EVS-EN 61800-5-2:2007

Reguleeritava kiirusega elektriajamisüsteemid. Osa 5-2: Ohutusnöuded. Funktsionaalsus  
Adjustable speed electrical power drive systems - Part 5-2: Safety requirements - Functional

Keel: en  
Alusdokumendid: IEC 61800-5-2:2007; EN 61800-5-2:2007  
Asendatud järgmiste dokumendiga: EVS-EN 61800-5-2:2017  
Standardi staatus: Kehtetu

## 17 METROLOOGIA JA MÖÖTMINE. FÜÜSIKALISED NÄHTUSED

### EVS-EN 60051-1:2001

Otsetoimelised elektrelised analoog-näitmööteriistad ja nende lisaseadmed. Osa 1: Määratlused ja ühtsed üldnöuded kõigile osadele

Direct acting indicating analogue electrical measuring instruments and their accessories - Part 1: Definitions and general requirements common to all parts

Keel: en  
Alusdokumendid: IEC 60051-1:1997; EN 60051-1:1998  
Asendatud järgmiste dokumendiga: EVS-EN 60051-1:2017  
Standardi staatus: Kehtetu

## 19 KATSETAMINE

### EVS-EN 1330-8:1999

Mittepurustav katsetamine. Oskussõnad. Osa 8: Lekkekindluse katsetamisel kasutatavad terminid

Non-destructive testing - Terminology - Part 8: Terms used in leak tightness testing

Keel: en  
Alusdokumendid: EN 1330-8:1998

Asendatud järgmise dokumendiga: EVS-EN ISO 20484:2017  
Standardi staatus: Kehtetu

### **EVS-EN 61010-2-020:2006**

**Ohutusnõuded elektrilistele mõõte-, juhtimis- ja laboratooriumiseadmetele. Osa 2-020:  
Erinõuded laboratoorsele tsentrifugidele  
Safety requirements for electrical equipment for measurement, control and laboratory use -  
Part 2-020: Particular requirements for laboratory centrifuges**

Keel: en  
Alusdokumendid: IEC 61010-2-020:2006; EN 61010-2-020:2006  
Asendatud järgmise dokumendiga: EVS-EN 61010-2-020:2017  
Standardi staatus: Kehtetu

## **23 ÜLDKASUTATAVAD HÜDRO- JA PNEUMOSÜSTEEMID JA NENDE OSAD**

### **EVS-EN 752:2008**

**Dreenide ja kanalisatsioonisüsteemid väljaspool hooneid  
Drain and sewer systems outside buildings**

Keel: en  
Alusdokumendid: EN 752:2008  
Asendatud järgmise dokumendiga: EVS-EN 752:2017  
Standardi staatus: Kehtetu

### **EVS-EN ISO 11114-4:2005**

**Transportable gas cylinders - Compatibility of cylinder and valve materials with gas contents -  
Part 4: Test methods for selecting metallic materials resistant to hydrogen embrittlement**

Keel: en  
Alusdokumendid: ISO 11114-4:2005; EN ISO 11114-4:2005  
Asendatud järgmise dokumendiga: EVS-EN ISO 11114-4:2017  
Standardi staatus: Kehtetu

### **EVS-EN ISO 5210:1999**

**Tööstuslikud ventiiliid. Ventiili mitmepöördelised täiturmehhanismid  
Industrial valves - Multi-turn valve actuator attachments**

Keel: en  
Alusdokumendid: ISO 5210:1991; EN ISO 5210:1996  
Asendatud järgmise dokumendiga: EVS-EN ISO 5210:2017  
Standardi staatus: Kehtetu

### **EVS-EN ISO 5211:2001**

**Industrial valves - Part-turn actuator attachments**

Keel: en  
Alusdokumendid: ISO 5211:2001; EN ISO 5211:2001  
Asendatud järgmise dokumendiga: EVS-EN ISO 5211:2017  
Standardi staatus: Kehtetu

## **25 TOOTMISTEHOLOOGIA**

### **EVS-EN 1274:2005**

**Thermal spraying - Powders - Composition, technical supply conditions**

Keel: en  
Alusdokumendid: EN 1274:2004  
Asendatud järgmise dokumendiga: EVS-EN ISO 14232-1:2017  
Standardi staatus: Kehtetu

### **EVS-EN ISO 14343:2010**

**Welding consumables - Wire electrodes, strip electrodes, wires and rods for arc welding of  
stainless and heat resisting steels - Classification**

Keel: en  
Alusdokumendid: ISO 14343:2009; EN ISO 14343:2009  
Asendatud järgmise dokumendiga: EVS-EN ISO 14343:2017  
Standardi staatus: Kehtetu

## 27 ELEKTRI- JA SOOJUSENERGEETIKA

### CLC/TR 50600-99-1:2016

**Information technology - Data centre facilities and infrastructures - Part 99-1: Recommended practices for energy management**

Keel: en

Alusdokumendid: CLC/TR 50600-99-1:2016

Asendatud järgmise dokumendiga: CLC/TR 50600-99-1:2017

Standardi staatus: Kehtetu

### EVS-EN 61646:2008

**Thin-film terrestrial photovoltaic (PV) modules - Design qualification and type approval**

Keel: en

Alusdokumendid: IEC 61646:2008; EN 61646:2008

Asendatud järgmise dokumendiga: EVS-EN 61215-1-2:2017

Asendatud järgmise dokumendiga: EVS-EN 61215-1-3:2017

Asendatud järgmise dokumendiga: EVS-EN 61215-1-4:2017

Standardi staatus: Kehtetu

## 29 ELEKTROTEHNIKA

### EVS-EN 50341-2-9:2016

**Overhead electrical lines exceeding AC 1 kV - Part 2-9: National Normative Aspects (NNA) for Great Britain and Northern Ireland (based on EN 50341-1:2012)**

Keel: en

Alusdokumendid: EN 50341-2-9:2015

Asendatud järgmise dokumendiga: EVS-EN 50341-2-9:2017

Standardi staatus: Kehtetu

### EVS-EN 60623:2002

**Secondary cells and batteries containing alkaline or other non-acid electrolytes - Vented nickel-cadmium prismatic rechargeable single cells**

Keel: en

Alusdokumendid: IEC 60623:2001; EN 60623:2001

Asendatud järgmise dokumendiga: EVS-EN 60623:2017

Standardi staatus: Kehtetu

### EVS-EN 60838-1:2004

**Mitmesugused lambipesad. Osa 1: Üldnõuded ja katsetused  
Miscellaneous lampholders - Part 1: General requirements and tests**

Keel: en

Alusdokumendid: IEC 60838-1:2004; EN 60838-1:2004

Asendatud järgmise dokumendiga: EVS-EN 60838-1:2017

Muudetud järgmise dokumendiga: EVS-EN 60838-1:2004/A1:2008

Muudetud järgmise dokumendiga: EVS-EN 60838-1:2004/A2:2011

Standardi staatus: Kehtetu

### EVS-EN 60838-1:2004/A1:2008

**Mitmesugused lambipesad. Osa 1: Üldnõuded ja katsetused  
Miscellaneous lampholders - Part 1: General requirements and tests**

Keel: en

Alusdokumendid: IEC 60838-1:2004/A1:2008; EN 60838-1:2004/A1:2008

Asendatud järgmise dokumendiga: EVS-EN 60838-1:2017

Standardi staatus: Kehtetu

### EVS-EN 60838-1:2004/A2:2011

**Mitmesugused lambipesad. Osa 1: Üldnõuded ja katsetused  
Miscellaneous lampholders - Part 1: General requirements and tests**

Keel: en

Alusdokumendid: IEC 60838-1:2004/A2:2011; EN 60838-1:2004/A2:2011

Asendatud järgmise dokumendiga: EVS-EN 60838-1:2017

Standardi staatus: Kehtetu

## **EVS-EN 61800-5-2:2007**

**Reguleeritava kiirusega elektrijamisüsteemid. Osa 5-2: Ohutusnõuded. Funktsionaalsus  
Adjustable speed electrical power drive systems - Part 5-2: Safety requirements - Functional**

Keel: en

Alusdokumendid: IEC 61800-5-2:2007; EN 61800-5-2:2007

Asendatud järgmise dokumendiga: EVS-EN 61800-5-2:2017

Standardi staatus: Kehtetu

## **EVS-EN 62196-2:2012**

**Pistikud, pistikupesad, söiduki-pistikühendused ja söidukisisendid. Elektrisöidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: IEC 62196-2:2011; EN 62196-2:2012

Asendatud järgmise dokumendiga: EVS-EN 62196-2:2017

Muudetud järgmise dokumendiga: EVS-EN 62196-2:2012/A11:2013

Muudetud järgmise dokumendiga: EVS-EN 62196-2:2012/A12:2014

Standardi staatus: Kehtetu

## **EVS-EN 62196-2:2012/A11:2013**

**Pistikud, pistikupesad, söiduki-pistikühendused ja söidukisisendid. Elektrisöidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: EN 62196-2:2012/A11:2013

Asendatud järgmise dokumendiga: EVS-EN 62196-2:2017

Standardi staatus: Kehtetu

## **EVS-EN 62196-2:2012/A12:2014**

**Pistikud, pistikupesad, söiduki-pistikühendused ja söidukisisendid. Elektrisöidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: EN 62196-2:2012/A12:2014

Asendatud järgmise dokumendiga: EVS-EN 62196-2:2017

Parandatud järgmise dokumendiga: EVS-EN 62196-2:2012/A12:2014/AC:2014

Standardi staatus: Kehtetu

## **EVS-EN 62196-2:2012/A12:2014/AC:2014**

**Pistikud, pistikupesad, söiduki-pistikühendused ja söidukisisendid. Elektrisöidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: EN 62196-2:2012/A12:2014/AC:2014

Asendatud järgmise dokumendiga: EVS-EN 62196-2:2017

Standardi staatus: Kehtetu

## 33 SIDETEHNika

### EVS-EN 319 411-2 V1.1.1:2013

**Electronic Signatures and Infrastructures (ESI);Policy and security requirements for Trust Service Providers issuing certificates;Part 2: Policy requirements for certification authorities issuing qualified certificates**

Keel: en

Alusdokumendid: EN 319 411-2 V1.1.1

Asendatud järgmise dokumendiga: EVS-EN 319 411-2 V2.1.1:2016

Standardi staatus: Kehtetu

### EVS-EN 319 411-3 V1.1.1:2013

**Electronic Signatures and Infrastructures (ESI);Policy and security requirements for Trust Service Providers issuing certificates;Part 3: Policy requirements for Certification Authorities issuing public key certificates**

Keel: en

Alusdokumendid: EN 319 411-3 V1.1.1

Asendatud järgmise dokumendiga: EVS-EN 319 411-1 V1.1.1:2016

Standardi staatus: Kehtetu

### EVS-EN 319 412-5 V1.1.1:2013

**Electronic Signatures and Infrastructures (ESI);Profiles for Trust Service Providers issuing certificates;Part 5: Extension for Qualified Certificate profile**

Keel: en

Alusdokumendid: EN 319 412-5 V1.1.1

Asendatud järgmise dokumendiga: EVS-EN 319 412-5 V2.1.1:2016

Standardi staatus: Kehtetu

### EVS-EN 55014-1:2007

**Elektromagnetiline ühilduvus. Nõuded majapidamismasinatele, elektrilistele tööriistadele ja nendesarnastele seadmetele. Osa 1: Emissioon**

**Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus -- Part 1: Emission**

Keel: en

Alusdokumendid: CISPR 14-1:2005; EN 55014-1:2006

Asendatud järgmise dokumendiga: EVS-EN 55014-1:2017

Muudetud järgmise dokumendiga: EVS-EN 55014-1:2007/A1:2009

Muudetud järgmise dokumendiga: EVS-EN 55014-1:2007/A2:2011

Standardi staatus: Kehtetu

### EVS-EN 55014-1:2007/A1:2009

**Elektromagnetiline ühilduvus. Nõuded majapidamismasinatele, elektrilistele tööriistadele ja nendesarnastele seadmetele. Osa 1: Emissioon**

**Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission**

Keel: en

Alusdokumendid: CISPR 14-1:2005/A1:2008; EN 55014-1:2006/A1:2009

Asendatud järgmise dokumendiga: EVS-EN 55014-1:2017

Standardi staatus: Kehtetu

### EVS-EN 55014-1:2007/A2:2011

**Elektromagnetiline ühilduvus. Nõuded majapidamismasinatele, elektrilistele tööriistadele ja nendesarnastele seadmetele. Osa 1: Emissioon**

**Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus -- Part 1: Emission**

Keel: en

Alusdokumendid: CISPR 14-1:2005/A2:2011; EN 55014-1:2006/A2:2011

Asendatud järgmise dokumendiga: EVS-EN 55014-1:2017

Standardi staatus: Kehtetu

### EVS-EN 55016-2-3:2010

**Raadiohäiringute ja häiringutaluvuse mõõtseeadmed ja -meetodid. Osa 2-3: Häiringute ja häiringutaluvuse mõõtmeetodid. Kiirgushäiringute mõõtmine**

## **Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements**

Keel: en

Alusdokumendid: CISPR 16-2-3:2010; EN 55016-2-3:2010

Asendatud järgmise dokumendiga: EVS-EN 55016-2-3:2017

Muudetud järgmise dokumendiga: EVS-EN 55016-2-3:2010/A1:2011

Muudetud järgmise dokumendiga: EVS-EN 55016-2-3:2010/A2:2014

Parandatud järgmise dokumendiga: EVS-EN 55016-2-3:2010/AC:2013

Standardi staatus: Kehtetu

### **EVS-EN 55016-2-3:2010/A1:2011**

**Raadiohäiringute ja häiringutaluvuse mõõteseadmed ja -meetodid. Osa 2-3: Häiringute ja häiringutaluvuse mõõtmeetodid. Kiirgushäiringute mõõtmine**

## **Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements**

Keel: en

Alusdokumendid: CISPR 16-2-3:2010/A1:2010; EN 55016-2-3:2010/A1:2010

Asendatud järgmise dokumendiga: EVS-EN 55016-2-3:2017

Standardi staatus: Kehtetu

### **EVS-EN 55016-2-3:2010/A2:2014**

**Raadiohäiringute ja häiringutaluvuse mõõteseadmed ja -meetodid. Osa 2-3: Häiringute ja häiringutaluvuse mõõtmeetodid. Kiirgushäiringute mõõtmine**

## **Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements**

Keel: en

Alusdokumendid: CISPR 16-2-3:2010/A2:2014; EN 55016-2-3:2010/A2:2014

Asendatud järgmise dokumendiga: EVS-EN 55016-2-3:2017

Standardi staatus: Kehtetu

### **EVS-EN 55016-2-3:2010/AC:2013**

**Raadiohäiringute ja häiringutaluvuse mõõteseadmed ja -meetodid. Osa 2-3: Häiringute ja häiringutaluvuse mõõtmeetodid. Kiirgushäiringute mõõtmine**

## **Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements**

Keel: en

Alusdokumendid: EN 55016-2-3:2010/AC:2013

Asendatud järgmise dokumendiga: EVS-EN 55016-2-3:2017

Standardi staatus: Kehtetu

## **35 INFOTEHNOLOGIA**

### **CLC/TR 50600-99-1:2016**

**Information technology - Data centre facilities and infrastructures - Part 99-1: Recommended practices for energy management**

Keel: en

Alusdokumendid: CLC/TR 50600-99-1:2016

Asendatud järgmise dokumendiga: CLC/TR 50600-99-1:2017

Standardi staatus: Kehtetu

## **43 MAANTEESÖIDUKITE EHITUS**

### **EVS-EN 62196-2:2012**

**Pistikud, pistikupesad, söiduki-pistikühendused ja söidukisisendid. Elektrisöidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel pöhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: IEC 62196-2:2011; EN 62196-2:2012

Asendatud järgmise dokumendiga: EVS-EN 62196-2:2017

Muudetud järgmise dokumendiga: EVS-EN 62196-2:2012/A11:2013

Muudetud järgmise dokumendiga: EVS-EN 62196-2:2012/A12:2014

Standardi staatus: Kehtetu

#### **EVS-EN 62196-2:2012/A11:2013**

**Pistikud, pistikupesad, sõiduki-pistikühendused ja sõidukisisendid. Elektrisõidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: EN 62196-2:2012/A11:2013

Asendatud järgmiste dokumendiga: EVS-EN 62196-2:2017

Standardi staatus: Kehtetu

#### **EVS-EN 62196-2:2012/A12:2014**

**Pistikud, pistikupesad, sõiduki-pistikühendused ja sõidukisisendid. Elektrisõidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: EN 62196-2:2012/A12:2014

Asendatud järgmiste dokumendiga: EVS-EN 62196-2:2017

Parandatud järgmiste dokumendiga: EVS-EN 62196-2:2012/A12:2014/AC:2014

Standardi staatus: Kehtetu

#### **EVS-EN 62196-2:2012/A12:2014/AC:2014**

**Pistikud, pistikupesad, sõiduki-pistikühendused ja sõidukisisendid. Elektrisõidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded**

**Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories**

Keel: en

Alusdokumendid: EN 62196-2:2012/A12:2014/AC:2014

Asendatud järgmiste dokumendiga: EVS-EN 62196-2:2017

Standardi staatus: Kehtetu

### **45 RAUDTEETEHNIKA**

#### **EVS-EN 13796-1:2005**

**Ohutusnõuded reisijateveoks köisraudteel. Kandurid. Osa 1: Haaratsid, karabiinid, toolid, T-latid ja platvormid**

**Safety requirements for cableway installations designed to carry persons - Carriers - Part 1: Grips, carrier trucks, on-board brakes, cabins, chairs, carriages, maintenance carriers, towhangers**

Keel: en

Alusdokumendid: EN 13796-1:2005

Asendatud järgmiste dokumendiga: EVS-EN 13796-1:2017

Standardi staatus: Kehtetu

#### **EVS-EN 15273-1:2013**

**Raudteealased rakendused. Gabariigid. Osa 1: Üldist. Üldreeglid taristule ja raudteeveeremile**  
**Railway applications - Gauges - Part 1: General - Common rules for infrastructure and rolling stock**

Keel: en

Alusdokumendid: EN 15273-1:2013

Asendatud järgmiste dokumendiga: EVS-EN 15273-1:2013+A1:2017

Standardi staatus: Kehtetu

## 49 LENNUNDUS JA KOSMOSETEHNIKA

### EVS-EN 2285:2000

Lennunduse ja kosmonautika seeria. Isemääriva kattega alumiiniumisulamist silepuksid.

Mõõtmed ja koormused

Aerospace series - Bushes, plain aluminium alloy with self-lubricating liner - Dimensions and loads

Keel: en

Alusdokumendid: EN 2285:1989

Asendatud järgmiste dokumendiga: EVS-EN 2285:2017

Standardi staatus: Kehtetu

### EVS-EN 2286:2000

Lennunduse ja kosmonautika seeria. Isemääriva kattega alumiiniumisulamist äärikpuksid.

Mõõtmed ja koormused

Aerospace series - Bushes, flanged aluminium alloy with self-lubricating liner - Dimensions and loads

Keel: en

Alusdokumendid: EN 2286:1989

Asendatud järgmiste dokumendiga: EVS-EN 2286:2017

Standardi staatus: Kehtetu

## 67 TOIDUAINETE TEHNOLOOGIA

### EVS-EN ISO 12966-2:2011

Animal and vegetable fats and oils - Gas chromatography of fatty acid methyl esters - Part 2: Preparation of methyl esters of fatty acids (ISO 12966-2:2011)

Keel: en

Alusdokumendid: ISO 12966-2:2011; EN ISO 12966-2:2011

Asendatud järgmiste dokumendiga: EVS-EN ISO 12966-2:2017

Standardi staatus: Kehtetu

### EVS-EN ISO 15302:2010

Loomsed ja taimsed rasvad ja ölid. Bensopüreenisisalduse määramine. Pöördfaasiline kõrgsurvevedelikkromatograafiline meetod

Animal and vegetable fats and oils - Determination of benzo[a]pyrene - Reverse-phase high performance liquid chromatography method

Keel: en

Alusdokumendid: ISO 15302:2007; EN ISO 15302:2010

Asendatud järgmiste dokumendiga: EVS-EN ISO 15302:2017

Standardi staatus: Kehtetu

## 71 KEEMILINE TEHNOLOOGIA

### EVS-EN 61010-2-020:2006

Ohutusnõuded elektrilistele mõõte-, juhtimis- ja laboratooriumiseadmetele. Osa 2-020:

Erinõuded laboratoorsele tsentrifuuugidele

Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-020: Particular requirements for laboratory centrifuges

Keel: en

Alusdokumendid: IEC 61010-2-020:2006; EN 61010-2-020:2006

Asendatud järgmiste dokumendiga: EVS-EN 61010-2-020:2017

Standardi staatus: Kehtetu

## 75 NAFTA JA NAFTATEHNOLOGIA

### EVS-EN 14778:2011

Solid biofuels - Sampling

Keel: en

Alusdokumendid: EN 14778:2011

Asendatud järgmiste dokumendiga: EVS-EN ISO 18135:2017

Standardi staatus: Kehtetu

## 77 METALLURGIA

### EVS-EN 1274:2005

#### Thermal spraying - Powders - Composition, technical supply conditions

Keel: en

Alusdokumendid: EN 1274:2004

Asendatud järgmise dokumendiga: EVS-EN ISO 14232-1:2017

Standardi staatus: Kehtetu

## 83 KUMMI- JA PLASTITÖÖSTUS

### EVS-EN ISO 15023-1:2006

#### Plastics - Poly(vinyl alcohol) (PVAL) materials - Part 1: Designation system and basis for specifications

Keel: en

Alusdokumendid: ISO 15023-1:2001; EN ISO 15023-1:2006

Asendatud järgmise dokumendiga: EVS-EN ISO 15023-1:2017

Standardi staatus: Kehtetu

## 91 EHITUSMATERJALID JA EHITUS

### EVS 811:2012

#### Hoone ehitusprojekt

#### Building Design

Keel: et

Asendatud järgmise dokumendiga: EVS 932:2017

Standardi staatus: Kehtetu

### EVS 907:2010

#### Rajatise ehitusprojekt

#### Infrastructure/civil engineering project

Keel: et

Asendatud järgmise dokumendiga: EVS 932:2017

Standardi staatus: Kehtetu

### EVS-EN 12098-1:2013

#### Controls for heating systems - Part 1: Control equipment for hot water heating systems

Keel: en

Alusdokumendid: EN 12098-1:2013

Asendatud järgmise dokumendiga: EVS-EN 12098-1:2017

Standardi staatus: Kehtetu

### EVS-EN 15316-1:2007

#### Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.

#### Osa 1: Üldist

#### Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 1: General

Keel: en

Alusdokumendid: EN 15316-1:2007

Asendatud järgmise dokumendiga: EVS-EN 15316-1:2017

Standardi staatus: Kehtetu

### EVS-EN 15316-2-1:2007

#### Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.

#### Osa 2-1: Kütte soojusväljastussüsteemid

#### Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 2-1: Space heating emission systems

Keel: en

Alusdokumendid: EN 15316-2-1:2007

Asendatud järgmise dokumendiga: EVS-EN 15316-2:2017

Standardi staatus: Kehtetu

## **EVS-EN 15316-2-3:2007**

**Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.**

**Osa 2-3: Kütte jaotussüsteemid**

**Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 2-3: Space heating distribution systems**

Keel: en

Alusdokumendid: EN 15316-2-3:2007

Asendatud järgmise dokumendiga: EVS-EN 15316-3:2017

Standardi staatus: Kehtetu

## **EVS-EN 15316-3-2:2007**

**Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.**

**Osa 3-2: Hoonesised soojaveevarustuse süsteemid, liigitus**

**Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 3-2: Domestic hot water systems, distribution**

Keel: en

Alusdokumendid: EN 15316-3-2:2007

Asendatud järgmise dokumendiga: EVS-EN 15316-3:2017

Standardi staatus: Kehtetu

## **EVS-EN 15316-4-2:2008**

**Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.**

**Osa 4-2: Küttessüsteemide soojusallikad, soojuspump-süsteemid**

**Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-2: Space heating generation systems, heat pump systems**

Keel: en

Alusdokumendid: EN 15316-4-2:2008

Asendatud järgmise dokumendiga: EVS-EN 15316-4-2:2017

Standardi staatus: Kehtetu

## **EVS-EN 15316-4-3:2007**

**Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.**

**Osa 4-3: Küttessüsteemide soojusallikad, päikeseküttessüsteemid**

**Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-3: Space heating generation systems, thermal solar systems**

Keel: en

Alusdokumendid: EN 15316-4-3:2007

Asendatud järgmise dokumendiga: EVS-EN 15316-4-3:2017

Standardi staatus: Kehtetu

## **EVS-EN 15316-4-4:2007**

**Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.**

**Osa 4-4: Soojust tootvad süsteemid, hoonesse integreeritud koostootmissüsteemid**

**Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-4: Heat generation systems, building-integrated cogeneration systems**

Keel: en

Alusdokumendid: EN 15316-4-4:2007

Asendatud järgmise dokumendiga: EVS-EN 15316-4-4:2017

Standardi staatus: Kehtetu

## **EVS-EN 15316-4-6:2007**

**Hoonete küttessüsteemid. Süsteemide energiavajaduse ja süsteemide töhususe arvutusmeetod.**

**Osa 4-6: Soojust tootvad süsteemid, valgusgalvaanilised süsteemid**

**Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-6: Heat generation systems, photovoltaic systems**

Keel: en

Alusdokumendid: EN 15316-4-6:2007

Asendatud järgmise dokumendiga: EVS-EN 15316-4-3:2017

Standardi staatus: Kehtetu

## **EVS-EN 15316-4-8:2011**

**Heating systems in buildings - Method for calculation of system energy requirements and system efficiencies - Part 4-8: Space heating generation systems, air heating and overhead radiant heating systems**

Keel: en

Alusdokumendid: EN 15316-4-8:2011

Asendatud järgmiste dokumendiga: EVS-EN 15316-4-8:2017

Standardi staatus: Kehtetu

## **EVS-EN 15378:2007**

**Hoonete küttesüsteemid. Katelde ja küttesüsteemide kontrollimine  
Heating systems in buildings - Inspection of boilers and heating systems**

Keel: en

Alusdokumendid: EN 15378:2007

Asendatud järgmiste dokumendiga: EVS-EN 15378-1:2017

Standardi staatus: Kehtetu

## **EVS-EN 451-1:2004**

**Method of testing fly ash - Part 1: Determination of free calcium oxide content**

Keel: en

Alusdokumendid: EN 451-1:2003

Asendatud järgmiste dokumendiga: EVS-EN 451-1:2017

Standardi staatus: Kehtetu

## **EVS-EN 451-2:2000**

**Lendtuba testimise meetodid. Osa 2 Peenusastme määramine märgsõelumise abil  
Method of testing fly ash - Part 2: Determination of fineness by wet sieving**

Keel: en

Alusdokumendid: EN 451-2:1994

Asendatud järgmiste dokumendiga: EVS-EN 451-2:2017

Standardi staatus: Kehtetu

## **93 RAJATISED**

### **EVS-EN 13803-1:2010**

**Raudteealased rakendused. Rööbastee. 1435 mm ja laiema rööpmelaiusega rööbastee projekteerimine. Osa 1: Raudteerada**

**Railway applications - Track - Track alignment design parameters - Track gauges 1435 mm and wider - Part 1: Plain line**

Keel: en

Alusdokumendid: EN 13803-1:2010

Asendatud järgmiste dokumendiga: EVS-EN 13803:2017

Standardi staatus: Kehtetu

### **EVS-EN 13803-2:2006+A1:2010**

**Raudteealased rakendused. Rööbastee. 1435 mm ja laiema rööpmevahega rööbastee projekteerimine. Osa 2: Pöörmed, ristmed ja nendega sarnaneva geomeetriaga järsult muutuva raadiusega köverike projekteerimisolutkorrad**

**Railway applications - Track - Track alignment design parameters - Track gauges 1435 mm and wider - Part 2: Switches and crossings and comparable alignment design situations with abrupt changes of curvature**

Keel: en, et

Alusdokumendid: EN 13803-2:2006+A1:2009

Asendatud järgmiste dokumendiga: EVS-EN 13803:2017

Standardi staatus: Kehtetu

### **EVS-EN 752:2008**

**Dreenide ja kanalisatsioonisüsteemid väljaspool hooneid  
Drain and sewer systems outside buildings**

Keel: en

Alusdokumendid: EN 752:2008

Asendatud järgmiste dokumendiga: EVS-EN 752:2017

Standardi staatus: Kehtetu

## 97 OLME. MEELELAHUTUS. SPORT

### EVS-EN 12098-1:2013

#### **Controls for heating systems - Part 1: Control equipment for hot water heating systems**

Keel: en

Alusdokumendid: EN 12098-1:2013

Asendatud järgmise dokumendiga: EVS-EN 12098-1:2017

Standardi staatus: Kehtetu

### EVS-EN 50491-1:2014

#### **General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 1: General requirements**

Keel: en

Alusdokumendid: EN 50491-1:2014

Asendatud järgmiste dokumendidega: EVS-EN 63044-1:2017

Standardi staatus: Kehtetu

# STANDARDIKAVANDITE ARVAMUSKÜSITLUS

Selleks, et tagada standardite vastuvõtmise, järgides konsensuse põhimõtteid, peab standardite vastuvõtmisele eelnema standardikavandite avalik arvamusküsitlus, milleks ettenähtud perioodi jooksul (reeglina 2 kuud) on ajast huvitatui võimalik tutvuda standardikavanditega, esitada kommentaare ning teha ettepanekuid parandusteks. Eriti on oodatud teave, kui rahvusvahelist või Euroopa standardikavandit ei peaks vastu võtma Eesti standardiks (vastuolu Eesti õigusaktidega, pole Eestis rakendatav jt põhjustel).

Arvamusküsitlusele esitatakse Euroopa ja rahvusvahelised standardikavandid, mis on kavas üle võtta Eesti standarditeks, ja Eesti algupärased standardikavandid ning algupäraste tehniliste spetsifikatsioonide ja juhendite kavandid.

Iga arvamusküsitlusel oleva kavandi kohta on esitatud järgnev informatsioon:

- Tähis
- Pealkiri
- Käsitusala
- Keel (en = inglise; et = eesti)
- Euroopa või rahvusvahelise alusdokumendi tähis, selle olemasolul
- Asendusseos, selle olemasolul
- Arvamuste esitamise tähtaeg

Kavanditega saab tutvuda ja kommentaare esitada Standardikeskuse veebilehel asuvas kommenteerimisportaalil:  
<https://www.evs.ee/kommenteerimisportaal/>

Igakuiselt uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Standardikeskuse veebilehel avaldatavast standardimisprogrammist.

## 01 ÜLDKÜSIMUSED. TERMINOOGIA. STANDARDIMINE. DOKUMENTATSIOON

### prEN 13707

#### **Flexible sheets for waterproofing - Reinforced bitumen sheets for roof waterproofing - Definitions and characteristics**

This draft European Standard specifies definitions and characteristics for flexible reinforced bitumen sheets for which the intended use is roofing. This covers sheets used as top layers, intermediate layers and underlayers.

Keel: en

Alusdokumendid: prEN 13707

Asendab dokumenti: EVS-EN 13707:2013

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN ISO 13567-1

#### **Technical product documentation - Organization and naming of layers for CAD - Part 1: Overview and principles (ISO/CDIS 13567-1:2017)**

This document establishes the general principles of layer structuring within CAD files. Layers are used to control visibility and to manage and communicate CAD file data. Layer names are used to represent this structure. The principles are applicable to all parties involved in preparing and using technical documentation on computer systems. Although these principles are primarily for users, CAD system developers are expected to provide software tools capable of implementing and supporting this document. An important use is also to structure data in component libraries produced by third parties.

Keel: en

Alusdokumendid: ISO/CDIS 13567-1; prEN ISO 13567-1

Asendab dokumenti: EVS-EN ISO 13567-1:2002

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN ISO 13567-2

#### **Technical product documentation - Organization and naming of layers for CAD - Part 2: Concepts, format and codes used in construction documentation (ISO/CDIS 13567-2:2017)**

This document covers the organization and allocation of layers for CAD on construction projects for the purposes of communication and management.

Keel: en

Alusdokumendid: ISO/CDIS 13567-2; prEN ISO 13567-2

Asendab dokumenti: EVS-EN ISO 13567-2:2002

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN ISO 13666

#### **Ophthalmic optics - Spectacle lenses - Vocabulary (ISO/DIS 13666:2017)**

This International Standard defines basic terms relating to ophthalmic optics, specifically to semifinished spectacle lens blanks, finished spectacle lenses and fitting purposes. Terms relating to processes and material for fabrication and surface treatment (other than some specific terms relating to coatings, which are defined in Clause 16) and terms relating to defects in materials and after optical processing are given in ISO 9802.

Keel: en  
Alusdokumendid: ISO/DIS 13666; prEN ISO 13666  
Asendab dokumenti: EVS-EN ISO 13666:2012  
**Arvamusküsitluse lõppkuupäev: 16.07.2017**

### **03 TEENUSED. ETTEVÖTTE ORGANISEERIMINE, JUHTIMINE JA KVALITEET. HALDUS. TRANSPORT. SOTSILOOGIA**

#### **prEN ISO 16407-2**

#### **Electronic fee collection - Evaluation of equipment for conformity to ISO 17575-1 - Part 2: Abstract test suite (ISO/DIS 16407-2:2017)**

The scope of ISO 16407 (all parts) is to provide a suite of tests in order to assess the Front End and Back End behaviours compliancy towards the requirements listed in ISO 17575-1. This document contains the definition of such tests in the form of Test Cases, reflecting the required individual steps listed in specific Test Purposes defined in ISO 16407-1. The Test Cases are written in Testing and Test Control Notation version 3 (TTCN v3).

Keel: en  
Alusdokumendid: ISO/DIS 16407-2; prEN ISO 16407-2  
Asendab dokumenti: CEN ISO/TS 16407-2:2012

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **prEN ISO 16410-2**

#### **Electronic fee collection - Evaluation of equipment for conformity to ISO 17575-3 - Part 2: Abstract test suite (ISO/DIS 16410-2:2017)**

The scope of ISO 16410 (all parts) is to provide a suite of tests in order to assess the Front End and Back End behaviours compliancy towards the requirements listed in ISO 17575-3. This document contains the definition of such tests in the form of Test Cases, reflecting the required individual steps listed in specific Test Purposes defined in ISO 16410-1. The Test Cases are written in Testing and Test Control Notation version 3 (TTCN v3).

Keel: en  
Alusdokumendid: ISO/DIS 16410-2; prEN ISO 16410-2  
Asendab dokumenti: CEN ISO/TS 16410-2:2012

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

### **11 TERVISEHOOLDUS**

#### **EN 60601-2-54:2009/prA2:2017**

#### **Elektrilised meditsiiniseadmed. Osa 2-54: Erinõuded radiograafias ja fluoroskoopias kasutatavate röntgenseadmete esmasele ohutusele ja olulistele toimimisnäitajatele Medical electrical equipment - Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy**

Muudatus standardile EN 60601-2-54:2009

Keel: en  
Alusdokumendid: IEC 60601-2-54:2009/A2:201X; EN 60601-2-54:2009/prA2:2017  
Muudab dokumenti: EVS-EN 60601-2-54:2009  
Muudab dokumenti: EVS-EN 60601-2-54:2009+A1:2015

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **prEN 80601-2-60:2017**

#### **Elektrilised meditsiiniseadmed. Osa 2-60: Erinõuded hambaravis kasutatavate seadmete esmasele ohutusele ja olulistele toimimisnäitajatele Medical electrical equipment - Part 2-60: Particular requirements for the basic safety and essential performance of dental equipment**

Replacement: This International Standard applies to the BASIC SAFETY and ESSENTIAL PERFORMANCE of DENTAL UNITS, DENTAL PATIENT CHAIRS, DENTAL HANDPIECES and DENTAL OPERATING LIGHTS, hereafter referred to as DENTAL EQUIPMENT. Excluded are amalgamators, sterilizers, cleaning and disinfection equipment not being part of a DENTAL UNIT and dental X-ray equipment. If a clause or subclause is specifically intended to be applicable to ME EQUIPMENT only, or to ME SYSTEMS only, the title and content of that clause or subclause will say so. If that is not the case, the clause or subclause applies both to ME EQUIPMENT and to ME SYSTEMS, as relevant. HAZARDS inherent in the intended physiological function of ME EQUIPMENT or ME SYSTEMS within the scope of this standard are not covered by specific requirements in this standard except in 7.2.13 and 8.4.1 of the general standard. NOTE See also 4.2 of the general standard.

Keel: en  
Alusdokumendid: IEC 80601-2-60:201X; prEN 80601-2-60:2017  
Asendab dokumenti: EVS-EN 80601-2-60:2015

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## **prEN ISO 10637**

### **Dentistry - Central suction source equipment (ISO/DIS 10637:2017)**

This document specifies requirements and test methods for stationary, electrically powered central suction source equipment. It also specifies requirements for information to be supplied by the manufacturer on the performance, installation, operation and maintenance of the central suction source equipment as part of the complete dental suction system. This document specifies requirements for central suction source equipment used to provide vacuum pressure and flow at the facility pipeline connection point. This document does not apply to portable suction source equipment, air/water venturi suction source equipment, or to suction source equipment located in the treatment room. It also does not apply to suction source equipment used for life support or for scavenging halogenated anaesthetic gases. This document does not include requirements for facility and exhaust piping systems or treatment room equipment. Centrally located amalgam separators and air water separators are both component parts of the central suction source equipment.

Keel: en

Alusdokumendid: ISO/DIS 10637; prEN ISO 10637

Asendab dokumenti: EVS-EN ISO 10637:2001

Arvamusküsitluse lõppkuupäev: 16.07.2017

## **prEN ISO 13666**

### **Ophthalmic optics - Spectacle lenses - Vocabulary (ISO/DIS 13666:2017)**

This International Standard defines basic terms relating to ophthalmic optics, specifically to semifinished spectacle lens blanks, finished spectacle lenses and fitting purposes. Terms relating to processes and material for fabrication and surface treatment (other than some specific terms relating to coatings, which are defined in Clause 16) and terms relating to defects in materials and after optical processing are given in ISO 9802.

Keel: en

Alusdokumendid: ISO/DIS 13666; prEN ISO 13666

Asendab dokumenti: EVS-EN ISO 13666:2012

Arvamusküsitluse lõppkuupäev: 16.07.2017

## **prEN ISO 20569**

### **Dentistry - Trepbine burs (ISO/DIS 20569:2017)**

This International Standard specifies requirements and their test methods for trepbine burs used in dentistry especially for oral surgical implant procedures such as collecting bones and removing the fractured implant. It also specifies the requirements for their marking and labelling.

Keel: en

Alusdokumendid: ISO/DIS 20569; prEN ISO 20569

Arvamusküsitluse lõppkuupäev: 16.07.2017

## **prEN ISO 20570**

### **Dentistry - Oral surgical scalpel handle (ISO/DIS 20570:2017)**

This International Standard specifies requirements and their test methods for oral surgical scalpel handles used in dentistry especially for oral surgical procedures such as gingival tissue cutting and making surgical incisions. It also specifies the requirements for their marking and labelling.

Keel: en

Alusdokumendid: ISO/DIS 20570; prEN ISO 20570

Arvamusküsitluse lõppkuupäev: 16.07.2017

## **13 KESKKONNA- JA TERVISEKAITSE. OHUTUS**

### **EN 54-22:2015/prA1**

#### **Fire detection and fire alarm systems - Part 22: Resettable line-type heat detectors**

This European Standard applies to resettable line-type heat detectors consisting of a sensing element using an optical fibre, a pneumatic tube or an electrical sensor cable connected to a sensor control unit, either directly or through an interface module, intended for use in fire detection and fire alarm systems installed in and around buildings and other civil engineering works (see EN 54-1:2011). This European Standard specifies the requirements and performance criteria, the corresponding test methods and provides for the Assessment and Verification of Constancy of Performance (AVCP) of resettable line-type heat detectors to this EN. This European Standard also covers resettable line-type heat detectors intended for use in the local protection of plant and equipment. Resettable line-type heat detectors with special characteristics and developed for specific risks are not covered by this EN. This European Standard does not cover line-type heat detectors that are based on non-resettable, fixed temperature electrical cables (so called digital systems).

Keel: en

Alusdokumendid: EN 54-22:2015/prA1

Muudab dokumenti: EVS-EN 54-22:2015

Arvamusküsitluse lõppkuupäev: 16.07.2017

## **prEN 12259-12**

### **Fixed firefighting systems - Components for sprinkler and water spray systems - Part 12: Pumps**

This part of EN 12259 specifies requirements for construction and performance of single and multistage rotodynamic (centrifugal) pumps used in automatic sprinklers systems conforming to EN 12845 Clause 10 Pumps and TS 14816 Water spray systems

Keel: en

Alusdokumendid: prEN 12259-12

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## **prEN 15650**

### **Ventilation for buildings - Fire dampers**

This document applies to fire dampers used in conjunction with fire separating elements to maintain fire compartments. This document specifies requirements and gives reference to test methods defined for fire dampers, which are installed in Heating, Ventilating and Air Conditioning (HVAC) installations in buildings. Details are given for the provision of evaluation of conformity and marking of fire dampers. To avoid duplication, reference is made to a variety of other standards. To this end, it is advised to read this document in conjunction with EN 1366 2 for details of the fire resistance testing and EN 13501 3 for classification. Fire dampers meeting the requirements of this document may be considered suitable for both ducted and unducted applications. This document does not consider in detail the detrimental and/or corrosive effects that can be caused by chemical processes present in the atmosphere, which are drawn through the system intentionally or inadvertently and therefore does not apply to fire dampers used in such applications. An indication of salt spray corrosion can be determined using the method described in Annex B. This document is not applicable to non-mechanical fire barriers nor to air transfer grilles.

Keel: en

Alusdokumendid: prEN 15650

Asendab dokumenti: EVS-EN 15650:2010

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## **prEN ISO 24505**

### **Ergonomics - Accessible design - Method for creating colour combinations taking account of age-related changes in human colour vision (ISO 24505:2016)**

ISO 24505:2016 provides a method for creating conspicuous colour combinations for use in visual signs and displays taking into account viewer age. It is based on the perceived similarity of colours at photopic and mesopic lighting conditions. ISO 24505:2016 applies to the design of visual signs and displays in which multiple colours are used so that the colours are conspicuous to people of any age, including older people who do not have deficient colour vision. The method and data in this International Standard are not applicable to the design of visual signs and displays for people with colour deficiencies or medical disorders affecting vision. Basically, this International Standard applies to the reflective or object mode colours, but may apply to self-luminous mode colours if the colour coordinates are appropriately transferred to those of the object mode colours.

Keel: en

Alusdokumendid: ISO 24505:2016; prEN ISO 24505

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## **23 ÜLDKASUTATAVAD HÜDRO- JA PNEUMOSÜSTEEMID JA NENDE OSAD**

### **prEN 60534-1:2017**

#### **Industrial-process control valves - Part 1: Control valve terminology and general considerations**

This part of IEC 60534 applies to all types of industrial-process control valves (hereinafter referred to as control valves). This part establishes a partial basic terminology list and provides guidance on the use of all other parts of IEC 60534.

Keel: en

Alusdokumendid: IEC 60534-1:201X; prEN 60534-1:2017

Asendab dokumenti: EVS-EN 60534-1:2005

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## **25 TOOTMISTEHOLOOGIA**

### **prEN 17120**

#### **Photocatalysis - Water purification - Performance of photocatalytic materials by measurement of phenol degradation**

This European Standard describes a test method to evaluate the performance of photocatalytic materials in water purification by measuring phenol degradation. This test method is applicable to photocatalytic materials in form of powders (suspensions in water, slurries) under UV irradiation. The photocatalytic performance of the tested material is assessed by the observed rate of phenol degradation at specified experimental conditions as determined by HPLC.

Keel: en

Alusdokumendid: prEN 17120

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN 60534-1:2017

#### **Industrial-process control valves - Part 1: Control valve terminology and general considerations**

This part of IEC 60534 applies to all types of industrial-process control valves (hereinafter referred to as control valves). This part establishes a partial basic terminology list and provides guidance on the use of all other parts of IEC 60534.

Keel: en

Alusdokumendid: IEC 60534-1:201X; prEN 60534-1:2017

Asendab dokumenti: EVS-EN 60534-1:2005

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN ISO 2081

#### **Metallic and other inorganic coatings - Electroplated coatings of zinc with supplementary treatments on iron or steel (ISO/DIS 2081:2016)**

This International Standard specifies requirements for electroplated coatings of zinc with supplementary treatments on iron or steel. It includes information to be supplied by the purchaser to the electroplater, and the requirements for heat treatment before and after electroplating. It is not applicable to zinc coatings applied — to sheet, strip or wire in the non-fabricated form, — to close-coiled springs, or — for purposes other than protective or decorative. This International Standard does not specify requirements for the surface condition of the basis metal prior to electroplating with zinc. However, defects in the surface of the basis metal can adversely affect the appearance and performance of the coating. The coating thickness that can be applied to threaded components can be limited by dimensional requirements, including class or fit.

Keel: en

Alusdokumendid: prEN ISO 2081; ISO/DIS 2081:2017

Asendab dokumenti: EVS-EN ISO 2081:2009

Arvamusküsitluse lõppkuupäev: 16.06.2017

## 29 ELEKTROTEHNIKA

### EN 60076-3:2013/prA1:2017

#### **Power transformers - Part 3: Insulation levels, dielectric tests and external clearances in air**

Amendment for EN 60076-3:2013

Keel: en

Alusdokumendid: IEC 60076-3:2013/A1:201X; EN 60076-3:2013/prA1:2017

Mudab dokumenti: EVS-EN 60076-3:2013

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN 50642:2017

#### **Cable management systems - Test method for content of halogens**

This European Standard specifies a method for the determination of the content of halogens in Cable Management System (CMS) products or parts of products made of polymeric material(s). The determination is made by combustion and subsequent analysis of the combustion product by Ion Chromatography. This standard specifies how CMS products can be declared as halogen free. This European Standard is for environmental performance only. Compliance with this standard does not guarantee the absence of toxicity, corrosivity or opacity of produced smoke, or other reaction to fire characteristics. If any of these characteristics are to be evaluated, the suitable standards can be used. The detection limit of this test method is 0,025 g of halogen per kg (0,0025 %). Halides insoluble in aqueous solution present in the original sample or produced during the combustion step are not determined by this method.

Keel: en

Alusdokumendid: prEN 50642:2017

Arvamusküsitluse lõppkuupäev: 16.06.2017

### prEN 61125:2017

#### **Insulating liquids - Test methods for oxidation stability - Test method for evaluating of oxidation stability of uninhibited and 6 inhibited insulating liquids (former IEC 61125 Part C)**

This method describes a test for evaluating the oxidation stability of insulating liquids in the delivered state under accelerated conditions regardless of whether or not antioxidant additives are present. The method can be used for measuring the induction period, the test shall be continued until the volatile acidity significantly exceeds 0,10 mg KOH/g in case of mineral oils. This value may be significantly higher in case of ester liquids. The insulating liquid sample is maintained at 120 °C in the presence of a solid copper catalyst whilst bubbling air at a constant flow. The degree of oxidation stability is estimated by measurement of volatile acidity, soluble acidity, sludge, dielectric dissipation factor or from the time to develop a given amount of volatile acidity (induction period). In the informative Annex B a test method for evaluating the oxidation stability of inhibited mineral insulating oils in the delivered state by measurement of the induction period is described. The method is only intended for testing the continuity of oil supplies. The results do not necessarily provide information on the performance in service. The oil sample is maintained at 120°C in the presence of a solid copper catalyst whilst bubbling through a constant flow of oxygen. The degree of oxidation stability is estimated by the time taken by the oil to develop a determined amount of volatile acidity. Additional criteria such as soluble and

volatile acidities, sludge and dielectric dissipation factor may also be determined after a specified duration. In the informative Annex C a test method intended to simulate the thermal-oxidation behaviour of ester insulating liquids (headspace of air at 150°C for 164h) is described. Additional test methods e. g. IEC TR 62036 based on differential scanning calorimetry may also be used as screening tests, but are not part of this standard.

Keel: en

Alusdokumendid: IEC 61125:201X; prEN 61125:2017

Asendab dokumenti: EVS-EN 61125:2002

Asendab dokumenti: EVS-EN 61125:2002/A1:2004

Arvamusküsitluse lõppkuupäev: 16.07.2017

### 33 SIDETEHNika

#### prEN 50441-5:2017

#### Cables for indoor residential telecommunication installations - Part 5: Cables up to 2 200 MHz for one pair and remaining pairs up to 1 000 MHz

This European Standard covers cables for installation in indoor Residential Cabling Systems. The cables are specified up to 2 200 MHz for only 1 pair and the remaining pairs to 1 000 MHz. Their design is based on the requirements of EN 50290-2-1. They are specifically designed for cabling in residential environments supporting ICT and BCT applications (Telephone, Computer and TV services). This specification defines the constructional details as well as the specific performances of the cables. Unless otherwise specified, all cables covered by this standard may be subjected to voltages not more than 300 V a.c. or 450 V d.c. and will meet the essential requirements of the low voltage directive. Due to current limitation related to the conductor cross sectional area, they are not intended for direct connection to mains electricity supply. The maximum current rating per conductor is less than or equal to 3 A/mm<sup>2</sup> unless otherwise specified in the relevant detail specification.

Keel: en

Alusdokumendid: prEN 50441-5:2017

Arvamusküsitluse lõppkuupäev: 16.07.2017

#### prEN 55015:2017

#### Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

This International Standard applies to the emission (radiated and conducted) of radiofrequency disturbances from: – lighting equipment; – the lighting part of multi-function equipment where this lighting part is a primary function; NOTE Examples are lighting equipment with visible-light communication – UV and IR radiation equipment for residential and non-industrial applications; – advertising signs; NOTE Examples are neon tube advertising signs – decorative lighting; – emergency signs. Excluded from the scope of this standard are: – components intended to be built into lighting equipment and which are not user-replaceable; NOTE See CISPR 30-series of technical reports for built-in controlgear – lighting equipment operating in the ISM frequency bands (as defined in Resolution 63 (1979) of the ITU Radio Regulation); – lighting equipment for aircraft and airfield facilities (runways, service facilities, platforms); – video signs; – installations; – equipment for which the electromagnetic compatibility requirements in the radio-frequency range are explicitly formulated in other CISPR standards, even if they incorporate a built-in lighting function. NOTE 1 Examples of exclusions are: - equipment with built-in lighting devices for display back lighting, scale illumination and signaling; - SSL-displays; - range hoods, refrigerators, freezers; - photocopiers, projectors; - lighting equipment for road vehicles.

Keel: en

Alusdokumendid: CISPR 15:201X; prEN 55015:2017

Asendab dokumenti: EVS-EN 55015:2013

Asendab dokumenti: EVS-EN 55015:2013/A1:2015

Asendab dokumenti: EVS-EN 55015:2013+A1:2015

Arvamusküsitluse lõppkuupäev: 16.07.2017

#### prEN 60793-1-54:2017

#### Optical fibres - Part 1-54: Measurement methods and test procedures - Gamma irradiation

This International Standard outlines a method for measuring the steady state response of optical fibres and optical cables exposed to gamma radiation. It can be employed to determine the level of radiation induced attenuation produced in Class B single-mode or Class A, category A1 and A2 multimode optical fibres, in either cabled or uncabled form, due to exposure to gamma radiation. The attenuation of cabled and uncabled optical fibres generally increases when exposed to gamma radiation. This is primarily due to the trapping of radiolytic electrons and holes at defect sites in the glass (i.e. the formation of "colour centres"). This test procedure focuses on two regimes of interest: the low dose rate regime suitable for estimating the effect of environmental background radiation, and the high dose rate regime suitable for estimating the effect of adverse nuclear environments. The testing of the effects of environmental background radiation is achieved with an attenuation measurement approach similar to IEC 60793-1-40 Method A, cut-back. The effects of adverse nuclear environments are tested by monitoring the power before, during and after exposure of the test sample to gamma radiation. The depopulation of colour centres by light (photo bleaching) or by heat causes recovery (lessening of radiation induced attenuation). Recovery may occur over a wide range of time which depends on the irradiation time and annealing temperature. This complicates the characterization of radiation induced attenuation since the attenuation depends on many variables including the temperature of the test environment, the configuration of the sample, the total dose and the dose rate applied to the sample and the light level used to measure it. This test is not a material test for the non-optical material components of a fibre optic cable. If degradation of cable materials exposed to irradiation is to be studied, other test methods will be required. This test method is written to contain a clear, concise listing of instructions. The background knowledge that is necessary to perform correct, relevant and expressive irradiation tests as well as to limit measurement uncertainty is presented separately in IEC/TR 62283. Attention is drawn to the fact that strict regulations and suitable protective

facilities are to be adopted in the laboratory for this test. Carefully selected trained personnel shall be used to perform this test. It can be extremely hazardous to test personnel if it is improperly performed or without qualified conditions.

Keel: en

Alusdokumendid: IEC 60793-1-54:201X; prEN 60793-1-54:2017

Asendab dokumenti: EVS-EN 60793-1-54:2013

Arvamusküsitluse lõppkuupäev: 16.07.2017

## prEN 62731:2017

### Text to speech for television - General requirements

This International Standard specifies the text-to-speech functionality for a (broadcast) receiver with a text-to-speech system. Such a system may be one device, i.e. a receiver with an integrated text-to-speech generator, or may be two devices, i.e. a receiver interfacing with an external text-to-speech device. This International Standard applies only to completely functional stationary (or semi-stationary) digital TV receivers such as set top boxes, integrated digital TVs, recorders and other products whose primary function is to receive TV content. Where this standard refers to TV, this will be shorthand for all such receivers. This International Standard does not apply to products that are capable of receiving TV as a secondary function (e.g. PCs or game consoles with digital television receivers). It also does not apply to sub-assemblies (e.g. PC tuner cards).

Keel: en

Alusdokumendid: IEC 62731:201X; prEN 62731:2017

Asendab dokumenti: EVS-EN 62731:2013

Arvamusküsitluse lõppkuupäev: 16.07.2017

## 35 INFOTEHNOLOGIA

### prEN ISO 13567-1

#### Technical product documentation - Organization and naming of layers for CAD - Part 1: Overview and principles (ISO/CDIS 13567-1:2017)

This document establishes the general principles of layer structuring within CAD files. Layers are used to control visibility and to manage and communicate CAD file data. Layer names are used to represent this structure. The principles are applicable to all parties involved in preparing and using technical documentation on computer systems. Although these principles are primarily for users, CAD system developers are expected to provide software tools capable of implementing and supporting this document. An important use is also to structure data in component libraries produced by third parties.

Keel: en

Alusdokumendid: ISO/CDIS 13567-1; prEN ISO 13567-1

Asendab dokumenti: EVS-EN ISO 13567-1:2002

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN ISO 13567-2

#### Technical product documentation - Organization and naming of layers for CAD - Part 2: Concepts, format and codes used in construction documentation (ISO/CDIS 13567-2:2017)

This document covers the organization and allocation of layers for CAD on construction projects for the purposes of communication and management.

Keel: en

Alusdokumendid: ISO/CDIS 13567-2; prEN ISO 13567-2

Asendab dokumenti: EVS-EN ISO 13567-2:2002

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN ISO 16407-2

#### Electronic fee collection - Evaluation of equipment for conformity to ISO 17575-1 - Part 2: Abstract test suite (ISO/DIS 16407-2:2017)

The scope of ISO 16407 (all parts) is to provide a suite of tests in order to assess the Front End and Back End behaviours compliancy towards the requirements listed in ISO 17575-1. This document contains the definition of such tests in the form of Test Cases, reflecting the required individual steps listed in specific Test Purposes defined in ISO 16407-1. The Test Cases are written in Testing and Test Control Notation version 3 (TTCN v3).

Keel: en

Alusdokumendid: ISO/DIS 16407-2; prEN ISO 16407-2

Asendab dokumenti: CEN ISO/TS 16407-2:2012

Arvamusküsitluse lõppkuupäev: 16.07.2017

### prEN ISO 16410-2

#### Electronic fee collection - Evaluation of equipment for conformity to ISO 17575-3 - Part 2: Abstract test suite (ISO/DIS 16410-2:2017)

The scope of ISO 16410 (all parts) is to provide a suite of tests in order to assess the Front End and Back End behaviours compliancy towards the requirements listed in ISO 17575-3. This document contains the definition of such tests in the form of

Test Cases, reflecting the required individual steps listed in specific Test Purposes defined in ISO 16410-1. The Test Cases are written in Testing and Test Control Notation version 3 (TTCN v3).

Keel: en  
Alusdokumendid: ISO/DIS 16410-2; prEN ISO 16410-2  
Asendab dokumenti: CEN ISO/TS 16410-2:2012

Arvamusküsitluse lõppkuupäev: 16.07.2017

## 49 LENNUNDUS JA KOSMOSETEHNIKA

### FprEN 2346-005

#### Aerospace series - Cable, electrical, fire resistant - Operating temperatures between -65 °C and 260 °C - Part 005: DW family, single UV laser printable and multicore assembly - Light weight - Product standard

This European Standard specifies the characteristics of light weight fire proof, unscreened, electrical cables for use in the on-board electrical systems of aircraft at operating temperature between – 65 °C and 260 °C. This cable has not been demonstrated to be arc resistance at a.c.voltsages above 200 V rms (network 115/200 V rms). Single core is UV Laser printable in accordance with EN 3838; UV laser markability is not mandatory for multicore cables.

Keel: en  
Alusdokumendid: FprEN 2346-005  
Asendab dokumenti: EVS-EN 2346-005:2014  
Arvamusküsitluse lõppkuupäev: 16.07.2017

### FprEN 3475-701

#### Aerospace series - Cables, electrical, aircraft use - Test methods - Part 701 - Strippability and adherence of insulation to the conductor

This European Standard specifies methods of measuring the strippability and adherence of the insulation to a conductor of a finished cable. When a particular method is not specified in the detail product specification, method A shall be used. Method B is recommended for wires insulated with materials showing a Low adhesion to the conductor due to the poor repeatability of the test Method A with this type of wires. It shall be used together with EN 3475-100.

Keel: en  
Alusdokumendid: FprEN 3475-701  
Asendab dokumenti: EVS-EN 3475-701:2002  
Arvamusküsitluse lõppkuupäev: 16.07.2017

### FprEN 4533-002

#### Aerospace series - Fibre optic systems - Handbook - Part 002: Test and measurement

This handbook examines the requirements to enable accurate measurement of fibre optic links from start of life and during the life cycle of the system from installation and through-service. Part 2 will explain the issues associated with optical link measurement and provide techniques to address these issues. This document discusses the measurement of key parameters associated with the passive layer (i.e. transmission of light through an optical harness). It does not discuss systems tests e.g. bit error rates.

Keel: en  
Alusdokumendid: FprEN 4533-002  
Asendab dokumenti: EVS-EN 4533-002:2006  
Arvamusküsitluse lõppkuupäev: 16.07.2017

### FprEN 4533-003

#### Aerospace series - Fibre optic systems - Handbook - Part 003: Looming and installation practices

This handbook considers best practice during initial design and how the practices chosen affect through life support of the installation. Looming and installation practices are a critical aspect of any aircraft electrical/avionics installation. In order to provide a reliable and efficient system it is important that the fibre optic installation is designed for reliability and maintainability. This document provides technical advice and assistance to designers and engineers on the incorporation of fibre optic harnesses into an airframe, while, wherever possible, maintaining maximum compliance with current aircraft electrical harness procedures. All topics that are related to Installation of optical cables are addressed in EN 3197. These rules are applicable for fibre optic cables and connectors defined by EN specifications.

Keel: en  
Alusdokumendid: FprEN 4533-003  
Asendab dokumenti: EVS-EN 4533-003:2006  
Arvamusküsitluse lõppkuupäev: 16.07.2017

### FprEN 4533-004

#### Aerospace series - Fibre optic systems - Handbook - Part 004: Repair, maintenance, cleaning and inspection

The handbook gives guidelines related to 'Fault analysis and repair' as well as 'maintenance and inspection of fibre optic links. The first deals with what to do when something goes wrong – how to go from a fault notification to locating the fault, and finally, repairing it. The second covers the recommended procedures for upkeep and maintaining harness health over the lifetime of its installation.

Keel: en

Alusdokumendid: FprEN 4533-004

Asendab dokumenti: EVS-EN 4533-004:2006

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **FprEN 4652-321**

#### **Aerospace series - Connectors, coaxial, radio frequency - Part 321: Type 3, N interface - Crimp assembly version - Right angle plug - Product standard**

This European Standard specifies the characteristics of screwed on coupling (N interface) coaxial right angle plugs – 50 ohms. The cable to connector assembly is a crimp technology.

Keel: en

Alusdokumendid: FprEN 4652-321

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **FprEN 4702-02**

#### **Aerospace series - Quick release fastening systems for non-structural and lining applications - Part 02: Spring clamp stud combination**

This European Standard describes the compilation of the component system the spring clip pin family for use in fuselage interior equipment and in non-structural or secondary structural area for aerospace applications.

Keel: en

Alusdokumendid: FprEN 4702-02

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **FprEN 4702-03**

#### **Aerospace series - Quick release fastening systems for non-structural and lining applications - Part 03: Stud - quick-release and locking**

This European Standard specifies the dimensions, mass, tolerances and static values of stud – quick-release and locking for use in fuselage interior equipment and non-structural or secondary structural area.

Keel: en

Alusdokumendid: FprEN 4702-03

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **FprEN 4702-04**

#### **Aerospace series - Quick release fastening systems for non-structural and lining applications - Part 04: Spring clamp**

This European Standard describes the dimensions, mass, tolerances and static values of quick-release and locking – clamps for use in fuselage interior equipment and non-structural or secondary structural area.

Keel: en

Alusdokumendid: FprEN 4702-04

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **FprEN 4702-05**

#### **Aerospace series - Quick release fastening systems for non-structural and lining applications - Part 05: Retaining washer**

The standard specifies the dimensions, mass tolerances of quick-release and locking – washers for use in fuselage interior equipment and non-structural or secondary structural area.

Keel: en

Alusdokumendid: FprEN 4702-05

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

#### **FprEN 6049-008**

#### **Aerospace series - Electrical cables, installation - Protection sleeve in meta-aramid fibres - Part 008: Self-wrapping shielded (EMI) protective sleeve with nickel copper braid, flexible post installation operating temperature from - 55 °C to 200 °C - Product standard**

This European Standard specifies the characteristics of post installation flexible self-wrapping EMI shielding protection sleeves for electrical cable and cable bundles made from meta-aramid fibres for the external sleeve, and nickel copper plated braid as the internal layer and provided with a water repellent protection for aerospace application.

Keel: en  
Alusdokumendid: FprEN 6049-008  
Asendab dokumenti: EVS-EN 6049-008:2013  
**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## FprEN 6064

### Aerospace series - Analysis of non-metallic materials (cured) for the determination of the extent of cure by Differential Scanning Calorimetry (DSC)

This test method defines the procedure for the estimation of the extent of cure of certain non-metallic materials (e.g. preimpregnated and neat resin systems, adhesives) for aerospace use. The extent of cure is estimated by Differential Scanning Calorimetry (DSC) measurements of uncured (reference) and cured materials. Additional evidence on the extent of cure may be gained by combining results from this method with those obtained by other techniques. This standard does not give any directions necessary to meet the health and safety requirements. It is the responsibility of the user of this standard to adopt appropriate health and safety precautions.

Keel: en  
Alusdokumendid: FprEN 6064  
**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## 59 TEKSTIILI- JA NAHATEHNOLOGIA

### prEN ISO 11640

#### Leather - Tests for colour fastness - Colour fastness to cycles of to-and-fro rubbing (ISO/DIS 11640:2017)

This International Standard specifies a method for determining the behaviour of the surface of a leather on rubbing with a wool felt. It is applicable to leathers of all kinds.

Keel: en  
Alusdokumendid: ISO/DIS 11640; prEN ISO 11640  
Asendab dokumenti: EVS-EN ISO 11640:2012  
**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## 67 TOIDUAINETE TEHNOLOGIA

### prEVS-ISO 605

#### Kaunviljad. Lisandite, suuruse, kõrvallõhnade, putukate, ning liikide ja sordi määramine.

#### Katsemeetodid

#### Pulses. Determination of impurities, size, foreign odours, insects, and species and variety. Test methods (ISO 605:1991)

See rahvusvaheline standard määratleb inimtoiduks või loomasöödaks möeldud töötlemata kaunviljade määramise meetodeid, mida ei ole esitatud teistes rahvusvahelistes standardites.

Keel: en  
Alusdokumendid: ISO 605:1991  
Asendab dokumenti: EVS 681:1996  
**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## 75 NAFTA JA NAFTATEHNOLOGIA

### prEN ISO 18797-1

#### Petroleum, petrochemical and natural gas industries - External corrosion protection of risers by coatings and linings - Part 1: Elastomeric coating systems-polychloroprene or EPDM (ISO 18797-1:2016)

ISO 18797-1:2016 specifies the minimum requirements for materials selection, surface preparation, application, inspection, testing, qualification and acceptance criteria of external coating for steel risers pipes used in the splash zone, their field joints and clamps/guides, using an elastomeric protective coating based on polychloroprene, EPDM or equivalent. This is applicable for new construction and repair of applied pipes before installation. Maintenance requirements and field repairs are covered in ISO 18797-2. ISO 18797-1:2016 also specifies the requirements for transportation, handling and storage of riser pipes before and after surface preparation and coating application.

Keel: en  
Alusdokumendid: ISO 18797-1:2016; prEN ISO 18797-1  
**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## prEN ISO 19008

### Standard cost coding system for oil and gas production and processing facilities (ISO 19008:2016)

ISO 19008:2016 describes the standard cost coding system (SCCS) that classifies costs and quantities related to exploration, development, operation and removal of oil and gas production and processing facilities and to the petroleum, petrochemical and natural gas industry. Upstream, midstream, downstream and petrochemical business categories are included. The SCCS for coding of costs is applicable to: - cost estimating; - actual cost monitoring and reporting; - collection of final quantities and cost data; - standardized exchange of cost data among organizations; - implementation in cost systems. ISO 19008:2016 is intended for users such as the following: a) owner/operator/company (individual or grouped entity that is entitled or contributes to operations in the exploitation of oil and gas fields); b) industry/trade associations; c) manufacturers/contractors; d) cost engineering service contractors, cost system providers, benchmarking providers, etc.; e) authorities/regulatory bodies. ISO 19008:2016 does not apply to the following: 1) cost classification relevant to cost accounting rules, specific contractual agreements, local requirements for cost reporting to national bodies, government rules and tax regulations, authorization for expenditure (AFE), billing purposes etc.; 2) specific project breakdown structures (e.g. work breakdown structures, contract breakdown structures, organizational breakdown structure) or asset breakdowns (e.g. TAG/system codes, area/module breakdown structure) which are and will remain unique. However, this International Standard can provide a basis for the establishment of such specific classification systems.

Keel: en

Alusdokumendid: ISO 19008:2016; prEN ISO 19008

Arvamusküsitluse lõppkuupäev: 16.07.2017

## prEN ISO 19901-9

### Petroleum and natural gas industries - Specific requirements for offshore structures - Part 9: Structural integrity management (ISO/DIS 19901-9:2017)

This part of ISO 19901 specifies the SIM process engineering requirements and recommendations to be used by an owner for demonstrating the structural fitness-for-service of existing platforms operating offshore. This part of ISO 19901 addresses the platform life-cycle from concept through to decommissioning and/or possible reuse at a different location and is applicable to: □ substructure structural components on compliant bottom founded structures, including fixed platforms, compliant towers, manifolds and structures used offshore as part of an alternative energy concept; □ topsides structural components irrespective of the structural form, including floating facilities and jack-ups.

Keel: en

Alusdokumendid: ISO/DIS 19901-9; prEN ISO 19901-9

Arvamusküsitluse lõppkuupäev: 16.07.2017

## 77 METALLURGIA

## prEN ISO 204

### Metallic materials - Uniaxial creep testing in tension - Method of test (ISO/DIS 204:2017)

This International Standard specifies the methods for a) Uninterrupted creep tests with continuous monitoring of extension, b) Interrupted creep tests with periodic measurement of elongation, c) Stress rupture tests where normally only the time to fracture is measured. NOTE 1: Creep tests can or can not continue until fracture has occurred NOTE 2: A test can also be undertaken to verify that a predetermined time was exceeded under a given force. NOTE 3: Details about testing notched test pieces are given in Annex C

Keel: en

Alusdokumendid: ISO/DIS 204; prEN ISO 204

Asendab dokumenti: EVS-EN ISO 204:2009

Arvamusküsitluse lõppkuupäev: 16.07.2017

## prEN ISO 20728

### Corrosion of metal and alloys - Determination of resistance of magnesium alloys to stress corrosion cracking (ISO/DIS 20728:2017)

This international Standard specifies a method for the determination of resistance to stress corrosion cracking (SCC) of magnesium alloys. This International Standard covers the method of sampling, the types of specimens, the loading procedure, the type of environment and the Interpretation of results. This International Standard is aimed at the determination of the resistance to SCC as a function of the chemical composition, the method of manufacture and heat treatment of magnesium alloys. This International Standard applies to cast and wrought magnesium alloys in the form of castings, semi-finished products, parts and weldments. Since most natural and many artificial environments contain chlorides, this International Standard can be used to compare the performance of products employed in environments containing chlorides providing that the failure mechanism is not changed. However, the results of this test should not be considered as an absolute criterion for the quality of alloys.

Keel: en

Alusdokumendid: ISO/DIS 20728; prEN ISO 20728

Arvamusküsitluse lõppkuupäev: 16.07.2017

## prEN ISO 3923-1

### Metallic powders - Determination of apparent density - Part 1: Funnel method (ISO/DIS 3923-1:2017)

This part of ISO 3923 specifies the funnel method for the determination of the apparent density of metallic powders under standardized conditions. The method is intended for metallic powders that flow freely through a 2,5 mm diameter orifice. It may, however, be used for powders that flow with difficulty through a 2,5 mm diameter orifice but flow through a 5 mm diameter orifice. Methods for the determination of the apparent density of powders that will not flow through a 5 mm diameter orifice are specified in ISO 3923-2.

Keel: en

Alusdokumendid: ISO/DIS 3923-1; prEN ISO 3923-1

Asendab dokumenti: EVS-EN ISO 3923-1:2010

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

### **prEN ISO 3927**

#### **Metallic powders, excluding powders for hardmetals - Determination of compressibility in uniaxial compression (ISO/FDIS 3927:2017)**

This document specifies methods for measuring the extent to which a metallic powder is compacted when subjected to uniaxial compressive loading in a confining die under specified conditions. The method is not applicable to powders for hardmetals.

Keel: en

Alusdokumendid: ISO/FDIS 3927; prEN ISO 3927

Asendab dokumenti: EVS-EN ISO 3927:2011

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

### **83 KUMMI- JA PLASTITÖÖSTUS**

#### **prEN 12012-4**

#### **Plastics and rubber machines - Size reduction machines - Part 4: Safety requirements for agglomerators**

This European Standard specifies the essential safety requirements applicable to the design and construction of agglomerators used to densify plastic scrap, reducing its size and/or volume. The limits of the agglomerator are as follows: - the outer edge of the feed opening, or the outer edge of the fixed feed device when it is an integral part of the machine or the interface between the agglomerator chamber and the feed system, when it is not an integral part of the machine and - the outer edge of the discharge opening of the agglomerator chamber or the integral discharge system or the interface between the agglomerator chamber and the discharge system, when it is not an integral part of the machine. When the feed or discharge device is covered by a specific type C standard (e.g. EN 1114-1 for extruder) this should be applied. Only the significant hazards listed in Annex A and dealt with in Clause 5 are subject to this European Standard. This European Standard does not deal with hazards caused by processing materials which, when heated, may lead to a risk of fire and release of toxic gases. This European Standard does not deal with hazards caused by upstream and/or downstream equipment. This document is not applicable to agglomerators manufactured before the date of its publication.

Keel: en

Alusdokumendid: prEN 12012-4

Asendab dokumenti: EVS-EN 12012-4:2006+A1:2008

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

### **87 VÄRVIDE JA VÄRVAINETE TÖÖSTUS**

#### **prEN ISO 12944-5**

#### **Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 5: Protective paint systems (ISO/DIS 12944-5:2016)**

This International Standard describes the types of paint and paint system commonly used for corrosion protection of steel structures. It also gives guidelines for the selection of paint systems available for different environments (see ISO 12944-2 except for corrosivity category CX and category Im4 as defined in ISO 12944-2) and different surface preparation grades (see ISO 12944-4), and the durability grade to be expected (see ISO 12944-1).

Keel: en

Alusdokumendid: prEN ISO 12944-5; ISO/DIS 12944-5:2017

Asendab dokumenti: EVS-EN ISO 12944-5:2007

**Arvamusküsitluse lõppkuupäev: 16.06.2017**

### **91 EHITUSMATERJALID JA EHITUS**

#### **EVS-EN 1992-4:2017/prNA**

#### **EUROKOODEKS 2: Betoonkonstruktsioonide projekteerimine. Osa 4: Kinnituste projekteerimine betooni. Eesti standardi rahvuslik lisa**

#### **Eurocode 2: Design of concrete structures. Part 4: Design of fastenings for use in concrete. Estonian National Annex**

Standardi EN 1992-4:2017 Eesti rahvuslik lisa.

Keel: et

Täiendab rahvuslikult dokumenti: prEN 1992-4

Arvamusküsitluse lõppkuupäev: 16.07.2017

### **EVS-EN 1993-1-4:2006/prNA**

**Eurokoodeks 3: Teraskonstruktsioonide projekteerimine. Osa 1-4: Üldreeglid. Täiendavad reeglid roostevaba terase jaoks. Eesti standardi rahvuslik lisa**

**Eurocode 3 - Design of steel structures - Part 1-4: General rules - Supplementary rules for stainless steels. Estonian National Annex**

Rahvuslik lisa EN 1993-1-4:2006 ja selle muudatusele EN 1993-1-4:2006/A1:2015

Keel: et

Asendab dokumenti: EVS-EN 1993-1-4/NA:2008

Arvamusküsitluse lõppkuupäev: 16.07.2017

### **prEN 13707**

**Flexible sheets for waterproofing - Reinforced bitumen sheets for roof waterproofing - Definitions and characteristics**

This draft European Standard specifies definitions and characteristics for flexible reinforced bitumen sheets for which the intended use is roofing. This covers sheets used as top layers, intermediate layers and underlays.

Keel: en

Alusdokumendid: prEN 13707

Asendab dokumenti: EVS-EN 13707:2013

Arvamusküsitluse lõppkuupäev: 16.07.2017

### **prEN 15650**

**Ventilation for buildings - Fire dampers**

This document applies to fire dampers used in conjunction with fire separating elements to maintain fire compartments. This document specifies requirements and gives reference to test methods defined for fire dampers, which are installed in Heating, Ventilating and Air Conditioning (HVAC) installations in buildings. Details are given for the provision of evaluation of conformity and marking of fire dampers. To avoid duplication, reference is made to a variety of other standards. To this end, it is advised to read this document in conjunction with EN 1366 2 for details of the fire resistance testing and EN 13501 3 for classification. Fire dampers meeting the requirements of this document may be considered suitable for both ducted and unducted applications. This document does not consider in detail the detrimental and/or corrosive effects that can be caused by chemical processes present in the atmosphere, which are drawn through the system intentionally or inadvertently and therefore does not apply to fire dampers used in such applications. An indication of salt spray corrosion can be determined using the method described in Annex B. This document is not applicable to non-mechanical fire barriers nor to air transfer grilles.

Keel: en

Alusdokumendid: prEN 15650

Asendab dokumenti: EVS-EN 15650:2010

Arvamusküsitluse lõppkuupäev: 16.07.2017

### **prEN ISO 12944-5**

**Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 5: Protective paint systems (ISO/DIS 12944-5:2016)**

This International Standard describes the types of paint and paint system commonly used for corrosion protection of steel structures. It also gives guidelines for the selection of paint systems available for different environments (see ISO 12944-2 except for corrosivity category CX and category Im4 as defined in ISO 12944-2) and different surface preparation grades (see ISO 12944-4), and the durability grade to be expected (see ISO 12944-1).

Keel: en

Alusdokumendid: prEN ISO 12944-5; ISO/DIS 12944-5:2017

Asendab dokumenti: EVS-EN ISO 12944-5:2007

Arvamusküsitluse lõppkuupäev: 16.06.2017

## **97 OLME. MEELELAHUTUS. SPORT**

### **prEN 17116-2**

**Specifications for industrial laundry machines - Definitions and testing of capacity and consumption characteristics - Part 2: Batch drying tumblers**

This draft European Standard defines the characteristics of batch drying tumblers and gives the usual test methods for these characteristics with regard to machine capacity, power consumption and productivity. It is applicable for use as a reference in the drafting of purchasing orders for batch drying tumblers for industrial use. In addition, it is recommended for determination of energy consumption and productivity according to Directive 2009/125 EC. Furthermore, the standard describes standard methods for measuring principal performance characteristics of professional tumble dryers. It does not cover safety requirements (see EN ISO 10472-4).

Keel: en

Alusdokumendid: prEN 17116-2

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

**prEN 17116-3**

**Specifications for industrial laundry machines - Definitions and testing of capacity and consumption characteristics - Part 3: Continuous tunnel washer**

This draft European standard defines the characteristics of continuous tunnel washer and gives the usual test methods for these characteristics with regard to machine capacity, power consumption and productivity. It is applicable for use as a reference in the drafting of purchasing orders for continuous tunnel washer. In addition it is recommended for determination of energy consumption and productivity according to Directive 2009/125 EC. This standard excludes the energy consumption for dewatering of the load. Furthermore, the standard describes standard methods for measuring principal performance characteristics of continuous tunnel washer. It does not cover safety requirements (see EN ISO 10472-3).

Keel: en

Alusdokumendid: prEN 17116-3

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

**prEN 17116-4**

**Specifications for industrial laundry machines - Definitions and testing of capacity and consumption characteristics - Part 4: Washer-extractors**

This draft European Standard defines the characteristics of washer-extractors and gives the usual test methods for these characteristics with regard to machine capacity, power consumption and productivity. It is applicable for use as a reference in the drafting of purchasing orders for washer-extractors whose net usable cage volume is 400 dm<sup>3</sup> (litres) respectively 40 kg and above. In addition, it is recommended for determination of energy consumption and productivity according to Directive 2009/125 EC. Furthermore, the standard describes standard methods for measuring principal performance characteristics of washer-extractors. It does not cover safety requirements (see EN ISO 10472-2).

Keel: en

Alusdokumendid: prEN 17116-4

**Arvamusküsitluse lõppkuupäev: 16.07.2017**

## TÖLKED KOMMENTEERIMISEL

Selles jaotises avaldame teavet eesti keelde tölgitavate Euroopa või rahvusvaheliste standardite ja standardilaadsete dokumentide kohta ja inglise keelde tölgitavate algupäraste Eesti standardite ja dokumentide kohta.

Tölgtega tutvumiseks võtta ühendust EVS-i standardiosakonnaga: standardiosakond@evs.ee, ostmiseks klienditeenindusega: standard@evs.ee.

Igakuiselt uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Standardikeskuse veebilehel avaldatavast standardimisprogrammist.

### EVS-EN 1993-1-4:2006/A1:2015

#### **Eurokoodeks 3: Teraskonstruktsoonide projekteerimine. Osa 1-4: Üldreeglid. Täiendavad reeglid roostevaba terase jaoks**

Standardi EVS-EN 1993-1-4:2006 muudatus.

Keel: et

Alusdokumendid: EN 1993-1-4:2006/A1:2015

Kommmenteerimise lõppkuupäev: 16.06.2017

### FprEN 61000-6-2:2015

#### **Elektromagnetiline ühilduvus. Osa 6-2: Erialased põhistandardid. Häiringutaluvus tööstuskeskkondades**

Elektromagnetilise ühilduvuse häiringutaluvusnõudeid käsitleva standardi IEC 61000 see osa kehtib elektri- ja elektroonikaseadmete kohta, mis on ette nähtud kasutamiseks tööstuspaikades. Häiringutaluvusnõuded haaravad sagedusvahemikku 0 Hz kuni 400 GHz. Sagedustel, mille puhul mingeid nõudeid ei esitata, ei ole katsetusi vaja sooritada. Seda elektromagnetilise ühilduvuse häiringutaluvuse põhistandardit rakendatakse siis, kui vastava toote või tootesarja kohta ei ole asjakohast elektromagnetilise ühilduvuse häiringutaluvusstandardit. Käesolev standard kehtib elektri- ja elektroonikaseadmete kohta, mis on ette nähtud käitamiseks jaotise 3.7 järgi määratletud tööstuspaikades nii sisseruumides kui ka väljas. See standard kehtib ka seadmete kohta, mis on ette nähtud otsesekts ühendamiseks alalisvoolu-jaotusvõrguga või mida käitatakse primaar-galvaanilemendi- või akupatareist ja mis on ette nähtud kasutamiseks tööstuspaikades. See standard määratleb käsitlusala sätetestatud seadmete häiringutaluvuse nõouded kestvate ja transientsete juhtivus- ja kiirgushäiringute, sealhulgas elektrostaatiliste lahenduste suhtes. Häiringutaluvusnõuded on valitud selliselt, et need tagaksid tööstuspaikades käitatavate seadmete adekvaatse häiringutaluvustaseme. Need tasemed ei arvesta äärmuslikke juhtumeid, mis võivad mingis paigas ette tulla, kuid mille toimumise töenäosus on äärmiselt madal. Käesolevas standardis esitatud katsetamisnõuetes ei ole arvestatud mitte kõiki häiringunähtusi, vaid ainult neid, mida on peetud vastavateks selles standardis käsitletavatele seadmetele. Need katsetamisnõuded on kooskõlas põhiliste elektromagnetilise ühilduvuse häiringutaluvusnõuetega. Need on sätetestatud iga arvesse võetava sidendi kohta. MÄRKUS 1 Informatsioon muude häiringunähtuste kohta on esitatud standardis IEC 61000-4-1. MÄRKUS 2 Käesolev standard ei haara ohutuskaalutlusi. MÄRKUS 3 Erijuhtumeil võivad tekkida olukorrad, mil häiringutasemed võivad ületada selles standardis sätetestatud tasemeid, nt kui seadmed on paigaldatud CISPR 11 järgi määratletud tööstuslike, teaduslike või meditsiiniseadmete lähedale või kui seadme lähedal kasutatakse kaasaskantavat saatjat. Neil juhtumeil võib soovitada spetsiaalse häiringuleevendusmeetmete kasutamist. Tööstuskeskkonda võib muuta spetsiaalsele leevedusmeetmete abil. Kui selliste meetmete kasutamisel saab näidata, et elektromagnetiline keskkond on võrdväärne olme-, kaubandus- või väiketööstuskeskkonnaga, võib rakendada selle keskkonna erialastandardit või asjakohast tootestandardit.

Keel: et

Alusdokumendid: FprEN 61000-6-2:2015; IEC 61000-6-2:201X (77/488/CDV) (EQV)

Kommmenteerimise lõppkuupäev: 16.06.2017

### FprHD 60364-7-704:2016

#### **Madalpingelised elektripaigaldised. Osa 7-704: Nõuded eripaigaldistele ja -paikadele. Ehituspaikade paigaldised**

Standardisarja IEC 60364 selle osa nõuded kehtivad elektripaigaldiste kohta, mida kasutatakse ehituspaikades ehitus- või lammutustööde ajal ja mis on ette nähtud talitlustest välja viia päraast tööde lõpetamist. Siia kuuluvad näiteks • uusehitustööd, • olemasolevate ehitiste või nende osade remont, ümberehitamine, laiendamine või lammutamine, • inseneritehnilised tööd, • mullatööd, • muud taolised tööd. Nõuded kehtivad nii kohtkindlate kui ka teisaldatavate paigaldiste kohta. Nõuded ei kehti ehituspaikade administratiivruumide (nt kontorite, riietusruumide, nõupidamisruumide, sööklate, restoranide, ööbimisruumide, käimlate) paigaldiste kohta.

Keel: et

Alusdokumendid: IEC 60364-7-704:201X; FprHD 60364-7-704:2016

Kommmenteerimise lõppkuupäev: 16.06.2017

### prEN 1992-4

#### **Eurokoodeks 2: Betoonkonstruktsoonide projekteerimine. Osa 4: Kinnituste projekteerimine betooni**

1.1 Üldsätted (1) Käesolev Euroopa standard annab koormuste betooni ülekandmiseks kasutatavate kinnituste projekteerimise meetodi (konstruktsoonielelemendi või mittekonstruktsoonielelemendi ühendus betoonkandeelementiga). See arvutusmeetod kasutab füüsikalisi mudeliteid, mis põhinevad EN 1990:2001 jaotisega 5.2 kooskõlas olevatel katsetel ja numbrilisel analüüsил. Nõuded kinnituselementide koormuste ülekandmiseks betoonelementides nende tugedeni on toodud EN 1992-1-1 ja selle EN

lisas A. Monteeritavatesse betoonielementidesse nende valmistamise ajal paigaldatud töistedetaile ja nendega kaasnevad armatuuri, mis on ette nähtud kasutamiseks ainult ajutistes töömis- ja käsitlusolukordades, on käsitletud CEN/TR 15728. (2) Käesolev EN ette nähtud rakenduste ohutusele, milles kinnituse purunemine võib viia konstruktsiooni või konstruktsiooniosa purunemisele, põhjustada ohtu inimelule või olulist majanduslikku kahju. Selles kontekstis hõlmab see ka mittekonstruktsioonielemente. (3) Kinnitise tugi võib olla kas staatikaga määratud või staatikaga määramatu. Iga tugi võib koosneda ühest kinnituselementist või kinnituselementide rühmast (4) Käesolev EN kehtib rakendusteks seeria EN1992 käsitlusallas. Rakendusteks erinõuetega valdkondades, näiteks tuumaelektrijaamad ja kaitseehitised, võivad olla vajalikud muudatused. (5) Käesolev EN ei hõlma kinnitise projekteerimist. Kinnitise projekteerimise nõuded on toodud asjakohastes standardites ja täidavad selles EN toodud kinnitise nõudeid. Käesolev dokument kehtib normkandevõimetele ja –kaugustele, mis on sätestatud Euroopa tehnilises tootespetsifikatsioonis (vt lisa A). Euroopa tehnilises tootespetsifikatsioonis on toodud vastavate koormustingimustesse kohta vähemalt Lisas A nimetatud parameetrid, mis annavad aluse käesoleva EN arvutusmeetoditele. MÄRKUS Märkustes toodud teatavate parameetrite numbrilisi suurusi võib kasutada eeldimensioneerimiseks. Kontrollimiseks vajalikud suurused on toodud Euroopa tehnilises tootespetsifikatsioonis ja võivad olla erinevad. 1.2 Kinnituselementide ja kinnitustega rühmade tüüpide (1) Käesolev EN kasutab kinnituselementide arvutamise teooriat1 (vt joonis1.1) ja rakendub: a) sissebetoneeritavatele kinnituselementidele, sellised nagu peaga kinnituselementid, ankurkanalid, millel on kanali ja kinnituselementi jäik ühendus (näiteks keevitatud, tihedalt sisse lõödud); b) järelpaigaldatavatele ankrutele, sellised nagu laienevad ankrud, süvalõigatavad ankrud, betooni-kruvid; c) järelpaigaldatavatele nakkeankrutele ja laienevatele nakkeankrutele. Teiste kinnituselementide tüüpide korral võib olla vajalik projekteerimiseeskirjade muutmine. 1) Kinnituselementide arvutamise teorias kasutatakse betooni tömbetugevust otsestelt koormuste ülekandmiseks betoon-kandeelementi. (3) Käesolev EN kehtib kinnituselementidele, mille sobivus määratletud rakenduseks betoonis on töentatud nende elementide käesolevale EN viitavates kasutusjuhendites ja millel on olemas käesoleva EN järgi nõutavad andmed. Kinnituselementi sobivus on määratletud asjakohases Euroopa tehnilises tootespetsifikatsioonis. Joonis 1.1 - Kinnituselementi arvutamise teoria - Näide (4) Käesolev EN kehtib üksikute kinnituselementide ja kinnituselementide rühmade kohta. Kinnituselementide rühmas ühele kinnituselementile rakenduvad koormused on määratud sellele kinnitava paigaldisega. Kinnituse rühmale rakendub käesolev Euroopa standard ainult siis, kui kasutatakse ühesugust tüüpi ja ühesuguse suurusega kinnituselemente. (5) Käesolevas EN -s käsitletavate sissebetoneeritavate peaga kinnituselementide ja järelpaigaldatavate kinnituselementide konfiguratsioon on näidatud joonisel 1.2. (6) Ankurkanalite korral ei ole ankrute arv piiratud. Selgitus 1 kinnituselement 2 terasplaat a) Kinnitusava lõtkuta kinnitused kõikide servauguste ja kõikide koormuste suundade korral ja servadest kaugel paiknevad tabelile 6.1 vastava kinnitusava lõtkuga kinnitused kõikide koormuste suundade korral ja servade lähedal paiknevad tabelile 6.1 vastava kinnitusava lõtkuga ainult tömbega koormatud kinnitused b) Servade lähedal paiknevad tabelile 6.1 vastava kinnitusava kõikide koormuse suundade korral Joonis 1.2 - Käesolevas EN -s käsitletavate peaga ja järelpaigaldatavate kinnituselementidega kinnituste paiknemine (7) Betoonelementide ühendamiseks kasutatavad järelpaigaldatavaid ribilise pinnaga armatuurvardaid käsitletakse Euroopa tehnilises tootespetsifikatsioonis. Käesolev EN rakendub kui ühendused projekteeritakse vastavalt EN 1992-1-1-le.

Keel: et

Alusdokumendid: prEN 1992-4

**Kommmenteerimise lõppkuupäev: 16.06.2017**

# **ALGUPÄRASTE STANDARDITE JA STANDARDILAADSETE DOKUMENTIDE KOOSTAMINE**

Alljärgnevalt on toodud teave eelmise EVS Teataja avaldamise järgselt Standardikeskusele esitatud algupäraste standardite ja standardilaadsete dokumentide koostamis-, muutmis- ja uustöötlusettepanekute kohta, millega algatatakse Eesti algupärase dokumendi koostamise protsess.

Rohkem infot koostatava dokumendi kohta saab EVS-i standardiosakonnast: standardiosakond@evs.ee.

Igakuiselt uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Standardikeskuse veebilehel avaldatavast standardimisprogrammist.

## **EVS 677:2014/prA1**

**Teraviljad ja teraviljasaadused. Organooleptiliste omaduste määramine**

**Cereals and cereal products. Determination of organoleptic properties**

Standardi EVS 677:2014 muudatus. Selles Eesti standardis kirjeldatakse vilja ja teraviljasaaduste lõhna ja värvuse määramise; jahu, manna ja toidukliide maitse (sh toidukliides krigina) määramise ning tatratangu ja kaerahelveste keedukvaliteedi määramise meetodeid.

Muudab dokumenti: EVS 677:2014

Koostamisettepaneku esitaja: Põllumajandusuuringute Keskus

## **EVS 679:2014/prA1**

**Teraviljad. Kahjuritega nakatatuse määramine**

**Cereals. Determination of insect infestation**

Standardi EVS 679:2014 muudatus. Selles Eesti standardis kirjeldatakse teravilja nähtaval ja varjatud kujul kahjuritega nakatatuse määramise meetodeid.

Muudab dokumenti: EVS 679:2014

Koostamisettepaneku esitaja: Põllumajandusuuringute Keskus

## **prEVS 884**

**Maagaasitorustik. Projekteerimise põhinõuded üle 16 baarise tööröhuga torustikele**

**Natural gas pipeline systems - Pipelines for maximum operating pressure over 16 bar - General requirements for design**

Standard sätestab ühtsed projekteerimisnõuded üle 16 baarise tööröhuga terasest gaasitorustikele, et tagada gaasitorustike ehitamisel torustike kasutuskindlus, inimeste ohutus, keskkonnakaitse ja õnnetusjuhtumite vältimine.

Asendab dokumenti: EVS 884:2005

Koostamisettepaneku esitaja: EVS/PK 65

## **ALGUPÄRASTE STANDARDITE KEHTIVUSE PIKENDAMINE**

Eesti standardite ülevaatuse tulemusena on pikendatud järgmiste standardite kehtivus:

### **EVS 8:2008**

**Infotehnoloogia reeglid eesti keele ja kultuuri keskkonnas**

**Requirements of information technology in Estonian language and cultural environment**

Standardi uustöötluse peamine eesmärk on Eesti ja eesti keele kultuuriandmestiku, lokaadi, võimalikult üldistatud esitamine, et tagada standardi pikaajaline kasutus. Erinevalt standardist eelmisest väljaandest EVS 8:2000 on uustöötlus täielikult Unicode'i-keskne (vastab ISO standardile ISO/IEC 10646), mainides piiratumaid kooditabeleid vaid soovitusena, milliseid neist eelistada vananenud ja piiratud tarkvarakeskkonnas. Muutmata kujul kordab EVS 8:2007 osa ESET1 (Eestis kasutatav ladina tähtede valik), mis samuti eeldab ühebaidiste kooditabelite asemel märksa laiemata tähevaliku kasutamist.

Kehtima jätmise alus: EVS/TK 04 otsus 15.03.2017 ja teade pikendamisküsitlusest 04.04.2017 EVS Teatajas

# TÜHISTAMISKÜSITLUS

Selles rubriigis avaldame teavet Euroopa standardimisorganisatsioonides algatatud Euroopa standardite tühistamisküsitluse kohta ning rahvusvahelise alusstandardiga Eesti standardite ja Eesti algupäraste dokumentide tühistamisküsitluse kohta. Küsitluse eesmärk on välja selgitada, kas alljärgnevalt nimetatud standardite ja standardilaadsete dokumentide jätkuv kehtimine Eesti ja/või Euroopa standardina/dokumendina on vajalik.

Allviidatud standardite ja dokumentide kehtivana hoidmise vajalikkusest palume teavitada EVS-i standardiosakonda (standardiosakond@evs.ee).

## EVS-EN 61000-4-23:2002

### **Electromagnetic compatibility (EMC) - Part 4-23: Testing and measurement techniques - Test methods for protective devices for HEMP and other radiated disturbance**

In this International Standard, the basis reasons behind HEMP testing are discussed and a brief description of the most important concepts for shielding element testing is summarised. For each test, the following basic information is provided: - theoretical foundation of the test (the test concept); - test set-up; - required equipment; - test procedures; - data processing. This International Standard does not provide information on requirements for specific levels for testing.

Keel: en

Alusdokumendid: IEC 61000-4-23:2000; EN 61000-4-23:2000

Tühistamisküsitluse lõppkuupäev: 16.06.2017

## EVS-EN 62766-2-1:2017

### **Consumer terminal function for access to IPTV and open internet multimedia services - Part 2-1: Media formats**

IEC 62766-2-1:2016 specifies formats for the audio/video content provided by IPTV services using fixed line access networks or mobile access networks and voice and video telephony services. It does not apply to the broadcast channel input of hybrid devices except where explicitly specified. It defines formats for the delivery of 3D video. At the present time, delivery to fixed terminals is targeted. It defines the media formats utilised on the UNI reference point UNIT-17 of the Open IPTV Forum functional architecture.

Keel: en

Alusdokumendid: IEC 62766-2-1:2016; EN 62766-2-1:2017

Tühistamisküsitluse lõppkuupäev: 16.06.2017

## EVS-EN 62766-2-2:2017

### **Consumer terminal function for access to IPTV and open internet multimedia services - Part 2-2: HTTP adaptive streaming**

IEC 62766-2-2:2016 specifies media formats for adaptive unicast content streaming over HTTP. Two HTTP adaptive streaming formats are specified. The first is based entirely on MPEG DASH. The second is the OIPF HTTP adaptive streaming (HAS) format, which is based upon 3GPP's release 9 adaptive HTTP streaming (AHS) format, with some profiling and extensions to add the features of media components and support for MPEG-2 transport stream content segment format. The latter format was specified before MPEG DASH had been published. It is retained due to usage in some legacy applications.

Keel: en

Alusdokumendid: IEC 62766-2-2:2016; EN 62766-2-2:2017

Tühistamisküsitluse lõppkuupäev: 16.06.2017

## EVS-EN 62766-3:2017

### **Consumer terminal function for access to IPTV and open internet multimedia services - Part 3: Content metadata**

IEC 62766-3:2016 specifies the aspects concerning content metadata.

Keel: en

Alusdokumendid: IEC 62766-3:2016; EN 62766-3:2017

Tühistamisküsitluse lõppkuupäev: 16.06.2017

## EVS-ISO 5682-1:2002

### **Taimekaitseeadmed. Pritsimisseadmed. Osa 1: Pritsi pihustite katsetusmeetodid Equipment for crop protection - Spraying equipment - Part 1: Test methods for sprayer nozzles**

Standardi ISO 5682 käesolev osa esitab üksikasjalikult (spetsifitseerib) meetodid hüdraulilise pihustamisega hüdropritsipihustite täpsuse hindamiseks. See kehtib ainult taimekaitseks ja väetamiseks kasutatavate pöllumajanduslike ripp-, haake- ja liikurpritside hüdropihustitele.

Keel: en, et

Alusdokumendid: ISO 5682-1:1996

Tühistamisküsitluse lõppkuupäev: 16.06.2017

## EVS-ISO 5682-2:2002

### **Taimekaitseeadmed. Pritsimisseadmed. Osa 2: Hüdropritside katsetusmeetodid**

## **Equipment for crop protection - Spraying equipment - Part 2: Test methods for hydraulic sprayers**

Standardi ISO 5682 käesolev osa esitab üksikasjalikult (spetsifitseerib) pöllukultuuride hüdropritside katsetamise ning tootlikkuse ja jaotamise täpsuse hindamise meetodid. See on rakendatav pöllumajanduslikele pöllukultuuride hüdropritsidele, välja arvatud käsimärgistatud ja lennukitele paigaldatud pritsid.

Keel: en, et

Alusdokumendid: ISO 5682-2:1997

Tühistamisküsitluse lõppkuupäev: 16.06.2017

## **TEADE EUROOPA STANDARDI OLEMASOLUST**

Selles rubriigis avaldame teavet Euroopa standardite ja CENELEC-i harmoniseerimisdokumentide kohta, mille on Standardikeskusele kättesaadavaks teinud Euroopa standardimisorganisatsioonid, ja mille Eesti standardina avaldamiseks on vajalik täiendav ettevalmistusaeg. Reeglina võib selliste teadete avaldamine olla vajalik, et tagada Euroopa standardite jõustumine Eesti standardina samaaegselt nii eesti- kui ka ingliskeelsena.

Igakuiselt uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Standardikeskuse veebilehel avaldatavast standardimisprogrammist. Täiendav teave standardiosakonnast: [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

### **EN 1993-1-5:2006/A1:2017**

**Eurokoodeks 3: Teraskonstruktsioonide projekteerimine. Osa 1-5: Tasapinnalised konstruktsioonielemendid**

**Eurocode 3 - Design of steel structures - Part 1-5: Plated structural elements**

Eeldatav avaldamise aeg Eesti standardina 10.2017

### **EN 1993-1-6:2007/A1:2017**

**Eurokoodeks 3: Teraskonstruktsioonide projekteerimine. Osa 1-6: Koorikkonstruktsioonide tugevus ja stabiilsus**

**Eurocode 3 - Design of steel structures - Part 1-6: Strength and Stability of Shell Structures**

Eeldatav avaldamise aeg Eesti standardina 01.2018

# **UUED EESTIKEELSED STANDARDID JA STANDARDILAADSED DOKUMENDID**

Igakuiselt uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Standardikeskuse veebilehel avaldatavast standardimisprogrammist.

## **EVS 932:2017**

### **Ehitusprojekt**

### **Construction design documents**

Selles Eesti standardis antakse juhised hoone, tehnovõrkude, tee, teerajatiste, haljastuse ja välisruumi kujunduslike rajatiste ehitusprojekti koostamiseks. Standardis kirjeldatud põhimõtted on kasutatavad ka muude ehitiste ehitusprojekti koostamiseks. Erisusena ei käsitle standard avalikult kasutatavaa tee ja avalikkusele ligipääsetava eratee ehitusprojekti koostamist. Standard käsitleb ehitusprojekti staadiumites ehk arengujärkudes tehtavat projekteerimistööd, esitatavat infot ja selle detailsust. Lisaks annab standard ülevaate projekteerimise ja ehitusprojekti koostamise kohast ehituse tervikprojektis ning seostest muude ehituse tervikprojekti konsultatsiooniteenustega. Ehitusprojekti ja projektdokumentide vormistuse ja esitusviisi (näiteks kas paberil või digitaalselt, seletuskirjad-joonised või ehitise informodel vms) määravaid õigusakte ei käsitleta selles standardis. Ka ei anna standard juhiseid projektlahenduste kohta ega lammutsusprojekti kohta. Nõuded lammutsusprojektile on esitatud õigusaktides. Standardit kasutatakse koos ehitusprojekti ja selle koostamist reglementeerivate õigusaktidega. Skeem 1 illustreerib standardi kohta projektlahenduste kavandamist ja ehitusprojekti koostamist käsitlevate õigusaktide, standardite ja juhendmaterjalide struktuuris. Erinevuste korral määratlustes ja juhistes, mis on ehitusprojekti staadiumite, staadiumites tehtava projekteerimistöö, esitatava info ja detailsuse kohta esitatud selles standardis ning muudes, teisi teemasid käsitlevates Eesti standardites, järgitakse selle standardi määratlusia ja juhiseid. Standard, tulenevalt kavandatavate ehitiste mitmekesisusest, ei ole ette nähtud kasutamiseks ehitusprojekti tellimise ja koostamise tüüpläheteülesandena.

## **EVS-EN 13108-8:2016**

### **Asfaltsegud. Materjali spetsifikatsioon. Osa 8: Ringlussevõetud asfalt**

### **Bituminous mixtures - Material specifications - Part 8: Reclaimed asphalt**

See Euroopa standard kehtestab nõuded ringlussevõetud asfaldi klassifitseerimisele ja kirjeldamisele asfaltsegude lähtematerjalina. See standard ei ole vastavuse hindamiseks. EE MÄRKUS Eestis on nõutud ringlussevõetud asfaldi vastavuse töendamine. See Euroopa standard kehtib ringlussevõetud asfaldile, kus on kasutatud bituumensideaineid nagu teebituumen, modifitseeritud bituumen või köva teebituumen. Kivisöetõrvaga või teiste ohtlikke piirmäära ületavate lisanditega või koostisosadega ringlussevõetud asfalt ei kuulu selle standardi käsitusalasse ja seda tuleb vaadelda kooskõlas liikmesriigi keskkonna, tervishoiu ja ohutuse regulatsioonidega.

## **EVS-EN 845-2:2013+A1:2016**

### **Müüritarvikute spetsifikatsioon. Osa 2: Sillused**

### **Specification for ancillary components for masonry - Part 2: Lintels**

See Euroopa standard esitab nõuded maksimaalselt kuni 4,5 m laiuste müürisseina avade sillamiseks ette nähtud valmissillustele, mis on valmistatud terasest, autoklaavsest poorbetoonist, tehiskividest, betoonist, keraamilistest müürividest, silikaatmüürividest, looduslikest müürividest või nende materjalide kombinatsioonist. Standard ei käsitle betoonist ja terasest talasid, mis vastavad standarditele EN 1090-1, EN 12602 ja EN 13225, nagu asjakohane. Valmissillused võivad olla kas terviksillused või liitsilluse koostisosad. Standard ei rakendu: a) sillustele, mis on täielikult valmistatud ehitusplatsil; b) sillustele, mille tömbetsoon on valmistatud ehitusplatsil; c) puidust sillustele; d) sarrustamata loodusküsisillustele. Selle standardi käsitusalasse ei kuulu lineaarsed elemendid müürisseina avadele laiusega üle 4,5 m ega eraldiseisvate kandeelementidena kasutatavad lineaarsed elemendid (nt talad).

## STANDARDIPEALKIRJADE MUUTMINE

Selles jaotises avaldame infot Eesti standardite eesti- ja ingliskeelsete pealkirjade muutmise kohta ja ingliskeelsete pealkirjade tõlkimise kohta.

Lisainformatsioon või ettepanekud standardipealkirjade ebatäpsustest [enquiry@evs.ee](mailto:enquiry@evs.ee).

Dokumendi tähis	Muudetav pealkiri	Uus pealkiri
EVS-EN 13108-8:2016	Asfaltsegud. Materjalide spetsifikatsioonid. Osa 8: Korduvkasutatav asfalt	Asfaltsegud. Materjali spetsifikatsioon. Osa 8: Ringlussevõetud asfalt
EVS-EN 845-2:2013+ A1:2016	Müüritarvikute spetsifikatsioonid. Osa 2: Sillused	Müüritarvikute spetsifikatsioon. Osa 2: Sillused

## UUED HARMONEERITUD STANDARDID

Toote nõuetele vastavuse seaduse kohaselt avaldab Eesti Standardikeskus oma veebilehel ja ametlikus väljaandes teavet harmoneeritud standardeid ülevõtvate Eesti standardite kohta.

Harmoneeritud standardiks nimetatakse EL-i direktiivide kontekstis Euroopa Komisjoni standardimisettepaneku alusel Euroopa standardimisorganisatsioonide koostatud ja vastu võetud standardit.

Harmoneeritud standardite kasutamise korral eeldatakse enamiku vastavate direktiivide mõistes, et standardi kohaselt valmistatud toode täidab direktiivi olulisi nõudeid ning on seega reeglina köige lihtsam viis töendada direktiivide oluliste nõuetega täitmist. Harmoneeritud standardi täpne tähdus ja õiguslik staatus tuleneb siiski iga direktiivi tekstist eraldi ning võib direktiivist olenevalt erineda.

Lisainfo:

<http://www.newapproach.org/>

<http://ec.europa.eu/growth/single-market/european-standards/harmonised-standards>

Eesti Standardikeskus avaldab ametlikus väljaandes harmoneeritud standardeid ülevõtvate Eesti standardite kohta järgmist infot:

- harmoneeritud standardi staatuse saanud Eesti standardid
- harmoneeritud standardi staatuses olevate Eesti standardite kohta avaldatud märkused ja hoiatused, mida tuleb standardite järgimisel arvestada
- harmoneeritud standardi staatuse kaotanud Eesti standardid

Info esitatakse vastavate direktiivide kaupa.

### Direktiiv 2013/29/EL Pürotehnilised tooted (EL Teataja 2017/C 149/01)

Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri	Kuupäev, millega Eesti standardi aluseks olevat Euroopa standardit võib rakendada harmoneeritud standardina	Vide asendatavale Euroopa standardile	Kuupäev, milles asendatava standardi järgimisest tulenev vastavus-eeldus kaotab kehtivuse Märkus 1
EVS-EN 15947-1:2015 Pürotehnilised tooted. Kategooria F1, F2 ja F3 ilutulestik. Osa 1: Terminoloogia	12.05.2017	EN 15947-1:2010 Märkus 2.1	30.06.2016
EVS-EN 15947-2:2015 Pürotehnilised tooted. Kategooria F1, F2 ja F3 ilutulestik. Osa 2: Ilutulestiku kategooriad ja liigid	12.05.2017	EN 15947-2:2010 Märkus 2.1	30.06.2016
EVS-EN 15947-3:2015 Pürotehnilised tooted. Kategooria F1, F2 ja F3 ilutulestik. Osa 3: Minimaalsed märgistusnõuded	12.05.2017	EN 15947-3:2010 Märkus 2.1	30.06.2016
EVS-EN 15947-4:2015 Pürotehnilised tooted. Kategooria F1, F2 ja F3 ilutulestik. Osa 4: Katsemeetodid	12.05.2017	EN 15947-4:2010 Märkus 2.1	30.06.2016
EVS-EN 15947-5:2015 Pürotehnilised tooted. Kategooria F1, F2 ja F3 ilutulestik. Osa 5: Ehitus- ja toimivusnõuded	12.05.2017	EN 15947-5:2010 Märkus 2.1	30.06.2016
EVS-EN 16256-1:2012 Pürotehnilised tooted. Laval ja teatris kasutatav pürotehnika. Osa 1: Terminoloogia	12.05.2017		
EVS-EN 16256-2:2012 Pürotehnilised tooted. Laval ja teatris kasutatav pürotehnika. Osa 2: Laval ja teatris kasutatava pürotehnika kategooriad	12.05.2017		
EVS-EN 16256-3:2012 Pürotehnilised tooted. Laval ja teatris kasutatav pürotehnika. Osa 3: Ehitus- ja toimivusnõuded	12.05.2017		
EVS-EN 16256-4:2012 Pürotehnilised tooted. Laval ja teatris kasutatav pürotehnika. Osa 4: Miinimumnõuded märgistamisele ja kasutusjuhendid	12.05.2017		
EVS-EN 16256-5:2012 Pürotehnilised tooted. Laval ja teatris kasutatav pürotehnika. Osa 5: Katsemeetodid	12.05.2017		
EVS-EN 16261-1:2012 Pürotehnilised tooted. 4. kategooria ilutulestikud. Osa 1: Terminoloogia	12.05.2017		
EVS-EN 16261-2:2013 Pürotehnilised tooted. 4. kategooria ilutulestikud. Osa 2: Nõuded	12.05.2017		

EVS-EN 16261-3:2012	12.05.2017
Pürotehnilised tooted. 4. kategooria ilutulestikud. Osa 3: Katsemeetodid	
EVS-EN 16261-4:2012	12.05.2017
Pürotehnilised tooted. 4. kategooria ilutulestikud. Osa 4: Miinimumnõuded märgistamisele ja kasutusjuhendid	
EVS-EN ISO 14451-1:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 1: Terminoloogia	
EVS-EN ISO 14451-10:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 10: Nõuded pooltoodetele ja nende kategoriseerimine	
EVS-EN ISO 14451-2:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 2: Katsemeetodid	
EVS-EN ISO 14451-3:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 3: Etikettimine	
EVS-EN ISO 14451-4:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 4: Nõuded mikrogaasigeneraatoritele ja nende kategoriseerimine	
EVS-EN ISO 14451-5:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 5: Nõuded turvapatjade gaasigeneraatoritele ja nende kategoriseerimine	
EVS-EN ISO 14451-6:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 6: Nõuded turvapatjade moodulitele ja nende kategoriseerimine	
EVS-EN ISO 14451-7:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 7: Nõuded turvavööde eelpingutitele ja nende kategoriseerimine	
EVS-EN ISO 14451-8:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 8: Nõuded süuteseadmetele ja nende kategoriseerimine	
EVS-EN ISO 14451-9:2013	12.05.2017
Pürotehnilised tooted. Pürotehnilised tooted sõidukitele.	
Osa 9: Nõuded täiturseadmetele ja nende kategoriseerimine	

Märkus 1: Tavaliselt on kuupäevaks, mil asendatava standardi järgimisest tulenev vastavuseeldus kehtivuse kaotab, Euroopa standardiorganisatsiooni kehtestatud tühistamiskuupäev, kuid könealuste standardite kasutajate tähelepanu juhitakse asjaolule, et teatavatel erandjuhtudel võib olla ka teisi.

Märkus 2.1: Uue (või muudetud) standardi reguleerimisala on samasugune nagu asendataval standardil. Osutatud kuupäevast alates ei loo asendatava standardi järgimine enam eeldust, et toode või teenus vastab liidu asjaomaste õigusaktide olulistele või muudele nõuetele.

### Direktiiv 2014/53/EL Raadioseadmed (EL Teataja 2017/C 149/02)

Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri	Kuupäev, millest alates Eesti standardi aluseks olevat Euroopa standardit võib rakendada harmoneeritud standardina	Viide asendatavale Euroopa standardile	Kuupäev, mil asendatava standardi järgimisest tulenev vastavuseeldus kaotab kehtivuse Märkus 1	Direktiivi 2014/53/EL artikkel
EVS-EN 300 328 V2.1.1:2017 Lairiba edastussüsteemid; 2,4 GHz ISM raadiosagedusalas töötavad andmeedastusseadmed, mis kasutavad lairibamodulatsiooni tehnoloogiat; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuetega alusel	13.01.2017			Artikli 3 lõige 2

EVS-EN 300 422-1 V2.1.2:2017 Raadiomikrofonid; Audio PMSE kuni 3 GHz; Osa 2: Klass A vastuvõtjad; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	10.02.2017	Artikli 3, lõige 2
EVS-EN 300 720 V2.1.1:2017 Ultrakõrgsagedusel (UHF) töötavad pardasidesüsteemid ja seadmed; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	10.03.2017	Artikli 3, lõige 2
EVS-EN 301 908-11 V11.1.2:2017 IMT kärvörgud; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel; Osa 11: CDMA otseste hajutamisega (UTRA FDD) repiiterid	10.02.2017	Artikli 3, lõige 2
EVS-EN 301 908-3 V11.1.3:2017 IMT kärvörgud; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel; Osa 3: CDMA otseste hajutamisega (UTRA FDD) baasjaamat (BS)	12.05.2017	Artikli 3, lõige 2
EVS-EN 302 186 V2.1.1:2017 Satelliisse maajaamat ja süsteemid (SES); Sagedusalades 11/12/14 GHz töötavate liikuvate satelliitside õhusõiduki maajaamade (AES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	12.04.2017	Artikli 3, lõige 2
EVS-EN 302 248 V2.1.1:2017 Navigatsiooniradarid SOLAS konventsiooniga hõlmamata laevadel; Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	10.03.2017	Artikli 3, lõige 2
EVS-EN 302 340 V2.1.1:2017 Satelliitside maajaamat ja süsteemid (SES); Sagedusalades 11/12/14 GHz töötavate veesõiduki pardal asuvate maajaamade (AES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	12.04.2017	Artikli 3, lõige 2
EVS-EN 302 448 V2.1.1:2017 Satelliitside maajaamat ja süsteemid (SES); Raadiosagedusalades 14/12 GHz töötavate rongidel asuvate asukoha jälgimise maajaamade (EST) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	12.04.2017	Artikli 3, lõige 2
EVS-EN 302 480 V2.1.2:2017 Süsteemid mobiilsidele lennuki pardal (MCOBA); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	10.03.2017	Artikli 3, lõige 2
EVS-EN 302 729 V2.1.1:2017 Lähitoimeseadmed (SRD); Sagedusvahemikes 6-8,5 GHz, 24,05-26,5 GHz, 57-64 GHz, 75-85 GHz töötavad taseme sondeerimisseadmed (LPR); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	12.05.2017	Artikli 3, lõige 2
EVS-EN 302 977 V2.1.1:2017 Satelliitside maajaamat ja süsteemid (SES); Raadiosagedusalades 14/12 GHz töötavate liiklusvahenile kinnitatud maajaamade (VMES) harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	12.04.2017	Artikli 3, lõige 2
EVS-EN 303 098 V2.1.1:2017 Madala võimsusega töötav isiklikku kasutusega asukoha määramise mereseade, mis kasutab automaatset identifitseerimissüsteemi (AIS); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	06.01.2017	Artikli 3, lõige 2

EVS-EN 303 135 V2.1.1:2017 Elektromagnetilise ühilduvuse ja raadiospektri küsimused (ERM); Ranniku seire, veesõiduki liikluse teenused ja sadamaradarid (CS/VTS/HR); Harmoneeritud standard direktiivi 2014/53/EL artikli 3.2 oluliste nõuete alusel	13.01.2017	Artikli 3 lõige 2
EVS-EN 303 213-6-1 V2.1.1:2017 Lennuvälja maapealse liikluse juhtimise täiustatud süsteem (A-SMGCS); Osa 6: Harmoneeritud standard direktiivi 2014/53/EL artikli 3 lõike 2 põhinõuete alusel süsteemi juures kasutatava maapealse liikluse seireradarite (SMR) jaoks; Alaosa 1: X-riba impulss-seireseadmed saatjavõimsusega kuni 100 kW	13.01.2017	Artikli 3 lõige 2

Märkus 1: Tavaliselt on kuupäevaks, mil asendatava standardi järgimisest tulenev vastavuseeldus kehtivuse kaotab, Euroopa standardiorganisatsiooni kehtestatud tühistamiskuupäev, kuid kõnealuste standardite kasutajate tähelepanu juhitakse asjaolule, et teatavatel erandjuhtudel võib olla ka teisiti.