

# Hrvatski zavod za norme

## Oglasnik za normativne dokumente

8/2019 kolovoz, 2019.

Oglasnik za normativne dokumente Hrvatskog zavoda za norme sadrži popise hrvatskih norma, nacrtu hrvatskih norma, prijedloga za prihvaćanje stranih norma u izvorniku, povučene hrvatske norme, povučene nacрте hrvatskih norma te ispravke, rezultate europske i međunarodne normizacije razvrstane po predmetnom ustroju i obavijesti HZN-a.

Tko u popisima normativnih dokumenata koji su objavljeni u ovom Oglasniku otkrije koju grešku, koja može voditi do krive primjene, moli se da o tome neodložno obavijesti Hrvatski zavod za norme, kako bi se mogli otkloniti uočeni propusti.

Izdavač:



HZN

**Hrvatski zavod za norme**  
Croatian Standards Institute

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# 1 Rezultati hrvatske normizacije

## 1.1 Hrvatske norme

Temeljem Zakona o normizaciji (Narodne novine 80/2013) hrvatske norme priprema, izdaje i objavljuje Hrvatski zavod za norme, na prijedlog tehničkih odbora.

Hrvatske norme mogu nastati na ova četiri načina:

- prihvaćanjem stranih (međunarodnih/europskih/nacionalnih) norma uz prevođenje na hrvatski jezik (pp)
- prihvaćanjem stranih norma u izvorniku s hrvatskim ovitkom (po)
- prihvaćanjem stranih norma u izvorniku objavom obavijesti o prihvaćanju (pr)
- izradbom izvorne hrvatske norme (izv).

Oznaka načina prihvaćanja navedena je uz referencijsku oznaku hrvatske norme. Hrvatske su norme zainteresiranima na raspolaganju u Normoteci Hrvatskoga zavoda za norme, Ulica grada Vukovara 78, Zagreb.

### HZN/TO 6, *Papir, karton i pulpe*

- HRN EN ISO 12625-11:2019 en pr  
Tanki upijajući papir i proizvodi od tankoga upijajućeg papira – 11. dio: Određivanje čvrstoće na prskanje mokre kugle (ISO 12625-11:2019; EN ISO 12625-11:2019)  
Tissue paper and tissue products – Part 11: Determination of wet ball burst strength (ISO 12625-11:2019; EN ISO 12625-11:2019)

### HZN/TO 21, *Protupožarna i vatrogasna oprema*

- HRN EN 12259-9:2019 en pr  
Stabilni protupožarni sustavi – Dijelovi sustava za prskanje (sprinkler sustava) i sustava raspršene vode – 9. dio: Deluge alarmni ventilii (EN 12259-9:2019)  
Fixed firefighting systems – Components for sprinkler and water spray systems – Part 9: Deluge alarm valves (EN 12259-9:2019)
- HRN EN 13565-2:2019 en pr  
Stabilni protupožarni sustavi – Sustavi s pjenom – 2. dio: Projektiranje, izvedba i održavanje (EN 13565-2:2018+AC:2019)  
Fixed firefighting systems – Foam systems – Part 2: Design, construction and maintenance (EN 13565-2:2018+AC:2019)

### HZN/TO 25, *Ljevarstvo*

- HRN EN ISO 945-1:2019 en pr  
Mikrostruktura željeznih lijevova – 1. dio: Razredba grafita vizualnom analizom (ISO 945-1:2019; EN ISO 945-1:2019)  
Microstructure of cast irons – Part 1: Graphite classification by visual analysis (ISO 945-1:2019; EN ISO 945-1:2019)

### HZN/TO 28, *Naftni proizvodi i maziva*

- HRN ISO 2714:2019 en pr  
Tekući ugljikovodici – Mjerenje obujma s pomoću mjerača protoka (ISO 2714:2017)  
Liquid hydrocarbons – Volumetric measurement by displacement meter (ISO 2714:2017)
- HRN ISO 2715:2019 en pr  
Tekući ugljikovodici – Mjerenje obujma turbinskim mjernim sustavima (ISO 2715:2017)  
Liquid hydrocarbons – Volumetric measurement by turbine flowmeter (ISO 2715:2017)
- HRN ISO 6578:2019 en pr  
Pothlađeni tekući ugljikovodici – Statičko mjerenje – Postupak izračunavanja (ISO 6578:2017)  
Refrigerated hydrocarbon liquids – Static measurement – Calculation procedure (ISO 6578:2017)
- HRN ISO 10976:2019 en pr  
Pothlađene lake ugljikovodične tekućine – Mjerenje tereta na brodovima za UPP (ISO 10976:2015)  
Refrigerated light hydrocarbon fluids – Measurement of cargoes on board LNG carriers (ISO 10976:2015)

- HRN ISO 12925-1:2019 en pr  
Maziva, industrijska ulja i srodni proizvodi (razred L) – Podrazred C (zupčanici) – 1. dio: Specifikacije maziva za podmazivanje zatvorenih zupčaničkih prijenosnika (ISO 12925-1:2018)  
Lubricants, industrial oils and related products (class L) – Family C (gears) – Part 1: Specifications for lubricants for enclosed gear systems (ISO 12925-1:2018)

- HRN ISO 15380:2019 en pr  
Maziva, industrijska ulja i srodni proizvodi (razred L) – Podrazred H (Hidraulički sustavi) – Specifikacije za kategorije HETG, HEPG, HEES i HEPR (ISO 15380:2016)  
Lubricants, industrial oils and related products (class L) – Family H (Hydraulic systems) – Specifications for hydraulic fluids in categories HETG, HEPG, HEES and HEPR (ISO 15380:2016)

- HRN EN 15940:2019 en pr  
Goriva za motorna vozila – Parafinska dizelska goriva dobivena sintezom ili hidroobradom – Zahtjevi i metode ispitivanja (EN 15940:2016+A1:2018+AC:2019)  
Automotive fuels – Paraffinic diesel fuel from synthesis or hydrotreatment – Requirements and test methods (EN 15940:2016+A1:2018+AC:2019)

### HZN/TO 92, *Zaštita od požara*

- HRN EN 1366-13:2019 en pr  
Ispitivanja otpornosti na požar servisnih instalacija – 13. dio: Dimnjaci (EN 1366-13:2019)  
Fire resistance tests for service installations – Part 13: Chimneys (EN 1366-13:2019)
- HRN EN 15269-11:2019 en pr  
Proširena primjena rezultata ispitivanja otpornosti na požar i/ili dimopropusnosti vrata, zaslona i prozora koji se mogu otvarati, uključujući pripadajući okov – 11. dio: Otpornost na požar zavjesa od tkanine koje se otvaraju (EN 15269-11:2018+AC:2019)  
Extended application of test results for fire resistance and/or smoke control for door, shutter and operable window assemblies, including their elements of building hardware – Part 11: Fire resistance for operable fabric curtains (EN 15269-11:2018+AC:2019)

### HZN/TO 136, *Namještaj*

- HRN EN 17214:2019 en pr  
Vizualna procjena površine namještaja (EN 17214:2019)  
Visual assessment of furniture surfaces (EN 17214:2019)

### HZN/TO 146, *Kvaliteta zraka*

- HRN EN 689:2019 en pr  
Profesionalna izloženost – Mjerenje izloženosti udisanjem kemijskih agensa – Strategija za provjeru usklađenosti s graničnim vrijednostima profesionalne izloženosti (EN 689:2018+AC:2019)  
Workplace exposure – Measurement of exposure by inhalation to chemical agents – Strategy for testing compliance with occupational exposure limit values (EN 689:2018+AC:2019)
- HRN EN 17255-1:2019 en pr  
Emisije iz nepokretnih izvora – Sustavi za prikupljanje i obradu podataka – 1. dio: Specifikacije zahtjeva za obradu podataka i izvješćivanje (EN 17255-1:2019)  
Stationary source emissions – Data acquisition and handling systems – Part 1: Specification of requirements for the handling and reporting of data (EN 17255-1:2019)
- HRS CEN/TS 17337:2019 en pr  
Emisije iz nepokretnih izvora – Određivanje masene koncentracije plinovitih tvari u smjesi – Infracrvena spektroskopija s Fourierovom transformacijom (CEN/TS 17337:2019)  
Stationary source emissions – Determination of mass concentration of multiple gaseous species – Fourier transform infrared spectroscopy (CEN/TS 17337:2019)

## **HZN/TO 178, Dizala, pokretne stube i pokretne trake za osobe**

HRN EN 81-28:2019 en pr  
Sigurnosna pravila za konstrukciju i ugradnju dizala – Dizala za prijevoz osoba i tereta – 28. dio: Daljinska dojava opasnosti na osobnim i osobno teretnim dizalima (EN 81-28:2018+AC:2019)  
Safety rules for the construction and installation of lifts – Lifts for the transport of persons and goods – Part 28: Remote alarm on passenger and goods passenger lifts (EN 81-28:2018+AC:2019)

HRN EN 81-71:2019 en pr  
Sigurnosna pravila za konstrukciju i ugradnju dizala – Posebna primjena za osobna dizala i osobna teretna dizala – 71. dio: Dizala otporna na vandalsko ponašanje (EN 81-71:2018+AC:2019)  
Safety rules for the construction and installation of lifts – Particular applications to passenger lifts and goods passenger lifts – Part 71: Vandal resistant lifts (EN 81-71:2018+AC:2019)

## **HZN/TO 525, Hidroizolacijski materijali i proizvodi za pokrivanje krovova**

HRN EN 13375:2019 en pr  
Savijljive hidroizolacijske trake – Hidroizolacija betonskih ploča mostova i drugih betonskih površina – Priprema ispitnih uzoraka (EN 13375:2019)  
Flexible sheets for waterproofing – Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles – Specimen preparation (EN 13375:2019)

## **HZN/TO 526, Bitumenska veziva**

HRN EN 13358:2019 en pr  
Bitumen i bitumenska veziva – Određivanje destilacijskih svojstava razrijeđenih i omekšanih bitumenskih veziva pripremljenih s mineralnim uljima za omekšavanje (EN 13358:2019)  
Bitumen and bituminous binders – Determination of the distillation characteristics of cut-back and fluxed bituminous binders made with mineral fluxes (EN 13358:2019)

## **HZN/TO 531, Plastika i guma**

HRN EN 856:2019 en pr  
Gumena crijeva i crijevni uređaji – Gumeni hidraulični tip obložen i ojačan spiralnom žicom – Specifikacija (EN 856:2015+AC:2019)  
Rubber hoses and hose assemblies – Rubber-covered spiral wire reinforced hydraulic type – Specification (EN 856:2015+AC:2019)

## **HZN/TO 532, Dimnjaci**

HRN EN 1443:2019 en pr  
Dimnjaci – Opći zahtjevi (EN 1443:2019)  
Chimneys – General requirements (EN 1443:2019)

HRN EN 13216-1:2019 en pr  
Dimnjaci – Metode ispitivanja za sustave dimnjaka – 1. dio: Opće metode ispitivanja (EN 13216-1:2019)  
Chimneys – Test methods for system chimneys – Part 1: General test methods (EN 13216-1:2019)

## **HZN/TO 533, Kolničke konstrukcije**

HRN EN 13880-6:2019 en pr  
Vruće brtvene mase – 6. dio: Metoda za pripremu ispitnih uzoraka (EN 13880-6:2019)  
Hot applied joint sealants – Part 6: Method for the preparation of samples for testing (EN 13880-6:2019)

HRN EN 13880-7:2019 en pr  
Vruće brtvene mase – 7. dio: Ispitivanje učinkovitosti brtvene mase (EN 13880-7:2019)  
Hot applied joint sealants – Part 7: Function testing of joint sealants (EN 13880-7:2019)

## **HZN/TO 536, Vrata, prozori i staklo u graditeljstvu**

HRN EN 13126-15:2019 en pr  
Građevni okovi – Okovi za prozore i prozorska vrata – Zahtjevi i metode ispitivanja – 15. dio: Kotačići za horizontalno-klizne i okovi za klizno-sklopive prozore (EN 13126-15:2019)  
Building hardware – Hardware for windows and door height windows – Requirements and test methods – Part 15: Rollers for horizontal sliding and hardware for sliding folding windows (EN 13126-15:2019)

HRN EN 13126-16:2019 en pr  
Građevni okovi – Okovi za prozore i prozorska vrata – Zahtjevi i metode ispitivanja – 16. dio: Okovi za podizno-klizne prozore (EN 13126-16:2019)  
Building hardware – Hardware for windows and door height windows – Requirements and test methods – Part 16: Hardware for Lift and Slide windows (EN 13126-16:2019)

HRN EN 13126-17:2019 en pr  
Građevni okovi – Okovi za prozore i prozorska vrata – Zahtjevi i metode ispitivanja – 17. dio: Okovi za otklopno-klizne prozore (EN 13126-17:2019)  
Building hardware – Hardware for windows and door height windows – Requirements and test methods – Part 17: Hardware for Tilt and Slide windows (EN 13126-17:2019)

## **HZN/TO 560, Tekstilni proizvodi**

HRN EN ISO 1833-12:2019 en pr  
Tekstil – Kvantitativna kemijska analiza – 12. dio: Mješavine akrilnih, određenih modakrilnih, klornih, elastanskih vlakana s drugim određenim vlaknima (metoda s uporabom dimetilformamida) (ISO 1833-12:2019; EN ISO 1833-12:2019)  
Textiles – Quantitative chemical analysis – Part 12: Mixtures of acrylic, certain modacrylics, certain chlorofibres, certain elastanes with certain other fibres (method using dimethylformamide) (ISO 1833-12:2019; EN ISO 1833-12:2019)

HRN EN ISO 1833-16:2019 en pr  
Tekstil – Kvantitativna kemijska analiza – 16. dio: Mješavine polipropilenskih s određenim drugim vlaknima (metoda s uporabom ksilena) (ISO 1833-16:2019; EN ISO 1833-16:2019)  
Textiles – Quantitative chemical analysis – Part 16: Mixtures of polypropylene fibres with certain other fibres (method using xylene) (ISO 1833-16:2019; EN ISO 1833-16:2019)

HRN EN 17132:2019 en pr  
Tekstil i tekstilni proizvodi – Određivanje policikličkih aromatskih ugljikovodika (PAH) metodom plinske kromatografije (EN 17132:2019)  
Textiles and textile products – Determination of Polycyclic Aromatic Hydrocarbons (PAH), method using gas chromatography (EN 17132:2019)

HRN EN 17134:2019 en pr  
Tekstil i tekstilni proizvodi – Određivanje određenih konzervansa metodom tekuće kromatografije (EN 17134:2019)  
Textiles and textile products – Determination of certain preservatives, method using liquid chromatography (EN 17134:2019)

## **HZN/TO 571, Sport, igrališta i ostali rekreacijski sadržaji i oprema**

HRN EN 1176-4:2019 en pr  
Oprema i podloge za igrališta – 4. dio: Dodatni posebni sigurnosni zahtjevi i metode ispitivanja za žičare (EN 1176-4:2017+AC:2019)  
Playground equipment and surfacing – Part 4: Additional specific safety requirements and test methods for cableways (EN 1176-4:2017+AC:2019)

HRN EN 1176-6:2019 en pr  
Oprema i podloge za igrališta – 6. dio: Dodatni posebni sigurnosni zahtjevi i metode ispitivanja za ljuljačke (EN 1176-6:2017+AC:2019)  
Playground equipment and surfacing – Part 6: Additional specific safety requirements and test methods for rocking equipment (EN 1176-6:2017+AC:2019)

HRN EN 1177:2019 en pr  
Podloge za ublažavanje udara na igralištima – Metode ispitivanja za utvrđivanje svojstava ublažavanja udara (EN 1177:2018+AC:2019)  
Impact attenuating playground surfacing – Methods of test for determination of impact attenuation (EN 1177:2018+AC:2019)

HRN EN 14619:2019 en pr  
Oprema za koturaljkaški sport – Romobili – Sigurnosni zahtjevi i metode ispitivanja (EN 14619:2019)  
Roller sports equipment – Kick scooters – Safety requirements and test methods (EN 14619:2019)

HRN EN 17229:2019 en pr  
Fitness centri – Zahtjevi o sadržajima i poslovanju centra – Zahtjevi za upravljanje i vođenje (EN 17229:2019)  
Fitness centres – Requirements for centre amenities and operation – Operational and managerial requirements (EN 17229:2019)

### **HZN/TO E9, Električna oprema za željeznicu**

HRN EN 50591:2019 en pr  
Željeznički sustav – Željeznička vozila – Specifikacija i verifikacija potrošnje energije (EN 50591:2019)  
Railway Applications – Rolling Stock – Specification and verification of energy consumption (EN 50591:2019)

HRN EN 50668:2019 en pr  
Željeznički sustav – Signalni i upravljački sustavi za gradske željezničke sustave koji nisu u sastavu gradskog upravljačkog sustava (EN 50668:2019)  
Railway applications – Signalling and control systems for non UGTMS Urban Rail systems (EN 50668:2019)

### **HZN/TO E17, Sklopni i upravljački uređaji**

HRN EN 60947-5-4:2005/A1:2019 en pr  
Niskonaponska sklopna aparatura – Dio 5-4: Upravljački aparati i sklopni elementi za upravljačke krugove – Metode određivanja radnih svojstava kontakata za male struje i napone – Posebna ispitivanja (IEC 60947-5-4:2002/am1:2019; EN 60947-5-4:2003/A1:2019)  
Low-voltage switchgear and controlgear – Part 5-4: Control circuit devices and switching elements – Method of assessing the performance of low-energy contacts – Special tests (IEC 60947-5-4:2002/am1:2019; EN 60947-5-4:2003/A1:2019)

### **HZN/TO E22, Energetska elektronika**

HRN EN IEC 62040-1:2019 en pr  
Energetski sustavi neprekidnog napajanja (UPS) – 1. dio: Sigurnosni zahtjevi (IEC 62040-1:2017; EN IEC 62040-1:2019)  
Uninterruptible power systems (UPS) – Part 1: Safety requirements (IEC 62040-1:2017; EN IEC 62040-1:2019)

### **HZN/TO E23, Električni instalacijski pribor**

HRN EN 61386-1:2008/A1:2019 en pr  
Sustavi cijevi za vođenje kabela – 1. dio: Opći zahtjevi (IEC 61386-1:2008/am1:2017; EN 61386-1:2008/A1:2019)  
Conduit systems for cable management – Part 1: General requirements (IEC 61386-1:2008/am1:2017; EN 61386-1:2008/A1:2019)

### **HZN/TO E45, Nuklearna instrumentacija**

HRN EN IEC 60964:2019/Ispr.1:2019 en pr  
Nuklearne elektrane – Upravljačke sobe – Projektiranje (EN IEC 60964:2019/AC:2019)  
Nuclear power plants – Control rooms – Design (EN IEC 60964:2019/AC:2019)

### **HZN/TO E55, Žice za namote**

HRN EN 60317-35:2014/A1:2019 en pr  
Specifikacije pojedinih vrsta žica za namote – 35. dio: Poliuretanom lakirana lemljiva okrugla bakrena žica, razreda 155, s vezivnim slojem (IEC 60317-35:2013/am1:2019; EN 60317-35:2014/A1:2019)  
Specifications for particular types of winding wires – Part 35: Solderable polyurethane enamelled round copper wire, class 155, with a bonding layer (IEC 60317-35:2013/am1:2019; EN 60317-35:2014/A1:2019)

HRN EN 60317-36:2014/A1:2019 en pr  
Specifikacije pojedinih vrsta žica za namote – 36. dio: Poliesterimidom lakirana lemljiva okrugla bakrena žica, razreda 180, s vezivnim slojem (IEC 60317-36:2013/am1:2019; EN 60317-36:2014/A1:2019)  
Specifications for particular types of winding wires – Part 36: Solderable polyesterimide enamelled round copper wire, class 180, with a bonding layer (IEC 60317-36:2013/am1:2019; EN 60317-36:2014/A1:2019)

HRN EN 60317-55:2014/A1:2019 en pr  
Specifikacije pojedinih vrsta žica za namote – 55. dio: Poliuretanom lakirana okrugla bakrena lemljiva žica prekrivena poliamidom, razreda 180 (IEC 60317-55:2013/am1:2019; EN 60317-55:2014/A1:2019)  
Specifications for particular types of winding wires – Part 55: Solderable polyurethane enamelled round copper wire overcoated with polyamide, class 180 (IEC 60317-55:2013/am1:2019; EN 60317-55:2014/A1:2019)

HRN EN 60317-68:2017/A1:2019 en pr  
Specifikacije pojedinih vrsta žica za namote – 68. dio: Polivinil acetalom lakirana profilna aluminijska žica, razreda 120 (IEC 60317-68:2017/am1:2019; EN 60317-68:2017/A1:2019)  
Specifications for particular types of winding wires – Part 68: Polyvinyl acetal enamelled rectangular aluminium wire, class 120 (IEC 60317-68:2017/am1:2019; EN 60317-68:2017/A1:2019)

### **HZN/TO E61, Sigurnost električnih kućanskih i sličnih aparata**

HRN EN 60335-2-12:2005/A11:2019 en pr  
Kućanski i slični električni aparati – Sigurnost – Dio 2-12: Posebni zahtjevi za tople ploče i slične aparate (EN 60335-2-12:2003/A11:2019)  
Household and similar electrical appliances – Safety – Part 2-12: Particular requirements for warming plates and similar appliances (EN 60335-2-12:2003/A11:2019)

HRN EN 60335-2-12:2005/A2:2019 en pr  
Kućanski i slični električni aparati – Sigurnost – Dio 2-12: Posebni zahtjevi za tople ploče i slične aparate (IEC 60335-2-12:2002/am2:2017; EN 60335-2-12:2003/A2:2019)  
Household and similar electrical appliances – Safety – Part 2-12: Particular requirements for warming plates and similar appliances (IEC 60335-2-12:2002/am2:2017; EN 60335-2-12:2003/A2:2019)

HRN EN 60335-2-13:2011/A1:2019 en pr  
Kućanski i slični električni aparati – Sigurnost – Dio 2-13: Posebni zahtjevi za friteze, tave za prženje i slične aparate (IEC 60335-2-13:2009/am1:2016; EN 60335-2-13:2010/A1:2019)  
Household and similar electrical appliances – Safety – Part 2-13: Particular requirements for deep fat fryers, frying pans and similar appliances (IEC 60335-2-13:2009/am1:2016; EN 60335-2-13:2010/A1:2019)

HRN EN 60335-2-17:2013/A11:2019 en pr  
Kućanski i slični električni aparati – Sigurnost – Dio 2-17: Posebni zahtjevi za grijače pokrivače, jastuke i slične gibljive grijače aparate (EN 60335-2-17:2013/A11:2019)  
Household and similar electrical appliances – Safety – Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances (EN 60335-2-17:2013/A11:2019)

HRN EN 61770:2011/A1:2019 en pr  
Električni aparati spojeni na vodovod – Izbjegavanje povratnog usisa i otkazivanja cijevnoga priključka (IEC 61770:2008/am1:2015; EN 61770:2009/A1:2019)  
Electric appliances connected to the water mains – Avoidance of backsiphonage and failure of hose-sets (IEC 61770:2008/am1:2015; EN 61770:2009/A1:2019)

### **HZN/TO E64, Električne instalacije i zaštita od električnog udara**

HRN HD 60364-8-2:2018/A11:2019 en pr  
Niskonaponske električne instalacije – Dio 8-2: Pametne niskonaponske električne instalacije (HD 60364-8-2:2018/A11:2019)  
Low-voltage electrical installations – Part 8-2: Prosumer's low-voltage electrical installations (HD 60364-8-2:2018/A11:2019)

### **HZN/TO E500, Elektromagnetska kompatibilnost u elektrotehnici i telekomunikacijama**

HRN EN 61000-3-3:2013/A1:2019 en pr  
Elektromagnetska kompatibilnost (EMC) – Dio 3-3: Granice – Ograničenje kolebanja napona i treperenja u niskonaponskim sustavima napajanja za opremu s nazivnom strujom <= 16 A i koja nije predmet uvjetovanog priključka (IEC 61000-3-3:2013/am1:2017; EN 61000-3-3:2013/A1:2019)  
Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current <= 16 A per phase and not subject to conditional connection (IEC 61000-3-3:2013/am1:2017; EN 61000-3-3:2013/A1:2019)



## **HZN/TO E502, Elektrotehnički aspekti telekomunikacijske opreme**

HRN EN 50697:2019 en pr  
Information technology – Measurement of end-to-end (E2E) links (EN 50697:2019)

## **HZN/TU C1, Kemikalije, kemijsko inženjerstvo, poljoprivredni i prehrambeni proizvodi 1**

HRN EN ISO 2431:2019 en pr  
Boje i lakovi – Određivanje vremena istjecanja s pomoću posuda za istjecanje (ISO 2431:2019; EN ISO 2431:2019)  
Paints and varnishes – Determination of flow time by use of flow cups (ISO 2431:2019; EN ISO 2431:2019)

HRN EN ISO 10123:2019 en pr  
Adhezivi – Određivanje smične čvrstoće anaerobnih adheziva uzorcima tipa klina i prstena (pin-and-collar) (ISO 10123:2013; EN ISO 10123:2019)  
Adhesives – Determination of shear strength of anaerobic adhesives using pin-and-collar specimens (ISO 10123:2013; EN ISO 10123:2019)

HRN EN ISO 11343:2019 en pr  
Adhezivi – Određivanje dinamičke otpornosti na kalanje adhezijskih veza visoke čvrstoće pod uvjetima udara – Metoda udara klinom (ISO 11343:2019; EN ISO 11343:2019)  
Adhesives – Determination of dynamic resistance to cleavage of high-strength adhesive bonds under impact wedge conditions – Wedge impact method (ISO 11343:2019; EN ISO 11343:2019)

HRN EN ISO/CIE 11664-1:2019 en pr  
Kolorimetrija – 1. dio: CIE standard kolorimetrijskih opazača (ISO/CIE 11664-1:2019; EN ISO/CIE 11664-1:2019)  
Colorimetry – Part 1: CIE standard colorimetric observers (ISO/CIE 11664-1:2019; EN ISO/CIE 11664-1:2019)

HRN EN ISO/CIE 11664-3:2019 en pr  
Kolorimetrija – 3. dio: CIE tristimulus vrijednosti (ISO/CIE 11664-3:2019; EN ISO/CIE 11664-3:2019)  
Colorimetry – Part 3: CIE tristimulus values (ISO/CIE 11664-3:2019; EN ISO/CIE 11664-3:2019)

HRN EN ISO/CIE 11664-4:2019 en pr  
Kolorimetrija – 4. dio: CIE 1976 L\*a\*b\* prostor boje (ISO/CIE 11664-4:2019; EN ISO/CIE 11664-4:2019)  
Colorimetry – Part 4: CIE 1976 L\*a\*b\* Colour space (ISO/CIE 11664-4:2019; EN ISO/CIE 11664-4:2019)

HRN EN 17224:2019 en pr  
Određivanje snage kompresije drvenih adheziva na višim temperaturama (EN 17224:2019)  
Determination of compressive shear strength of wood adhesives at elevated temperatures (EN 17224:2019)

HRN EN ISO 18473-3:2019 en pr  
Funkcionalni pigmenti i punila za posebnu primjenu – 3. dio: Pirogeni silicijev dioksid za silikonsku gumu (ISO 18473-3:2018; EN ISO 18473-3:2019)  
Functional pigments and extenders for special application – Part 3: Fumed silica for silicone rubber application (ISO 18473-3:2018; EN ISO 18473-3:2019)

HRN EN ISO 22631:2019 en pr  
Adhezivi – Metoda ispitivanja adheziva za podne i zidne obloge – Ispitivanje ljuštenjem (ISO 22631:2019; EN ISO 22631:2019)  
Adhesives – Test method for adhesives for floor and wall coverings – Peel test (ISO 22631:2019; EN ISO 22631:2019)

HRN EN ISO 22632:2019 en pr  
Adhezivi – Metoda ispitivanja adheziva za podne i zidne obloge – Ispitivanje smicanjem (ISO 22632:2019; EN ISO 22632:2019)  
Adhesives – Test method for adhesives for floor and wall coverings – Shear test (ISO 22632:2019; EN ISO 22632:2019)

HRN EN ISO 22635:2019 en pr  
Adhezivi – Metoda ispitivanja za adhezive za plastične ili gumene podne ili zidne obloge – Određivanje dimenzijskih promjena nakon ubrzanog starenja (ISO 22635:2019; EN ISO 22635:2019)  
Adhesives – Test method for adhesives for plastic or rubber floor coverings or wall coverings – Determination of dimensional changes after accelerated ageing (ISO 22635:2019; EN ISO 22635:2019)

HRN EN ISO 22637:2019 en pr  
Adhezivi – Ispitne metode za adhezive za podne obloge – Određivanje električne otpornosti adhezijskih filmova i kompozita (ISO 22637:2019; EN ISO 22637:2019)  
Adhesives – Test of adhesive for floor covering – Determination of the electrical resistance of adhesive films and composites (ISO 22637:2019; EN ISO 22637:2019)

## **HZN/TU T1, Prijevoz, rukovanje materijalima i pakiranje 1**

HRN EN 3299:2019 en pr  
Zrakoplovstvo – Osovinske matice i navojni prsteni, samozatvarajući, lijevi ili desni MJ navoji, od čelika otpornog na toplinu FE-PA2601 (A286), prevučene srebrom – Tehnička specifikacija (EN 3299:2019)  
Aerospace series – Shaft-nuts and threaded rings, self-locking, right- or left-hand MJ threads, in heat resisting steel FE-PA2601 (A286), silver plated – Technical specification (EN 3299:2019)

HRN EN 16602-70-60:2019 en pr  
Osiguranje kvalitete proizvoda za upotrebu u svemiru – Kvalifikacija i nabava tiskanih pločica (EN 16602-70-60:2019)  
Space product assurance – Qualification and Procurement of printed circuit boards (EN 16602-70-60:2019)

## **HZN/TU U1, Opća elektrotehnika 1**

HRN EN IEC 60721-3-3:2019 en pr  
Klasifikacija uvjeta okoliša – 3-3. dio: Klasifikacija skupina parametara okoliša i njihovog intenziteta – Stacionarna uporaba na mjestima zaštićenim od vremenskih utjecaja (IEC 60721-3-3:2019; EN IEC 60721-3-3:2019)  
Classification of environmental conditions – Part 3-3: Classification of groups of environmental parameters and their severities – Stationary use at weatherprotected locations (IEC 60721-3-3:2019; EN IEC 60721-3-3:2019)

HRN EN IEC 60721-3-4:2019 en pr  
Klasifikacija uvjeta okoliša – 3-4. dio: Klasifikacija skupina parametara okoliša i njihovog intenziteta – Stacionarna uporaba na mjestima nezaštićenim od vremenskih utjecaja (IEC 60721-3-4:2019; EN IEC 60721-3-4:2019)  
Classification of environmental conditions – Part 3-4: Classification of groups of environmental parameters and their severities – Stationary use at non-weatherprotected locations (IEC 60721-3-4:2019; EN IEC 60721-3-4:2019)

## **HZN/TU V1, Elektronika 1**

HRN EN IEC 60793-2-10:2019 en pr  
Optičke vlakne – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres (IEC 60793-2-10:2019; EN IEC 60793-2-10:2019)

HRN EN IEC 61280-4-1:2019 en pr  
Fibre-optički komunikacijski sustavi – Test procedure – Part 4-1: Installed cable plant – Multimode attenuation measurement (IEC 61280-4-1:2019; EN IEC 61280-4-1:2019)

## **1.3 Prijedlozi za prihvaćanje stranih norma iz izvorniku**

Temeljem Zakona o normizaciji (Narodne novine 80/2013) Hrvatski zavod za norme na prijedlog tehničkih odbora objavljuje raspravu o prijedlogu za prihvaćanje stranih norma (međunarodnih, europskih i njemačkih norma) kao hrvatskih norma.

Pisane primjedbe na prijedloge za prihvaćanje norma dostavljaju se Hrvatskome zavodu za norme (uz naznaku tehničkog odbora i referencijsku oznaku norme) u roku od 30 dana od dana objave rasprave u službenom glasilu Hrvatskoga zavoda za norme (HZN e-glasilo).

## **HZN/TO 92, Zaštita od požara**

prEN 1366-4 en  
Fire resistance tests for service installations – Part 4: Linear joint seals  
Ispitivanja otpornosti na požar servisnih instalacija – 4. dio: Brtve linearnih spojeva

## **HZN/TO 120, Koža i obuća**

prEN ISO 18219-2 en  
Leather – Determination of chlorinated hydrocarbons in leather – Part 2: Chromatographic method for middle-chain chlorinated paraffins (MCCP) (ISO/DIS 18219-2:2019)

## **HZN/TO 134, Gnojiva i poboljšivači tla**

prEN 17411 en  
Fertilizers – Determination of perchlorate in mineral fertilizers by liquid chromatography and tandem mass spectrometry detection (LC-MS/MS)  
Gnojiva – Određivanje perklorata u mineralnim gnojivima tekućinskom kromatografijom i tandemskom spektrometrijom masa

## **HZN/TO 147, Kvaliteta vode**

prEN ISO 22017 en  
Water quality – Guidance for rapid radioactivity measurements in nuclear or radiological emergency situation (ISO/DIS 22017:2019)

## **HZN/TO 163, Toplinska izolacija**

prEN ISO 9229 en  
Thermal insulation – Vocabulary (ISO/DIS 9229:2019)  
Toplinska izolacija – Terminološki rječnik (ISO/DIS 9229:2019)

## **HZN/TO 182, Geotehničke konstrukcije**

EN ISO 18674-3:2017/prA1 en  
Geotechnical investigation and testing – Geotechnical monitoring by field instrumentation – Part 3: Measurement of displacements across a line: Inclometers (ISO 18674-3:2017/DAMd1:2019)  
Geotehničko istraživanje i ispitivanje – Geotehničko opažanje terenskom mjernom opremom – 3. dio: Mjerenje pomaka okomito na liniju: Inklinometri (ISO 18674-3:2017/DAMd1:2019)

prEN ISO 18674-4 en  
Geotechnical investigation and testing – Geotechnical monitoring by field instrumentation – Part 4: Measurement of pore water pressure: Piezometers (ISO/DIS 18674-4:2019)

prEN ISO 22476-9 en  
Ground investigation and testing – Field testing – Part 9: Field vane test (FVT and FVT-F) (ISO/DIS 22476-9:2019)

## **HZN/TO 215, Medicinska informatika**

prEN ISO 21393 en  
Health informatics – Omics Markup Language (OML) (ISO/DIS 21393:2019)

## **HZN/TO 503, Metalni materijali**

prEN ISO 6892-1 en  
Metallic materials – Tensile testing – Part 1: Method of test at room temperature (ISO/FDIS 6892-1:2019)  
Metalni materijali – Vlačno ispitivanje – 1. dio: Metoda ispitivanja pri sobnoj temperaturi (ISO/FDIS 6892-1:2019)

prEN 10210-3 en  
Hot finished steel structural hollow sections – Part 3: Technical delivery conditions for mechanical engineering purposes  
Toplo oblikovani šuplji profili od konstrukcijskog čelika – 3. dio: Tehnički uvjeti isporuke za primjenu u strojarstvu

prEN 10219-3 en  
Cold formed welded steel structural hollow sections – Part 3: Technical delivery conditions for mechanical engineering purposes  
Hladno oblikovani zavareni šuplji profili od konstrukcijskog čelika – 3. dio: Tehnički uvjeti isporuke za primjenu u strojarstvu

## **HZN/TO 504, Korozija i zaštita metala i legura**

prEN ISO 7539-10 en  
Corrosion of metals and alloys – Stress corrosion testing – Part 10: Reverse U-bend method (ISO/DIS 7539-10:2019)  
Korozija metala i legura – Ispitivanje korozije uz naprezanje – 10. dio: Povratna metoda U-savijanja (ISO/DIS 7539-10:2019)

## **HZN/TO 509, Cestovna oprema**

prEN 17383 en  
Road traffic noise reducing devices – Sustainability : Key Sustainability Performance Indicators (KSPI) Declaration

## **HZN/TO 524, Inteligentni transportni sustavi**

EN ISO 14906:2018/prA1 en  
Electronic fee collection – Application interface definition for dedicated short-range communication (ISO 14906:2018/DAMd 1:2019)  
Elektronička naplata – Definicije programskih sučelja za dodijeljeno kratkovalno područje komunikacije (ISO 14906:2018/DAMd 1:2019)

prEN ISO 14907-1 en  
Electronic fee collection – Test procedures for user and fixed equipment – Part 1: Description of test procedures (ISO/DIS 14907-1:2019)  
Elektronička naplata – Postupci ispitivanja za korisnika i ugrađena oprema – 1. dio: Opis postupaka ispitivanja (ISO/DIS 14907-1:2019)

CEN/TS 17378:2019 en  
Intelligent transport systems – Urban ITS – Air quality management in urban areas

FprCEN/TR 17401 en  
Intelligent transport systems – Urban-ITS – Mixed vendor environment guide

FprCEN/TS 17413 en  
Intelligent transport systems – Urban ITS – Models and definitions for new modes

## **HZN/TO 528, Oprema za željeznice**

prEN 15020 en  
Railway applications – Rescue coupler – Performance requirements, specific interface geometry and test methods  
Željeznički sustav – Pomoćno kvačilo – Zahtjevi za radne značajke, posebna utjecajna geometrija i metode ispitivanja

prEN 15551 en  
Railway applications – Railway rolling stock – Buffers  
Željeznički sustav – Željeznička vozila – Odbojnici

prEN 15566 en  
Railway applications – Railway Rolling stock – Draw gear and screw coupling  
Željeznički sustav – Željeznička vozila – Vučni uređaj i vijčano kvačilo

prEN 16116-2 en  
Railway applications – Design requirements for steps, handrails and associated access for staff – Part 2: Freight wagons  
Željeznički sustav – Projektni zahtjevi za stepenice, rukohvate i prateće dodatke za osoblje – 2. dio: Teretni vagoni

prEN 16186-5 en  
Railway applications – Driver's cabs – Part 5: External visibility for tram vehicles

## **HZN/TO 529, Granici, dizalice i prenosila neprekidne dobave**

prEN 528 en  
Rail dependent storage and retrieval equipment – Safety requirements for S/R machines  
Oprema regalnih uređaja na tračnicama – Sigurnosni zahtjevi

prEN 13586 en  
Cranes – Access  
Granici – Pristup

## **HZN/TO 531, Plastika i guma**

prEN ISO 180 en  
Plastics – Determination of Izod impact strength (ISO/DIS 180:2019)  
Plastika – Određivanje savojne žilavosti prema Izodu (ISO/DIS 180:2019)

prEN ISO 10352 en  
Fibre-reinforced plastics – Moulding compounds and prepregs – Determination of mass per unit area and fibre mass per unit area (ISO/DIS 10352:2019)

prEN 12814-2 en  
Testing of welded joints of thermoplastics semi-finished products – Part 2: Tensile test  
Ispitivanje zavarenih spojeva plastomernih poluproizvoda – 2. dio: Ispitivanje rastezanjem

prEN 12814-8 en  
Testing of welded joints of thermoplastics semi-finished products – Part 8: Requirements  
Ispitivanje zavarenih spojeva plastomernih poluproizvoda – 8. dio: Zahtjevi

prEN 17417 en  
Determination of the ultimate biodegradation of plastics materials in an aqueous system under anoxic (denitrifying) conditions – Method by measurement of pressure increase

prEN ISO 29988-1 en  
Plastics – Polyoxymethylene (POM) moulding and extrusion materials – Part 1: Designation system and basis for specifications (ISO/DIS 29988-1:2019)  
Plastika – Poli(oksimetilenski) (POM) materijali za kalupljenje i ekstrudiranje – 1. dio: Sustav označavanja i osnove za specifikacije (ISO/DIS 29988-1:2019)

### **HZN/TO 536, Vrata, prozori i staklo u graditeljstvu**

prEN 17416 en  
Glass in building – Assessment of release of dangerous substances – Determination of emissions into indoor air from glass products  
Staklo u graditeljstvu – Procjena otpuštanja opasnih tvari – Određivanje emisija proizvoda od stakla u zrak u zatvorenom prostoru

### **HZN/TO 537, Tehnički crteži, dimenzijske i geometrijske specifikacije, opis proizvoda i odgovarajuća dokumentacija**

EN ISO 25178-72:2017/prA1 en  
Geometrical product specifications (GPS) – Surface texture: Areal – Part 72: XML file format x3p (ISO 25178-72:2017/DAMd 1:2019)  
Geometrijske specifikacije proizvoda (GSP) – Tekstura površine: Ploštinska – 72. dio: x3p format XML datoteke (ISO 25178-72:2017/DAMd 1:2019)

### **HZN/TO 543, Poštanske usluge**

FprCEN/TS 15130 en  
Postal services – DPM infrastructure – Messages supporting DPM applications  
Poštanske usluge – DPM infrastruktura – Poruke za podršku DPM aplikacijama

FprCEN/TS 17073 en  
Postal services – Interfaces for cross border parcels

CEN/TR 17386:2019 en  
Postal services – Transit time measurement for cross border postal items using real mail feasibility study

### **HZN/TO 549, Svjetlo i rasvjeta**

prEN 12464-1 en  
Light and lighting – Lighting of work places – Part 1: Indoor work places  
Svjetlo i rasvjeta – Rasvjeta radnih mjesta – 1. dio: Unutrašnji radni prostori

### **HZN/TO 550, Opskrba vodom**

EN 938:2016/prA1 en  
Chemicals used for treatment of water intended for human consumption – Sodium chlorite  
Kemikalije koje se upotrebljavaju u obradi vode namijenjene ljudskoj potrošnji – Natrijev klorit

### **HZN/TO 551, Gradnja**

prEN ISO 16739-1 en  
Industry Foundation Classes (IFC) for data sharing in the construction and facility management industries – Part 1: Data schema (ISO 16739-1:2018)  
Industry Foundation Classes (IFC) za razmjenu podataka u građevinskoj industriji i industriji upravljanja održavanjem građevina – 1. dio: Shema podataka (ISO 16739-1:2018)

prEN ISO 19650-5 en  
Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) – Information management using building information modelling – Part 5: security-minded approach to information management (ISO/DIS 19650-5:2019)  
Organizacija i digitalizacija informacija o zgradama i inženjerskim građevinama uključujući modeliranje informacija o građevinama (BIM) – Upravljanje informacijama modeliranjem informacija o građevinama – 5. dio: sigurnosni pristup upravljanju informacijama (ISO/DIS 19650-5:2019)

### **HZN/TO 560, Tekstilni proizvodi**

prEN ISO 105-B06 en  
Textiles – Tests for colour fastness – Part B06: Colour fastness and ageing to artificial light at high temperatures: Xenon arc fading lamp test (ISO/DIS 105-B06:2019)  
Tekstil – Ispitivanje postojanosti obojenja – Dio B06: Postojanost obojenja i starenje uzrokovano umjetnim svjetlom pri visokoj temperaturi: Ispitivanje na blijeđenje s Xenon lampom (ISO/DIS 105-B06:2019)

prEN ISO 3303-1 en  
Rubber- or plastics-coated fabrics – Determination of bursting strength – Part 1: Steel-ball method (ISO/DIS 3303-1:2019)

prEN ISO 3303-2 en  
Rubber- or plastics-coated fabrics – Determination of bursting strength – Part 2: Hydraulic method (ISO/DIS 3303-2:2019)

prEN ISO 12945-1 en  
Textiles – Determination of fabric propensity to surface pilling, fuzzing or matting – Part 1: Pilling box method (ISO/DIS 12945-1:2019)  
Tekstil – Određivanje sklonosti površinskom stvaranju dlačica i pilingu na plošnom tekstilu – 1. dio: Metoda u komori za piling (ISO/DIS 12945-1:2019)

prEN ISO 12945-2 en  
Textiles – Determination of fabric propensity to surface pilling, fuzzing or matting – Part 2: Modified Martindale method (ISO/DIS 12945-2:2019)  
Tekstil – Određivanje sklonosti površinskom stvaranju dlačica i pilingu na plošnom tekstilu – 2. dio: Preinačena metoda po Martindaleu (ISO/DIS 12945-2:2019)

prEN ISO 12945-3 en  
Textiles – Determination of the fabric propensity to surface pilling, fuzzing or matting – Part 3: Random tumble pilling method (ISO/DIS 12945-3:2019)  
Tekstil – Određivanje sklonosti tkanine na površinsko stvaranje pilinga, dlačica ili matiranja – 3. dio: Metoda slučajnog prevrtanja (ISO/DIS 12945-3:2019)

prEN ISO 12945-4 en  
Textiles – Determination of fabric propensity to surface pilling, fuzzing or matting – Part 4: Assessment of pilling, fuzzing or matting by visual analysis (ISO/DIS 12945-4:2019)

prEN ISO 13938-1 en  
Textiles – Bursting properties of fabrics – Part 1: Hydraulic method for determination of bursting strength and bursting distension (ISO/FDIS 13938-1:2019)  
Tekstil – Otpornost na probijanje – 1. dio: Hidraulička metoda određivanja čvrstoće kod probijanja i visine ispupčenja (ISO/FDIS 13938-1:2019)

prEN ISO 13938-2 en  
Textiles – Bursting properties of fabrics – Part 2: Pneumatic method for determination of bursting strength and bursting distension (ISO/FDIS 13938-2:2019)  
Tekstil – Otpornost na probijanje – 2. dio: Pneumatska metoda određivanja čvrstoće kod probijanja i visine ispupčenja (ISO/FDIS 13938-2:2019)

prEN 17394-2 en  
Textiles and textile products – Part 2: Safety of children's clothing – Security of attachment of buttons – Test method

prEN ISO 20932-1 en  
Textiles – Determination of the elasticity of fabrics – Part 1: Strip tests (ISO 20932-1:2018)  
Tekstil – Određivanje elastičnosti tekstila – 1. dio: Ispitivanje u obliku trake (ISO 20932-1:2018)



prEN ISO 20932-2 en  
Textiles – Determination of the elasticity of fabrics – Part 2:  
Multiaxial tests (ISO 20932-2:2018)  
Tekstil – Određivanje elastičnosti plošnih tekstila – 2. dio:  
Višeosna ispitivanja (ISO 20932-2:2018)

prEN ISO 20932-3 en  
Textiles – Determination of the elasticity of fabrics – Part 3:  
Narrow fabrics (ISO 20932-3:2018)  
Tekstil – Određivanje elastičnosti plošnih tekstila – 3. dio: Uski  
plošni tekstili (ISO 20932-3:2018)

prEN ISO 22751 en  
Rubber or plastic coated fabrics – Physical and mechanical  
test – Determination of bending force (ISO/DIS 22751:2019)

### **HZN/TO 568, Analiza hrane – horizontalne metode, mikrobiologija, posuđe i pribor u kontaktu s hranom**

EN ISO 6579-1:2017/prA1 en  
Microbiology of the food chain – Horizontal method for the  
detection, enumeration and serotyping of Salmonella – Part 1:  
Detection of Salmonella spp. – Amendment 1 Broader range  
of incubation temperatures, amendment to the status of  
Annex D, and correction of the composition of MSRV and SC  
(ISO 6579-1:2017/DAMd 1:2019)  
Mikrobiologija u lancu hrane – Horizontalna metoda za  
dokazivanje prisutnosti, određivanje broja i serotipizaciju  
Salmonella – 1. dio: Dokazivanje prisutnosti Salmonella spp.  
– Amandman 1 Proširenje raspona temperatura inkubacije,  
izmjena značaja Dodatka D i ispravak sastava MSRV i SC  
(ISO 6579-1:2017/DAMd 1:2019)

prEN 17424 en  
Foodstuffs – Determination of aflatoxins in spices other than  
paprika by IAC clean-up and HPLC-FLD with post-column  
derivatization  
Hrana – Određivanje u začinima osim paprike paprici  
čišćenjem na imunoafinitetnoj koloni (IAC) i metodom  
HPLC-FLD s postkolonskom derivatizacijom

prEN 17425 en  
Foodstuffs – Determination of ergot alkaloids in cereals and  
cereal products by dSPE clean-up and LC-MS/MS  
Hrana – Određivanje ergot alkaloida u žitaricama i proizvodima  
od žitarica disperzivnom ekstrakcijom na čvrstoj fazi (dSPE)  
i LC-MS/MS

### **HZN/TO 571, Sport, igrališta i ostali rekreacijski sadržaji i oprema**

prEN 13451-1 en  
Swimming pool equipment – Part 1: General safety  
requirements and test methods for equipment installed in  
pools for public use

prEN 14960-3 en  
Inflatable play equipment – Part 3: Additional safety  
requirements and test methods for snappies

### **HZN/TO E23, Električni instalacijski pribor**

prEN 60898-2 en  
Electrical accessories – Circuit-breakers for overcurrent  
protection for household and similar installations  
– Part 2: Circuit-breakers for a.c. and d.c. operation  
(IEC 60898-2:2016)  
Električni pribor – Prekidači za nadstrujnu zaštitu za kućanstvo  
i slične instalacije – 2. dio: Prekidači za rad s izmjeničnom i  
istosmjernom strujom (IEC 60898-2:2016)

### **HZN/TO E79, Alarmni sustavi**

prEN 50131-2-4:2019 en  
Alarm systems – Intrusion and hold-up systems – Part 2-4:  
Requirements for combined passive infrared and microwave  
detectors  
Alarmni sustavi – Protuprovalni i protuprepadni sustavi  
– Dio 2-4: Zahtjevi za kombinirane pasivne infracrvene i  
mikrovalne detektore

### **HZN/TO E502, Elektrotehnički aspekti telekomunikacijske opreme**

EN 50310:2016/prA1:2019 en  
Telecommunications bonding networks for buildings and other  
structures  
Mreža uzemljenja telekomunikacija u zgradama i ostalim  
građevinama

### **HZN/TU C1, Kemikalije, kemijsko inženjerstvo, poljoprivredni i prehrambeni proizvodi 1**

prEN ISO 3262-1 en  
Extenders – Specifications and methods of test – Part 1:  
Introduction and general test methods (ISO/DIS 3262-1:2019)  
Punila za boje – Specifikacije i metode ispitivanja – 1. dio:  
Uvod i opće metode ispitivanja (ISO/DIS 3262-1:2019)

prEN ISO 3668 en  
Paints and varnishes – Visual comparison of colour of paints  
(ISO 3668:2017)  
Boje i lakovi – Vizualna usporedba obojenja (ISO 3668:2017)

prEN 17399 en  
Algae and algae-based products or intermediates – Terms and  
definitions  
Alge i proizvodi i međuprodukti na bazi algi – Nazivi i  
definicije

prEN 17408 en  
Determination of the flowability and application behaviour of  
viscoelastic adhesives using the oscillatory rheometry  
Određivanje sposobnosti tečenja i ponašanja pri nanošenju  
viskoelastičnih adheziva oscilatornom reometrijom

prEN ISO 19396-1 en  
Paints and varnishes – Determination of pH value – Part 1: pH  
electrodes with glass membrane (ISO 19396-1:2017)  
Boje i lakovi – Određivanje pH vrijednosti – 1. dio: pH elektrode  
sa staklenom membranom (ISO 19396-1:2017)

prEN ISO 19396-2 en  
Paints and varnishes – Determination of pH value – Part 2: pH  
electrodes with ISFET technology (ISO 19396-2:2017)  
Boje i lakovi – Određivanje pH vrijednosti – 2. dio: pH elektrode  
s ISFET tehnologijom (ISO 19396-2:2017)

prEN ISO 19403-1 en  
Paints and varnishes – Wettability – Part 1: Terminology and  
general principles (ISO 19403-1:2017)  
Boje i lakovi – Kvašenje – 1. dio: Nazivlje i opća načela  
(ISO 19403-1:2017)

prEN ISO 19403-2 en  
Paints and varnishes – Wettability – Part 2: Determination of  
the surface free energy of solid surfaces by measuring the  
contact angle (ISO 19403-2:2017)  
Boje i lakovi – Kvašenje – 2. dio: Određivanje slobodne  
površinske energije krute površine mjerenjem kontaktnog  
kuta (ISO 19403-2:2017)

prEN ISO 19403-3 en  
Paints and varnishes – Wettability – Part 3: Determination of  
the surface tension of liquids using the pendant drop method  
(ISO 19403-3:2017)  
Boje i lakovi – Kvašenje – 3. dio: Određivanje površinske  
napetosti tekućina metodom viseće kapi (ISO 19403-3:2017)

prEN ISO 19403-4 en  
Paints and varnishes – Wettability – Part 4: Determination of  
the polar and dispersive fractions of the surface tension of  
liquids from an interfacial tension (ISO 19403-4:2017)  
Boje i lakovi – Kvašenje – 4. dio: Određivanje polarnih  
i disperzivnih udjela površinske napetosti tekućina iz  
međupovršinske napetosti (ISO 19403-4:2017)

prEN ISO 19403-5 en  
Paints and varnishes – Wettability – Part 5: Determination  
of the polar and dispersive fractions of the surface tension  
of liquids from contact angles measurements on a solid  
with only a disperse contribution to its surface energy  
(ISO 19403-5:2017)  
Boje i lakovi – Kvašenje – 5. dio: Određivanje polarnih i  
disperzivnih udjela površinske napetosti tekućina iz mjerenja  
kontaktnih kutova na krutini s čisto disperzivnim doprinosom  
energiji površine (ISO 19403-5:2017)

prEN ISO 19403-6 en  
Paints and varnishes – Wettability – Part 6: Measurement of dynamic contact angle (ISO 19403-6:2017)  
Boje i lakovi – Kvašenje – 6. dio: Mjerenje dinamičkog kontaktnog kuta (ISO 19403-6:2017)

prEN ISO 19403-7 en  
Paints and varnishes – Wettability – Part 7: Measurement of the contact angle on a tilt stage (roll-off angle) (ISO 19403-7:2017)  
Boje i lakovi – Kvašenje – 7. dio: Mjerenje kontaktnog kuta na platformi na naginjanje (kut kotrljanja kapi) (ISO 19403-7:2017)

#### **HZN/TU M1, Metalni materijali 1**

prEN ISO 7526 en  
Feronickels – Determination of sulfur content – Infra-red absorption method after combustion in an induction furnace [Routine method] (ISO/DIS 7526:2019)  
Feronikal – Određivanje sadržaja sumpora – Metoda infracrvene apsorpcije nakon izgaranja u indukcijskoj peći [Rutinska metoda] (ISO/DIS 7526:2019)

#### **HZN/TU T1, Prijevoz, rukovanje materijalima i pakiranje 1**

prEN 1459-5 en  
Rough-terrain trucks – Safety requirements and verification – Part 5: Attachment interface

prEN ISO 23411 en  
Small craft – Steering wheels (ISO/DIS 23411:2019)

#### **HZN/TU Z1, Informatika 1**

prEN 17419 en  
Digital Information Interchange in the Insurance Industry – Transfer of electronic documents

### **1.4 Povučene hrvatske norme**

Na prijedlog tehničkog odbora ravnatelj Hrvatskoga zavoda za norme donosi odluku o povlačenju hrvatske norme kada je donesena nova hrvatska norma ili kada je postojeća hrvatska norma postala neprimjenjiva.

Kada je koje područje uređeno propisima i neki od propisa (pravilnik, naredba, naputak) upućuje na norme koje su povučene, one se primjenjuju silom tih propisa i bit će, do izmjene propisa ili izradbe novih, na raspolaganju u Normoteci HZN-a.

#### **HZN/TO 6, Papir, karton i pulpe**

HRN EN ISO 12625-11:2013 en  
Tanki upijajući papir i proizvodi od tankoga upijajućeg papira – 11. dio: Određivanje otpornosti na prskanje mokre kugle (ISO 12625-11:2012; EN ISO 12625-11:2012)  
Tissue paper and tissue products – Part 11: Determination of wet ball burst strength (ISO 12625-11:2012; EN ISO 12625-11:2012)  
- zamijenjena s: HRN EN ISO 12625-11:2019

#### **HZN/TO 21, Protupožarna i vatrogasna oprema**

HRN EN 13565-2:2018 en  
Stabilni protupožarni sustavi – Sustavi s pjenom – 2. dio: Projektiranje, izvedba i održavanje (EN 13565-2:2018)  
Fixed firefighting systems – Foam systems – Part 2: Design, construction and maintenance (EN 13565-2:2018)  
- zamijenjena s: HRN EN 13565-2:2019

#### **HZN/TO 25, Ljevarstvo**

HRN EN ISO 945-1:2018 en  
Mikrostruktura željeznih lijevova – 1. dio: Razredba grafita vizualnom analizom (ISO 945-1:2017; EN ISO 945-1:2018)  
Microstructure of cast irons – Part 1: Graphite classification by visual analysis (ISO 945-1:2017; EN ISO 945-1:2018)  
- zamijenjena s: HRN EN ISO 945-1:2019

#### **HZN/TO 28, Naftni proizvodi i maziva**

HRN ISO 2714:2002 en  
Tekući ugljikovodici – Volumetrijsko mjerenje s pomoću sustava za mjerenje protoka osim razdjelnih pumpa (ISO 2714:1980)  
Liquid hydrocarbons – Volumetric measurement by displacement meter system other than dispensing pumps (ISO 2714:1980)  
- zamijenjena s: HRN ISO 2714:2019

HRN ISO 2715:2005 en  
Tekući ugljikovodici – Mjerenje obujma turbinskim mjernim sustavima (ISO 2715:1981)  
Liquid hydrocarbons – Volumetric measurement by turbine meter systems (ISO 2715:1981)  
- zamijenjena s: HRN ISO 2715:2019

HRN ISO 6578:2002 en  
Pothlađeni tekući ugljikovodici – Statičko mjerenje – Postupak izračunavanja (ISO 6578:1991)  
Refrigerated hydrocarbon liquids – Static measurement – Calculation procedure (ISO 6578:1991)  
- zamijenjena s: HRN ISO 6578:2019

HRN ISO 10976:2015 en  
Pothlađene lake ugljikovodične tekućine – Mjerenje tereta na brodovima za UPP (ISO 10976:2012)  
Refrigerated light hydrocarbon fluids – Measurement of cargoes on board LNG carriers (ISO 10976:2012)  
- zamijenjena s: HRN ISO 10976:2019

HRN ISO 12925-1:2005 en  
Maziva, industrijska ulja i srodni proizvodi – (razred L) – Podrazred C (zupčanic) – 1. dio: Specifikacije ulja za podmazivanje zatvorenih zupčaničkih prijenosnika (ISO 12925-1:1996+Cor 1:2002)  
Lubricants, industrial oils and related products – (class L) – Family C (Gears) – Part 1: Specifications for lubricants for enclosed gear systems (ISO 12925-1:1996+Cor 1:2002)  
- zamijenjena s: HRN ISO 12925-1:2019

HRN ISO 15380:2015 en  
Maziva, industrijska ulja i srodni proizvodi (razred L) – Podrazred H (hidraulički sustavi) – Specifikacije za kategorije HETG, HEPG, HEES i HEPR (ISO 15380:2011)  
Lubricants, industrial oils and related products (class L) – Family H (Hydraulic systems) – Specifications for categories HETG, HEPG, HEES and HEPR (ISO 15380:2011)  
- zamijenjena s: HRN ISO 15380:2019

HRN EN 15940:2018 en  
Goriva za motorna vozila – Parafinska dizelska goriva dobivena sintezom ili hidroobradom – Zahtjevi i metode ispitivanja (EN 15940:2016+A1:2018)  
Automotive fuels – Paraffinic diesel fuel from synthesis or hydrotreatment – Requirements and test methods (EN 15940:2016+A1:2018)  
- zamijenjena s: HRN EN 15940:2019

#### **HZN/TO 92, Zaštita od požara**

HRN EN 15269-11:2018 en  
Proširena primjena rezultata ispitivanja otpornosti na požar i/ili dimopropusnosti vrata, zaslona i prozora koji se mogu otvarati, uključujući pripadajući okov – 11. dio: Otpornost na požar zavjesa od tkanine koje se otvaraju (EN 15269-11:2018)  
Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware – Part 11: Fire resistance for operable fabric curtains (EN 15269-11:2018)  
- zamijenjena s: HRN EN 15269-11:2019

#### **HZN/TO 146, Kvaliteta zraka**

HRN EN 689:2018 en  
Profesionalna izloženost – Mjerenje izloženosti udisanjem kemijskih agensa – Strategija za provjeru usklađenosti s граниčnim vrijednostima profesionalne izloženosti (EN 689:2018)  
Workplace exposure – Measurement of exposure by inhalation to chemical agents – Strategy for testing compliance with occupational exposure limit values (EN 689:2018)  
- zamijenjena s: HRN EN 689:2019

## **HZN/TO 178, Dizala, pokretne stube i pokretne trake za osobe**

HRN EN 81-28:2018 en

Sigurnosna pravila za konstrukciju i ugradnju dizala – Dizala za prijevoz osoba i tereta – 28. dio: Daljinska dojava opasnosti na osobnim i osobno teretnim dizalima (EN 81-28:2018)  
Safety rules for the construction and installation of lifts – Lifts for the transport of persons and goods – Part 28: Remote alarm on passenger and goods passenger lifts (EN 81-28:2018)  
- zamijenjena s: HRN EN 81-28:2019

HRN EN 81-71:2018 en

Sigurnosna pravila za konstrukciju i ugradnju dizala – Posebna primjena za osobna dizala i osobna teretna dizala – 71. dio: Dizala otporna na vandalsko ponašanje (EN 81-71:2018)  
Safety rules for the construction and installation of lifts – Particular applications to passenger lifts and goods passenger lifts – Part 71: Vandal resistant lifts (EN 81-71:2018)  
- zamijenjena s: HRN EN 81-71:2019

## **HZN/TO 525, Hidroizolacijski materijali i proizvodi za pokrivanje krovova**

HRN EN 13375:2005 en

Savitljive hidroizolacijske trake – Hidroizolacija betonskih ploča mostova i drugih betonskih vozni površina – Priprema ispitnih uzoraka (EN 13375:2004)  
Flexible sheets for waterproofing – Waterproofing of concrete bridge decks and other concrete surfaces trafficable by vehicles – Specimen preparation (EN 13375:2004)  
- zamijenjena s: HRN EN 13375:2019

## **HZN/TO 526, Bitumenska veziva**

HRN EN 13358:2010 en

Bitumen i bitumenska veziva – Određivanje destilacijskih svojstava razrijeđenih i omekšanih bitumenskih veziva pripremljenih s mineralnim uljima za omekšavanje (EN 13358:2010)  
Bitumen and bituminous binders – Determination of the distillation characteristics of cut-back and fluxed bituminous binders made with mineral fluxes (EN 13358:2010)  
- zamijenjena s: HRN EN 13358:2019

## **HZN/TO 531, Plastika i guma**

HRN EN 856:2015 en

Gumena crijeva i crijevni uređaji – Gumeni hidraulični tip obložen i ojačan spiralnom žicom – Specifikacija (EN 856:2015)  
Rubber hoses and hose assemblies – Rubber-covered spiral wire reinforced hydraulic type – Specification (EN 856:2015)  
- zamijenjena s: HRN EN 856:2019

## **HZN/TO 532, Dimnjaci**

HRN EN 1443:2003 en

Dimnjaci – Opći zahtjevi (EN 1443:2003)  
Chimneys – General requirements (EN 1443:2003)  
- zamijenjena s: HRN EN 1443:2019

HRN EN 13216-1:2004 en

Dimnjaci – Ispitne metode za sustave dimnjaka – 1. dio: Opće ispitne metode (EN 13216-1:2004)  
Chimneys – Test methods for system chimneys – Part 1: General test methods (EN 13216-1:2004)  
- zamijenjena s: HRN EN 13216-1:2019

## **HZN/TO 533, Kolničke konstrukcije**

HRN EN 13880-6:2004 en

Vruće brtvene mase – 6. dio: Metoda za pripremu ispitnih uzoraka (EN 13880-6:2004)  
Hot applied joint sealants – Part 6: Method for the preparation of samples for testing (EN 13880-6:2004)  
- zamijenjena s: HRN EN 13880-6:2019

HRN EN 13880-7:2004 en

Vruće brtvene mase – 7. dio: Ispitivanje učinkovitosti brtvene mase (EN 13880-7:2003)  
Hot applied joint sealants – Part 7: Function testing of joint sealants (EN 13880-7:2003)  
- zamijenjena s: HRN EN 13880-7:2019

## **HZN/TO 536, Vrata, prozori i staklo u graditeljstvu**

HRN EN 13126-15:2008 en

Građevni okovi – Zahtjevi i metode ispitivanja za prozore i prozorska vrata – 15. dio: Koturaljke za klizne i sklopivo-klizne prozore i vrata (EN 13126-15:2008)  
Building hardware – Requirements and test methods for windows and doors height windows – Part 15: Rollers for horizontal sliding and sliding folding windows and doors (EN 13126-15:2008)  
- zamijenjena s: HRN EN 13126-15:2019

HRN EN 13126-16:2008 en

Građevni okovi – Zahtjevi i metode ispitivanja za prozore i prozorska vrata – 16. dio: Okovi za podizno-klizne prozore i vrata (EN 13126-16:2008)  
Building hardware – Requirements and test methods for windows and doors height windows – Part 16: Hardware for lift&slide windows and doors (EN 13126-16:2008)  
- zamijenjena s: HRN EN 13126-16:2019

HRN EN 13126-17:2008 en

Građevni okovi – Zahtjevi i metode ispitivanja za prozore i prozorska vrata – 17. dio: Okovi za otklopno-klizne prozore i vrata (EN 13126-17:2008)  
Building hardware – Requirements and test methods for windows and doors height windows – Part 17: Hardware for tilt&slide windows and doors (EN 13126-17:2008)  
- zamijenjena s: HRN EN 13126-17:2019

## **HZN/TO 560, Tekstilni proizvodi**

HRN EN ISO 1833-12:2010 en

Tekstil – Kvantitativna kemijska analiza – 12. dio: Mješavine akrilnih, određenih modakrilnih, klornih, elastanskih vlakana s drugim određenim vlaknima (metoda s uporabom dimetilformamida) (ISO 1833-12:2006; EN ISO 1833-12:2010)  
Textiles – Quantitative chemical analysis – Part 12: Mixtures of acrylic, certain modacrylics, certain chlorofibres, certain elastanes and certain other fibres (method using dimethylformamide) (ISO 1833-12:2006; EN ISO 1833-12:2010)  
- zamijenjena s: HRN EN ISO 1833-12:2019

HRN EN ISO 1833-16:2010 en

Tekstil – Kvantitativna kemijska analiza – 16. dio: Mješavine polipropilenskih i određenih drugih vlakana (metoda s uporabom ksilena) (ISO 1833-16:2006; EN ISO 1833-16:2010)  
Textiles – Quantitative chemical analysis – Part 16: Mixtures of polypropylene fibres and certain other fibres (method using xylene) (ISO 1833-16:2006; EN ISO 1833-16:2010)  
- zamijenjena s: HRN EN ISO 1833-16:2019

## **HZN/TO 568, Analiza hrane – horizontalne metode, mikrobiologija, posuđe i pribor u kontaktu s hranom**

HRN EN 13585:2003 en

Namirnice – Određivanje fumonisina B1 i B2 u kukuruzu – HPLC metoda čišćenjem preko SPE (EN 13585:2001)  
Foodstuffs – Determination of fumonisins B1 and B2 in maize – HPLC method with solid phase extraction clean-up (EN 13585:2001)  
- bez zamjene

## **HZN/TO 571, Sport, igrališta i ostali rekreacijski sadržaji i oprema**

HRN EN 1176-4:2017 en

Oprema i podloge za igrališta – 4. dio: Dodatni posebni sigurnosni zahtjevi i metode ispitivanja za žičare (EN 1176-4:2017)  
Playground equipment and surfacing – Part 4: Additional specific safety requirements and test methods for cableways (EN 1176-4:2017)  
- zamijenjena s: HRN EN 1176-4:2019

HRN EN 1176-6:2017 en

Oprema i podloge za igrališta – 6. dio: Dodatni posebni sigurnosni zahtjevi i metode ispitivanja za ljulačke (EN 1176-6:2017)  
Playground equipment and surfacing – Part 6: Additional specific safety requirements and test methods for rocking equipment (EN 1176-6:2017)  
- zamijenjena s: HRN EN 1176-6:2019



HRN EN 1177:2018 en  
Podloge za ublazavanje udara na igralistima – Metode ispitivanja za utvrđivanje svojstava ublazavanja udara (EN 1177:2018)  
Impact attenuating playground surfacing – Methods of test for determination of impact attenuation (EN 1177:2018)  
- zamijenjena s: HRN EN 1177:2019

HRN EN 14619:2015 en  
Sportska oprema za koturaljkanje – Romobili – Sigurnosni zahtjevi i metode ispitivanja (EN 14619:2015)  
Roller sports equipment – Kick scooters – Safety requirements and test methods (EN 14619:2015)  
- zamijenjena s: HRN EN 14619:2019

### **HZN/TU C1, Kemikalije, kemijsko inženjerstvo, poljoprivredni i prehrambeni proizvodi 1**

HRN EN 1372:2015 en  
Adhezivi – Metoda ispitivanja adheziva za podne i zidne obloge – Ispitivanje ljuštenjem (EN 1372:2015)  
Adhesives – Test method for adhesives for floor and wall coverings – Peel test (EN 1372:2015)  
- zamijenjena s: HRN EN ISO 22631:2019

HRN EN 1373:2015 en  
Adhezivi – Metoda ispitivanja adheziva za podne i zidne obloge – Ispitivanje smicanjem (EN 1373:2015)  
Adhesives – Test method for adhesives for floor and wall coverings – Shear test (EN 1373:2015)  
- zamijenjena s: HRN EN ISO 22632:2019

HRN EN 1903:2015 en  
Adhezivi – Metoda ispitivanja za adhezive za plastične ili gumene podne ili zidne obloge – Određivanje dimenzijskih promjena nakon ubrzanog starenja (EN 1903:2015)  
Adhesives – Test method for adhesives for plastic or rubber floor coverings or wall coverings – Determination of dimensional changes after accelerated ageing (EN 1903:2015)  
- zamijenjena s: HRN EN ISO 22635:2019

HRN EN ISO 2431:2012 en  
Boje i lakovi – Određivanje vremena istjecanja s pomoću posuda za istjecanje (ISO 2431:2011; EN ISO 2431:2011)  
Paints and varnishes – Determination of flow time by use of flow cups (ISO 2431:2011; EN ISO 2431:2011)  
- zamijenjena s: HRN EN ISO 2431:2019

HRN EN ISO 11343:2008 en  
Adhezivi – Određivanje dinamičke otpornosti na klanje adhezijskih veza visoke čvrstoće pod uvjetima udara – Metoda udara klinom (ISO 11343:2003; EN ISO 11343:2005)  
Adhesives – Determination of dynamic resistance to cleavage of high-strength adhesive bonds under impact conditions – Wedge impact method (ISO 11343:2003; EN ISO 11343:2005)  
- zamijenjena s: HRN EN ISO 11343:2019

HRN EN ISO 11664-1:2012 en  
Kolorimetrija – 1. dio: CIE standard kolorimetrijskih opazača (ISO 11664-1:2007; EN ISO 11664-1:2011)  
Colorimetry – Part 1: CIE standard colorimetric observers (ISO 11664-1:2007; EN ISO 11664-1:2011)  
- zamijenjena s: HRN EN ISO/CIE 11664-1:2019

HRN EN ISO 11664-3:2013 en  
Kolorimetrija – 3. dio: CIE tristimulus vrijednosti (ISO 11664-3:2012; EN ISO 11664-3:2013)  
Colorimetry – Part 3: CIE tristimulus values (ISO 11664-3:2012; EN ISO 11664-3:2013)  
- zamijenjena s: HRN EN ISO/CIE 11664-3:2019

HRN EN ISO 11664-4:2012 en  
Kolorimetrija – 4. dio: CIE 1976 L\*a\*b\* prostor boje (ISO 11664-4:2008; EN ISO 11664-4:2011)  
Colorimetry – Part 4: CIE 1976 L\*a\*b\* Colour space (ISO 11664-4:2008; EN ISO 11664-4:2011)  
- zamijenjena s: HRN EN ISO/CIE 11664-4:2019

HRN EN 13415:2010 en  
Ispitivanje adheziva za podno pokrivanje – Određivanje električne otpornosti adhezijskih filmova i kompozita (EN 13415:2010)  
Test of adhesives for floor covering – Determination of the electrical resistance of adhesive films and composites (EN 13415:2010)  
- zamijenjena s: HRN EN ISO 22637:2019

HRN EN 15337:2008 en  
Adhezivi – Određivanje smične čvrstoće anaerobnih adheziva primjenom pin and collar uzoraka (ISO 10123:1990, MOD; EN 15337:2007)  
Adhesives – Determination of shear strength of anaerobic adhesives using pin-and-collar specimens (ISO 10123:1990, MOD; EN 15337:2007)  
- zamijenjena s: HRN EN ISO 10123:2019

### **HZN/TU T1, Prijevoz, rukovanje materijalima i pakiranje 1**

HRN EN 3299:2008 en  
Nizovi o zrakoplovstvu – Osovinske matice i navojni prsteni, samozatvarajući, lijevi ili desni MJ navoji, od čelika otpornog na toplinu FE-PA2601 (A286), prevučene srebrom – Tehnička specifikacija (EN 3299:2007)  
Aerospace series – Shaft-nuts and threaded rings, self-locking, right- or left-hand MJ threads, in heat resisting steel FE-PA2601 (A286), silver plated – Technical specification (EN 3299:2007)  
- zamijenjena s: HRN EN 3299:2019

HRN EN 16602-70-10:2015 en  
Osiguranje kvalitete proizvoda za upotrebu u svemiru – Kvalifikacija tiskanih pločica (EN 16602-70-10:2015)  
Space product assurance – Qualification of printed circuit boards (EN 16602-70-10:2015)  
- zamijenjena s: HRN EN 16602-70-60:2019

HRN EN 16602-70-11:2015 en  
Osiguranje kvalitete proizvoda za upotrebu u svemiru – Nabava tiskanih pločica (EN 16602-70-11:2015)  
Space product assurance – Procurement of printed circuit boards (EN 16602-70-11:2015)  
- zamijenjena s: HRN EN 16602-70-60:2019

## **1.7 Naslovi objavljenih hrvatskih norma na hrvatskome jeziku**

Te su hrvatske norme ranije objavljene samo s naslovima na engleskome jeziku pa se sada objavljuju njihovi naslovi na hrvatskome jeziku, koji nisu nužno uključeni u norme koje su prethodno objavljene.

### **HZN/TU V1, Elektronika 1**

HRN EN IEC 60068-2-82:2019 en pr  
Ispitivanje utjecaja okoliša – Dio 2-82: Ispitivanja – Ispitivanje Xw1: Metode ispitivanja na nepravilnosti (viskere) za komponente i dijelove koji se upotrebljavaju u elektroničkim sklopovima (IEC 60068-2-82:2019; EN IEC 60068-2-82:2019)  
Environmental testing – Part 2-82: Tests – Test Xw1: Whisker test methods for components and parts used in electronic assemblies (IEC 60068-2-82:2019; EN IEC 60068-2-82:2019)

HRN EN IEC 62148-19:2019 en pr  
Aktivne svjetlovodne komponente i uređaji – Norme za pakete i sučelja – 19. dio: Fotonski paket u veličini čipa (IEC 62148-19:2019; EN IEC 62148-19:2019)  
Fibre optic active components and devices – Package and interface standards – Part 19: Photonic chip scale package (IEC 62148-19:2019; EN IEC 62148-19:2019)

HRN EN IEC 62129-3:2019 en pr  
Umjeravanje instrumenata za mjerenje valne duljine/optičke frekvencije – 3. dio: Mjerači optičke frekvencije s internim upućivanjem na frekvencijski češalj (IEC 62129-3:2019; EN IEC 62129-3:2019)  
Calibration of wavelength/optical frequency measurement instruments – Part 3: Optical frequency meters internally referenced to a frequency comb (IEC 62129-3:2019; EN IEC 62129-3:2019)

HRN EN 61291-5-2:2017/Ispr.1:2019 en pr  
Optička pojačala – Dio 5-2: Specifikacije za ocjenjivanje – Ocjenjivanje pouzdanosti pojačala optičkih vlakana (IEC 61291-5-2:2017/Corr.1:2019; EN 61291-5-2:2017/AC:2019)  
Optical amplifiers – Part 5-2: Qualification specifications – Reliability qualification for optical fibre amplifiers (IEC 61291-5-2:2017/Corr.1:2019; EN 61291-5-2:2017/AC:2019)



HRN EN 50411-3-4:2019 en pr  
Sustavi upravljanja optičkim vlaknima i zaštitna kućišta za optičke komunikacijske sustave – Specifikacija proizvoda – Dio 3-4: Zidna kutija za spojeve kabela za spajanje, za kategoriju C i A (EN 50411-3-4:2019)  
Fibre management systems and protective housings to be used in optical fibre communication systems – Product specifications – Part 3-4: Wall box for splice to patchcord connections, for category C and A (EN 50411-3-4:2019)

HRN EN 50411-4-1:2019 en pr  
Sustavi upravljanja optičkim vlaknima i zaštitna kućišta za optičke komunikacijske sustave – Specifikacija proizvoda – Dio 4-1: Pasivni optički razvodni ormarić za kategoriju A (EN 50411-4-1:2019)  
Fibre management systems and protective housings to be used in optical fibre communication systems – Product specifications – Part 4-1: Passive optical street cabinet for category A (EN 50411-4-1:2019)

## 2 Rezultati međunarodne i europske normizacije razvrstani po predmetnom ustroju

### 01.020 Nazivlje (načela i usklađivanje)

Europska normizacija  
CEN

CEN-CENELEC Guide 8:2019  
CEN-CENELEC guidelines for implementation of the common policy on patents (and other statutory intellectual property rights based on inventions)

Međunarodna normizacija  
ISO

ISO 12620:2019  
Management of terminology resources – Data category specifications

### 01.040.17 Mjeriteljstvo i mjerenje. Fizikalne pojave (Rječnici)

Međunarodna normizacija  
ISO

ISO 25178-73:2019  
Geometrical product specifications (GPS) – Surface texture: Areal – Part 73: Terms and definitions for surface defects on material measures

### 01.040.29 Elektrotehnika (Rječnici)

Međunarodna normizacija  
IEC

IEC 60050-442:1998/Amd.3:2019  
Amendment 3 – International Electrotechnical Vocabulary – Part 442: Electrical accessories

### 01.040.35 Informacijska tehnologija. Uredski strojevi (Rječnici)

Europska normizacija  
CEN

EN 17054:2019  
Biometrics multilingual vocabulary based upon the English version of ISO/IEC 2382-37:2012

### 01.040.65 Poljoprivreda (Rječnici)

Europska normizacija  
CEN

EN 12944-3:2019  
Fertilizers and liming materials – Vocabulary – Part 3: Terms relating to liming materials

### 01.040.71 Kemijska tehnologija (Rječnici)

Međunarodna normizacija  
ISO

ISO/TR 23199:2019  
Cosmetics – Calculation of organic indexes of hydrolates – Supplemental information for ISO 16128-2

### 01.040.85 Tehnologija papira (Rječnici)

Europska normizacija  
CEN

EN ISO 12625-1:2019  
Tissue paper and tissue products – Part 1: Vocabulary (ISO 12625-1:2019)

### 01.040.87 Industrija boja (Rječnici)

Europska normizacija  
CEN

EN ISO 8130-14:2019  
Coating powders – Part 14: Vocabulary (ISO 8130-14:2019)  
EN ISO 18451-1:2019  
Pigments, dyestuffs and extenders – Terminology – Part 1: General terms (ISO 18451-1:2019)

### 01.070 Kodiranje bojama

Međunarodna normizacija  
ISO

ISO 10243:2019  
Tools for pressing – Compression springs with rectangular section – Housing dimensions and colour coding

### 01.080.10 Simboli za javne obavijesti

Međunarodna normizacija  
ISO

ISO 28564-3:2019  
Public information guidance systems – Part 3: Guidelines for the design and use of information index signs

### 01.080.20 Grafički simboli za upotrebu na posebnoj opremi

Međunarodna normizacija  
ISO

ISO/IEC 13251:2019  
Information technology – Collection of graphical symbols for office equipment

### 01.110 Tehnička dokumentacija o proizvodu

Međunarodna normizacija  
ISO/IEC

ISO/IEC/IEEE 82079-1:2019  
Preparation of information for use (instructions for use) of products – Part 1: Principles and general requirements

### 01.120 Normizacija. Opća pravila

Međunarodna normizacija  
ISO/IEC

ISO/IEC Directives Part 1:2019  
ISO/IEC Directives, Part 1 – Procedures for the technical work  
ISO/IEC Directives Part 1 + Supplement IEC:2019  
ISO/IEC Directives, Part 1 – Procedures for the technical work – Procedures specific to IEC  
ISO/IEC Directives Part 1 + Supplement ISO:2019  
ISO/IEC Directives, Part 1 – Consolidated ISO Supplement – Procedures specific to ISO

### 03.100.01 Ustroj poduzeća i upravljanje poduzećem općenito

#### Međunarodna normizacija ISO

ISO/TR 44000:2019  
Principles for successful collaborative business relationship management

#### IEC

IEC 62402:2019  
Obsolescence management

### 03.100.70 Sustavi upravljanja

#### Međunarodna normizacija ISO

ISO 34101-1:2019  
Sustainable and traceable cocoa – Part 1: Requirements for cocoa sustainability management systems

ISO/TR 44000:2019  
Principles for successful collaborative business relationship management

### 03.120.20 Certificiranje proizvoda i tvrtki. Ocjenjivanje sukladnosti

#### Europska normizacija CEN

EN ISO 34101-4:2019  
Sustainable and traceable cocoa – Part 4: Requirements for certification schemes (ISO 34101-4:2019)

#### Međunarodna normizacija ISO

ISO 34101-4:2019  
Sustainable and traceable cocoa – Part 4: Requirements for certification schemes

### 03.140 Patenti. Intelektualno vlasništvo

#### Europska normizacija CEN

CEN-CENELEC Guide 8:2019  
CEN-CENELEC guidelines for implementation of the common policy on patents (and other statutory intellectual property rights based on inventions)

### 03.220.01 Prijevoz općenito

#### Međunarodna normizacija ISO

ISO 19297-1:2019  
Intelligent transport systems – Shareable geospatial databases for ITS applications – Part 1: Framework

ISO 37159:2019  
Smart community infrastructures – Smart transportation for rapid transit in and between large city zones and their surrounding areas

### 07.120 Nanotehnologije

#### Međunarodna normizacija ISO

ISO/TR 22019:2019  
Nanotechnologies – Considerations for performing toxicokinetic studies with nanomaterials

### 11.040.20 Transfuzijska, infuzijska i injekcijska oprema

#### Europska normizacija CENELEC

EN IEC 60601-2-16:2019  
Medical electrical equipment – Part 2-16: Particular requirements for the basic safety and essential performance of haemodialysis, haemodiafiltration and haemofiltration equipment (IEC 60601-2-16:2018)

### 11.040.25 Šprice. Igle. Kateteri

#### Međunarodna normizacija ISO

ISO 13926-3:2019  
Pen systems – Part 3: Seals for pen-injectors for medical use

ISO 20487:2019  
Traditional Chinese medicine – Test method of single-use acupuncture needles for electrical stimulation

### 11.040.30 Kirurški instrumenti i materijali

#### Međunarodna normizacija IEC

IEC/TR 61289:2019  
High frequency surgical equipment and high frequency surgical accessories – Operation and maintenance

### 11.040.40 Implantati za kirurgiju, protetiku i ortotiku

#### Međunarodna normizacija ISO

ISO 14243-5:2019  
Implants for surgery – Wear of total knee prostheses – Part 5: Durability performance of the patellofemoral joint

### 11.040.50 Radiografska oprema

#### Europska normizacija CENELEC

EN 60601-2-54:2009/A2:2019  
Medical electrical equipment – Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy (IEC 60601-2-54:2009/A2:2018)

#### Međunarodna normizacija IEC

IEC/TR 62926:2019  
Medical electrical system – Guidelines for safe integration and operation of adaptive external-beam radiotherapy systems for real-time adaptive radiotherapy

### 11.040.55 Dijagnostička oprema

#### Europska normizacija CENELEC

EN IEC 80601-2-30:2019  
Medical electrical equipment – Part 2-30: Particular requirements for the basic safety and essential performance of automated non-invasive sphygmomanometers (IEC 80601-2-30:2018)

#### Međunarodna normizacija ISO/IEC

IEC 80601-2-26:2019  
Medical electrical equipment – Part 2-26: Particular requirements for the basic safety and essential performance of electroencephalographs

## 11.040.60 Terapeutska oprema

### Europska normizacija CENELEC

EN IEC 60601-2-39:2019  
Medical electrical equipment – Part 2-39: Particular requirements for basic safety and essential performance of peritoneal dialysis equipment (IEC 60601-2-39:2018)

EN IEC 60601-2-76:2019  
Medical electrical equipment – Part 2-76: Particular requirements for the basic safety and essential performance of low energy ionized gas haemostasis equipment (IEC 60601-2-76:2018)

### Međunarodna normizacija ISO

ISO 21291:2019  
Traditional Chinese medicine – Therapeutic fumigation devices

### IEC

IEC 60601-2-83:2019  
Medical electrical equipment – Part 2-83: Particular requirements for the basic safety and essential performance of home light therapy equipment

## 11.040.99 Ostala medicinska oprema

### Međunarodna normizacija ISO

ISO 21366:2019  
Traditional Chinese medicine – General requirements for smokeless moxibustion devices

## 11.060.01 Stomatologija općenito

### Međunarodna normizacija ISO

ISO 16202-1:2019  
Dentistry – Nomenclature of oral anomalies – Part 1: Code for the representation of oral anomalies

ISO 16202-2:2019  
Dentistry – Nomenclature of oral anomalies – Part 2: Developmental anomalies of teeth

## 11.060.10 Stomatološki materijali

### Međunarodna normizacija ISO

ISO 4049:2019  
Dentistry – Polymer-based restorative materials

## 11.180.10 Pomagala i prilagodbe za kretanje

### Međunarodna normizacija ISO

ISO 19894:2019  
Walking trolleys – Requirements and test methods

## 13.020.01 Okoliš i zaštita okoliša općenito

### Međunarodna normizacija IEC

IEC 60364-8-1 Corrigendum 1:2019  
Low-voltage electrical installations – Part 8-1: Functional aspects – Energy efficiency; Corrigendum 1

## 13.020.10 Upravljanje okolišem

### Međunarodna normizacija ISO

ISO 14005:2019  
Environmental management systems – Guidelines for a flexible approach to phased implementation

## 13.020.20 Ekogospodarstvo

### Međunarodna normizacija ISO

ISO 37122:2019  
Sustainable cities and communities – Indicators for smart cities

ISO 37159:2019  
Smart community infrastructures – Smart transportation for rapid transit in and between large city zones and their surrounding areas

## 13.020.40 Onečišćenje, nadzor nad onečišćenjem i zaštita od onečišćenja

### Europska normizacija CEN

EN ISO 14064-2:2019  
Greenhouse gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements (ISO 14064-2:2019)

EN ISO 14064-3:2019  
Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements (ISO 14064-3:2019)

## 13.030.01 Otpad općenito

### Europska normizacija CEN

CEN/TR 17309:2019  
Test methods for environmental characterization of solid matrices – Guide to flash point testing

## 13.040.01 Kvaliteta zraka općenito

### Međunarodna normizacija ISO

ISO 11665-9:2019  
Measurement of radioactivity in the environment – Air: Radon-222 – Part 9: Test methods for exhalation rate of building materials

## 13.040.20 Atmosfera okoliša

### Europska normizacija CEN

EN 16868:2019  
Ambient air – Sampling and analysis of airborne pollen grains and fungal spores for networks related to allergy – Volumetric Hirst method

### Međunarodna normizacija ISO

ISO 16000-39:2019  
Indoor air – Part 39: Determination of amines – Analysis of amines by (ultra-) high-performance liquid chromatography coupled to high resolution or tandem mass spectrometry



### 13.040.30 Atmosfera u radnome prostoru

Međunarodna normizacija  
ISO

ISO 22065:2019  
Workplace air – Gases and vapours – Requirements for evaluation of measuring procedures using pumped samplers

### 13.040.35 Čiste sobe i srodni nadzirani okoliš

Međunarodna normizacija  
ISO

ISO 14644-16:2019  
Cleanrooms and associated controlled environments – Part 16: Energy efficiency in cleanrooms and separative devices

### 13.060.01 Kvaliteta vode općenito

Međunarodna normizacija  
ISO

ISO 21939-1:2019  
A method to calculate and express energy consumption of industrial wastewater treatment for the purpose of water reuse – Part 1: Biological processes

ISO 22519:2019  
Purified water and water for injection pretreatment and production systems

ISO 24516-2:2019  
Guidelines for the management of assets of water supply and wastewater systems – Part 2: Waterworks

### 13.060.30 Kanalizacijske vode

Međunarodna normizacija  
ISO

ISO 21939-1:2019  
A method to calculate and express energy consumption of industrial wastewater treatment for the purpose of water reuse – Part 1: Biological processes

### 13.060.60 Ispitivanje fizikalnih svojstava vode

Europska normizacija  
CEN

EN ISO 9698:2019  
Water quality – Tritium – Test method using liquid scintillation counting (ISO 9698:2019)

EN ISO 13163:2019  
Water quality – Lead-210 – Test method using liquid scintillation counting (ISO 13163:2013)

### 13.060.70 Ispitivanje bioloških svojstava vode

Europska normizacija  
CEN

EN 17218:2019  
Water quality – Guidance on sampling of mesozooplankton from marine and brackish water using mesh

### 13.110 Sigurnost strojeva

Europska normizacija  
CEN

EN ISO 19085-10:2019  
Woodworking machines – Safety – Part 10: Building site saws (contractor saws) (ISO 19085-10:2018)

Međunarodna normizacija  
IEC

IEC/TR 63074:2019  
Safety of machinery – Security aspects related to functional safety of safety-related control systems

### 13.160 Utjecaj vibracija i udara na ljude

Međunarodna normizacija  
ISO

ISO 28927-8:2009/AMD 2:2019  
Hand-held portable power tools – Test methods for evaluation of vibration emission – Part 8: Saws, polishing and filing machines with reciprocating action and small saws with oscillating or rotating action – Amendment 2: Oscillating knives (vibrating screen removal tools)

### 13.180 Ergonomija

Međunarodna normizacija  
ISO

ISO 25065:2019  
Systems and software engineering – Software product Quality Requirements and Evaluation (SQuaRE) – Common Industry Format (CIF) for Usability: User requirements specification

### 13.220.20 Zaštita od požara

Međunarodna normizacija  
ISO

ISO 6182-8:2019  
Fire protection – Automatic sprinkler systems – Part 8: Requirements and test methods for pre-action dry alarm valves

ISO 6182-11:2019  
Fire protection – Automatic sprinkler systems – Part 11: Requirements and test methods for pipe hangers

### 13.220.40 Zapaljivost i ponašanje materijala i proizvoda pri izgaranju

Europska normizacija  
CEN

CEN/TR 17309:2019  
Test methods for environmental characterization of solid matrices – Guide to flash point testing

Međunarodna normizacija  
ISO

ISO/TR 17252  
Fire tests – Applicability of reaction to fire tests to fire modelling and fire safety engineering

### 13.220.50 Vatrootpornost građevnih materijala i elemenata

Međunarodna normizacija  
ISO

ISO 834-13:2019  
Fire-resistance tests – Elements of building construction – Part 13: Requirements for the testing and assessment of applied fire protection to steel beams with web openings

ISO 834-14:2019  
Fire-resistance tests – Elements of building construction – Part 14: Requirements for the testing and assessment of applied fire protection to solid steel bar

ISO/TR 17252 :2019  
Fire tests – Applicability of reaction to fire tests to fire modelling and fire safety engineering

## 13.240 Zaštita od previsokoga tlaka

Europska normizacija  
CEN

EN ISO 4126-1:2013/A2:2019  
Safety devices for protection against excessive pressure  
– Part 1: Safety valves (ISO 4126-1:2013)

## 13.260 Zaštita od električnog udara. Rad pod naponom

Međunarodna normizacija  
IEC

IEC 60479-2:2019  
Effects of current on human beings and livestock – Part 2:  
Special aspects

IEC 61991:2019  
Railway applications – Rolling stock – Protective provisions  
against electrical hazards

## 13.280 Zaštita od zračenja

Europska normizacija  
CEN

EN ISO 9698:2019  
Water quality – Tritium – Test method using liquid scintillation  
counting (ISO 9698:2019)

Međunarodna normizacija  
ISO

ISO 15080:2001/AMD 1:2019  
Nuclear facilities – Ventilation penetrations for shielded  
enclosures; Amendment 1

ISO 20785-4:2019  
Dosimetry for exposures to cosmic radiation in civilian aircraft  
– Part 4: Validation of codes

## 13.320 Alarmni sustavi i sustavi uzbunjivanja

Europska normizacija  
CENELEC

EN 50131-8:2019  
Alarm systems – Intrusion and hold-up systems – Part 8:  
Security fog devices

EN 50194-2:2019  
Electrical apparatus for the detection of combustible gases in  
domestic premises – Part 2: Electrical apparatus for  
continuous operation in a fixed installation in recreational  
vehicles and similar premises – Additional test methods and  
performance requirements

## 17.040.40 Geometrijska specifikacija proizvoda (GPS)

Europska normizacija  
CEN

EN ISO 20170:2019  
Geometrical product specifications (GPS) – Decomposition  
of geometrical characteristics for manufacturing control  
(ISO 20170:2019)

Međunarodna normizacija  
ISO

ISO 25178-73:2019  
Geometrical product specifications (GPS) – Surface texture:  
Areal – Part 73: Terms and definitions for surface defects on  
material measures

## 17.140.20 Buka koju proizvode strojevi i oprema

Europska normizacija  
CEN

EN 12102-2:2019  
Air conditioners, liquid chilling packages, heat pumps, process  
chillers and dehumidifiers with electrically driven compressors  
– Determination of the sound power level – Part 2: Heat pump  
water heaters

CENELEC

EN 60704-2-14:2013/A1:2019  
Household and similar electrical appliances – Test code for  
the determination of airborne acoustical noise – Part 2-14:  
Particular requirements for refrigerators, frozen-food storage  
cabinets and food freezers (IEC 60704-2-14:2013/A1:2019)

Međunarodna normizacija  
IEC

IEC 60704-2-16:2019  
Household and similar electrical appliances – Test code for  
the determination of airborne acoustical noise – Part 2-16:  
Particular requirements for washer-dryers

IEC 60704-3:2019  
Household and similar electrical appliances – Test code for the  
determination of airborne acoustical noise – Part 3: Procedure  
for determining and verifying declared noise emission values

## 17.180.01 Optika i optička mjerenja općenito

Međunarodna normizacija  
ISO

ISO 13653:2019  
Optics and photonics – General optical test methods  
– Measurement of relative irradiance in the image field

ISO 19962:2019  
Optics and photonics – Spectroscopic measurement methods  
for integrated scattering by plane parallel optical elements

## 17.180.20 Boje i mjerenje svjetlosti

Međunarodna normizacija  
ISO

ISO/CIE 17166:2019  
Erythema reference action spectrum and standard erythema  
dose

## 17.180.30 Optički mjerni instrumenti

Međunarodna normizacija  
IEC

IEC 62129-3:2019  
Calibration of wavelength / optical frequency measurement  
instruments – Part 3: Optical frequency meters internally  
referenced to a frequency comb

## 17.220.20 Mjerenje električnih i magnetskih veličina

Međunarodna normizacija  
IEC

IEC 61400-21-1:2019  
Wind energy generation systems – Part 21-1: Measurement  
and assessment of electrical characteristics – Wind turbines

IEC 62812:2019  
Low resistance measurements – Methods and guidance

## 17.220.99 Ostale norme koje se odnose na elektricitet i magnetizam

### Europska normizacija CENELEC

- EN IEC 62631-3-4:2019  
Dielectric and resistive properties of solid insulating materials – Part 3-4: Determination of resistive properties (DC methods) – Volume resistance and volume resistivity at elevated temperatures (IEC 62631-3-4:2019)

## 17.240 Mjerenja zračenja

### Europska normizacija CEN

- EN ISO 13163:2019  
Water quality – Lead-210 – Test method using liquid scintillation counting (ISO 13163:2013)

### Međunarodna normizacija ISO

- ISO 11665-9:2019  
Measurement of radioactivity in the environment – Air: Radon-222 – Part 9: Test methods for exhalation rate of building materials

### IEC

- IEC 62209-2:2010/AMD 1:2019  
Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz); Amendment 1

- IEC 62209-2 Edition 1.1:2019  
Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)

- IEC 62244:2019  
Radiation protection instrumentation – Installed radiation portal monitors (RPMs) for the detection of illicit trafficking of radioactive and nuclear materials

## 19.040 Ispitivanje utjecaja okoliša

### Međunarodna normizacija IEC

- IEC 60068-2-82:2019  
Environmental testing – Part 2-82: Tests – Test Xw1: Whisker test methods for components and parts used in electronic assemblies

- IEC 60721-3-3:2019  
Classification of environmental conditions – Part 3-3: Classification of groups of environmental parameters and their severities – Stationary use at weatherprotected locations

- IEC 60721-3-4:2019  
Classification of environmental conditions – Part 3-4: Classification of groups of environmental parameters and their severities – Stationary use at non-weatherprotected locations

## 19.100 Nerazorna ispitivanja

### Europska normizacija CEN

- EN ISO 15549:2019  
Non-destructive testing – Eddy current testing – General principles (ISO 15549:2019)

- EN ISO 16809:2019  
Non-destructive testing – Ultrasonic thickness measurement (ISO 16809:2017)

## 21.100.10 Klizni ležajevi

### Međunarodna normizacija ISO

- ISO 7146-1:2019  
Plain bearings – Appearance and characterization of damage to metallic hydrodynamic bearings – Part 1: General

## 21.100.20 Valjni ležajevi

### Međunarodna normizacija ISO

- ISO 355:2019  
Rolling bearings – Tapered roller bearings – Boundary dimensions and series designations

## 23.020.35 Plinske boce

### Međunarodna normizacija ISO

- ISO/TR 11364:2019  
Gas cylinders – Compilation of national and international valve stem/gas cylinder neck threads and their identification and marking system

## 23.020.40 Kriogeničke posude

### Međunarodna normizacija ISO

- ISO 21013-4:2012/AMD 1:2019  
Cryogenic vessels – Pilot operated pressure relief devices – Part 4: Pressure-relief accessories for cryogenic service; Amendment 1

- ISO 21029-1:2018/AMD 1:2019  
Cryogenic vessels – Transportable vacuum insulated vessels of not more than 1000 litres volume – Part 1: Design, fabrication, inspection and tests; Amendment 1

## 23.040.70 Crijeva i crijevni sklopovi

### Europska normizacija CEN

- EN 14423:2013+A2:2019  
Clamp type coupling assemblies for use with steam hoses rated for pressures up to 18 bar

## 23.080 Pumpe

### Europska normizacija CEN

- EN 17038-2:2019  
Pumps – Methods of qualification and verification of the Energy Efficiency Index for rotodynamic pump units – Part 2: Testing and calculation of Energy Efficiency Index (EEI) of single pump units

## 23.100.40 Cijevovodi i spojnice

### Europska normizacija CEN

- EN ISO 6149-1:2019  
Connections for hydraulic fluid power and general use – Ports and stud ends with ISO 261 metric threads and O-ring sealing – Part 1: Ports with truncated housing for O-ring seal (ISO 6149-1:2019)

## 23.120 Ventilatori. Klimatizacijski uređaji

### Međunarodna normizacija IEC

IEC 60879:2019  
Comfort fans and regulators for household and similar purposes – Methods for measuring performance

## 25.040.40 Mjerenje i upravljanje u industrijskim procesima

### Europska normizacija CENELEC

EN IEC 61918:2018/A11:2019  
Industrial communication networks – Installation of communication networks in industrial premises

### Međunarodna normizacija ISO

ISO 10303-235:2019  
Industrial automation systems and integration – Product data representation and exchange – Part 235: Application protocol: Engineering properties and material information

ISO/TR 16161:2019  
Automation systems and integration – Use case of capability profiles for cooperation between manufacturing software units

### IEC

IEC/TR 63069:2019  
Industrial-process measurement, control and automation – Framework for functional safety and security

IEC/TR 63074:2019  
Safety of machinery – Security aspects related to functional safety of safety-related control systems

## 25.080.30 Strojevi za provlačenje

### Međunarodna normizacija ISO

ISO 6779:2019  
Test conditions for vertical internal type broaching machines – Testing of accuracy

## 25.100.70 Abrazivi

### Međunarodna normizacija ISO

ISO 13942:2019  
Bonded abrasive products – Limit deviations and run-out tolerances

## 25.120.10 Oprema za kovanje. Preše. Škare

### Međunarodna normizacija ISO

ISO 10243:2019  
Tools for pressing – Compression springs with rectangular section – Housing dimensions and colour coding

## 25.140.10 Pneumatski alati

### Međunarodna normizacija ISO

ISO 28927-8:2009/AMD 2:2019  
Hand-held portable power tools – Test methods for evaluation of vibration emission – Part 8: Saws, polishing and filing machines with reciprocating action and small saws with oscillating or rotating action – Amendment 2: Oscillating knives (vibrating screen removal tools)

## 25.160.10 Procesi zavarivanja

### Međunarodna normizacija ISO

ISO 15620:2019  
Welding – Friction welding of metallic materials

## 25.160.20 Dodatni i potrošni materijali za zavarivanje

### Europska normizacija CEN

EN ISO 14174:2019  
Welding consumables – Fluxes for submerged arc welding and electroslag welding – Classification (ISO 14174:2019)

EN ISO 24598:2019  
Welding consumables – Solid wire electrodes, tubular cored electrodes and electrode-flux combinations for submerged arc welding of creep-resisting steels – Classification (ISO 24598:2019)

## 25.160.30 Oprema za zavarivanje

### Europska normizacija CEN

EN ISO 5171:2019  
Gas welding equipment – Pressure gauges used in welding, cutting and allied processes (ISO 5171:2019)

## 25.220.10 Priprema površina

### Međunarodna normizacija ISO

ISO 11124-5:2019  
Preparation of steel substrates before application of paints and related products – Specifications for metallic blast-cleaning abrasives – Part 5: Cut steel wire

## 27.015 Energetska učinkovitost. Očuvanje energije općenito

### Međunarodna normizacija IEC

IEC 60364-8-1:2019/COR1:2019  
Low-voltage electrical installations – Part 8-1: Functional aspects – Energy efficiency; Corrigendum 1

## 27.070 Gorivi članci

### Međunarodna normizacija IEC

IEC 62282-6-400:2019  
Fuel cell technologies – Part 6-400: Micro fuel cell power systems – Power and data interchangeability

## 27.120.20 Nuklearne elektrane. Sigurnost

### Međunarodna normizacija ISO

ISO 15080:2001/AMD 1:2019  
Nuclear facilities – Ventilation penetrations for shielded enclosures; Amendment 1



## 27.140 Hidroenergetika

### Europska normizacija CENELEC

EN IEC 62097:2019  
Hydraulic machines, radial and axial – Methodology for performance transposition from model to prototype (IEC 62097:2019)

## 27.160 Solarna energetika

### Europska normizacija CENELEC

EN 61643-31:2019  
Low-voltage surge protective devices – Part 31: Requirements and test methods for SPDs for photovoltaic installations (IEC 61643-31:2018, modified)

### Međunarodna normizacija ISO

ISO 22975-5:2019  
Solar energy – Collector components and materials – Part 5: Insulation material durability and performance

## 27.180 Sustavi vjetroagregata

### Međunarodna normizacija IEC

IEC 61400-21-1:2019  
Wind energy generation systems – Part 21-1: Measurement and assessment of electrical characteristics – Wind turbines

IEC 61400-26-1:2019  
Wind energy generation systems – Part 26-1: Availability for wind energy generation systems

## 29.020 Elektrotehnika općenito

### Međunarodna normizacija IEC

IEC 62402:2019  
Obsolescence management

IEC/IEEE 82079-1:2019  
Preparation of information for use (instructions for use) of products – Part 1: Principles and general requirements

## 29.035.01 Izolacijski materijali općenito

### Europska normizacija CENELEC

EN IEC 62631-3-4:2019  
Dielectric and resistive properties of solid insulating materials – Part 3-4: Determination of resistive properties (DC methods) – Volume resistance and volume resistivity at elevated temperatures (IEC 62631-3-4:2019)

## 29.035.20 Plastični i gumeni izolacijski materijali

### Međunarodna normizacija IEC

IEC 62677-3-103:2019  
Heat-shrinkable low and medium voltage moulded shapes – Part 3: Specification for individual materials – Sheet 103: Heat-shrinkable, polyolefin, conductive moulded shapes for medium voltage applications

## 29.040.10 Izolacijska ulja

### Međunarodna normizacija IEC

IEC 63012:2019  
Insulating liquids – Unused modified or blended esters for electrotechnical applications

## 29.040.20 Izolacijski plinovi

### Europska normizacija CENELEC

EN IEC 60480:2019  
Specifications for the re-use of sulphur hexafluoride (SF6) and its mixtures in electrical equipment (IEC 60480:2019)

## 29.060.10 Žice

### Međunarodna normizacija IEC

IEC 60851-2:2009/AMD2:2019  
Winding wires – Test methods – Part 2: Determination of dimensions; Amendment 2

IEC 60851-2 Edition 3.2:2019  
Winding wires – Test methods – Part 2: Determination of dimensions

## 29.120.10 Zaštitne cijevi za električne potrebe

### Međunarodna normizacija IEC

IEC 60050-442:1998/AMD3:2019  
International Electrotechnical Vocabulary – Part 442: Electrical accessories; Amendment 3

## 29.120.30 Utikači, utičnice, spreznici

### Međunarodna normizacija IEC

IEC 60320-1:2015/COR2:2019  
Appliance couplers for household and similar general purposes – Part 1: General requirements; Corrigendum 2

IEC 62613-1:2019  
Plugs, socket-outlets and ship couplers for high-voltage shore connection (HVSC) systems – Part 1: General requirements

## 29.120.40 Sklopke

### Europska normizacija CENELEC

EN IEC 60947-9-1:2019  
Low-voltage switchgear and controlgear – Part 9-1: Active arc-fault mitigation systems – Arc quenching devices (IEC 60947-9-1:2019)

## 29.120.50 Osigurači i ostale naprave za nadstrujnu zaštitu

### Europska normizacija CENELEC

EN 61643-31:2019  
Low-voltage surge protective devices – Part 31: Requirements and test methods for SPDs for photovoltaic installations (IEC 61643-31:2018, modified)

## 29.130.01 Rasklopni i upravljački uređaji općenito

Europska normizacija  
CENELEC

EN IEC 60480:2019  
Specifications for the re-use of sulphur hexafluoride (SF6) and its mixtures in electrical equipment (IEC 60480:2019)

## 29.130.10 Visokonaponski rasklopni i upravljački uređaji

Međunarodna normizacija  
IEC

IEC 62271-107:2019  
High-voltage switchgear and controlgear – Part 107: Alternating current fused circuit-switchers for rated voltages above 1 kV up to and including 52 kV

## 29.130.20 Niskonaponski rasklopni i upravljački uređaji

Europska normizacija  
CENELEC

EN IEC 60947-9-1:2019  
Low-voltage switchgear and controlgear – Part 9-1: Active arc-fault mitigation systems – Arc quenching devices (IEC 60947-9-1:2019)

Međunarodna normizacija  
IEC

IEC 60947-5-4:2002/AMD1:2019  
Low-voltage switchgear and controlgear – Part 5-4: Control circuit devices and switching elements – Method of assessing the performance of low-energy contacts – Special tests; Amendment 1

IEC 60947-5-4 Edition 2.1:2019  
Low-voltage switchgear and controlgear – Part 5-4: Control circuit devices and switching elements – Method of assessing the performance of low-energy contacts – Special tests

IEC 62026-1:2019  
Low-voltage switchgear and controlgear – Controller-device interfaces (CDIs) – Part 1: General rules

IEC/TR 63201:2019  
Low-voltage switchgear and controlgear – Guidance for the development of embedded software

## 29.140.30 Fluorescentne svjetiljke. Svjetiljke s izbojem

Međunarodna normizacija  
IEC

IEC 62386-104:2019  
Digital addressable lighting interface – Part 104: General requirements – Wireless and alternative wired system components

## 29.140.50 Rasvjetni instalacijski sustavi

Međunarodna normizacija  
IEC

IEC 62386-104:2019  
Digital addressable lighting interface – Part 104: General requirements – Wireless and alternative wired system components

## 29.140.99 Ostale norme koje se odnose na svjetiljke

Međunarodna normizacija  
IEC

IEC 63128:2019  
Lighting control interface for dimming – Analogue voltage dimming interface for electronic current sourcing controlgear

IEC 63146:2019  
LED packages for general lighting – Specification sheet

## 29.160.30 Motori

Europska normizacija  
CENELEC

EN 60335-2-95:2015/A2:2019  
Household and similar electrical appliances – Safety – Part 2-95: Particular requirements for drives for vertically moving garage doors for residential use (IEC 60335-2-95:2011/A2:2017)

## 29.240.01 Mreže za prijenos i razdiobu električne energije općenito

Međunarodna normizacija  
IEC

IEC SRD 62913-2-3:2019  
Generic smart grid requirements – Part 2-3: Resources connected to the grid domains

## 29.240.10 Podstanice. Odvodnici prenapona

Međunarodna normizacija  
IEC

IEC 60099-6:2019  
Surge arresters – Part 6: Surge arresters containing both series and parallel gapped structures – System voltage of 52 kV and less

## 29.240.20 Vodovi za prijenos i razdiobu električne energije

Europska normizacija  
CENELEC

EN 50341-2-2:2019  
Overhead electrical lines exceeding AC 1 kV – Part 2-2: National Normative Aspects (NNA) for BELGIUM (based on EN 50341-1:2012)

EN 50341-2-4:2019  
Overhead electrical lines exceeding AC 1 kV – Part 2-4: National Normative Aspects (NNA) for GERMANY (based on EN 50341-1:2012)

EN 50341-2-15:2019  
Overhead electrical lines exceeding AC 1 kV – Part 2-15: National Normative Aspects (NNAs) for the Netherlands (based on EN 50341-1:2012)

## 31.040.01 Otpornici općenito

Međunarodna normizacija  
IEC

IEC 62812:2019  
Low resistance measurements – Methods and guidance

### 31.060.30 Papirni i plastični kondenzatori

Europska normizacija  
CENELEC

EN IEC 60384-17:2019  
Fixed capacitors for use in electronic equipment – Part 17:  
Sectional specification – Fixed metallized polypropylene film  
dielectric AC and pulse capacitors (IEC 60384-17:2019)

### 31.080.01 Poluvodičke naprave općenito

Europska normizacija  
CENELEC

EN IEC 60749-17:2019  
Semiconductor devices – Mechanical and climatic test  
methods – Part 17: Neutron irradiation (IEC 60749-17:2019)

Međunarodna normizacija  
IEC

IEC 62951-6:2019  
Semiconductor devices – Flexible and stretchable  
semiconductor devices – Part 6: Test method for sheet  
resistance of flexible conducting films

### 31.080.99 Ostale poluvodičke naprave

Međunarodna normizacija  
IEC

IEC 60747-18-1:2019  
Semiconductor devices – Part 18-1: Semiconductor bio  
sensors – Test method and data analysis for calibration of  
lens-free CMOS photonic array sensors

IEC 63150-1:2019  
Semiconductor devices – Measurement and evaluation  
methods of kinetic energy harvesting devices under practical  
vibration environment – Part 1: Arbitrary and random  
mechanical vibrations

### 31.140 Piezoelektrične naprave

Međunarodna normizacija  
IEC

IEC 62884-4:2019  
Measurement techniques of piezoelectric, dielectric and  
electrostatic oscillators – Part 4: Short-term frequency stability  
test methods

### 31.180 Tiskani krugovi i pločice

Međunarodna normizacija  
IEC

IEC 61188-6-4:2019  
Printed boards and printed board assemblies – Design and  
use – Part 6-4: Land pattern design – Generic requirements  
for dimensional drawings of surface mounted components  
(SMD) from the viewpoint of land pattern design

IEC 62899-204:2019  
Printed electronics – Part 204: Materials – Insulator ink  
– Measurement methods of properties of insulator inks and  
printed insulating layers

### 31.190 Sklopovi elektroničkih sastavnih dijelova

Međunarodna normizacija  
IEC

IEC 61188-6-4:2019  
Printed boards and printed board assemblies – Design and  
use – Part 6-4: Land pattern design – Generic requirements  
for dimensional drawings of surface mounted components  
(SMD) from the viewpoint of land pattern design

### 31.200 Integrirani krugovi. Mikroelektronika

Europska normizacija  
CENELEC

EN IEC 62228-3:2019  
Integrated circuits – EMC evaluation of transceivers – Part 3:  
CAN transceivers (IEC 62228-3:2019)

### 31.220.01 Elektromehanički sastavni dijelovi općenito

Međunarodna normizacija  
IEC

IEC 60512-11-1:2019  
Connectors for electrical and electronic equipment – Tests  
and measurements – Part 11-1: Climatic tests – Test 11a  
– Climatic sequence

IEC 62951-6:2019  
Semiconductor devices – Flexible and stretchable  
semiconductor devices – Part 6: Test method for sheet  
resistance of flexible conducting films

### 31.220.10 Utikačke i utičničke naprave. Konektori

Europska normizacija  
CENELEC

EN IEC 61076-3-124:2019  
Connectors for electrical and electronic equipment – Product  
requirements – Part 3-124: Rectangular connectors – Detail  
specification for 10-way, shielded, free and fixed connectors  
for I/O and data transmission with frequencies up to 500 MHz  
(IEC 61076-3-124:2019)

### 33.020 Telekomunikacije općenito

Europska normizacija  
ETSI

ETSI ES 201873-1 V 4.11.1:2019  
Methods for Testing and Specification (MTS) – The Testing  
and Test Control Notation version 3 – Part 1: TTCN-3 Core  
Language

ETSI ES 201873-6 V 4.11.1:2019  
Methods for Testing and Specification (MTS) – The Testing  
and Test Control Notation version 3 – Part 6: TTCN-3 Control  
Interface (TCI)

ETSI ES 201873-9 V 4.10.1:2019  
Methods for Testing and Specification (MTS) – The Testing  
and Test Control Notation version 3 – Part 9: Using XML  
schema with TTCN-3

### 33.040.01 Telekomunikacijski sustavi općenito

Europska normizacija  
ETSI

ETSI TS 103281 V 1.3.1:2019  
Speech and multimedia Transmission Quality (STQ) – Speech  
quality in the presence of background noise: Objective test  
methods for super-wideband and fullband terminals

ETSI TR 103604 V 1.1.1:2019  
User Group – User centric approach – Qualification of the  
interaction with the digital ecosystem

ETSI TR 119112 V 1.1.1:2019  
Electronic Signatures and Infrastructures (ESI) – Most  
significant differences between AdES/ASiC ENs and previous  
TSs

### 33.040.35 Telefonske mreže

#### Europska normizacija ETSI

ETSI TS 102232-1 V 3.19.1:2019  
Lawful Interception (LI) – Handover Interface and Service-Specific Details (SSD) for IP delivery – Part 1: Handover specification for IP delivery

ETSI TS 103120 V 1.3.1:2019  
Lawful Interception (LI) – Interface for warrant information

### 33.040.40 Mreže za prijenos podataka

#### Europska normizacija ETSI

ETSI TR 103282 V 2.1.1:2019  
Network Technologies (NTECH) – Options for Number Portability and actual use cases

### 33.040.99 Ostala oprema za komunikacijske sustave

#### Europska normizacija ETSI

ETSI TS 101572-2 V 2.1.1:2019  
Core Network and Interoperability Testing (INT) – Conformance tests – (3GPPTM Release 10) – Interworking between SIP-I based circuit-switched core network and other networks – Part 2: SIP-I/SIP NNI Test Suite Structure and Test Purposes (TSS&TP)

### 33.050.10 Telefonska oprema

#### Europska normizacija ETSI

ETSI TR 103679 V 1.1.1:2019  
Environmental Engineering (EE) – Explore the challenges of developing product group-specific Product Environmental Footprint Category Rules (PEFCRs) for smartphones

### 33.060.40 Kabelski distribucijski sustavi

#### Europska normizacija ETSI

ETSI ES 203311-1 V 1.1.1:2019  
Integrated broadband cable telecommunication networks (CABLE) – Fourth generation transmission systems for interactive cable television services – IP cable modems – Part 1: General – DOCSIS® 3.1

ETSI ES 203311-2 V 1.1.1:2019  
Integrated broadband cable telecommunication networks (CABLE) – Fourth generation transmission systems for interactive cable television services – IP cable modems – Part 2: Physical layer – DOCSIS® 3.1 [ANSI/SCTE 220-1 2016]

ETSI ES 203311-3 V 1.1.1:2019  
Integrated broadband cable telecommunication networks (CABLE) – Fourth generation transmission systems for interactive cable television services – IP cable modems – Part 3: MAC and upper layer protocols interface – DOCSIS® 3.1 [ANSI/SCTE 220-2 2016]

ETSI ES 203311-4 V 1.1.1:2019  
Integrated broadband cable telecommunication networks (CABLE) – Fourth generation transmission systems for interactive cable television services – IP cable modems – Part 4: Cable modem operations support system interface – DOCSIS® 3.1 [ANSI/SCTE 220-3 2016]

ETSI ES 203311-5 V 1.1.1:2019  
Integrated broadband cable telecommunication networks (CABLE) – Fourth generation transmission systems for interactive cable television services – IP cable modems – Part 5: Converged cable access platform operations support system interface – DOCSIS® 3.1 [ANSI/SCTE 220-4 2016]

ETSI ES 203311-6 V 1.1.1:2019  
Integrated broadband cable telecommunication networks (CABLE) – Fourth generation transmission systems for interactive cable television services – IP cable modems – Part 6: Security – DOCSIS® 3.1 [ANSI/SCTE 220-5 2016]

### 33.070.01 Usluge pokretne mreže općenito

#### Međunarodna normizacija IEC

IEC 62209-2:2010/AMD1:2019  
Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz); Amendment 1

IEC 62209-2 Edition 1.1:2019  
Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)

### 33.070.50 Globalni sustavi za pokretne komunikacije (GSM)

#### Europska normizacija ETSI

ETSI TS 123502 V 15.5.1:2019  
5G – Procedures for the 5G System (5GS)  
(3GPP TS 23.502 version 15.5.1 Release 15)

ETSI TS 124008 V 15.6.0:2019  
Digital cellular telecommunications system (Phase 2+) (GSM) – Universal Mobile Telecommunications System (UMTS) – LTE – Mobile radio interface Layer 3 specification – Core network protocols – Stage 3 (3GPP TS 24.008 version 15.6.0 Release 15)

ETSI TS 124301 V 15.6.0:2019  
Universal Mobile Telecommunications System (UMTS) – LTE – 5G – Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS) – Stage 3 (3GPP TS 24.301 version 15.6.0 Release 15)

ETSI TS 124302 V 15.6.0:2019  
Universal Mobile Telecommunications System (UMTS) – LTE – Access to the 3GPP Evolved Packet Core (EPC) via non-3GPP access networks – Stage 3 (3GPP TS 24.302 version 15.6.0 Release 15)

ETSI TS 125101 V 15.3.0:2019  
Universal Mobile Telecommunications System (UMTS) – User Equipment (UE) radio transmission and reception (FDD) (3GPP TS 25.101 version 15.3.0 Release 15)

ETSI TS 125460 V 8.2.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN lant interface: General aspects and principles (3GPP TS 25.460 version 8.2.0 Release 8)

ETSI TS 125460 V 9.1.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN lant interface: General aspects and principles (3GPP TS 25.460 version 9.1.0 Release 9)

ETSI TS 125460 V 10.1.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN lant interface: General aspects and principles (3GPP TS 25.460 version 10.1.0 Release 10)

ETSI TS 125460 V 11.1.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN lant interface: General aspects and principles (3GPP TS 25.460 version 11.1.0 Release 11)

ETSI TS 125460 V 12.1.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN lant interface: General aspects and principles (3GPP TS 25.460 version 12.1.0 Release 12)



- ETSI TS 125460 V 13.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: General aspects and principles  
(3GPP TS 25.460 version 13.1.0 Release 13)
- ETSI TS 125460 V 14.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: General aspects and principles  
(3GPP TS 25.460 version 14.1.0 Release 14)
- ETSI TS 125460 V 15.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: General aspects and principles  
(3GPP TS 25.460 version 15.1.0 Release 15)
- ETSI TS 125461 V 8.5.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 8.5.0 Release 8)
- ETSI TS 125461 V 9.4.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 9.4.0 Release 9)
- ETSI TS 125461 V 10.4.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 10.4.0 Release 10)
- ETSI TS 125461 V 11.3.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 11.3.0 Release 11)
- ETSI TS 125461 V 12.2.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 12.2.0 Release 12)
- ETSI TS 125461 V 13.2.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 13.2.0 Release 13)
- ETSI TS 125461 V 14.2.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 14.2.0 Release 14)
- ETSI TS 125461 V 15.4.0:2019  
Universal Mobile Telecommunications System (UMTS) – UTRAN  
luant interface: Layer 1 (3GPP TS 25.461 version 15.4.0 Release 15)
- ETSI TS 125462 V 8.2.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 8.2.0 Release 8)
- ETSI TS 125462 V 9.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 9.1.0 Release 9)
- ETSI TS 125462 V 10.2.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 10.2.0 Release 10)
- ETSI TS 125462 V 11.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 11.1.0 Release 11)
- ETSI TS 125462 V 12.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 12.1.0 Release 12)
- ETSI TS 125462 V 13.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 13.1.0 Release 13)
- ETSI TS 125462 V 14.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 14.1.0 Release 14)
- ETSI TS 125462 V 15.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Signalling transport  
(3GPP TS 25.462 version 15.1.0 Release 15)
- ETSI TS 125466 V 8.4.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – UTRAN luant interface: Application part  
(3GPP TS 25.466 version 8.4.0 Release 8)
- ETSI TS 125466 V 9.3.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – UTRAN luant interface: Application part  
(3GPP TS 25.466 version 9.3.0 Release 9)
- ETSI TS 125466 V 10.4.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – UTRAN luant interface: Application part  
(3GPP TS 25.466 version 10.4.0 Release 10)
- ETSI TS 125466 V 11.4.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – UTRAN luant interface: Application part  
(3GPP TS 25.466 version 11.4.0 Release 11)
- ETSI TS 125466 V 12.3.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – UTRAN luant interface: Application part  
(3GPP TS 25.466 version 12.3.0 Release 12)
- ETSI TS 125466 V 13.3.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – UTRAN luant interface: Application part  
(3GPP TS 25.466 version 13.3.0 Release 13)
- ETSI TS 125466 V 14.3.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Application part (3GPP TS 25.466  
version 14.3.0 Release 14)
- ETSI TS 125466 V 15.4.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN luant interface: Application part  
(3GPP TS 25.466 version 15.4.0 Release 15)
- ETSI TR 125931 V 15.0.1:2019  
Universal Mobile Telecommunications System (UMTS)  
– UTRAN functions, examples on signalling procedures  
(3GPP TR 25.931 version 15.0.1 Release 15)
- ETSI TS 126114 V 13.8.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – LTE – IP Multimedia Subsystem (IMS)  
– Multimedia telephony – Media handling and interaction  
(3GPP TS 26.114 version 13.8.0 Release 13)
- ETSI TS 126114 V 14.9.0:2019  
Universal Mobile Telecommunications System  
(UMTS) – LTE – IP Multimedia Subsystem (IMS)  
– Multimedia telephony – Media handling and interaction  
(3GPP TS 26.114 version 14.9.0 Release 14)
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Universal Mobile Telecommunications System  
(UMTS) – LTE – IP Multimedia Subsystem (IMS)  
– Multimedia telephony – Media handling and interaction  
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5G – Objective test methodologies for the evaluation of immersive  
audio systems (3GPP TS 26.260 version 15.1.0 Release 15)
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– Codec for Enhanced Voice Services (EVS) – Detailed algorithmic  
description (3GPP TS 26.445 version 12.13.0 Release 12)
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description (3GPP TS 26.445 version 13.8.0 Release 13)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Codec for Enhanced Voice Services (EVS) – Detailed algorithmic  
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– Codec for Enhanced Voice Services (EVS) – Comfort Noise  
Generation (CNG) aspects (3GPP TS 26.449 version 12.1.0  
Release 12)
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– Codec for Enhanced Voice Services (EVS) – Comfort Noise  
Generation (CNG) aspects (3GPP TS 26.449 version 13.1.0  
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– Codec for Enhanced Voice Services (EVS) – Comfort Noise  
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Release 14)
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Generation (CNG) aspects (3GPP TS 26.449 version 15.1.0  
Release 15)
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – 5G – AT command set for User Equipment (UE)  
(3GPP TS 27.007 version 15.5.0 Release 15)
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5G – Management and orchestration – Provisioning  
(3GPP TS 28.531 version 15.2.0 Release 15)
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5G – Management and orchestration – Generic management  
services (3GPP TS 28.532 version 15.2.0 Release 15)
- ETSI TS 128541 V 15.2.0:2019  
5G – Management and orchestration – 5G Network Resource  
Model (NRM) – Stage 2 and stage 3 (3GPP TS 28.541 version  
15.2.0 Release 15)
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5G – Management and orchestration – Performance  
assurance (3GPP TS 28.550 version 15.1.0 Release 15)
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5G – Management and orchestration – 5G performance  
measurements (3GPP TS 28.552 version 15.2.0 Release 15)
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5G – Management and orchestration – 5G end to end Key  
Performance Indicators (KPI) (3GPP TS 28.554 version 15.2.0  
Release 15)
- ETSI TS 128623 V 15.2.0:2019  
Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Generic Network  
Resource Model (NRM) Integration Reference Point (IRP)  
– Solution Set (SS) definitions (3GPP TS 28.623 version 15.2.0  
Release 15)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – State management data  
definition Integration Reference Point (IRP) – Solution Set  
(SS) definitions (3GPP TS 28.626 version 15.1.0 Release 15)
- ETSI TS 128628 V 15.1.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– LTE – Telecommunication management – Self-Organizing  
Networks (SON) Policy Network Resource Model (NRM)  
Integration Reference Point (IRP) – Information Service (IS)  
(3GPP TS 28.628 version 15.1.0 Release 15)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Evolved Universal  
Terrestrial Radio Access Network (E-UTRAN) Network  
Resource Model (NRM) Integration Reference Point (IRP)  
– Information Service (IS) (3GPP TS 28.658 version 11.7.0  
Release 11)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Evolved Universal  
Terrestrial Radio Access Network (E-UTRAN) Network  
Resource Model (NRM) Integration Reference Point (IRP)  
– Information Service (IS) (3GPP TS 28.658 version 12.3.0  
Release 12)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Evolved Universal  
Terrestrial Radio Access Network (E-UTRAN) Network  
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– Information Service (IS) (3GPP TS 28.658 version 13.2.0  
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Evolved Universal  
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Resource Model (NRM) Integration Reference Point (IRP)  
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Release 14)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Evolved Universal  
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– Information Service (IS) (3GPP TS 28.658 version 15.4.0  
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– Solution Set (SS) definitions (3GPP TS 28.659 version 12.3.0  
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– Telecommunication management – Evolved Universal  
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– Solution Set (SS) definitions (3GPP TS 28.659 version 14.3.0  
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Evolved Universal  
Terrestrial Radio Access Network (E-UTRAN) Network  
Resource Model (NRM) Integration Reference Point (IRP)  
– Solution Set (SS) definitions (3GPP TS 28.659 version 15.3.0  
Release 15)
- ETSI TS 129163 V 14.11.0:2019  
Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Interworking between the IP Multimedia (IM) Core  
Network (CN) subsystem and Circuit Switched (CS) networks  
(3GPP TS 29.163 version 14.11.0 Release 14)
- ETSI TS 129163 V 15.6.0:2019  
Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Interworking between the IP Multimedia (IM) Core  
Network (CN) subsystem and Circuit Switched (CS) networks  
(3GPP TS 29.163 version 15.6.0 Release 15)
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Inter-IMS Network to Network Interface (NNI)  
(3GPP TS 29.165 version 11.25.0 Release 11)
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Inter-IMS Network to Network Interface (NNI)  
(3GPP TS 29.165 version 12.20.0 Release 12)

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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Inter-IMS Network to Network Interface (NNI)  
(3GPP TS 29.165 version 13.13.0 Release 13)
- ETSI TS 129165 V 14.10.0:2019  
Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Inter-IMS Network to Network Interface (NNI)  
(3GPP TS 29.165 version 14.10.0 Release 14)
- ETSI TS 129165 V 15.7.0:2019  
Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Inter-IMS Network to Network Interface (NNI)  
(3GPP TS 29.165 version 15.7.0 Release 15)
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– Policy and Charging Control (PCC) – Reference points  
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– Policy and Charging Control (PCC) – Reference points  
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Universal Mobile Telecommunications System (UMTS)  
– LTE – Policy and charging control over Rx reference point  
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Universal Mobile Telecommunications System (UMTS)  
– LTE – 3GPP Evolved Packet System (EPS) – Evolved  
General Packet Radio Service (GPRS) Tunneling  
Protocol for Control plane (GTPv2-C) – Stage 3  
(3GPP TS 29.274 version 15.7.1 Release 15)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Interworking between the IP Multimedia (IM) Core Network  
(CN) subsystem (IMS) and MSC Server for IMS Centralized  
Services (ICS) (3GPP TS 29.292 version 14.6.0 Release 14)
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Universal Mobile Telecommunications System (UMTS)  
– LTE – Group Communication System Enablers for  
LTE (GCSE LTE) – MB2 reference point – Stage 3  
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(USIM) application (3GPP TS 31.102 version 14.7.0 Release 14)
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Digital cellular telecommunications system (Phase 2+)  
(GSM) – Universal Mobile Telecommunications System  
(UMTS) – LTE – Universal Subscriber Identity Module (USIM)  
Application Toolkit (USAT) (3GPP TS 31.111 version 15.6.0  
Release 15)
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Universal Mobile Telecommunications System (UMTS)  
– LTE – Mobile Equipment (ME) conformance test  
specification – Universal Subscriber Identity Module  
Application Toolkit (USAT) conformance test specification  
(3GPP TS 31.124 version 15.4.0 Release 15)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Fixed Mobile Convergence  
(FMC) model repertoire (3GPP TS 32.156 version 11.4.0  
Release 11)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Fixed Mobile Convergence  
(FMC) model repertoire (3GPP TS 32.156 version 12.2.0  
Release 12)
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Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Fixed Mobile Convergence  
(FMC) model repertoire (3GPP TS 32.156 version 13.2.0 Release 13)
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– Telecommunication management – Fixed Mobile Convergence  
(FMC) model repertoire (3GPP TS 32.156 version 14.2.0 Release 14)
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– Telecommunication management – Fixed Mobile Convergence  
(FMC) model repertoire (3GPP TS 32.156 version 15.2.0 Release 15)
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5G – Telecommunication management – Charging  
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Telecommunication management – Charging  
management – IP Multimedia Subsystem (IMS) charging  
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS)  
– LTE – Telecommunication management – Charging  
management – Short Message Service (SMS) charging  
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5G – Telecommunication management – Charging  
management – 5G system – Services, operations and  
procedures of charging using Service Based Interface (SBI)  
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5G – Telecommunication management – Charging  
management – 5G system, charging service – Stage 3  
(3GPP TS 32.291 version 15.2.1 Release 15)
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Charging management  
– Charging Data Record (CDR) file format and transfer  
(3GPP TS 32.297 version 14.1.0 Release 14)
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Charging management  
– Charging Data Record (CDR) file format and transfer  
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Charging management  
– Charging Data Record (CDR) parameter description  
(3GPP TS 32.298 version 12.16.0 Release 12)
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Charging management  
– Charging Data Record (CDR) parameter description  
(3GPP TS 32.298 version 13.12.0 Release 13)
- ETSI TS 132298 V 14.8.0:2019  
Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Charging management  
– Charging Data Record (CDR) parameter description  
(3GPP TS 32.298 version 14.8.0 Release 14)
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Digital cellular telecommunications system (Phase 2+) (GSM)  
– Universal Mobile Telecommunications System (UMTS) – LTE  
– Telecommunication management – Charging management  
– Charging Data Record (CDR) parameter description  
(3GPP TS 32.298 version 15.6.0 Release 15)

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Digital cellular telecommunications system (Phase 2+) (GSM) – Universal Mobile Telecommunications System (UMTS) – LTE – Telecommunication management – Charging management – Diameter charging applications (3GPP TS 32.299 version 15.6.0 Release 15)
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Universal Mobile Telecommunications System (UMTS) – LTE – Digital cellular telecommunications system (Phase 2+) (GSM) – 3G security – Lawful interception architecture and functions (3GPP TS 33.107 version 15.5.0 Release 15)
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LTE – 5G – Digital cellular telecommunications system (Phase 2+) (GSM) – Universal Mobile Telecommunications System (UMTS) – Lawful Interception (LI) architecture and functions (3GPP TS 33.127 version 15.1.0 Release 15)
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LTE – Security of the mission critical service (3GPP TS 33.180 version 14.6.0 Release 14)
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LTE – Security of the mission critical service (3GPP TS 33.180 version 15.4.0 Release 15)
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5G – Security architecture and procedures for 5G System (3GPP TS 33.501 version 15.4.0 Release 15)
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LTE – Evolved Universal Terrestrial Radio Access (E-UTRA) – Base Station (BS) radio transmission and reception (3GPP TS 36.104 version 9.15.0 Release 9)
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LTE – Evolved Universal Terrestrial Radio Access (E-UTRA) – Multiplexing and channel coding (3GPP TS 36.212 version 15.5.0 Release 15)
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- ETSI TS 136331 V 13.13.0:2019  
LTE – Evolved Universal Terrestrial Radio Access (E-UTRA) – Radio Resource Control (RRC) – Protocol specification (3GPP TS 36.331 version 13.13.0 Release 13)
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### 33.070.99 Ostale pokretne službe

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- ETSI TS 124379 V 14.9.0:2019  
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- ETSI TS 124481 V 15.3.0:2019  
LTE – Mission Critical Services (MCS) group management – Protocol specification (3GPP TS 24.481 version 15.3.0 Release 15)
- ETSI TS 124483 V 13.7.0:2019  
LTE – Mission Critical Services (MCS) Management Object (MO) (3GPP TS 24.483 version 13.7.0 Release 13)
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LTE – Mission Critical Services (MCS) Management Object (MO) (3GPP TS 24.483 version 14.6.0 Release 14)
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- ETSI TS 124581 V 14.5.0:2019  
LTE – Mission Critical Video (MCVideo) media plane control – Protocol specification (3GPP TS 24.581 version 14.5.0 Release 14)

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LTE – Mission Critical Video (MCVideo) media plane control – Protocol specification (3GPP TS 24.581 version 15.3.0 Release 15)
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- ETSI TS 129222 V 15.3.0:2019  
5G – Common API Framework for 3GPP Northbound APIs (3GPP TS 29.222 version 15.3.0 Release 15)
- ETSI TS 129504 V 15.3.0:2019  
5G – 5G System – Unified Data Repository Services – Stage 3 (3GPP TS 29.504 version 15.3.0 Release 15)
- ETSI TS 129507 V 15.3.0:2019  
5G – 5G System – Access and Mobility Policy Control Service – Stage 3 (3GPP TS 29.507 version 15.3.0 Release 15)
- ETSI TS 129508 V 15.3.0:2019  
5G – 5G System – Session Management Event Exposure Service – Stage 3 (3GPP TS 29.508 version 15.3.0 Release 15)
- ETSI TS 129512 V 15.3.0:2019  
5G – 5G System – Session Management Policy Control Service – Stage 3 (3GPP TS 29.512 version 15.3.0 Release 15)
- ETSI TS 129513 V 15.3.0:2019  
5G – 5G System – Policy and Charging Control signalling flows and QoS parameter mapping – Stage 3 (3GPP TS 29.513 version 15.3.0 Release 15)
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5G – 5G System – Policy Authorization Service – Stage 3 (3GPP TS 29.514 version 15.3.0 Release 15)
- ETSI TS 129519 V 15.3.0:2019  
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5G – 5G System – Binding Support Management Service – Stage 3 (3GPP TS 29.521 version 15.3.0 Release 15)
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5G – 5G System – Cause code mapping between 5GC interfaces – Stage 3 (3GPP TS 29.524 version 15.1.0 Release 15)
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5G – 5G System – UE Policy Control Service – Stage 3 (3GPP TS 29.525 version 15.1.0 Release 15)
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5G – 5G System – Packet Flow Description Management Service – Stage 3 (3GPP TS 29.551 version 15.3.0 Release 15)
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LTE – Evolved Universal Terrestrial Radio Access (E-UTRA) – Requirements for support of radio resource management (3GPP TS 36.133 version 12.19.0 Release 12)
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Universal Mobile Telecommunications System (UMTS) – LTE – Active Antenna System (AAS) Base Station (BS) transmission and reception (3GPP TS 37.105 version 13.9.0 Release 13)
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– LTE – Active Antenna System (AAS) Base Station (BS)  
conformance testing – Part 2: radiated conformance testing  
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– Universal Terrestrial Radio Access (UTRA) and Evolved  
UTRA (E-UTRA) – User Equipment (UE) performance  
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access (3GPP TS 37.213 version 15.2.0 Release 15)
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– 5G – luan interface: Layer 1 (3GPP TS 37.461 version 11.3.0  
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– 5G – luan interface: Layer 1 (3GPP TS 37.461 version 12.2.0  
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– 5G – luan interface: Layer 1 (3GPP TS 37.461 version 13.2.0  
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– 5G – luan interface: Layer 1 (3GPP TS 37.461 version 14.2.0  
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– 5G – luan interface: Layer 1 (3GPP TS 37.461 version 15.4.0  
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- ETSI TS 137462 V 8.2.0:2019  
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(3GPP TS 37.466 version 14.3.0 Release 14)
- ETSI TS 137466 V 15.4.0:2019  
Universal Mobile Telecommunications System (UMTS)  
– LTE – 5G – luant interface: Application part  
(3GPP TS 37.466 version 15.4.0 Release 15)
- ETSI TS 138101-1 V 15.5.0:2019  
5G – NR – User Equipment (UE) radio transmission  
and reception – Part 1: Range 1 Standalone  
(3GPP TS 38.101-1 version 15.5.0 Release 15)
- ETSI TS 138101-2 V 15.5.0:2019  
5G – NR – User Equipment (UE) radio transmission  
and reception – Part 2: Range 2 Standalone  
(3GPP TS 38.101-2 version 15.5.0 Release 15)
- ETSI TS 138101-3 V 15.5.0:2019  
5G – NR – User Equipment (UE) radio transmission and  
reception – Part 3: Range 1 and Range 2 Interworking  
operation with other radios (3GPP TS 38.101-3 version 15.5.0  
Release 15)
- ETSI TS 138101-4 V 15.1.0:2019  
5G – NR – User Equipment (UE) radio transmission  
and reception – Part 4: Performance requirements  
(3GPP TS 38.101-4 version 15.1.0 Release 15)
- ETSI TS 138104 V 15.5.0:2019  
5G – NR – Base Station (BS) radio transmission and reception  
(3GPP TS 38.104 version 15.5.0 Release 15)
- ETSI TS 138113 V 15.5.0:2019  
5G – NR – Base Station (BS) ElectroMagnetic Compatibility  
(EMC) (3GPP TS 38.113 version 15.5.0 Release 15)
- ETSI TS 138124 V 15.2.0:2019  
5G – NR – Electromagnetic compatibility (EMC)  
requirements for mobile terminals and ancillary equipment  
(3GPP TS 38.124 version 15.2.0 Release 15)
- ETSI TS 138171 V 15.1.0:2019  
5G – NR – Requirements for support of Assisted Global Navigation  
Satellite System (A-GNSS) (3GPP TS 38.171 version 15.1.0  
Release 15)
- ETSI TS 138211 V 15.5.0:2019  
5G – NR – Physical channels and modulation  
(3GPP TS 38.211 version 15.5.0 Release 15)
- ETSI TS 138212 V 15.5.0:2019  
5G – NR – Multiplexing and channel coding  
(3GPP TS 38.212 version 15.5.0 Release 15)
- ETSI TS 138213 V 15.5.0:2019  
5G – NR – Physical layer procedures for control  
(3GPP TS 38.213 version 15.5.0 Release 15)
- ETSI TS 138214 V 15.5.0:2019  
5G – NR – Physical layer procedures for data  
(3GPP TS 38.214 version 15.5.0 Release 15)
- ETSI TS 138300 V 15.5.0:2019  
5G – NR – Overall description – Stage-2  
(3GPP TS 38.300 version 15.5.0 Release 15)
- ETSI TS 138304 V 15.3.0:2019  
5G – NR – User Equipment (UE) procedures in idle mode  
and in RRC Inactive state (3GPP TS 38.304 version 15.3.0  
Release 15)
- ETSI TS 138305 V 15.3.0:2019  
5G – NR Radio Access Network (NG-RAN) – Stage 2  
functional specification of User Equipment (UE) positioning  
in NG-RAN (3GPP TS 38.305 version 15.3.0 Release 15)
- ETSI TS 138306 V 15.5.0:2019  
5G – NR – User Equipment (UE) radio access capabilities  
(3GPP TS 38.306 version 15.5.0 Release 15)
- ETSI TS 138321 V 15.5.0:2019  
5G – NR – Medium Access Control (MAC) protocol  
specification (3GPP TS 38.321 version 15.5.0 Release 15)
- ETSI TS 138322 V 15.5.0:2019  
5G – NR – Radio Link Control (RLC) protocol specification  
(3GPP TS 38.322 version 15.5.0 Release 15)
- ETSI TS 138323 V 15.5.0:2019  
5G – NR – Packet Data Convergence Protocol (PDCP)  
specification (3GPP TS 38.323 version 15.5.0 Release 15)
- ETSI TS 138331 V 15.5.1:2019  
5G – NR – Radio Resource Control (RRC) – Protocol  
specification (3GPP TS 38.331 version 15.5.1 Release 15)
- ETSI TS 138401 V 15.5.0:2019  
5G – NR – Architecture description  
(3GPP TS 38.401 version 15.5.0 Release 15)
- ETSI TS 138413 V 15.3.0:2019  
5G – NR – NG-RAN – NG Application Protocol (NGAP)  
(3GPP TS 38.413 version 15.3.0 Release 15)
- ETSI TS 138423 V 15.3.0:2019  
5G – NR – NG-RAN – Xn Application Protocol (XnAP)  
(3GPP TS 38.423 version 15.3.0 Release 15)
- ETSI TS 138425 V 15.5.0:2019  
5G – NR – NG-RAN – NR user plane protocol  
(3GPP TS 38.425 version 15.5.0 Release 15)
- ETSI TS 138460 V 15.3.0:2019  
5G – NR – E1 general aspects and principles  
(3GPP TS 38.460 version 15.3.0 Release 15)
- ETSI TS 138462 V 15.3.0:2019  
5G – NR – E1 signalling transport  
(3GPP TS 38.462 version 15.3.0 Release 15)
- ETSI TS 138463 V 15.3.0:2019  
5G – NR – E1 Application Protocol (E1AP)  
(3GPP TS 38.463 version 15.3.0 Release 15)
- ETSI TS 138470 V 15.5.0:2019  
5G – NR – F1 general aspects and principles  
(3GPP TS 38.470 version 15.5.0 Release 15)
- ETSI TS 138472 V 15.3.0:2019  
5G – NR – F1 signalling transport  
(3GPP TS 38.472 version 15.3.0 Release 15)
- ETSI TS 138473 V 15.5.0:2019  
5G – NR – F1 Application Protocol (F1AP)  
(3GPP TS 38.473 version 15.5.0 Release 15)
- ETSI TS 138508-1 V 15.3.0:2019  
5G – NR – User Equipment (UE) conformance  
specification – Part 1: Common test environment  
(3GPP TS 38.508-1 version 15.3.0 Release 15)
- ETSI TS 138508-2 V 15.3.0:2019  
5G – NR – User Equipment (UE) conformance specification  
– Part 2: Common Implementation Conformance Statement  
(ICS) proforma (3GPP TS 38.508-2 version 15.3.0 Release 15)
- ETSI TS 138509 V 15.3.0:2019  
5G – NR – Special conformance testing functions for User  
Equipment (UE) (3GPP TS 38.509 version 15.3.0 Release 15)
- ETSI TS 138521-1 V 15.2.0:2019  
5G – NR – User Equipment (UE) conformance specification  
– Radio transmission and reception – Part 1: Range 1  
standalone (3GPP TS 38.521-1 version 15.2.0 Release 15)
- ETSI TS 138521-2 V 15.2.0:2019  
5G – NR – User Equipment (UE) conformance specification  
– Radio transmission and reception – Part 2: Range 2  
standalone (3GPP TS 38.521-2 version 15.2.0 Release 15)
- ETSI TS 138521-3 V 15.2.0:2019  
5G – NR – User Equipment (UE) conformance specification  
– Radio transmission and reception – Part 3: Range 1  
and Range 2 Interworking operation with other radios  
(3GPP TS 38.521-3 version 15.2.0 Release 15)
- ETSI TS 138521-4 V 15.0.0:2019  
5G – NR – User Equipment (UE) conformance specification  
– Radio transmission and reception – Part 4: Performance  
(3GPP TS 38.521-4 version 15.0.0 Release 15)



ETSI TS 138522 V 15.2.0:2019  
5G – NR – User Equipment (UE) conformance specification – Applicability of radio transmission, radio reception and radio resource management test cases (3GPP TS 38.522 version 15.2.0 Release 15)

ETSI TS 138523-1 V 15.3.0:2019  
5G – 5GS – User Equipment (UE) conformance specification – Part 1: Protocol (3GPP TS 38.523-1 version 15.3.0 Release 15)

ETSI TS 138523-2 V 15.3.0:2019  
5G – 5GS – User Equipment (UE) conformance specification – Part 2: Applicability of protocol test cases (3GPP TS 38.523-2 version 15.3.0 Release 15)

ETSI TS 138523-3 V 15.3.0:2019  
5G – 5GS – User Equipment (UE) conformance specification – Part 3: Protocol Test Suites (3GPP TS 38.523-3 version 15.3.0 Release 15)

ETSI TS 138533 V 15.0.0:2019  
5G – NR – User Equipment (UE) conformance specification – Radio Resource Management (RRM) (3GPP TS 38.533 version 15.0.0 Release 15)

ETSI TR 138903 V 15.2.0:2019  
5G – NR – Derivation of test tolerances and measurement uncertainty for User Equipment (UE) conformance test cases (3GPP TR 38.903 version 15.2.0 Release 15)

ETSI TR 138905 V 15.2.0:2019  
5G – NR – Derivation of test points for radio transmission and reception User Equipment (UE) conformance test cases (3GPP TR 38.905 version 15.2.0 Release 15)

### 33.100.10 Zračenje

#### Europska normizacija CENELEC

EN 61000-2-2:2002/A2:2019  
Electromagnetic compatibility (EMC) – Environment – Compatibility levels for low-frequency conducted disturbances and signalling in public low-voltage power supply systems (IEC 61000-2-2:2002/A2:2018)

ETSI TR 103595 V 1.1.1:2019  
System Reference document (SRdoc) – Transmission characteristics – Technical characteristics for level probing radar within the frequency range 75 GHz to 85 GHz

#### Međunarodna normizacija IEC

CISPR 16-1-1:2019  
Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus

### 33.100.20 Otpornost

#### Europska normizacija CENELEC

EN IEC 62228-3:2019  
Integrated circuits – EMC evaluation of transceivers – Part 3: CAN transceivers (IEC 62228-3:2019)

#### Međunarodna normizacija IEC

IEC 61000-4-18:2019  
Electromagnetic compatibility (EMC) – Part 4-18: Testing and measurement techniques – Damped oscillatory wave immunity test

### 33.120.20 Žice i simetrični kabeli

#### Međunarodna normizacija IEC

IEC 61156-11:2019  
Multicore and symmetrical pair/quad cables for digital communications – Part 11: Symmetrical single pair cables with transmission characteristics up to 600 MHz – Horizontal floor wiring – Sectional specification

### 33.140 Posebna mjerna oprema za upotrebu u telekomunikacijama

#### Europska normizacija CENELEC

EN IEC 61315:2019  
Calibration of fibre-optic power meters (IEC 61315:2019)

### 33.160.01 Audiosustavi, videosustavi i audiovizualni sustavi općenito

#### Međunarodna normizacija IEC

IEC/TR 62368-2:2019  
Audio/video, information and communication technology equipment – Part 2: Explanatory information related to IEC 62368-1:2018

### 33.170 Televizijski i radijski prijenos

#### Europska normizacija ETSI

ETSI TS 103205 V 1.4.1:2019  
Digital Video Broadcasting (DVB) – Extensions to the CI PlusTM Specification

ETSI TS 103270 V 1.3.1:2019  
RadioDNS Hybrid Radio – Hybrid lookup for radio services

ETSI TS 103491 V 1.2.1:2019  
DTS-UHD Audio Format – Delivery of Channels, Objects and Ambisonic Sound Fields

### 33.180.01 Svjetlovodni sustavi općenito

#### Europska normizacija CENELEC

EN IEC 61918:2018/A11:2019  
Industrial communication networks – Installation of communication networks in industrial premises

### 33.180.10 Svjetlovodna vlakna i kabeli

#### Europska normizacija CENELEC

EN IEC 60793-1-40:2019  
Optical fibres – Part 1-40: Attenuation measurement methods (IEC 60793-1-40:2019)

EN IEC 60794-2-30:2019  
Optical fibre cables – Part 2-30: Indoor cables – Family specification for optical fibre ribbon cables for use in terminated cable assemblies (IEC 60794-2-30:2019)

EN IEC 61315:2019  
Calibration of fibre-optic power meters (IEC 61315:2019)

#### Međunarodna normizacija IEC

IEC 60793-2-10:2019  
Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres

IEC 61280-4-1:2019  
Fibre-optic communication subsystem test procedures – Part 4-1: Installed cabling plant – Multimode attenuation measurement

### 33.180.20 Svjetlovodne vezne naprave

#### Europska normizacija CENELEC

EN IEC 61300-2-46:2019  
Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-46: Tests – Damp heat, cyclic (IEC 61300-2-46:2019)

EN IEC 61754-7-3:2019  
Fibre optic interconnecting devices and passive components – Fibre optic connector interfaces – Part 7-3: Type MPO connector family – Two fibre rows 16 fibre wide (IEC 61754-7-3:2019)

#### Međunarodna normizacija IEC

IEC 61753-1 Corrigendum 1:2019  
Fibre optic interconnecting devices and passive components – Performance standard – Part 1: General and guidance; Corrigendum 1

### 33.180.30 Optička pojačala

#### Europska normizacija CENELEC

EN IEC 62148-21:2019  
Fibre optic active components and devices – Package and interface standards – Part 21: Design guide of electrical interface of PIC packages using silicon fine-pitch ball grid array (S-FBGA) and silicon fine-pitch land grid array (S-FLGA) (IEC 62148-21:2019)

#### Međunarodna normizacija IEC

IEC 61291-5-2 Corrigendum 1:2019  
Optical amplifiers – Part 5-2: Qualification specifications – Reliability qualification for optical fibre amplifiers; Corrigendum 1

IEC 62148-19:2019  
Fibre optic active components and devices – Package and interface standards – Part 19: Photonic chip scale package

### 33.180.99 Ostala svjetlovodna oprema

#### Međunarodna normizacija IEC

IEC 62129-3:2019  
Calibration of wavelength / optical frequency measurement instruments – Part 3: Optical frequency meters internally referenced to a frequency comb

### 33.200 Daljinsko upravljanje. Daljinsko mjerenje

#### Europska normizacija ETSI

ETSI TS 103410-4 V 1.1.1:2019  
SmartM2M Extension to SAREF – Part 4: Smart Cities Domain

ETSI TS 103410-5 V 1.1.1:2019  
SmartM2M – Extension to SAREF – Part 5: Industry and Manufacturing Domains

ETSI TS 103410-6 V 1.1.1:2019  
SmartM2M – Extension to SAREF – Part 6: Smart Agriculture and Food Chain Domain

### 35.020 Informacijska tehnologija (IT) općenito

#### Međunarodna normizacija ISO

ISO/IEC 13251:2019  
Information technology – Collection of graphical symbols for office equipment

ISO/IEC 30071-1:2019  
Information technology – Development of user interface accessibility – Part 1: Code of practice for creating accessible ICT products and services

### 35.030 Informatička sigurnost

#### Međunarodna normizacija ISO

ISO/IEC 19823-21:2019  
Information technology – Conformance test methods for security service crypto suites – Part 21: Crypto suite SIMON

ISO/IEC 19823-22:2019  
Information technology – Conformance test methods for security service crypto suites – Part 22: Crypto suite SPECK

ISO/IEC 24760-1:2019  
IT Security and Privacy – A framework for identity management – Part 1: Terminology and concepts

#### IEC

IEC/TR 63069:2019  
Industrial-process measurement, control and automation – Framework for functional safety and security

### 35.040.40 Kodiranje audioinformacija, videoinformacija, multimedijjskih i hipermedijjskih informacija

#### Međunarodna normizacija ISO

ISO/IEC 13818-1:2019  
Information technology – Generic coding of moving pictures and associated audio information – Part 1: Systems

### 35.060 Jezici koji se upotrebljavaju u informacijskoj tehnologiji

#### Međunarodna normizacija ISO

ISO/IEC TR 19075-8:2019  
Information technology database languages – SQL technical reports – Part 8: Multi-dimensional arrays (SQL/MDA)

### 35.080 Softver (programaska podrška)

#### Međunarodna normizacija ISO

ISO/IEC 19515:2019  
Information technology – Object Management Group Automated Function Points (AFP), 1.0

ISO/IEC 26552:2019  
Software and systems engineering – Tools and methods for product line architecture design

ISO/IEC 26560:2019  
Software and systems engineering – Tools and methods for product line product management

ISO 25065:2019  
Systems and software engineering – Software product Quality Requirements and Evaluation (SQuaRE) – Common Industry Format (CIF) for Usability: User requirements specification

## 35.110 Umrežavanje

### Europska normizacija CENELEC

EN IEC 61918:2018/A11:2019  
Industrial communication networks – Installation of communication networks in industrial premises

### ETSI

ETSI TR 103282 V 2.1.1:2019  
Network Technologies (NTECH) – Options for Number Portability and actual use cases

ETSI GS NFV-SOL 001 V 2.6.1:2019  
Network Functions Virtualisation (NFV) Release 2 – Protocols and Data Models – NFV descriptors based on TOSCA specification

### Međunarodna normizacija ISO

ISO/IEC 21228:2019  
Information technology – Telecommunications and information exchange between systems – Coexistence mechanism for broadband powerline communication technologies

## 35.140 Računalna grafika

### Međunarodna normizacija ISO

ISO/IEC 18040:2019  
Information technology – Computer graphics, image processing and environmental data representation – Live actor and entity representation in mixed and augmented reality (MAR)

## 35.220.30 Optičke naprave za pohranu podataka

### Međunarodna normizacija ISO

ISO/IEC 30190 AMD 1:2019  
Information technology – Digitally recorded media for information interchange and storage – 120 mm Single Layer (25,0 Gbytes per disk) and Dual Layer (50,0 Gbytes per disk) BD Recordable disk; Amendment 1

ISO/IEC 30191 AMD 1:2019  
Information technology – Digitally recorded media for information interchange and storage – 120 mm Triple Layer (100,0 Gbytes single sided disk and 200,0 Gbytes double sided disk) and Quadruple Layer (128,0 Gbytes single sided disk) BD Recordable disk; Amendment 1

ISO/IEC 30192 AMD 1:2019  
Information technology – Digitally recorded media for information interchange and storage – 120 mm Single Layer (25,0 Gbytes per disk) and Dual Layer (50,0 Gbytes per disk) BD Rewritable disk; Amendment 1

## 35.240.15 Identifikacijske kartice i pripadajuće naprave

### Europska normizacija CEN

EN 17054:2019  
Biometrics multilingual vocabulary based upon the English version of ISO/IEC 2382-37:2012

### ETSI

ETSI TS 101220 V 15.1.0:2019  
Smart Cards – ETSI numbering system for telecommunication application providers (Release 15)

ETSI TS 102221 V 15.2.0:2019  
Smart Cards – UICC-Terminal interface – Physical and logical characteristics (Release 15)

ETSI TS 102230-1 V 11.1.0:2019  
Smart Cards – UICC-Terminal interface – Physical, electrical and logical test specification – Part 1: Terminal features (Release 11)

ETSI TS 102230-1 V 12.0.0:2019  
Smart Cards – UICC-Terminal interface – Physical, electrical and logical test specification – Part 1: Terminal features (Release 12)

ETSI TS 102230-1 V 13.2.0:2019  
Smart Cards – UICC-Terminal interface – Physical, electrical and logical test specification – Part 1: Terminal features (Release 13)

ETSI TS 102230-1 V 14.1.0:2019  
Smart Cards – UICC-Terminal interface – Physical, electrical and logical test specification – Part 1: Terminal features (Release 14)

ETSI TS 102694-1 V 11.0.0:2019  
Smart Cards – Test specification for the Single Wire Protocol (SWP) interface – Part 1: Terminal features (Release 11)

ETSI TS 102705 V 11.1.0:2019  
Smart Cards – UICC Application Programming Interface for Java Card for Contactless Applications (Release 11)

ETSI TS 102705 V 12.0.0:2019  
Smart Cards – UICC Application Programming Interface for Java Card for Contactless Applications (Release 13)

ETSI TS 103465 V 15.0.0:2019  
Smart Cards – Smart Secure Platform (SSP) – Requirements Specification

### Međunarodna normizacija ISO

ISO/IEC 29109-5:2019  
Information technology – Conformance testing methodology for biometric data interchange formats defined in ISO/IEC 19794 – Part 5: Face image data

ISO/IEC 30106-1 AMD 1:2019  
Information technology – Object oriented BioAPI – Part 1: Architecture – Amendment 1: Additional specifications and conformance statements; Amendment 1

ISO/IEC 30137-1:2019  
Information technology – Use of biometrics in video surveillance systems – Part 1: System design and specification

## 35.240.20 Primjene informacijske tehnologije u uredskom poslovanju

### Međunarodna normizacija ISO

ISO/IEC 30113-5:2019  
Information technology – User interface – Gesture-based interfaces across devices and methods – Part 5: Gesture Interface Markup Language (GIML)

## 35.240.30 Primjene informacijske tehnologije u obavješćivanju, dokumentaciji i izdavaštvu

### Međunarodna normizacija ISO

ISO 12620:2019  
Management of terminology resources – Data category specifications

ISO/IEC 23681:2019  
Information technology – Self-contained Information Retention Format (SIRF) Specification

## 35.240.50 Primjene informacijske tehnologije u industriji

### Međunarodna normizacija ISO

ISO 10303-235:2019  
Industrial automation systems and integration – Product data representation and exchange – Part 235: Application protocol: Engineering properties and material information

### IEC

IEC SRD 62913-1:2019  
Generic smart grid requirements – Part 1: Specific application of the Use Case methodology for defining generic smart grid requirements according to the IEC systems approach

IEC SRD 62913-2-1:2019  
Generic smart grid requirements – Part 2-1: Grid related domains

IEC SRD 62913-2-2:2019  
Generic smart grid requirements – Part 2-2: Market related domain

IEC SRD 62913-2-4:2019  
Generic smart grid requirements – Part 2-4: Electric transportation related domain

IEC/TR 63069:2019  
Industrial-process measurement, control and automation – Framework for functional safety and security

## 35.240.60 Primjene informacijske tehnologije u prijevozu i trgovini

### Europska normizacija CEN

CEN/TR 17297-1:2019  
Intelligent transport systems – Location referencing harmonization for Urban ITS – Part 1: State of the art and guidelines

### ETSI

EN 302636-5-1 V 2.2.1:2019  
Intelligent Transport Systems (ITS) – Vehicular Communications – GeoNetworking – Part 5: Transport Protocols – Sub-part 1: Basic Transport Protocol

ETSI TR 103257-1 V 1.1.1:2019  
Intelligent Transport Systems (ITS) – Access Layer – Part 1: Channel Models for the 5,9 GHz frequency band

ETSI TS 103600 V 1.1.1:2019  
Intelligent Transport Systems (ITS) – Testing – Interoperability test specifications for security

### Međunarodna normizacija ISO

ISO 19297-1:2019  
Intelligent transport systems – Shareable geospatial databases for ITS applications – Part 1: Framework

ISO 20900:2019  
Intelligent transport systems – Partially automated parking systems (PAPS) – Performance requirements and test procedures

ISO/TR 22085-1:2019  
Intelligent transport systems (ITS) – Nomadic device service platform for micro-mobility – Part 1: General information and use case definitions

ISO 26683-3:2019  
Intelligent transport systems – Freight land conveyance content identification and communication – Part 3: Monitoring cargo condition information during transport

## 35.240.70 Primjene informacijske tehnologije u znanosti

### Međunarodna normizacija ISO

ISO 19150-4:2019  
Geographic information – Ontology – Part 4: Service ontology

## 35.240.80 Primjene informacijske tehnologije u tehnologiji zaštite zdravlja

### Europska normizacija CEN

EN ISO 13120:2019  
Health informatics – Syntax to represent the content of healthcare classification systems – Classification Markup Language (ClaML) (ISO 13120:2019)

## 39.060 Nakit

### Europska normizacija CEN

EN ISO 9202:2019  
Jewellery and precious metals – Fineness of precious metal alloys (ISO 9202:2019)

## 43.040.15 Informatika vozila. Računalni sustavi u vozilu

### Međunarodna normizacija ISO

ISO/TR 22085-1:2019  
Intelligent transport systems (ITS) – Nomadic device service platform for micro-mobility – Part 1: General information and use case definitions

## 43.040.20 Uređaji za osvjetljivanje, svjetlosnu signalizaciju i upozoravanje

### Europska normizacija CENELEC

EN 60809:2015/A3:2019  
Lamps for road vehicles – Dimensional, electrical and luminous requirements (IEC 60809:2014/A3:2019)

## 43.060.40 Sustavi goriva

### Međunarodna normizacija ISO

ISO 20766-6:2019  
Road vehicles – Liquefied petroleum gas (LPG) fuel systems components – Part 6: Pressure relief valves (PRV)

## 45.060.01 Željeznička tračnička vozila općenito

### Europska normizacija CEN

EN 15355:2019  
Railway applications – Braking – Distributor valves and distributor-isolating devices

### Međunarodna normizacija IEC

IEC 61991:2019  
Railway applications – Rolling stock – Protective provisions against electrical hazards



## 45.060.10 Vučna vozila

### Europska normizacija CEN

EN 16186-4:2019  
Railway applications – Driver's cab – Part 4: Layout and access

## 45.100 Oprema za žičare

### Europska normizacija CEN

EN 12927:2019  
Safety requirements for cableway installations designed to carry persons – Ropes

## 47.020.30 Cjevovodni sustavi

### Međunarodna normizacija ISO

ISO 20602:2019  
Ships and marine technology – Check valves for use in low temperature applications – Design and testing requirements

## 47.020.60 Električna oprema brodova i pomorskih konstrukcija

### Međunarodna normizacija IEC

IEC 62613-1:2019  
Plugs, socket-outlets and ship couplers for high-voltage shore connection (HVSC) systems – Part 1: General requirements

## 47.020.99 Ostale norme koje se odnose na brodogradnju i pomorske konstrukcije

### Međunarodna normizacija ISO

ISO 11711-1:2019  
Ships and marine technology – Aquatic nuisance species – Part 1: Ballast water discharge sample port

## 47.080 Mala plovila

### Europska normizacija CEN

EN ISO 11591:2019  
Small craft – Field of vision from the steering position (ISO 11591:2019)

ISO 12215-5:2019  
Small craft – Hull construction and scantlings – Part 5: Design pressures for monohulls, design stresses, scantlings determination

## 49.020 Zrakoplovi i svemirska vozila općenito

### Međunarodna normizacija ISO

ISO 20785-4:2019  
Dosimetry for exposures to cosmic radiation in civilian aircraft – Part 4: Validation of codes

## 49.025.10 Čelici

### Europska normizacija CEN

EN 2951:2019  
Aerospace series – Metallic materials – Micrographic determination of content of non-metallic inclusions

## 49.025.15 Neželjezni metali općenito

### Europska normizacija CEN

EN 2959:2019  
Aerospace series – Heat resisting alloy NI-PH1302 (NiCr20Co13Mo4Ti3Al) – Solution treated and cold worked – Bar for forged fasteners – 3 mm ≤ D ≤ 30 mm

EN 4842:2019  
Aerospace series – X5CrNiCu15-5 (1.4545) – Consumable electrode remelted (ESR or VAR) – Solution treated and precipitation treated (H1025) – Bar for machining – a or D ≤ 250 mm – 1070 MPa ≤ Rm ≤ 1200 MPa – Premium quality (pq)

## 49.025.20 Aluminij

### Europska normizacija CEN

EN 2114:2019  
Aerospace series – Aluminium 1050A-H14 – Wire for solid rivets – D ≤ 10 mm

EN 2510:2019  
Aerospace series – Aluminium alloy 2024- – T42 – Drawn tubes for structural applications

EN 2638:2019  
Aerospace series – Aluminium alloy 2024- – T3 – Extruded bar and section – 1,2 mm (a or D) 150 mm with coarse peripheral grain control

## 49.025.30 Titan

### Europska normizacija CEN

EN 3378:2019  
Aerospace series – Titanium TI-P99002 – Annealed – Wires for rivets – 1,6 mm ≤ D ≤ 10 mm

EN 3460:2019  
Aerospace series – Titanium TI-P99002 – Annealed – Bar for machining – a or D ≤ 150 mm – Rm ≥ 390 MPa

## 49.025.40 Guma i plastika

### Europska normizacija CEN

EN 2566:2019  
Aerospace series – Fluorocarbon rubber (FKM) – Hardness 70 IRHD

EN 2567:2019  
Aerospace series – Fluorocarbon rubber (FKM) – Hardness 80 IRHD

EN 2568:2019  
Aerospace series – Fluorocarbon rubber (FKM) – Hardness 90 IRHD

EN 2798:2019  
Aerospace series – Fluorocarbon rubber (FKM) – Low compressions set – Hardness 80 IRHD

## 49.025.99 Ostali materijali

### Europska normizacija CEN

- EN 2959:2019  
Aerospace series – Heat resisting alloy NI-PH1302 (NiCr20Co13Mo4Ti3Al) – Solution treated and cold worked – Bar for forged fasteners – 3 mm ≤ D ≤ 30 mm

## 49.030.20 Vijci i svorni vijci

### Europska normizacija CEN

- EN 3818:2019  
Aerospace series – Bolts, MJ threads, in titanium alloy Ti-P64001 – Strength class: 1100 MPa (at ambient temperature) – Technical specification
- EN 4852:2019  
Aerospace series – External spiral drive heads for threaded fasteners – Geometrical definition and fastener head wrenching configuration

## 49.045 Konstrukcije i elementi konstrukcija

### Europska normizacija CEN

- EN 3001:2019  
Aerospace series – Tempered float glass plies for aircraft applications – Technical specification

## 49.060 Zrakoplovna električna oprema i sustavi

### Europska normizacija CEN

- EN 4529-002:2019  
Aerospace series – Elements of electrical and optical connection – Sealing plugs – Part 002: Index of product standards
- EN 4604-001:2019  
Aerospace series – Cable, electrical, for signal transmission – Part 001: Technical specification
- EN 4708-103:2019  
Aerospace series – Sleeving, heat-shrinkable, for binding, insulation and identification – Part 103: Fluoroelastomer sleeves – Operating temperature -55 °C to 200 °C – Product standard

## 49.080 Hidraulični i pneumatski sustavi i sastavni dijelovi za zrakoplove

### Europska normizacija CEN

- EN 3086:2019  
Aerospace series – Hose assemblies – Designation limited to 15 digits

## 49.140 Svemirski sustavi i operacije

### Međunarodna normizacija ISO

- ISO 14621-1:2019  
Space systems – Electrical, electronic and electromechanical (EEE) parts – Part 1: Parts management
- ISO 14621-2:2019  
Space systems – Electrical, electronic and electromechanical (EEE) parts – Part 2: Control programme requirements

## 53.060 Industrijski prijevozni sustavi

### Međunarodna normizacija ISO

- ISO 22915-21:2019  
Industrial trucks – Verification of stability – Part 21: Order-picking trucks with operator position elevating above 1 200 mm

## 55.180.01 Distribucija robe općenito

### Međunarodna normizacija ISO

- ISO 26683-3:2019  
Intelligent transport systems – Freight land conveyance content identification and communication – Part 3: Monitoring cargo condition information during transport

## 59.060.01 Tekstilna vlakna općenito

### Europska normizacija CEN

- EN 16711-3:2019  
Textiles – Determination of metal content – Part 3: Determination of lead release by artificial saliva solution
- EN ISO 1833-3:2019  
Textiles – Quantitative chemical analysis – Part 3: Mixtures of acetate with certain other fibres (method using acetone) (ISO 1833-3:2019)
- EN ISO 1833-10:2019  
Textiles – Quantitative chemical analysis – Part 10: Mixtures of triacetate or polylactide with certain other fibres (method using dichloromethane) (ISO 1833-10:2019)
- EN ISO 1833-18:2019  
Textiles – Quantitative chemical analysis – Part 18: Mixtures of silk with other protein fibres (method using sulfuric acid) (ISO 1833-18:2019)
- EN ISO 1833-21:2019  
Textiles – Quantitative chemical analysis – Part 21: Mixtures of chlorofibres, certain modacrylics, certain elastanes, acetates, triacetates and certain other fibres (method using cyclohexanone) (ISO 1833-21:2019)

## 59.080.40 Naslojeni plošni tekstil

### Međunarodna normizacija ISO

- ISO 1419:2019  
Rubber- or plastics-coated fabrics – Accelerated-ageing tests

## 59.080.70 Geotekstili

### Međunarodna normizacija ISO

- ISO 11058:2019  
Geotextiles and geotextile-related products – Determination of water permeability characteristics normal to the plane, without load

## 59.140.30 Koža i krzno

### Međunarodna normizacija ISO

- ISO 20942:2019  
Leather – Full chrome upper leather – Specification and test methods
- ISO 22517:2019  
Leather – Chemical tests – Determination of pesticide residues content

## 65.060.10 Poljoprivredni traktori i priključna vozila

Europska normizacija  
CEN

EN 1853:2017+AC:2019  
Agricultural machinery – Trailers – Safety

## 65.080 Gnojiva

Europska normizacija  
CEN

EN 12944-3:2019  
Fertilizers and liming materials – Vocabulary – Part 3: Terms relating to liming materials

EN ISO 14820-1:2019  
Fertilizers and liming materials – Sampling and sample preparation – Part 1: Sampling (ISO 14820-1:2016)

EN ISO 14820-2:2019  
Fertilizers and liming materials – Sampling and sample preparation – Part 2: Sample preparation (ISO 14820-2:2016)

## 65.160 Duhan, duhanski proizvodi i odgovarajuća oprema

Međunarodna normizacija  
ISO

ISO 22486:2019  
Water pipe tobacco smoking machine – Definitions and standard conditions

## 67.050 Opće metode ispitivanja i analize hrane

Međunarodna normizacija  
ISO

ISO 20813:2019  
Molecular biomarker analysis – Methods of analysis for the detection and identification of animal species in foods and food products (nucleic acid-based methods) – General requirements and definitions

## 67.100.10 Mlijeko i obrađeni mliječni proizvodi

Međunarodna normizacija  
ISO

ISO 17678:2019  
Milk and milk products – Determination of milk fat purity by gas chromatographic analysis of triglycerides

## 67.140.30 Kakao

Europska normizacija  
CEN

EN ISO 34101-3:2019  
Sustainable and traceable cocoa – Part 3: Requirements for traceability (ISO 34101-3:2019)

EN ISO 34101-4:2019  
Sustainable and traceable cocoa – Part 4: Requirements for certification schemes (ISO 34101-4:2019)

Međunarodna normizacija  
ISO

ISO 34101-1:2019  
Sustainable and traceable cocoa – Part 1: Requirements for cocoa sustainability management systems

ISO 34101-2:2019  
Sustainable and traceable cocoa – Part 2: Requirements for performance (related to economic, social and environmental aspects)

ISO 34101-3:2019  
Sustainable and traceable cocoa – Part 3: Requirements for traceability

ISO 34101-4:2019  
Sustainable and traceable cocoa – Part 4: Requirements for certification schemes

## 67.200.20 Uljarice

Međunarodna normizacija  
ISO

ISO 9167:2019  
Rapeseed and rapeseed meals – Determination of glucosinolates content – Method using high-performance liquid chromatography

## 71.040.40 Kemijska analiza

Međunarodna normizacija  
ISO

ISO 11952:2019  
Surface chemical analysis – Scanning-probe microscopy – Determination of geometric quantities using SPM: Calibration of measuring systems

ISO 22415:2019  
Surface chemical analysis – Secondary ion mass spectrometry – Method for determining yield volume in argon cluster sputter depth profiling of organic materials

## 71.100.60 Eterična ulja

Međunarodna normizacija  
ISO

ISO 3140:2019  
Essential oil of sweet orange expressed [Citrus sinensis (L.)]

## 71.100.70 Kozmetika. Toaletne potrepštine

Međunarodna normizacija  
ISO

ISO/TR 22582:2019  
Cosmetics – Methods of extract evaporation and calculation of organic indexes – Supplemental information to use with ISO 16128-2

ISO/TR 23199:2019  
Cosmetics – Calculation of organic indexes of hydrolates – Supplemental information for ISO 16128-2

## 73.020 Rudarstvo i vađenje kamena

Europska normizacija  
CEN

EN 12407:2019  
Natural stone test methods – Petrographic examination

Međunarodna normizacija  
ISO

ISO 19434 AMD 1:2019  
Mining – Classification of mine accidents; Amendment 1

## 75.080 Naftni proizvodi općenito

### Europska normizacija CEN

- EN 12916:2019  
Petroleum products – Determination of aromatic hydrocarbon types in middle distillates – High performance liquid chromatography method with refractive index detection
- EN ISO 3015:2019  
Petroleum and related products from natural or synthetic sources – Determination of cloud point (ISO 3015:2019)
- EN ISO 3016:2019  
Petroleum and related products from natural or synthetic sources – Determination of pour point (ISO 3016:2019)
- EN ISO 22995:2019  
Petroleum products – Determination of cloud point – Automated step-wise cooling method (ISO 22995:2019)

## 75.100 Maziva, industrijska ulja i srodni proizvodi

### Međunarodna normizacija ISO

- ISO 6521-1:2019  
Lubricants, industrial oils and related products (Class L) – Family D (compressors) – Part 1: Specifications of categories DAA and DAB (lubricants for reciprocating and drip feed rotary air compressors)

## 75.180.10 Oprema za iskorištavanje i vađenje

### Međunarodna normizacija ISO

- ISO 10418:2019  
Petroleum and natural gas industries – Offshore production installations – Process safety systems
- ISO 15156-2 Technical Circular 3:2019  
Petroleum and natural gas industries – Materials for use in H<sub>2</sub>S-containing environments in oil and gas production – Part 2: Cracking-resistant carbon and low-alloy steels, and the use of cast irons; Technical Circular 3
- ISO 15156-3 Technical Circular 3:2019  
Petroleum and natural gas industries – Materials for use in H<sub>2</sub>S-containing environments in oil and gas production – Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys; Technical Circular 3
- ISO 19904-1:2019  
Petroleum and natural gas industries – Floating offshore structures – Part 1: Ship-shaped, semi-submersible, spar and shallow-draught cylindrical structures

## 75.200 Oprema za rukovanje naftnim proizvodima i prirodnim plinom

### Međunarodna normizacija ISO

- ISO 19345-1:2019  
Petroleum and natural gas industry – Pipeline transportation systems – Pipeline integrity management specification – Part 1: Full-life cycle integrity management for onshore pipeline
- ISO 19345-2:2019  
Petroleum and natural gas industry – Pipeline transportation systems – Pipeline integrity management specification – Part 2: Full-life cycle integrity management for offshore pipeline

## 77.060 Korozija metala

### Međunarodna normizacija ISO

- ISO 15156-2 Technical Circular 3:2019  
Petroleum and natural gas industries – Materials for use in H<sub>2</sub>S-containing environments in oil and gas production – Part 2: Cracking-resistant carbon and low-alloy steels, and the use of cast irons; Technical Circular 3
- ISO 15156-3 Technical Circular 3:2019  
Petroleum and natural gas industries – Materials for use in H<sub>2</sub>S-containing environments in oil and gas production – Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys; Technical Circular 3
- ISO 22479:2019  
Corrosion of metals and alloys – Sulfur dioxide test in a humid atmosphere (fixed gas method)

## 77.120.20 Magnezij i magnezijeve legure

### Međunarodna normizacija ISO

- ISO 3116:2019  
Magnesium and magnesium alloys – Wrought magnesium and magnesium alloys

## 77.140.10 Toplinski obradivi čelici

### Europska normizacija CEN

- EN 10225-1:2019  
Weldable structural steels for fixed offshore structures – Technical delivery conditions – Part 1: Plates
- EN 10225-2:2019  
Weldable structural steels for fixed offshore structures – Technical delivery conditions – Part 2: Sections
- EN 10225-3:2019  
Weldable structural steels for fixed offshore structures – Technical delivery conditions – Part 3: Hot finished hollow sections
- EN 10225-4:2019  
Weldable structural steels for fixed offshore structures – Technical delivery conditions – Part 4: Cold formed welded hollow sections

## 77.140.50 Proizvodi i poluproizvodi od plosnatog čelika

### Međunarodna normizacija ISO

- ISO 5000:2019  
Steel sheet, aluminium-silicon alloy-coated by the continuous hot-dip process, of commercial and drawing qualities

## 77.140.75 Čelične cijevi i čelične cijevi za posebnu namjenu

### Europska normizacija CEN

- EN 10225-4:2019  
Weldable structural steels for fixed offshore structures – Technical delivery conditions – Part 4: Cold formed welded hollow sections



## 79.120.10 Strojevi za obradu drva

### Europska normizacija CEN

- EN ISO 19085-10:2019  
Woodworking machines – Safety – Part 10: Building site saws (contractor saws) (ISO 19085-10:2018)

## 81.040.20 Staklo u graditeljstvu

### Europska normizacija CEN

- EN 12150-1:2015+A1:2019  
Glass in building – Thermally toughened soda lime silicate safety glass – Part 1: Definition and description

## 83.080.01 Plastika općenito

### Europska normizacija CEN

- EN ISO 178:2019  
Plastics – Determination of flexural properties (ISO 178:2019)
- EN ISO 6721-1:2019  
Plastics – Determination of dynamic mechanical properties – Part 1: General principles (ISO 6721-1:2019)
- EN ISO 6721-2:2019  
Plastics – Determination of dynamic mechanical properties – Part 2: Torsion-pendulum method (ISO 6721-2:2019)
- EN ISO 15512:2019  
Plastics – Determination of water content (ISO 15512:2019)
- EN ISO 17556:2019  
Plastics – Determination of the ultimate aerobic biodegradability of plastic materials in soil by measuring the oxygen demand in a respirometer or the amount of carbon dioxide evolved (ISO 17556:2019)

### Međunarodna normizacija ISO

- ISO 3251:2019  
Paints, varnishes and plastics – Determination of non-volatile-matter content
- ISO 6721-11:2019  
Plastics – Determination of dynamic mechanical properties – Part 11: Glass transition temperature
- ISO 16014-1:2019  
Plastics – Determination of average molecular weight and molecular weight distribution of polymers using size-exclusion chromatography – Part 1: General principles
- ISO 16014-2:2019  
Plastics – Determination of average molecular weight and molecular weight distribution of polymers using size-exclusion chromatography – Part 2: Universal calibration method
- ISO 16014-3:2019  
Plastics – Determination of average molecular weight and molecular weight distribution of polymers using size-exclusion chromatography – Part 3: Low-temperature method
- ISO 16014-4:2019  
Plastics – Determination of average molecular weight and molecular weight distribution of polymers using size-exclusion chromatography – Part 4: High-temperature method
- ISO 16014-5:2019  
Plastics – Determination of average molecular weight and molecular weight distribution of polymers using size-exclusion chromatography – Part 5: Light-scattering method
- ISO 21475:2019  
Plastics – Methods of exposure to determine the wavelength dependent degradation using spectrally dispersed radiation
- ISO 21702:2019  
Measurement of antiviral activity on plastics and other non-porous surfaces

## 83.080.20 Plastomerni materijali

### Europska normizacija CEN

- EN ISO 307:2019  
Plastics – Polyamides – Determination of viscosity number (ISO 307:2019)
- EN ISO 21302-1:2019  
Plastics – Polybutene-1 (PB-1) moulding and extrusion materials – Part 1: Designation system and basis for specifications (ISO 21302-1:2019)
- EN ISO 21302-2:2019  
Plastics – Polybutene-1 (PB-1) moulding and extrusion materials – Part 2: Preparation of test specimens and determination of properties (ISO 21302-2:2019)

### Međunarodna normizacija ISO

- ISO 305:2019  
Plastics – Determination of thermal stability of poly(vinyl chloride), related chlorine-containing homopolymers and copolymers and their compounds – Discoloration method
- ISO 1110:2019  
Plastics – Polyamides – Accelerated conditioning of test specimens
- ISO 4574:2019  
Plastics – PVC resins for general use – Determination of hot plasticizer absorption
- ISO 21302-1:2019  
Plastics – Polybutene-1 (PB-1) moulding and extrusion materials – Part 1: Designation system and basis for specifications
- ISO 21302-2:2019  
Plastics – Polybutene-1 (PB-1) moulding and extrusion materials – Part 2: Preparation of test specimens and determination of properties

## 83.160.99 Ostale vrste guma za vozila

### Međunarodna normizacija ISO

- ISO 10499-1:2019  
Industrial tyres and rims – Rubber solid tyres (metric series) for pneumatic tyre rims – Part 1: Designation, dimensions and marking

## 83.180 Adhezivi

### Europska normizacija CEN

- EN ISO 29862:2019  
Self adhesive tapes – Determination of peel adhesion properties (ISO 29862:2018)
- EN ISO 29863:2019  
Self adhesive tapes – Measurement of static shear adhesion (ISO 29863:2018)
- EN ISO 29864:2019  
Self adhesive tapes – Measurement of breaking strength and elongation at break (ISO 29864:2018)

### Međunarodna normizacija ISO

- ISO 11003-2:2019  
Adhesives – Determination of shear behaviour of structural adhesives – Part 2: Tensile test method using thick adherends
- ISO 21760-1:2019  
Adhesives for organic electronic devices – Determination of water vapour transmission rate – Part 1: Adhesive film preparation methods
- ISO 21760-2:2019  
Adhesives for organic electronic devices – Determination of water vapour transmission rate – Part 2: Edge seal methods

## 85.060 Papir i karton

### Europska normizacija CEN

- EN 17085:2019  
Paper and board – Sampling procedures for paper and board for recycling

### Međunarodna normizacija ISO

- ISO 5628:2019  
Paper and board – Determination of bending stiffness – General principles for two-point, three-point and four-point methods
- ISO 5647:2019  
Paper and board – Determination of titanium dioxide content

## 85.080.20 Tanki upijajući papir

### Europska normizacija CEN

- EN ISO 12625-1:2019  
Tissue paper and tissue products – Part 1: Vocabulary (ISO 12625-1:2019)

### Međunarodna normizacija ISO

- ISO 12625-11:2019  
Tissue paper and tissue products – Part 11: Determination of wet ball burst strength

## 87.040 Boje i lakovi

### Europska normizacija CEN

- EN ISO 2812-3:2019  
Paints and varnishes – Determination of resistance to liquids – Part 3: Method using an absorbent medium (ISO 2812-3:2019)
- EN ISO 8130-1:2019  
Coating powders – Part 1: Determination of particle size distribution by sieving (ISO 8130-1:2019)
- EN ISO 8130-7:2019  
Coating powders – Part 7: Determination of loss of mass on stoving (ISO 8130-7:2019)
- EN ISO 8130-11:2019  
Coating powders – Part 11: Inclined-plane flow test (ISO 8130-11:2019)
- EN ISO 8130-12:2019  
Coating powders – Part 12: Determination of compatibility (ISO 8130-12:2019)
- EN ISO 8130-13:2019  
Coating powders – Part 13: Particle size analysis by laser diffraction (ISO 8130-13:2019)
- EN ISO 8130-14:2019  
Coating powders – Part 14: Vocabulary (ISO 8130-14:2019)

### Međunarodna normizacija ISO

- ISO 3251:2019  
Paints, varnishes and plastics – Determination of non-volatile-matter content
- ISO 6504-1:2019  
Paints and varnishes – Determination of hiding power – Part 1: Kubelka-Munk method for white and light-coloured paints
- ISO 9514:2019  
Paints and varnishes – Determination of the pot life of multicomponent coating systems – Preparation and conditioning of samples and guidelines for testing

## 87.060.10 Pigmenti i punila

### Europska normizacija CEN

- EN ISO 787-17:2019  
General methods of test for pigments and extenders – Part 17: Comparison of lightening power of white pigments (ISO 787-17:2019)
- EN ISO 18451-1:2019  
Pigments, dyestuffs and extenders – Terminology – Part 1: General terms (ISO 18451-1:2019)

### Međunarodna normizacija ISO

- ISO 787-28:2019  
General methods of tests for pigments and extenders – Part 28: Determination of total content of polychlorinated biphenyls (PCB) by dissolution, cleanup and GC-MS

## 87.060.20 Veziva

### Međunarodna normizacija ISO

- ISO 3251:2019  
Paints, varnishes and plastics – Determination of non-volatile-matter content

## 91.010.01 Građevinska industrija općenito

### Europska normizacija CEN

- EN ISO 16757-1:2019  
Data structures for electronic product catalogues for building services – Part 1: Concepts, architecture and model (ISO 16757-1:2015)
- EN ISO 16757-2:2019  
Data structures for electronic product catalogues for building services – Part 2: Geometry (ISO 16757-2:2016)

## 91.010.30 Tehnički aspekti

### Europska normizacija CEN

- EN 1992-1-2:2004/A1:2019  
Eurocode 2: Design of concrete structures – Part 1-2: General rules – Structural fire design

## 91.040.01 Građevine općenito

### Međunarodna normizacija ISO

- ISO 21931-2:2019  
Sustainability in buildings and civil engineering works – Framework for methods of assessment of the environmental, social and economic performance of construction works as a basis for sustainability assessment – Part 2: Civil engineering works

## 91.080.40 Betonske konstrukcije

### Europska normizacija CEN

- EN 1992-1-2:2004/A1:2019  
Eurocode 2: Design of concrete structures – Part 1-2: General rules – Structural fire design

## 91.090 Vanjske konstrukcije

### Europska normizacija CENELEC

EN 60335-2-95:2015/A2:2019  
Household and similar electrical appliances – Safety – Part 2-95: Particular requirements for drives for vertically moving garage doors for residential use (IEC 60335-2-95:2011/A2:2017)

## 91.100.10 Cement. Gips. Vapno. Mort

### Europska normizacija CEN

CEN/TR 17365:2019  
Method for the determination of C3A in the clinker from cement analysis

## 91.100.15 Mineralni materijali i proizvodi

### Europska normizacija CEN

EN 12407:2019  
Natural stone test methods – Petrographic examination

EN 13383-2:2019  
Armourstone, Part 2: Test methods

## 91.140.50 Sustavi opskrbe električnom energijom

### Međunarodna normizacija IEC

IEC 60364-8-1 Corrigendum 1:2019  
Low-voltage electrical installations – Part 8-1: Functional aspects – Energy efficiency; Corrigendum 1

IEC 61820-1:2019  
Electrical installations for aeronautical ground lighting at aerodromes – Part 1: Fundamental principles

## 91.140.65 Oprema za grijanje vode

### Europska normizacija CEN

EN 12102-2:2019  
Air conditioners, liquid chilling packages, heat pumps, process chillers and dehumidifiers with electrically driven compressors – Determination of the sound power level – Part 2: Heat pump water heaters

## 91.220 Građevinska oprema

### Međunarodna normizacija ISO

ISO 21873-2:2019  
Building construction machinery and equipment – Mobile crushers – Part 2: Safety requirements and verification

## 93.010 Niskogradnja općenito

### Međunarodna normizacija ISO

ISO 21931-2:2019  
Sustainability in buildings and civil engineering works – Framework for methods of assessment of the environmental, social and economic performance of construction works as a basis for sustainability assessment – Part 2: Civil engineering works

## 93.120 Gradnja zračnih luka

### Međunarodna normizacija IEC

IEC 61820-1:2019  
Electrical installations for aeronautical ground lighting at aerodromes – Part 1: Fundamental principles

## 97.030 Kućanski električni uređaji općenito

### Međunarodna normizacija IEC

IEC 60704-3:2019  
Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 3: Procedure for determining and verifying declared noise emission values

## 97.040.20 Štednjaci, radni stolovi, pećnice i slični uređaji

### Međunarodna normizacija IEC

IEC 60335-2-9:2019  
Household and similar electrical appliances – Safety – Part 2-9: Particular requirements for grills, toasters and similar portable cooking appliances

## 97.040.30 Kućanski rashladni uređaji

### Europska normizacija CENELEC

EN 60704-2-14:2013/A1:2019  
Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 2-14: Particular requirements for refrigerators, frozen-food storage cabinets and food freezers (IEC 60704-2-14:2013/A1:2019)

## 97.060 Praonički uređaji

### Međunarodna normizacija IEC

IEC 60335-2-7:2019  
Household and similar electrical appliances – Safety – Part 2-7: Particular requirements for washing machines

IEC 60704-2-16:2019  
Household and similar electrical appliances – Test code for the determination of airborne acoustical noise – Part 2-16: Particular requirements for washer-dryers

## 97.080 Uređaji za čišćenje podova

### Međunarodna normizacija IEC

IEC 60335-2-2:2019  
Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances

## 97.100.10 Električni grijači

### Međunarodna normizacija IEC

IEC 60335-2-96:2019  
Household and similar electrical appliances – Safety – Part 2-96: Particular requirements for flexible sheet heating elements for room heating

## **97.120 Automatsko upravljanje za kućansku upotrebu**

**Međunarodna normizacija  
IEC**

IEC 60730-2-11:2019  
Automatic electrical controls – Part 2-11: Particular requirements for energy regulators

## **97.130.20 Trgovački rashladni uređaji**

**Međunarodna normizacija  
ISO**

ISO 22041:2019  
Refrigerated storage cabinets and counters for professional use – Performance and energy consumption

## **97.150 Netekstilni podni prekrivači**

**Europska normizacija  
CEN**

EN 687:2019  
Resilient floor coverings – Specification for plain and decorative linoleum on a corkment backing

EN ISO 10833:2019  
Textile floor coverings – Determination of resistance to damage at cut edges using the modified Vettermann drum test (ISO 10833:2017)

EN ISO 16581:2019  
Resilient and laminate floor coverings – Determination of the effect of simulated movement of a furniture leg (ISO 16581:2014)

## **97.170 Oprema za njegu tijela**

**Međunarodna normizacija  
IEC**

IEC 60335-2-27:2019  
Household and similar electrical appliances – Safety – Part 2-27: Particular requirements for appliances for skin exposure to optical radiation

## **97.190 Oprema za djecu**

**Europska normizacija  
CEN**

EN 14960-1:2019  
Inflatable play equipment – Part 1: Safety requirements and test methods

## **97.200.40 Igrališta**

**Europska normizacija  
CEN**

EN 13814-1:2019  
Safety of amusement rides and amusement devices – Part 1: Design and manufacture

EN 13814-2:2019  
Safety of amusement rides and amusement devices – Part 2: Operation, maintenance and use

EN 13814-3:2019  
Safety of amusement rides and amusement devices – Part 3: Requirements for inspection during design, manufacture, operation and use

## **97.200.50 Igračke**

**Europska normizacija  
CEN**

EN 14960-1:2019  
Inflatable play equipment – Part 1: Safety requirements and test methods

## **97.220.30 Oprema za sportske dvorane**

**Europska normizacija  
CEN**

EN ISO 20957-9:2016/A1:2019  
Stationary training equipment – Part 9: Elliptical trainers, additional specific safety requirements and test methods – Amendment 1 (ISO 20957-9:2016/Amd 1:2019)