

WORK PROGRAMME 2019

EUROPEAN COMMITTEE FOR STANDARDIZATION • EUROPEAN COMMITTEE FOR ELECTROTECHNICAL STANDARDIZATION



European Standardization
and related activities

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Introduction

Standardization is a forward-looking activity, as it calls for the ability to understand the future, define agreed roadmaps on how to make it possible in practice, and enable it to happen. For this reason, CEN and CENELEC are proud to present this 2019 Work Programme, which provides an overview of the main standardization developments and strategic priority areas for 2019. Thanks to a strong and committed membership in 34 countries, CEN and CENELEC will continue in 2019 with their efforts to provide the best standardization environment and technical solutions to European industry and stakeholders, to support their global competitiveness and contribute to European economic growth.

The timely citation of harmonized standards (hENs) in the Official Journal of the EU is a factor of strategic importance for the industry, as it ensures legal certainty and reduces excessive burdens for businesses, thus increasing trust in the smooth functioning of the Single Market. For this reason, in 2019 we will keep as a priority the implementation of the Action Plan agreed between the European Commission and the European Standardization Organisations (ESOs) to ensure the timely citation of hENs, that provide presumption of conformity with EU/EFTA legislation. The constructive dialogue with the European Commission has helped to progress on the number of citations. CEN and CENELEC will reinforce this important work in 2019, developing monitoring mechanisms for the citation of hENs and progressing towards clearer workflows with improved transparency and legal certainty.

It is crucial to foster the ability of the European economy to innovate and to ensure that the outcomes of research and innovation projects do access and disseminate in the market. This has made CEN and CENELEC set ambitious goals to develop and adopt the Innovation Strategic Plan approved in 2018. In particular, during 2019 CEN and CENELEC will focus on attracting the Research & Innovation community in standardization by recognizing their contributions and by offering fast-track standardization solutions that meet the researchers and innovators' needs. CEN and CENELEC's Technology Market Watch will become operational during 2019, allowing gathering information on, and proposing responses to, potential new topics for standardization.

The fourth industrial revolution is here and CEN and CENELEC are committed to providing their stakeholders with solutions that enable their digital transformation and engaging further with all sectors in order to understand how standardization can meet their needs. The implementation of the Strategic Plan for Digital Transformation, adopted in 2017, will continue in 2019, with the launch of a series of pilot projects on machine interpretable standards and open innovation, coordinating with our international partners ISO and IEC.

Artificial Intelligence, Autonomous driving and Cybersecurity are part of our program and we will continue working on our ambition to deliver standards in innovative, more flexible and solution-driven formats.

Moreover, CEN and CENELEC aim to enhance the competitiveness of the European industries and contribute to the removal of barriers to trade in the global market. In 2018, our members identified specific priority countries and regions where standardization cooperation can reinforce trade relations with Europe. This exercise is strengthened with the launch of a dialogue with the European Commission to ensure that standardization priorities are coordinated and reflected in EU trade agreements.

Finally, we have made an important step further to strengthen the engagement of industry in European standardization by establishing the Industry Advisory Forum (IAF). The aim of the Forum, participated by industry representatives, is to provide a platform for dialogue with industry to advise on key standardization strategic issues and ensure that standards provide an adequate response to market needs. In 2019 it will identify

standardization-relevant priorities and provide strategic input to our governance to guide further the CEN-CENELEC Work Programme, feeding also into the European Commission's Annual Union Work Programme for Standardization.

All these initiatives, together with the forthcoming CEN-CENELEC manifesto for the new EU Commission and Parliament, announce that 2019 will be a fundamental year in the development of the European Standardization System. With the invaluable contribution, enthusiasm and expertise of all our stakeholders we can continue building together a successful European Standardization model to support the Single Market for products and services for the years to come.

I wish you a good reading and a successful 2019!

*Elena SANTIAGO CID
Director General of CEN and CENELEC*



Chemicals are building blocks of several of the products we come across in our daily lives. Within Europe, chemicals are predominantly regulated through comprehensive legislations, among which the most relevant are Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Classification, Labelling and Packaging of chemical substances (CLP). REACH, which came into force in 2008, aims at improving the protection of human health and environment and enhancing innovation and competitiveness of the EU chemicals industry.

Currently, about 21,551 substances have been submitted to the European Chemicals Agency (ECHA) under REACH. Other groups of chemicals such as fertilisers, biocides, pesticides, pharmaceuticals and cosmetics are addressed by other legislations. In 2018, the chemical industry in Europe has a turnover of €507 billion and employs about 1,140,000 people.

Standards in the sector of chemicals have a threefold aim:

- they support the EU Circular Economy package, creating a market for secondary raw materials without endangering human health and environment due to the presence of hazardous chemicals;

- they aid the replacement of non-sustainable chemicals by sustainable ones by identifying gaps and proposing future standardization activities;
- they harness developments in Key Enabling Technologies (KETs) identified by the EU, such as nanotechnologies, to support EU's industrial policy.

The majority of CEN's deliverables are developed in response to Standardization Requests from the European Commission and support public policies. In this context, experts from research, academia and industry, NGOs and public entities contribute to the recommendations and deliverables.

Standardization can support the implementation of European legislation, including Regulation (EC) No 1907/2006, Regulation (EC) 2003/2003 on fertilisers (currently under revision), Directive 2014/28/EU on Explosives for civil uses, and Directive 2007/23/EC and the recast Directive 2013/29/EU. CEN's work in this area also supports EU policies such as the Action Plan for the Circular Economy (COM [2015] 614).



22 Technical bodies responsible

CEN/TC 139	Paints and varnishes
CEN/TC 193	Adhesives
CEN/TC 223	Soil improvers and growing media
CEN/TC 249	Plastics
CEN/TC 260	Fertilizers and liming materials
CEN/TC 276	Surface active agents
CEN/TC 298	Pigments and extenders
CEN/TC 317	Derivatives from coal pyrolysis
CEN/TC 321	Explosives for civil uses
CEN/TC 347	Methods for analysis of allergens
CEN/TC 352	Nanotechnologies
CEN/TC 360	Coating systems for chemical apparatus and plants against corrosion
CEN/TC 363	Organic contaminants (tar) in biomass producer gases
CEN/TC 366	Materials obtained from End-of-Life Tyres (ELT)
CEN/TC 386	Photocatalysis
CEN/TC 401	Reduced Ignition Propensity Cigarettes
CEN/TC 421	Emission safety of combustible air fresheners
CEN/TC 437	Electronic cigarettes and e-liquids
CEN/WS 089	Platform - Guidelines and best practices for sustainable production of carbon nanotube-based nano-enabled products (CNT-based NEPs)
CEN/SS C10	Starch
CEN/SS C20	Explosives and firework
CEN/SS I44	Nanotechnologies

CEN & CENELEC portfolio of deliverables: 1240 ENs +73 other deliverables

Work items currently in the Work Programmes: 204 ENs + 19 other deliverables

Standardization Requests from EC/EFTA

- M/004 – Nickel and nickel release
- M/335 – Modernization of the methods of analysis of fertilizers
- M/418 & M/454 amending M/335
- M/430 – Bio-polymers and bio-lubricants
- M/461 – Nanotechnologies and nanomaterials
- M/491 – Bio-surfactants and bio-solvents
- M/492 – Bio-based products
- M/547 – Algae and algae-based products or intermediaries
- M/556 – PAH in rubber and plastic
- M/XXX (anticipated) – Fertilizers
- M/XXX (anticipated) Explosives for civil uses

Relevant elements of EU Work Programme 2019

2.3 Action in support of the circular economy action plan

Further information

<https://www.cen.eu/work/areas/chemical/Pages/default.aspx>



EXPLOSIVES FOR CIVIL USE

Since 20th April 2016, the revised Directive 2014/28/EU on Explosives for Civil use has been applicable in the EU. The scope of this directive includes explosives used for purposes such as blasting for mining and aims at achieving a secure, safe and competitive market within the EU.

Standardization supports the Directive by establishing safety requirements, terminology, categorisation and test methods. Manufacturers will be able to place their civil explosive products on the market if they comply with certain essential safety requirements, demonstrate conformity during standardised tests and are CE marked.

Deliverables from CEN that are currently cited in the Official Journal of the European Union (OJEU) were developed to support the previous version of the Explosives for Civil use Directive. The European Commission is currently finalising a Standardization Request aimed particularly to revise these deliverables, and to cover electronic detonators including remote firing systems.

In 2019, CEN/TC 321 'Explosives for civil uses' will be involved in revising/developing deliverables in response to this Standardization Request.





NANOTECHNOLOGIES

Nanotechnologies have been identified as KETs by the EU, with the potential to bring forward a manufacturing boom across different industrial sectors. Given the stably rising innovation in this field and its applications ranging from consumer products to electronics and healthcare, the EC has recognised a need for standards to support the activities within this sector.

CEN's work includes responding to Standardization Request M/461, as well as the development of deliverables for terminology and classification, measurement and characterization, health and environmental safety testing, risk assessment and risk management. Given the multidisciplinary nature of the domain and focus of the deliverables, work on this Standardization Request is shared by three Technical Committees that develop standards at the European level and collaborate with ISO at the international level. In 2019, these TCs will continue developing deliverables in the framework of the Standardization Request M/461:

- CEN/TC 352 'Nanotechnologies', that focusses on nanotechnologies and nanomaterials, will finalise the Technical Specifications (CEN/TS 17276, 17273, 17274 and 17275) providing guidelines on Life Cycle Assessment and aspects related to the management and disposal of waste from manufacturing and processing nanomaterials. In addition, CEN/TC 352 will work in parallel with ISO and adopt several deliverables.
- CEN/TC 137 'Assessment of workplace exposure to chemical and biological agents' will continue its work on developing European standards on workplace exposure (EN 17199-1 to EN 17199-5), characterisation of bulk materials (EN 17289-1 to EN 17289-3) and, in parallel with ISO, on procedures for measuring gases and vapours using pumped samplers, to place requirements and test methods for workplace air (EN ISO 22065).
- CEN/TC 195 'Air filters for general air cleaning' that develops test methods to measure efficiency of air filtration media against spherical nanomaterials across different sizes, will publish the ongoing parallel work with ISO, which comprises amongst others the EN ISO 29461 series on air intake filter systems for rotary machinery specification. The TC will also continue to work on EN 1822-1, addressing classification, performance testing, marking of high efficiency filters (EPA, HEPA and ULPA).



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

PAHs in rubber and plastic - In 2019, CEN-CENELEC/BTWG 13 'Polycyclic Aromatic Hydrocarbons (PAHs) in rubber and plastic' will deliver a work programme in response to Standardization Request M/556 referring to compliance to maximum content criteria of eight restricted PAHs under REACH which are classified as carcinogenic 1B. This work programme is preceded by a scoping study that identifies existing methods to determine the total content for PAHs in articles with rubber and plastic components, and the associated sample preparation and extraction methodologies, expected to be completed by end of 2018.

Fertilisers - In 2019, CEN/TC 260 'Fertilisers and Liming materials' will:

- revise two vocabulary standards (EN 12944-1 and EN 12944-2) focussing on general and specific terms relating to the concerned materials.

- develop two new European standards: EN 17090, within which a test method using high performance liquid chromatography (HPLC) will be used to determine nitrification inhibitor DMP5A in fertilisers, and EN 12944-3 that will address vocabulary relating to liming materials.

- work in response to the upcoming Standardization Request related to the expected new Regulation on fertilizing materials, along with four other Technical Committees covering Soil improvers and growing media, Fertilizers and liming materials, Test methods for environmental characterization of solid matrices and Plant biostimulants and agricultural micro-organisms.

Photocatalysis-CEN/TC386 'Photocatalysis' will publish a standard (EN 17120) on Photocatalysis - Water purification - Performance of photocatalytic materials by measurement of phenol degradation. This standard includes a test method to evaluate the performance of photocatalytic materials in water purification



by measuring phenol degradation, which is applicable to photocatalytic materials in form of powders (suspensions in water, slurries) under UV irradiation.

Release of Nickel - CEN/TC 347 'Methods for analysis of allergens' will continue its work on the revision of EN 12472, which provides a method for the simulation of accelerated wear and corrosion to facilitate the detection of nickel release from coated items and responds to the EC Standardization Request M/004 on Nickel and Nickel, in support of REACH. The main aim of this revision is to update the normative references and adapt the wordings within the standard with the ones used by the REACH legislation.

Algae - In response to Standardization Request M/547, CEN/TC 454 'Algae and algae products' will finalise several European standards. In particular, the TC intends to

- conclude its work regarding terms and definitions related to functions, products, and properties of algae and algae products;
- finalise a standard dealing with methods of sampling and analysis that would provide the market with a sample preparation method for wet and dry samples of micro- and macro algae;
- deliver a Report to allow stakeholders to have access to a clear point of reference on the use of algae in food and feed and cosmetics;
- further develop its work programme, consisting of the development of 10 CEN deliverables in total to respond to Mandate M547, among which three new CEN standards on 'Product test methods' related to algae;
- launch the start-up of an inter laboratory trial to validate specific product test method(s) for integration into a future CEN standard(s).

Plastics - CEN/TC 249 on plastics is devoted to standardization of terminology, test methods, specifications, classifications and designation systems, environmental aspects, joining systems and techniques of plastics, plastic-based materials, semi-finished products and products. During 2019, their work will focus on:

- Plastics - Bio-based polymers, plastics, and plastic products - Terminology, characteristics and communication
- Unplasticized poly(vinyl chloride) (PVC-U) profiles for the fabrication of windows and doors - Classification, requirements and test methods - Non-coated PVC-U profiles with light coloured surface
- Continuous - fibre - reinforced plastic composites - Pultruded unidirectional rods - Determination of tensile properties in parallel to the fibre direction
- Composites made from cellulose-based materials and thermoplastics (usually called wood-polymer composites (WPC) or natural fibre composites (NFC)) - Part 5: Specifications for cladding profiles and tiles
- Thermoplastics rigid protective wallcovering panels for internal use in buildings - Performance characteristics
- Plastics welding personnel - Qualification testing of welders - Thermoplastics welded assemblies
- Imperfections in thermoplastics welded joints - Quality levels
- Determination of the ultimate anoxic biodegradability of plastic materials in an aqueous system - Method by measurement of pressure increase

During the course of 2019, they will also work with ISO on 42 ISO standards.



Construction



The European Commission (EC) estimates that Europeans spend 90% of their time in buildings. CEN's work in the construction sector is therefore instrumental in the development of European standards to assess the performance of construction products and to provide tools in the form of the requisite testing and/or calculation methods for such assessments. Harmonized European Standards are developed with the ultimate aim of supporting the Construction Products Regulation (CPR) ((EU) No 305/2011) and of fulfilling national building regulations. Given the size of the domain, some construction products are also subject to other Directives that regulate other aspects such as their chemical composition, effects on the environment and safety in the workplace.

Hence, construction sector standards also address initiatives such as climate change policy, energy performance of buildings, circular economy and drinking water directive among others.

Harmonized Standards provide a solid technical basis for testing the performance of products, allowing manufacturers to prepare a declaration of performance (DoP) for their products as defined in the CPR and to affix the CE mark.

Given its outreach, work in the construction sector is driven by a wide array of stakeholders such as manufacturers, national/European associations, laboratories and notified bodies, engineers, structural designers, academia, research and the European Commission.



77 Technical bodies responsible

CEN/TC 33	Doors, windows, shutters, building hardware and curtain walling
CEN/TC 38	Durability of wood and wood-based products
CEN/TC 50	Lighting columns and spigots
CEN/TC 51	Cement and building limes
CEN/TC 53	Temporary works equipment
CEN/TC 67	Ceramic tiles
CEN/TC 88	Thermal insulating materials and products
CEN/TC 89	Thermal performance of buildings and building components
CEN/TC 99	Wallcoverings
CEN/TC 104	Concrete and related products
CEN/TC 112	Wood-based panels
CEN/TC 124	Timber structures
CEN/TC 125	Masonry
CEN/TC 126	Acoustic properties of building elements and of buildings
CEN/TC 127	Fire safety in buildings
CEN/TC 128	Roof covering products for discontinuous laying and products for wall cladding
CEN/TC 129	Glass in building
CEN/TC 134	Resilient, textile and laminate floor coverings
CEN/TC 154	Aggregates
CEN/TC 163	Sanitary appliances
CEN/TC 166	Chimneys
CEN/TC 167	Structural bearings
CEN/TC 169	Light and lighting
CEN/TC 175	Round and sawn timber
CEN/TC 177	Prefabricated reinforced components of autoclaved aerated concrete or light-weight aggregate concrete with open structure
CEN/TC 178	Paving units and kerbs
CEN/TC 185	Fasteners
CEN/TC 187	Refractory products and materials
CEN/TC 189	Geosynthetics
CEN/TC 203	Cast iron pipes, fittings and their joints
CEN/TC 208	Elastomeric seals for joints in pipework and pipelines
CEN/TC 217	Surfaces for sports areas
CEN/TC 218	Rubber and plastics hoses and hose assemblies
CEN/TC 227	Road materials
CEN/TC 229	Precast concrete products
CEN/TC 241	Gypsum and gypsum based products
CEN/TC 243	Cleanroom technology
CEN/TC 246	Natural stones
CEN/TC 247	Building Automation, Controls and Building Management
CEN/TC 250	Structural Eurocodes
CEN/TC 254	Flexible sheets for waterproofing
CEN/TC 277	Suspended ceilings
CEN/TC 284	Greenhouses
CEN/TC 288	Execution of special geotechnical works
CEN/TC 297	Free-standing industrial chimneys
CEN/TC 303	Floor screeds and screed materials



CEN/TC 315	Spectator facilities
CEN/TC 336	Bituminous binders
CEN/TC 339	Slip resistance of pedestrian surfaces - Methods of evaluation
CEN/TC 340	Anti-seismic devices
CEN/TC 341	Geotechnical Investigation and Testing
CEN/TC 346	Conservation of Cultural Heritage
CEN/TC 349	Sealants for joints in building construction
CEN/TC 350	Sustainability of construction works
CEN/TC 351	Construction Products - Assessment of release of dangerous substances
CEN/TC 357	Stretched ceilings
CEN/TC 361	Polymer modified bituminous thick coatings for waterproofing - Definitions/requirements and test methods
CEN/TC 371	Energy Performance of Buildings project group
CEN/TC 396	Earthworks
CEN/TC 407	Cylindrical helical springs made from round wire and bar - Calculation and design
CEN/TC 422	Side curtains ventilation systems – safety
CEN/TC 442	Building Information Modelling (BIM)
CLC/SR 3	Information structures, documentation and graphical symbols
CEN/SS B02	Structures
CEN/SS B09	Energy Performance of Buildings Directive (EPBD)
CEN/SS F01	Technical drawings
CEN/SS F02	Units and symbols
CEN/SS F16	Graphical symbols
CEN/WS 063	Structural Condition Determination for Integrated Lifetime Assessment of Plants, Structures and Components
CEN/WS Smart-CE-Marking	Smart CE marking for the construction industry
CEN/WS 071	Validation of computational solid mechanics models using strain fields from calibrated measurements (VANESSA)
CEN/WS SUSTINROADS	Sustainability assessment of roads
ECISS/TC 103	Structural steels other than reinforcements
ECISS/TC 104	Concrete reinforcing and prestressing steels
CEN/CLC/Guides	Group for CEN-CENELEC Guides
CEN/CLC/JTC 11	Accessibility in the built environment

CEN & CENELEC portfolio of deliverables: 2912 ENs + 278 other deliverables

Work items currently in the Work Programmes: 612 ENs + 37 other deliverables

Standardization requests from EC/EFTA

43 active Standardization Requests (including amendments and revisions)

Relevant elements of EU Work Programme 2019

2.2. Actions in support of the Energy union and climate

2.4 Action in support of a deeper and fairer internal market with a strengthened industrial base

14. The quality of water intended for human consumption (Directive 98/83/EC) and the Construction Product Regulation (EU) 305/2011

Further information

www.cen.eu/work/areas/construction



STRUCTURAL EUROCODES

Structural Eurocodes are a comprehensive set of standards that relate to the design of building and civil engineering works. They are widely used in the construction and civil engineering industry throughout Europe, and have been implemented in neighbouring countries and worldwide.

The European Commission has asked CEN to revise existing Eurocodes to incorporate improvements to the existing suite of standards (Standardization Request M/515), to reflect the state of the art and the needs of the market. Enhancements in user-friendliness, without reducing applicability, will assist new entrants to the market and small and medium-sized enterprises. Further developments in new areas include the assessment and retrofitting of existing structures and the use of new materials, such as structural glass, fibre-reinforced polymers and membrane structures.

This work is being carried out by CEN/TC 250 'Structural Eurocodes', in cooperation with stakeholders including structural design companies, the scientific community, industry associations and engineers, supported by the European Commission and its Joint Research Centre (JRC).

76 project teams have been established under M/515 across the four phases of the work programme following successful open calls for experts. The first phase of the work was completed in April 2018 and work is ongoing on Phases 2, 3 and 4. A comprehensive publication plan, clearly outlining when standards will be released, has been developed accounting for the complex interdependencies across the suite of standards, and work is now progressing to finalise the first documents to proceed towards publication.

SUSTAINABILITY OF CONSTRUCTION WORKS

CEN/TC 350 'Sustainability of construction works' is responsible for the development of horizontal standardised methods for the assessment of sustainability aspects of new and existing construction works (buildings and civil engineering works), including standards for environmental product declaration (EPD).

In response to Standardization Request M/350 concerning the development of horizontal standardised methods for the assessment of the integrated Environmental performance of buildings, the focus of the Technical Committee in 2019 will be the publication of the amended EN 15804, as well as the revision of EN 15978 and EN 15643.

The Technical Committee will also continue developing two standards as a part of the 'Adaption to Climate Change' project, while continuing to provide support to Technical Committees (TCs) in the construction sector for the development of product specific environmental product declarations.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Release of Dangerous Substances - CEN/TC 351 'Construction Products - Assessment of release of dangerous substances' is responsible for developing harmonised test methods for the release of dangerous substances from construction products. During the course of 2019, the focus of the Technical Committee will be to develop nine deliverables addressing sampling, sample preparation, release testing, analysis of test outcomes and verification and reporting taking into account composition, fabrication and use in release scenarios of soil/groundwater, indoor air and radiations.

The outcome of this work will allow the declaration of release of dangerous substances from construction products to be included in the CE marking of Construction products.

Lights and lighting - CEN/TC 169 'Lights and lighting' will finalise two standards (EN 17037 and EN 13032-5) and one technical specification (CEN/TS 17165) related to the design process of lighting systems. EN 13032-5 is currently being amended as a deliverable for standardization requests M/519 (to develop standardization in the field of light emitting diodes - LEDs) and M/495 (under Directive 2009/125/EC relating to harmonised standards in the field of Ecodesign).

Elastomeric seals for joints in pipework and pipelines - CEN/TC 208 'Elastomeric seals for joints in pipework and pipelines', will revise two standards, EN 549 - Rubber materials for seals and diaphragms for gas appliances and gas equipment, and EN 681-1 - Elastomeric seals - Material requirements for pipe joint seals used in water and drainage applications - Part 1: Vulcanized rubber.



Ceramic tiles - CEN/TC 67 'Ceramic Tiles' will continue to revise Parts 2, 4, 10 and 15 of EN ISO 10545 series, which define test methods for ceramic tiles, and work on four European standards (EN 17160, 14411, 13888-1 and 2).

Sanitary appliances - CEN/TC 163 'Sanitary appliances' will amend harmonised standards to comply with CPR provisions, as well as developing a technical specification for WC seats and a new standard on drainage systems for the application of sanitary appliances. The revision of EN 16578 Ceramics sanitary appliances - Sustainability assessment is also foreseen.





Consumer



European standards are used every day by businesses, manufacturers, public bodies and other organisations as a tool for ensuring that consumer products are safe. In its standardization work, CEN monitors how society and industry evolve, keeping the ambition to be proactive and mitigate risks of existing and of new types of products.

20 CEN Technical Committees (TCs) are carrying out standardization activities in this field. Their work falls mainly in the area of the General Product Safety Directive (2001/95/EC), and is also concerned by a number of other pieces of European legislation, such as the Toy Safety Directive (2009/48/EC) or Regulation (EU) 1007/2011 on textile fibre names and related labelling and marking of the fibre composition of textile products.

A large proportion of the European standards in this sector are drafted at the request of

the European Commission in response to standardization requests. Furthermore, in support of European companies' internationalisation strategies, global harmonization is reached where possible by developing standards in parallel with CEN's international counterpart (ISO) in sectors such as footwear, sport equipment or textiles.

Given the variety of topics covered, ranging from child and toy safety, through clothing and accessories, textiles and leather, and sports goods to furniture, furnishings and cleaning, the relevant Technical Committees (TCs) work independently from one another, even if they exchange information through liaison officers and sometimes cooperate on topics of common interest. The exchange of information, in the consumer area, will become more important in the coming years, as horizontal topics such as accessibility will have a greater relevance throughout all new standardization activities.



23 Technical bodies responsible

CEN/TC 52	Safety of toys
CEN/TC 93	Ladders
CEN/TC 136	Sports, playground and other recreational facilities and equipment
CEN/TC 207	Furniture
CEN/TC 212	Pyrotechnic articles
CEN/TC 248	Textiles and textile products
CEN/TC 252	Child care articles
CEN/TC 281	Appliances, solid fuels and firelighters for barbecuing
CEN/TC 289	Leather
CEN/TC 309	Footwear
CEN/TC 355	Lighters
CEN/TC 364	High Chairs
CEN/TC 369	Candle fire safety
CEN/TC 398	Child Protective Products
CEN/TC 402	Domestic Pools and Spas
CEN/TC 410	Consumer confidence and nomenclature in the diamond industry
CEN/TC 426	Domestic appliances used for water treatment not connected to water supply
CEN/TC 443	Feather and down
CEN/TC 456	Reporting in support of online gambling supervision
CEN/TC 457	Preservation of digital cinema movies
CEN/SS H22	Smokers' lighters
CEN/SS M21	Precious metals - Applications in jewellery and associated products
CEN/CLC/JTC 12	Design for All

CEN & CENELEC portfolio of deliverables: 799 ENs + 57 other deliverables

Work items currently in the Work Programmes: 178 ENs + 7 other deliverables

Standardization requests from EC/EFTA

- M/445 – Safety of Toys
- M/464 – Safety of childcare articles (bath rings, bath aids, bathtubs, etc.)
- M/473 – Design for All
- M/497 – Safety of childcare articles – Risks in the sleeping environment
- M/527 – Certain seats for children
- M/445 – Safety of toys
- M/461 - Nanotechnologies
- M/506 – Stationary training equipment
- M/507 – Gymnastic equipment
- M/532 – Methods for quantitative analysis of textile products
- M/553 – Advanced garments and ensembles of garments that provide protection against heat and flame, with integrated smart textiles and non-textile elements

Relevant elements of EU Work Programme 2019

- 2.1. Action in support of the digital single market strategy
- 4.2 Inclusiveness
- 14. The quality of water intended for human consumption (Directive 98/83/EC) and the Construction Product Regulation (EU) 305/2011.

Further information

<https://www.cen.eu/work/areas/consumerproducts/Pages/default.aspx>



SAFETY OF TOYS

In support of the Toy Safety Directive 2009/48/EC, CEN/TC 52 'Safety of Toys' is preparing a project for 2019 which will result in the elaboration of five new European standards to allow users to test for the presence of chemicals in certain types of toys, specifically:

- Formamide in foamed toy materials
- TCEP and alternative flame retardants
- Isothiazolinones in aqueous (toy) materials
- Phenol
- Bisphenol A

Another European Standard under revision, EN 71-3 'Migration of certain elements' is expected for 2019. The project will lead to an improved migration procedure and a new test method for chromium (VI).

To raise safety levels for consumers and respond to market needs, two European Standards under revision in 2018 will be published in 2019: EN 71-2 on Flammability and EN 71-14 on Trampolines that now includes buried trampolines.

With this constant ambition to keep the standards up-to-date and address potentially new hazards, CEN/TC 52 'Safety of Toys' is considering the revision of three European Standards for 2019 on 'Experimental sets'.

SPORTS AND PLAYGROUND EQUIPMENT STANDARDS

CEN/TC 136 'Sports, playground and other recreational facilities and equipment' will start the development of three entirely new European standards in 2019 on:

- Trampoline parks
- Public spas and saunas
- Individual and multifunctional vaulting boxes

The standardization work responds to highly relevant market needs and will set the safety requirements for the design, construction, inspection and maintenance of those equipments.

In addition, standard series EN 13451 'Swimming pool equipment' will undergo improvements in 2019 to increase the safety for customers in public swimming pools, and to increase the comprehensibility for manufacturers, public domains and operators. The focus of the update is the alignment (wherever relevant, practicable and possible) between public swimming pools and domestic swimming pools (other standards apply) to simplify the requirements for the stakeholders and industry.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Furniture - CEN/TC 207 'Furniture' will publish a new European Standard setting out requirements for office furniture. The upcoming standards refers to office work chair and specifies dimensions of three types of chairs as well as test methods for their determination (EN 1335-1) and respectively safety, strength and durability requirements (EN 1335-2).

Childcare articles - Standardisation of childcare articles comprises horizontal requirements for any product designed in order to safely ensure and facilitate seating, bathing, changing and general body care, feeding, sleeping, transportation and protection for young children.

CEN/TC 252 'Child care articles' will publish three European standards on reclined cradles for children up to when they try to sit up (EN 12790-1) and reclined cradles for children up to when they start to walk (EN 12790-1) as well as safety requirements and test methods for child seats for cycles.

Textile - In 2019, CEN/TC 248 Textiles will work on standardization activities in support of European Mandates:

- M/461 Nanotechnologies: CEN/TS 17222 'Textiles products and Nanotechnologies - Guidance on tests to simulate nanoparticle release - Skin exposure' will be published in 2019.

- M/532 Methods for quantitative analysis of textile products composed of certain binary and ternary textile fibre mixtures: various parts of the EN ISO 1833 series on Textiles - Quantitative chemical analysis will be published in 2019, with a target completion date of 2020 for the project.

- M/553 Advanced garments and ensembles of garments that provide protection against heat and flame, with integrated smart textiles and non-textile elements for enhanced health, safety and survival capabilities.

In 2019, CEN/TC 248 will **develop new standards** with relevance to REACH (1907/2006/EC) related to methods of analysis for Dimethylfumarate (DMFu) (EN 17130), Dimethylformamide (DMF) (EN 17131), Polycyclic Aromatic Hydrocarbons (PAH) (EN 17132) and Certain preservatives (EN 17134). In addition, an EN ISO (under CEN lead) will cover Determination of Organotin compounds (EN ISO 22744-1).

Additional potential standardization work is foreseen on the determination of micro plastics shedding from textiles containing synthetic fibres and the activation of two new standardization processes on the analysis of perfluorinated compounds (PFCs), related also to the REACH Regulation.





Defence and security



Our world is challenged by a variety of threats to both society and individual citizens. The possibility of more sophisticated and diverse attacks has pushed public authorities to increase their readiness and reaction capabilities.

Creating EU-wide standards and promoting them on a worldwide level is a vital component of the global competitiveness of the EU security industry. Standards are also of utmost importance for the demand side, notably to ensure the interoperability of technologies used by first responders and law enforcement authorities.

Nonetheless, the security market in Europe is highly fragmented with divergent national

standards. This poses a major obstacle for the creation of a truly competitive and integrated internal market for security across the EU.

The newly established CEN-CENELEC Sector Forum on Security will build a network of European security experts in order to coordinate ongoing European standardization activities on security topics within several sectors (construction, healthcare, protective equipment, machinery, digital technologies among others). The Forum will also make recommendations on strategic actions to enhance the participation of the European industry, the law enforcement agencies and the associations representing citizens' rights in the standardization activities and to increase societal resilience in Europe.



23 Technical bodies responsible

CEN/TC 70	Manual means of fire fighting equipment
CEN/TC 72	Fire detection and fire alarm systems
CEN/TC 191	Fixed firefighting systems
CEN/TC 192	Fire and Rescue Service Equipment
CEN/TC 263	Secure storage of cash, valuables and data media
CEN/TC 325	Crime prevention through building, facility and area design
CEN/TC 367	Breath-alcohol testers
CEN/TC 368	Product Identification
CEN/TC 388	Perimeter Protection
CEN/TC 391	Societal and Citizen Security
CEN/TC 419	Forensic Science Processes
CEN/TC 439	Private security services
CEN/WS D-Box	Demining tool-box for humanitarian clearing of large scale areas from anti-personnel landmines and cluster munitions
CEN/WS 088	Functional Specification for a Resilience Information Portal
CEN/WS 091	City Resilience Development - Maturity Model
CEN/WS 092	City Resilience Development - Operational Guidance
CEN/WS TER-CDM	Terminologies in Crisis and Disaster Management
CEN/CLC/JTC 4	Services for fire safety and security systems
CEN/CLC/WS HECTOS	CEN-CENELEC Workshop on Guidelines on evaluation systems and schemes for physical security products
CEN/CLC/WS ZONeSEC	Interoperability of security systems for the surveillance of widezones
CLC/TC 79	Alarm systems
CLC/BTTF 133-1	Sound systems for emergency purposes which are not part of fire detection and alarm systems
CLC/BTTF 157-1	Public address and general emergency alarm systems

CEN & CENELEC portfolio of deliverables: 235 ENs + 51 other deliverables

Work items currently in the Work Programmes: 54 ENs published + 3 other deliverables published

Standardization requests from EC/EFTA

M/530 - Privacy management for the design of security technologies and services

Relevant elements of EU Work Programme 2019

2.5. Action in support of the European defence action plan

2.7. Action in support of the European agenda on security

Further information

<https://www.cencenelec.eu/standards/Sectors/DefenceSecurityPrivacy/defence/Pages/default.aspx>



SOCIETAL SECURITY

CEN/TC 391 'Societal and citizen security' has reinforced its activities in 2018 and will pursue the development of new standards on training for security professionals on CBRN-E (Chemical Biological, radiological Nuclear and Explosives) and guidelines for handling crowds during major events.

The publication of the glossary on CBRN-E (EN 17173:2019) will be one of the major achievements in 2019. Inspired by the glossary of the European Commission's Joint Research Centre (JRC), this glossary includes a set of around 600 terms and definitions to be used by security professionals when responding to emerging threats related to the management of dangerous substances.





OTHER ACTIVITIES

Security and defence - Many of the standards used by the defence industry in Europe are civilian. Where specific defence standards are required they are developed nationally, which can hinder cooperation and increase costs for the industry. The development of common defence standards would greatly enhance cooperation and interoperability between European armies and improve the competitiveness of Europe's emerging technologies industry.

Security services - Standards are essential for ensuring a level playing field and optimal quality in the provision of security services. CEN and CENELEC have long-lasting relationships with the security industry, represented by European associations such as EURALARM (Association of

European manufacturers, installers and service providers of the electronic Fire Safety and Security industry), and COESS (Confederation of European security services). The associations fully support the standardization work of CEN-CENELEC/TC 4 'Services for fire and security systems' and CEN/TC 439 'Private security services'.

Through the development of European standards, the security industry ensures that providers of private security solutions meet the highest quality criteria. In 2019, CEN-CENELEC/TC 4 'Services for fire and security systems' will finalise the draft standard 'Guidelines and requirements for remote services for fire safety and security systems'.



ICT is a broad category that includes everything from computers to telephones, television, the internet, satellite-based navigation and other innovative technologies. These technologies have become increasingly important in our daily lives: having access to the latest ICTs is essential for broad and sustained social and economic development.

In the ICT sector, it is especially important that products and services are mutually compatible and interoperable, so that information can be shared over the internet, and people can communicate with each other using different devices. Relevant standards help to ensure that products such as computer peripherals and other electronic devices made by different companies are able to work together seamlessly.

European Standards are key contributors to the development of the EU Digital Single Market in many fields, including Cybersecurity, Data

protection and Privacy, Smart Grids, Intelligent transport systems, Advanced Manufacturing, Digital Skills, Blockchain and Distributed ledger technologies, contributing to an inclusive European digital society. As such, they represent one of the most critical issues for businesses approaching the global market.

CEN and CENELEC work together to develop standards in support of the development of open and competitive markets, meeting the needs of business, consumers and other stakeholders in the ICT sector. They bring a major contribution to ICT standardization through their expertise in vertical sectors (manufacturing, machinery, energy management and energy efficiency, transport, healthcare, and construction) impacted by ICT. Furthermore, CEN and CENELEC's long-standing cooperation with ISO and IEC allows them deliver global standardization solutions that facilitate trade.



44 Technical bodies responsible

CEN/TC 224	Personal identification and related personal devices with secure element, systems, operations and privacy in a multi sectorial environment
CEN/TC 225	AIDC technologies
CEN/TC 287	Geographic Information
CEN/TC 294	Communication systems for meters
CEN/TC 365	Internet Filtering
CEN/TC 428	ICT Professionalism and Digital competences
CEN/TC 434	Electronic Invoicing
CEN/TC 440	Electronic Public Procurement
CEN/SS F12	Information Processing Systems
CEN/WS 084	Self-Sovereign Identifier for Personal Data Ownership and Usage Control (CEN WS ISÆN)
CEN/WS BDA	Big Data
CEN/WS ICT	ICT/SKILLS Workshop (IT profiles and curricula)
CEN/WS FATEDA	Standards-Compliant Formats for Fatigue Test Data
CEN/WS JXF	XFS for the Java Platform
CEN/WS METEDA	Mechanical Test Data
CEN/WS XFS	eXtensions for Financial Services
CEN/WS 084	Self-Sovereign Identifier for Personal Data Ownership and Usage Control (CEN WS ISÆN)
CEN/CLC/JTC 8	Privacy management in products and services
CEN/CLC/JTC 13	Cybersecurity and Data Protection
CEN/CLC/WS SEP2	Industry Best Practices and an Industry Code of Conduct for Licensing of Standard Essential Patents in the field of 5G and Internet of Things
CEN/CLC/WS SEP-IoT	Workshop on Best Practices and a Code of Conduct for Licensing Industry Standard Essential Patents in 5G and the Internet of Things (IoT), including the Industrial Internet
CEN/CLC/ETSI/JWG eAcc	eAccessibility
CEN/CLC/ETSI/SF-SSCC	CEN-CENELEC-ETSI Sector Forum on Smart and Sustainable Cities and Communities
CLC/ETSI/JWG DD	ETSI-CENELEC Joint Working Group Digital Dividend
CLC/TC 46X	Communication cables
CLC/TC 57	Power systems management and associated information exchange
CLC/TC 65X	Industrial-process measurement, control and automation
CLC/TC 86A	Optical fibres and optical fibre cables
CLC/TC 86BXA	Fibre optic interconnect, passive and connectorised components
CLC/TC 100X	Audio, video and multimedia systems and equipment and related sub-systems
CLC/TC 108X	Safety of electronic equipment within the fields of Audio/Video, Information Technology and Communication Technology
CLC/TC 209	Cable networks for television signals, sound signals and interactive services
CLC/TC 215	Electrotechnical aspects of telecommunication equipment
CLC/SR 47F	Micro-electromechanical systems



CLC/SR 86	Fibre optics
CLC/SR 86B	Fibre optic interconnecting devices and passive components
CLC/SR 86C	Fibre optic systems and active devices
CLC/SR 100	Audio, video and multimedia systems and equipment
CLC/TC 100X	Audio, video and multimedia systems and equipment and related sub-systems
CLC/SR 103	Transmitting equipment for radiocommunication
CLC/SR 110	Flat panel display devices
CLC/SS V24	Information technology equipment and audio, video and audio-visual equipment and systems
CLC/WS 04	Interoperability framework requirements specification for services to the home (IFRS)
CLC/SS V24	Information technology equipment and audio, video and audio-visual equipment and systems

CEN & CENELEC portfolio of deliverables: 1837 ENs + 347 other deliverables

Work items currently in the Work Programmes: 227 ENs + 36 other deliverables

Standardization requests from EC/EFTA

M/536 – Radio Equipment Directive

Relevant elements of EU Work Programme 2019

2.1. Action in support of the digital single market strategy

2.4. Action in support of a deeper and fairer internal market with a strengthened industrial base

12. The interoperability of the rail system within the European Union (Directive (EU) 2016/797) (recast).

2018 Rolling Plan on ICT Standardization

Further information

<https://www.cencenelec.eu/standards/Sectors/ICT/Pages/default.aspx>





ICT SKILLS

Digital, Information and Communication technologies are critical components to ensure the continued progress of the European economy and society. In an increasingly digital economy, the challenge for Europe is to support its citizens in developing sufficient and appropriate ICT skills and competences in all sectors and levels. In this context, closing the gap between the number of job seekers and the number of vacant digital jobs is among the main priorities of the European economy.

CEN/TC 428 'ICT Professionalism and Digital Competences' is responsible for all aspects of standardization related to developing ICT skills in all sectors, public and private. This includes activities related to four major building blocks of ICT professionalism:

- competences;
- education and certification;
- code of ethics;
- body of knowledge.

Sharing a common language regarding ICT knowledge, skills and competences can significantly contribute to increasing transparency and efficiency in professional development.

In 2019, the Technical Committee will finalise the revision of EN 16234-1 'e-Competence Framework (e-CF) – A common European Framework for ICT Professionals in all industry sectors'. The European Standard will provide a reference of 40 competences as required and applied in the Information and Communication Technology business related workplace, using a common language for competences, skills and proficiency levels that can be understood across Europe.

The European Standard will be designed to meet the needs of companies of all sizes and solve the lack of e-skills across Europe. The framework is intended for use by companies that are suppliers or users of ICT-related services, managers and human resources departments, education institutions and training bodies.

CEN has been notably working with CEPIS, the Council of Professional Informatics Societies, to develop standards that fit the markets' needs.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Personal identification - CEN/TC 224 'Personal identification and related personal devices with secure elements, systems, operations and privacy in a multi sectorial environment' develops standards to strengthen the interoperability and security of personal identification and related personal devices. The Technical Committee involves a variety of sectors such as government - citizens' interactions, transport, banking, and

eHealth. In 2019, the Technical Committee will continue the development of European Standards, especially on Biometrics (prEN 17054), and on secure and interoperable breeder documents.

Cybersecurity and Data Protection - The relevance of Cybersecurity is not limited to 'digital natives'. It is also becoming increasingly relevant to all industry sectors, including the traditional industries. The security of information and communication systems is an area of increasing concern, both for public authorities



and for private companies. While this shift opens up opportunities, it also creates threats to operational safety, robustness and resilience. This is why the CEN-CENELEC Joint Technical Committee (CEN-CLC/JTC 13) 'Cybersecurity and Data protection' will work, in cooperation with ISO and IEC, towards the publication of European Standards for data protection, information protection and security techniques with a specific focus on cybersecurity. These standards will cover all the concurrent aspects of the evolving information society (organisational frameworks, process and product evaluation schemes, privacy guidelines, etc.).

Advanced Manufacturing - The development of an inclusive European digital society calls for the uptake of innovative technologies by the European industry. CEN/TC 310 'Advanced automation technologies and their applications', CEN/TC 438 'Additive manufacturing' and CLC/TC

65X 'Industrial-process measurement, control and automation' will continue to collaborate with ISO and IEC in order to develop European Standards to support the digital transformation of European industry.

In 2019, the following standards will be released: EN ISO 10218-1 and 10218-2 on the safety requirements for industrial robots, EN ISO/ASTM 52902 on geometric capability assessment of additive manufacturing systems, and EN IEC 62443-3-2 on security risk assessment and system design.

eInvoicing - CEN/TC 434 deals with electronic invoicing and has undertaken the standardization activities required by the Directive 2014/55/EU. In 2019, the TC will continue its work, and will notably address syntax bindings and methodologies for using validation artefacts in electronic invoicing.





AIDC and RFID technologies - CEN/TC 225 'AIDC technologies' relates to automatic identification and data capture techniques such as AD and 2D optical data carriers, radio frequency identification (RFID) and real-time locating systems. These technologies are widely used as end points, allowing the connection of billions of objects. The majority of Internet of Things (IoT) applications are based on AIDC technologies, and their growth potential is huge, given that more and more products involve the capture and processing of sensitive and personal data.

In 2019, CEN/TC 225 will further work towards the publication of European Standards on automatic identification and data capture techniques, to be applied in various industry sectors.

eAccessibility - Following the release of the second version of EN 301549 'Accessibility requirements for ICT products and services' in 2018, the CEN-CENELEC-ETSI Joint Working

Group on eAccessibility will work on its third version. The project will also be candidate for citation in the Official Journal of European Union to provide presumption of conformity with the requirements of Directive 2016/2102/EU (relevant to accessibility of websites and mobile applications of public sector bodies).

Control systems of agriculture machinery - In 2019, CEN/TC 144 'Tractors and machinery for agriculture and forestry' in cooperation with ISO/TC 23 will finalise the revision of the EN ISO 25119 series 'Tractors and machinery for agriculture and forestry - Safety-related parts of control systems'.

Part 3 of this series is dedicated to hardware and software of safety-related parts of control systems (SRP/CS) on tractors used in agriculture and forestry and on self-propelled ride-on machines and mounted, semi-mounted and trailed machines used in agriculture.



Electrotechnology



A wide range of CENELEC Technical Committees, Task Forces and Working Groups deal with different topics and types of products. Their standardization activities always ensure that the highest possible levels of safety and performance and the most efficient use of energy are met.

CENELEC values close cooperation with its international counterpart, the International Electrotechnical Commission (IEC). To facilitate a consensus-based process between European and international standard development activities in the electrical sector, CENELEC and IEC formalized the framework of their cooperation

through the signature of an 'agreement on common planning of new work and parallel voting', known as the Frankfurt Agreement.

Because of this cooperation, over 72% of CENELEC standards are identical to international standards adopted by the IEC, and another 6% are based on IEC standards.

The high level of alignment between European and international standards means that companies active in the electrotechnical sector can benefit from access to markets around the world, with lower compliance costs and integrated supply chains.



34 Technical bodies responsible

CLC/TC 20	Electric cables
CLC/TC 21X	Secondary cells and batteries
CLC/TC 22X	Power electronics
CLC/TC 23BX	Switches, boxes and enclosures for household and similar purposes, plugs and socket outlet for D.C.
CLC/TC 23E	Circuit breakers and similar devices for household and similar applications
CLC/TC 23H	Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles
CLC/TC 34	Lamps and related equipment
CLC/TC 37A	Low voltage surge protective devices
CLC/TC 38	Instrument transformers
CLC/TC 40XA	Capacitors and EMI suppression components
CLC/TC 40XB	Resistors
CLC/TC 55	Winding wires
CLC/TC 64	Electrical installations and protection against electric shock
CLC/TC 66X	Safety of measuring, control, and laboratory equipment
CLC/TC 72	Automatic controls for household use
CLC/TC 76	Optical radiation safety and laser equipment
CLC/TC 81X	Lightning protection
CLC/TC 85X	Measuring equipment for electrical and electromagnetic quantities
CLC/TC 95X	Measuring relays and protection equipment
CLC/TC 106X	Electromagnetic fields in the human environment
CLC/TC 121A	Low-voltage switchgear and controlgear
CLC/TC 204	Safety of electrostatic painting and finishing equipment
CLC/TC 205	Home and Building Electronic Systems (HBES)
CLC/TC 210	Electromagnetic Compatibility (EMC)
CLC/TC 213	Cable management systems
CLC/TC 216	Gas detectors
CLC/BTTF 60-1	Assembly of electronic equipment
CLC/BTTF 62-3	Operation of electrical installations
CLC/BTTF 129-1	Thermal resistant aluminium alloy wire for overhead line conductor
CLC/BTTF 132-1	Aluminium conductors steel supported (ACSS type) for overhead electrical lines
CLC/BTTF 132-2	Revision of EN 50156 "Electrical equipment for furnaces and ancillary equipment"
CLC/BTTF 146-1	Losses of small transformers : methods of measurement, marking and other requirements related to eco-design regulation
CLC-ETSI/JWG EMC	EMC conducted transmission networks
CLC/WS 05	Flow batteries - Requirements and test methods

CEN & CENELEC portfolio of deliverables: 3342 ENs + 47 other deliverables

Work items currently in the Work Programmes: 639 ENs + 6 other deliverables



Standardization requests from EC/EFTA

M/443 - Cables
M/BC/CEN/92/46 - ATEX
M/468 - Charging of electric vehicles
M/495 & 17 Product Mandates - Ecodesign
M/552 - EMF
M/351 - EMC
M/356 - Environmental
M/412 - Weighing instruments
M/511 & M/452 - Low Voltage
M/374 - Measuring Instruments
M/212 - Optical Cables
M/031 - Personal Protective Equipment
M/536 - Radio Equipment
M/083 - Machinery

Relevant elements of EU Work Programme 2019

- 2.1. Action in support of the digital single market strategy
- 2.2. Actions in support of the Energy union and climate

Further information

<https://www.cenelec.eu/aboutcenelec/whatwedo/technologysectors/index.html>

EMC

The multiplication of electronic devices in our everyday life and their interactions complicate the electromagnetic environment. The need for convergence in electronics across the board leads to the development of electromagnetic compatibility (EMC) standards.

CLC/TC 210 'Electromagnetic compatibility' deals with a wide range of product families, generic and basic EMC standards. Some of these are initiated and developed within the European Technical Committee CLC/TC 210 itself, but the majority result from its cooperation with IEC/TC 77 'Electromagnetic compatibility' and with the International Special Committee on Radio Interference (CISPR).

Based on CISPR activities, in 2019, CLC/TC 210 will continue amending its generic EMC standards, including standards on the limits for harmonic current emissions.

In addition, the CENELEC Technical Committee will continue working on the alignment with European legal requirements for the Electromagnetic Compatibility (2014/30/EU) and Radio Equipment (2014/53/EU) Directives and their corresponding Standardization Requests (respectively M/552 and M/536). These efforts will seek the highest alignment possible with IEC (CISPR) work.

To ensure a coherent and comprehensive scheme regarding EMC matters, CLC/TC 210 offers liaison to other CLC TCs and closely cooperates with CEN and ETSI.



COMMUNICATION CABLES

While the trend for industry is to go 'wireless', cables remain essential parts of the backbone of communication systems. They need to continuously evolve to offer greater speed and quality, and support the ever higher demands of the overall communication system.

This is illustrated by the work done by CLC/TC 46X to accommodate future high bit rates cabling solutions (40GB/s): the extension of the EN 50288 series to meet frequencies up to 2000MHz (aka CAT8).

Similarly, the EN 50117 series on coaxial cables has been reviewed and extended to coaxial cables for analogue and digital signal transmission for frequencies up to 6000MHz. The series will become available early 2019. Both standard series will be completed to ensure their continued acceptance as harmonized standards under the Low Voltage Directive (2014/35/EU).

While the communication cables under the responsibility of CLC/TC46X do not fall under the scope of the Radio Equipment (2014/53/EU) or EMC (2014/30/EU) Directives, their specific characteristics in terms of transfer impedance, screening attenuation or coupling attenuation are critical for their use in combination with equipment that fall under that directive.

Further activities relate to the revision of electrical test methods to deal with greater transmission speeds: extension of the frequency range for balanced measurements up to 2000MHz and to include modal decomposition (aka balunless) test methods.

CLC/TC46X created a specific Working Group (WG4) to establish and maintain electrical, mechanical, EMC and environmental test procedures described in the EN 50289-series.

Finally, new work is launched for the EN 50290-series dealing with: sheathing and compounds (PE halogen free, etc...) to improve security and quality.





OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

CLC/TC 36A Insulated bushings - Standard EN 50673 'Plug-in type bushings for 72,5 kV with 630 A and 1 250 A for electrical equipment' has been under enquiry over summer 2018 and will be finalised in 2019.

The development of new offshore windparks with larger turbines that are operated on 66 kV requires new standards for plug in bushings to deal with the uprated voltages to 72.5 kV. The standard also supports the development of a new generation of switchgear and transformers to match the needs of this specific application.

The aim of this work is to complement the current EN 50180-series and EN 50181 by a new standard addressing the extended voltage range up to 72.5 kV.

CLC/TC 85X Measuring equipment for electrical and electromagnetic quantities - Energy use has entered a new era, with increasing requirements on the 'demand side'. To that extent, the development – at IEC level – of the Technical report IEC TR 63191 ED1 'Demand Side Power Quality Management' is key, as it offers ways to improve the power quality of electrical networks on the 'demand side'.

In an effort to increase the safety of electrical equipment and apparatuses during their lifetime, CLC/TC 85X has undertaken the development of the future EN 50678 'General procedure for verifying the effectiveness of the protective measures of electrical equipment after repair'.

In the same spirit, the maintenance of standard series IEC-EN 61557 parts -1 to parts 7 and part 11, foreseen to kick off in 2019, is important to support verification and increased safety of electrical installations after erecting and during their lifetime.

CLC/TC 85X will also kick off activities on 'Calibration of test and measurement equipment' that support quality management and inspections according to ISO 9001.

CLC/TC 76 'Optical radiation safety and laser equipment' - CLC/TC 76 'Optical radiation safety and laser equipment' will continue the development of the EN 60825 series 'Safety of laser products' in close coordination with IEC/TC 76. This standard introduces a system of classification of lasers and laser products to aid hazard evaluation and the determination of user control measures (including warning labels and user instructions that contain all relevant safety information).

Moreover, CLC/TC 76 will also develop a European Standard defining the laser product classes considered acceptable on the EU market (only laser products in lower classes are considered safe to be used by consumers and therefore acceptable for the European market). This new standard is in support of M/531 on 'Consumer laser products'. The intent is that compliance with the new standard gives the presumption of conformity with European legislation, particularly with the General Product Safety (2001/95/EC) and Low Voltage (2014/35/EU) Directives.

CLC/TC 14 'Power transformer' - CLC/TC 14 'Power transformer' develops and maintains standards for power transformers. The Committee analyzes and incorporates in its standards the trends and changes in European market demand for all types of power transformers manufactured or traded between countries.

During the 2019, CLC/TC 14 will be engaged in the main following matters:

- **Standardization update according with Regulation 548/2014 revision**

The Technical Committee will prepare or update standards on the requirements of European power transformers as requested by the EU Regulation 548/2014 and their revisions. This Regulation establishes ecodesign rules for placing on the market or putting into service power transformers with a minimum power rating of 1 kVA used in 50 Hz electricity transmission and distribution networks or for industrial applications. According to the new rules, power transformers shall comply with



the maximum allowed load and no-load losses or the Peak Efficiency Index (PEI) values they set out.

- **Energy performance assessment**

The Technical Committee will also provide information on the use of tolerances in verification procedures of energy performances of power transformers, with examples explaining to stakeholders the use of tolerances in different situations. Today there are different possibilities of interpretation of the tolerances according to the documents considered. The proposal is to clarify these uncertainties, with the publication of a technical report.

- **Circular economy**

The Technical Committee will prepare new documents incorporating renewable energy, use of ester fluids and smart grids, with the aim to introduce better functional standardization catering for different and new technologies, such as transformers for electrical vehicles' charging stations.

CLC/TC 215 Electrotechnical aspects of telecommunication equipment - The work of CLC/TC 215 is closely linked to international work in ISO/IEC JTC 1.

CLC/TC 215 will continue the revision of series EN 50600 on data centres, which is developed under requests M/462 and partly M/526. Five European Standards (EN) of the series will be completed, new work will include the revision of EN 50600-2-1 under Revised Mandate rM/526 to contribute to building and maintaining a more climate resilient infrastructure throughout the EU.

Similarly, a new EN on Key Performance Indicators for resource efficiency of cooling systems will be developed to meet the needs of operators, customers and EU policies for resource efficient data centres.

CLC/TC 215 will also continue its maintenance of ICT cabling installation standards (series EN 50174).

CLC/TC 205 Home and Building Electronic Systems (HBES) - 'Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS)' have a particular role in Smart Grids, as they focus on the increasingly important 'demand side', i.e. the energy consumer / prosumer, instead of the more common issue of energy production and distribution.

CLC/TC 205 has defined the base for the Smart Grid premises side through EN 50491-12-1 'General requirements for Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Smart grid - Application specification - Interface and framework for customer - Part 12-1: Interface between the CEM and Home/Building Resource manager - General Requirements and Architecture' in 2018.

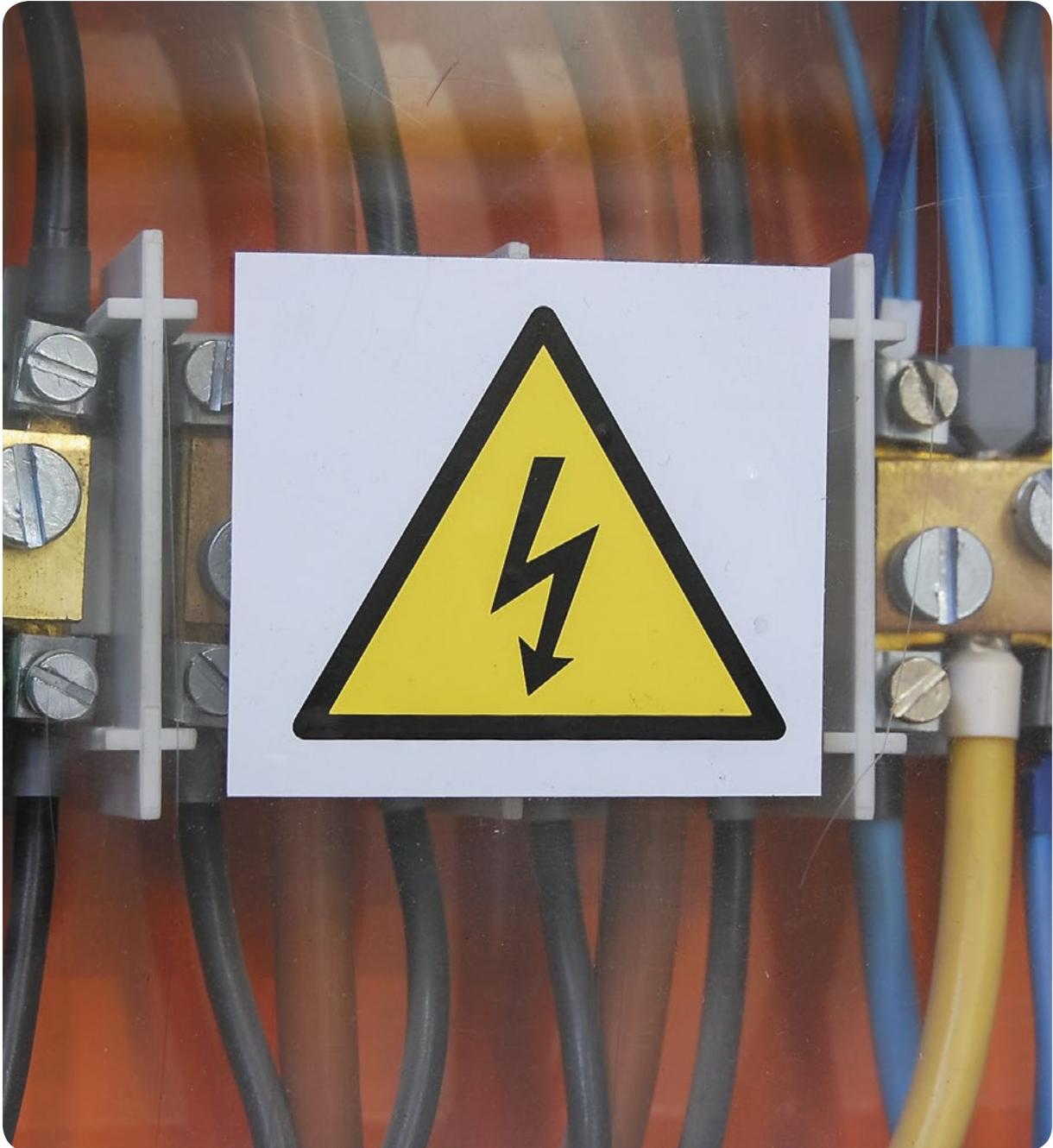
In 2019, the Technical Committee will continue the work on this standardization series with, among others, a standard on 'Data model and messaging', completing the EN 50491-series.

CLC/TC 209 Cable networks for television signals, sound signals and interactive services

- CLC/TC 209 aims to develop harmonised standards, and other European standards and deliverables relating to cable networks. These include equipment and associated methods of measurement for headend reception, processing and distribution of television and sound signals and for processing, interfacing and transmitting all kinds of data signals for interactive services using all applicable transmission media. These signals are typically transmitted in networks by frequency-multiplexing techniques. Work ranges from the antennas/headend up to the terminal input of the customer premises equipment. CLC/TC 209 considers coexistence with users of the RF spectrum in wired and wireless transmission systems.

In 2019, CLC/TC TC 209 will:

- revise EN 50083-2:2012 'Cable networks for television signals, sound signals and interactive services - Part 2: Electromagnetic compatibility for equipment', in order to align it with current technical requirements.



- finalise work on EN 50083-2-4 on LTE (4G) interference mitigation filters in the 700 and 800 MHz frequency bands, which are needed to reduce RF interference from LTE Base Stations and LTE User Equipment to receiving equipment and cable distribution systems of broadcast DVB-T and DVB-T2 signals in the VHF and UHF bands.

Both European Standards are needed by industry to maintain the signal quality of multimedia signal distribution under changed technical conditions introduced by the transition from analogue to fully digital signal transmission and the release of the 700 and 800 MHz frequency bands for mobile communication services.



After having received the necessary input from the National members, CLC/TC 209 envisages to start maintenance of EN 50083-8 'Cable networks for television signals, sound signals and interactive services - Part 8: Electromagnetic compatibility for networks'.

CLC/TC 121A - CENELEC TC121A (Low-voltage switchgear and control gear) will continue in 2019 to publish European standards developed at IEC level through parallel work with CENELEC. The 'core' is the series of IEC 60947-x-y, on switchgear and control gear mostly used worldwide. At CENELEC level, almost all of these publications are subjected to the following mandates and directives, for which industry needs a quick referencing in the Official Journal of the EU:

- M/511 – 2014/35/EU - Low Voltage Directive
- M/552 – 2014/30/EU - Electromagnetic compatibility
- 2006/42/EC – Machinery

In addition, TC121A has started a review and maintenance process for some old European Standards (e.g. current projects prEN 50041:2018, prEN 50047:2018).

TC121A is considering the impact of RED (M/536 – 2014/53/EU - Radio Equipment Directive) on some selected publications, and will very likely initiate in 2019 a European Standard project for RED amendment A11 for industrial proximity sensors. This will be a milestone responding to new market needs, as radio communication will be more and more applied in industrial products.



Energy and utilities



The transition to a low carbon economy has started. The Energy Union strategy is in place, with a 'Clean Energy Package' that sets an energy efficiency target of 30% and of at least 27% of renewable energy consumed in the EU in 2030.

Helping businesses and consumers make a better and more rational use of energy can lead to important benefits in terms of cost savings and efficiency. The further modernization of the European economy and the development of more secure, affordable and sustainable energy systems for all EU citizens call for the renewal of infrastructures and the emergence of new technologies.

One of the great values of European standardization is to prevent and eliminate

technical barriers to trade, fostering innovation-friendly legislation. European standards not only play a critical role in supporting the creation of a Single Market for energy, as they enable the reduction of energy costs and the further deployment of new technologies, but they also facilitate the energy transition. European standards provide a basis for the integration of technologies into complex systems, and facilitate interoperability and data exchange.

CEN and CENELEC, through the work of over 65 Technical Committees, collaborate with industry partners, the European Commission and other stakeholders to develop and adopt European Standards that support the successful implementation of European legislation.



77 Technical bodies responsible

CEN/TC 19	Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin.
CEN/TC 107	Prefabricated district heating and district cooling pipe system
CEN/TC 164	Water supply
CEN/TC 183	Waste management
CEN/TC 230	Water analysis
CEN/TC 234	Gas infrastructure
CEN/TC 235	Gas pressure regulators and associated safety devices for use in gas transmission and distribution
CEN/TC 264	Air quality
CEN/TC 282	Installation and equipment for LNG
CEN/TC 292	Characterization of waste
CEN/TC 308	Characterization and management of sludge
CEN/TC 312	Thermal solar systems and components
CEN/TC 335	Solid biofuels
CEN/TC 343	Solid Recovered Fuels
CEN/TC 345	Characterization of soils
CEN/TC 383	Sustainably produced biomass for energy applications
CEN/TC 408	Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid
CEN/TC 411	Bio-based products
CEN/TC 430	Nuclear energy, nuclear technologies, and radiological protection
CEN/TC 441	Fuel labelling
CEN/TC 444	Test methods for environmental characterization of solid matrices
CEN/TC 451	Water wells and borehole heat exchangers
CEN/TC 454	Algae and algae products
CEN/SS F23	Energy
CEN/SS N02	Solid fuels
CEN/SS N21	Gaseous fuels and combustible gas
CEN/SS S08	Air quality
CEN/SS S12	Gas analysis
CEN/SS S26	Environmental management
CEN/SS S27	Waste - Characterization, treatment and streams
CEN/WS 064 Phase 1	Design and Construction Code for mechanical equipments of innovative nuclear installations (European Sustainable Nuclear Industrial Initiative)
CEN/WS 064 Phase 2	Design and Construction Codes for Gen II to IV nuclear facilities (pilot case for process for evolution of AFCEN codes)
CEN/WS 066	Clean harbours - Best practices
CEN/WS 073	Eco-efficient Substations
CEN/WS 079	Sustainable Integrated Water Use & Treatment in Process Industries "SustainWATER"
CEN/WS 082	AquaVir
CEN/TC 165	Waste water engineering
CEN/CLC/JTC 2	Power Engineering



CEN/CLC/JTC 6	Hydrogen in energy systems
CEN/CLC/JTC 10	Energy-related products - Material Efficiency Aspects for Ecodesign
CEN/CLC/JTC 14	Energy management, energy audits, energy savings
CEN/CLC/JTC 15	Energy measurement plan for organizations
CEN/CLC/WS EINSTEIN	Good Practice Thermal Energy Audits (GPTEA)
CEN/CLC/WS REEMAIN	CEN/CENELEC Workshop on REEMAIN Methodology for Resource and Energy Efficiency Manufacturing
CEN/CLC/ETSI/SEG-CG	CEN-CENELEC-ETSI Coordination Group on Smart Energy Grids
CEN/CLC/ETSI/SMCG	CEN-CENELEC-ETSI Coordination Group on Smart Meters
CLC/TC 8X	System aspects of electrical energy supply
CLC/TC 11	Overhead electrical lines exceeding 1 kV a.c. (1,5 kV d.c.)
CLC/TC 13	Electrical energy measurement and control
CLC/TC 14	Power transformers
CLC/TC 17AC	High-voltage switchgear and control gear
CLC/TC 36A	Insulated bushings
CLC/TC 7X	Overhead electrical conductors
CLC/TC 45AX	Instrumentation, control and electrical power systems of nuclear facilities
CLC/TC 45B	Radiation protection instrumentation
CLC/TC 82	Solar photovoltaic energy systems
CLC/TC 88	Wind turbines
CLC/TC 99X	Power installations exceeding 1 kV a.c. (1,5 kV d.c.)
CLC/TC 111X	Environment
CLC/SR 118	Smart grid user interface
CLC/SR 122	UHV AC transmission systems
CLC/SR 115	High Voltage Direct Current (HVDC) Transmission for DC voltages above 100kV (Provisional)
CLC/SR 28	Insulation co-ordination
CLC/SR 32	Fuses
CLC/SR 32A	High-voltage fuses
CLC/SR 36	Insulators
CLC/SR 37	Surge arresters
CLC/SR 37B	Components for low-voltage surge protection
CLC/SR 42	High-voltage and high-current test techniques
CLC/SR 73	Short-circuit currents
CLC/SR 90	Superconductivity
CLC/SR 105	Fuel cell technologies
CLC/SR 114	Marine energy - Wave and tidal energy converters
CLC/SR 117	Solar thermal electric plants
CLC/SR 4	Hydraulic turbines
CLC/SR 5	Steam turbines
CLC/SR 45	Nuclear instrumentation

CEN & CENELEC portfolio of deliverables: 1697 ENs + 201 other deliverables

Work items currently in the Work Programmes: 373 ENs + 25 other deliverables

Standardization requests from EC/EFTA

M/536 – Radio Equipment Directive



Standardization requests from EC/EFTA

M/400 – Gas quality
M/458 – Household washing machines
M/459 – Household refrigerating appliances
M/481 – Household dishwashers
M/485 – Fluorescent lamps, high-intensity discharge lamps, and ballasts and luminaires able to operate such lamps
M/495 – Ecodesign
M/498 – Pumps
M/500 – Fans
M/519 – Light Emitting Diodes (LEDs)
M/534 – Water heaters
M/535 – Space heaters
M/537 – Ventilation units
M/539 – Non-household washing machines, dryers and dishwashers
M/540 – Vacuum cleaners
M/543 – Material efficiency aspects
M/550 – Local space heaters
M/551 – Solid fuel boilers
M/559 – Welding equipment
M/XXX (anticipated) – Ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coils
M/XXX (anticipated) – Hydrogen

Relevant elements of EU Work Programme 2019

A Resilient Energy Union with a Forward Looking Climate Change Policy
2.2. Actions in support of the Energy union and climate
2.4. Action in support of a deeper and fairer internal market with a strengthened industrial base

Further information

<https://www.cen.eu/work/areas/energy/Pages/default.aspx>

<https://www.cencenelec.eu/standards/Sectors/SustainableEnergy/Pages/default.aspx>



ENERGY MANAGEMENT & ENERGY EFFICIENCY

The CEN-CENELEC Sector Forum on Energy Management (SFEM) acts as an advisory and coordination body for policy and strategic matters in relation to the standardization of energy management and efficiency.

The Sector Forum adapts its activity to the latest scientific and political trends. It gathers all stakeholders, such as business, policy makers and consumers with the aim to pave the way from innovation to market and to anticipate needs for further standardization developments.

The forum puts big emphasis on identifying the standardization needs for the energy transition and the financing tools for the energy efficiency.

In 2019, SFEM's Working Group (WG) 'Financing tools' will focus on linking energy efficiency standards and sustainable financing needs, while the Working Group (WG) 'Behaviour change' will work more closely with the CEN/BTWG 219 'Strategic Advisory Body on Environment' (SABE) and define the scope of the work jointly, by keeping the focus on measuring the benefits of the actions leading to behaviour change.

The SFEM WG, dedicated to 'Energy storage' – including electricity, gas and heating & cooling-related Task Forces - will finalise a mapping exercise of standardization needs regarding energy storage. Since the topic is of high interest for CEN and CENELEC stakeholders and for the European Commission, follow-up actions will be implemented in 2019.

The SFEM Ad-hoc-group on the Clean Energy Package that has been given the role to investigate how standardization can contribute to the energy transition will pursue its activities in 2019 and identify proper follow-up actions for further implementation.





ECODESIGN

In the field of Ecodesign (2009/125/EC) and Energy Labelling (2010/30/EU), CEN and CENELEC produce European Standards that provide dedicated methods for measuring the energy performance of various energy-related products against the compulsory values and thresholds laid down in Ecodesign Regulations adopted by the European Commission.

The CEN-CENELEC Ecodesign Coordination Group (ECO-CG) coordinates and advises on standardization activities in the fields of Ecodesign and Energy Labelling. The group serves as a focal point concerning standardization issues relating to the Ecodesign Standardization Requests delivered under Directive 2009/125/EC on Ecodesign of energy-related products and Directive 2010/30/EU on Energy labelling of energy-related products and their future versions.

The CEN-CENELEC Joint Technical Committee 10 (CEN-CLC JTC 10) 'Energy-related products - Material Efficiency Aspects for Ecodesign' will continue its work in response to Standardization Request M/543 on material efficiency aspects of energy-related products. The aim in this area is to produce 8 horizontal standards and two Technical Reports giving generic principles for addressing the material efficiency of products, such as the extension of product lifetime, the ability to re-use components or recycle materials from products at end-of-life and the re-use of components and/or recycled materials.

It is expected to have the first two CEN-CLC JTC 10 standards published in the first quarter of 2019:

- EN 45558 'General method to declare the use of critical raw materials in energy related products'
- EN 45559 'Methods for providing information relating to material efficiency aspects of energy related products'.

OTHER SOURCES OF ENERGY SUPPLIES AND DISTRIBUTION

Hydrogen is a significant element for the energy transition as it is an energy carrier and/or storage medium with great potential for clean and transport applications. Hydrogen is transported using gas infrastructure or through infrastructures blended with natural gas. The uptake of hydrogen as a more common source of energy in Europe cannot be done without proper safety standards.

The CEN-CENELEC Joint Technical Committee 6 'Hydrogen in energy systems' is dealing with devices and connections for the production, storage, transport and distribution, measurement and use of hydrogen from renewable energy sources and other sources.

In 2019, the Committee will pursue its activities related to terms and definitions, guarantee of origin and hydrogen safety in confined environments.

Lastly, progress on the upcoming draft Standardization Request for the development of standards covering hydrogen (technologies and energy carriers) will affect the work programme of CEN-CLC/TC 6 in 2019.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Gas distribution and related services -

Standardization in this field plays an important role in the context of the liberalisation and globalisation of markets where both gas suppliers and manufacturers are currently facing a new economic reality, characterised by increasing competition and the need for cost effectiveness under which efficiency, quality and cost reduction are key elements.

Gas quality: The composition of natural gas (and thus its quality) varies from one European country to another. Gas quality standards are important for the safe and secure delivery and use of gas all around Europe. The CEN Sector Forum Gas Infrastructure and the Sector Forum Gas Utilization have therefore established a Joint Working Group to investigate the quality parameters of H-gas in 2017.

In 2019, the group will continue gathering evidence as a basis for making recommendations to CEN/TC 234 concerning the revision of the European Standard on the quality of H-gas.

Gas classification: In 2019, CEN/TC 238 'Test gases, test pressures, appliance categories and gas appliance types' will pursue its work on prEN 1749 'Classification of gas appliances according to the method of supplying combustion air and of evacuation of the combustion products'. The project is intended to become a European Standard giving guidance on the harmonization of products standards, for the preparation of installation standards and for the common understanding of the types of gas appliances around Europe.

Gas infrastructure: In 2019, CEN/TC 234 'Gas infrastructure' should finalise the revision of the 15001 series dealing with 'Gas installation pipework with an operating pressure greater than 0.5 bar for industrial installations and greater than 5 bar for industrial and non-industrial installations'.

Equipment for oil and gas: In 2019, CEN/TC 12 'Materials, equipment and offshore structures

for petroleum, petrochemical and natural gas industries' will continue, in cooperation with ISO/TC 67, to maintain its standards portfolio. The main objective is to further improve safety, also in response to industry events (i.e. license to operate). Expected publications in 2019 include the revised editions of EN ISO 10418 'Offshore production installations - Process safety systems' and EN ISO 23251 'Pressure-relieving and depressuring systems'.

Another area of action is addressing climate change and adaptation. This is taken into account in the design and construction of offshore structures with a lifetime of several decades, which should withstand more extreme weather conditions (e.g. higher waves and wind speeds). In this context, in 2019, CEN/TC 12 and ISO/TC 67 will finalise a number of revised editions within the EN ISO 19900 series on offshore structures, including among others EN ISO 19900 on General requirements, EN ISO 19902 on Fixed steel offshore structures and EN-ISO 19906 on Arctic offshore structures.

Electric Generation - Wind Energy: Recent years have seen a very strong uptake of renewable energy sources in Europe, with wind energy being one of the most used sources. In this field, CLC/TC 88 'Wind turbines' will continue developing standards to demonstrate compliance with European Directives and adopting standards of IEC/TC 88 'Wind energy generation systems' under the framework of the Frankfurt agreement.

In 2019, the Committee will also continue working on the development of several parts of EN IEC 61400 'Wind energy generation systems' series.

Solar Energy: Solar photovoltaic energy systems convert solar energy into electrical energy. CLC/TC 82 'Solar photovoltaic energy systems' is involved in all topics of solar photovoltaic energy systems, from the conversion of light to the interfaces to the public grid or other consumers.

Standardization in this field is necessary to ensure a high level of product quality, product safety and the consideration of environmental



aspects. The majority of the CLC/TC 82 standards are standards developed by IEC and adopted at European level.

In 2019, EN 62788-1-7 'Measurement procedures for materials used in photovoltaic modules - Part 1-7: Test procedure for the optical durability of transparent polymeric PV packaging materials' should be published.

Nuclear Energy - Nuclear energy generates around a third of the electricity consumed in the European Union. In the coming years, nuclear power could potentially play an important role in reducing CO₂ emissions while ensuring reliable and affordable energy supplies.

The core principle and responsibility of the nuclear industry is to guarantee its safety. For this reason, CEN and CENELEC in close collaboration with the international standardization organizations, ISO and IEC, are working on the development and publication of standards that ensure the safety, environmental and technical requirements of the European nuclear energy industry.

In 2019, CLC/TC 45AX 'Instrumentation, control and electrical power systems of nuclear facilities' will start developing activities related to nuclear security by adopting as a European Standard the upcoming amendment to IEC 62859:2016 'Nuclear power plants. Instrumentation and control systems. Requirements for coordinating safety and cybersecurity'.

CEN/TC 430 'Nuclear energy, nuclear technologies, and radiological protection' will adopt European Standard ISO 16639:2017 on 'Radiological protection - Monitoring and internal dosimetry for staff members exposed to medical radionuclides as unsealed sources'.

Ecodesign of household and similar electrical appliances - LC/TC 59X 'Performance of household and similar electrical appliances' prepares European Standards on methods of measurement of characteristics that are of importance to determine the performance of electrical appliances for household use or of electrical appliances for commercial use and that are of interest to the user.

In 2019 the TC will finalise the Round Robin Test (interlaboratory test performed independently several times, defining the uncertainties of the procedures) of the already published standards EN 50640:2018 and EN 50594:2018 for measuring the performance of clothes washing machines and tumble dryers for commercial use.

In the field of vacuum cleaners, the Committee is following up the developments in its international counterpart, IEC/TC 59 'Performance of household and similar electrical appliances', of standards that are relevant for European legislation on Ecodesign and Energy Labelling. In addition, new projects related to upcoming European Regulations on washing machines, washer-dryers, refrigerators and dishwashers are also expected.

CLC/TC 59X will also develop additional standards to EN 50631-1:2017 'Household appliances network and grid connectivity - Part 1: General Requirements, Generic Data Modelling and Neutral Messages' that defines data models for interoperable connected household appliances. This was the first standard of smart household appliances developed by CLC/TC 59X.

Moreover, the Ad-hoc Group on consumer-relevant products will continue discussing the ways of assessing standards to reflect 'real-life conditions', while also being suitable for producing measurement standards with the required repeatability and reproducibility necessary to support Ecodesign and Energy labelling legislation. The Working Group, in close collaboration with CEN-CENELEC Ecodesign Coordination Group – Task Force 2 on Tolerance and Uncertainties, will address anti-circumvention in the development of standards under Ecodesign and Energy Labelling regulations.

Electricity distribution and equipment - In 2019, CLC/TC 8X 'System aspects of electrical energy supply' will finalise amendments to EN 50160 'Voltage characteristics of electricity supplied by public electricity networks'. These amendments intend to adapt the standard that describes and



specifies the main characteristics of the voltage at a network user's supply terminals in public low, medium and high voltage AC electricity networks under normal operating conditions to recent developments in the grids and in other standardization work.

In addition, CLC/TC 8X will start working on requirements for power frequency measurement in distributed energy resources to be connected to electrical energy supply systems.

Water utilities - CEN/TC 165 'Waste water engineering' develops standards for performance and installation in the field of wastewater engineering for systems and components. In 2019 the TC will finalise the revision of several parts

in the EN 12566 series on 'Small wastewater treatment systems for up to 50 PT' and will start the revision of 2 parts in the EN 14654 series on management and control of activities of drain and sewer systems outside buildings.

CEN/TC 164 is in charge of elaborating standards for the installation and performance requirements of systems, constructions of components used for the water supply. In 2019 the Committee will finalise the revision of EN 12873-3 on influence of materials due to migration on drinking water and will finalise the development of EN 17215 on analytical methods for iron-based coagulants used for the treatment of water intended for human consumption.





Fuels and biofuels - The development of European Standards for sampling and testing methods for fuels is important for ensuring that consumers and businesses are provided with safe and reliable fuels.

CEN/TC 19 'Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin' is the most active TC in this sector. In 2019, it will finalise the

development of EN 17178 on the determination of the total volatile sulfur content in liquefied petroleum gases by ultraviolet fluorescence spectroscopy and the EN 17181 on a test method for determination of aerobic biological degradation of fully formulated lubricants in an aqueous solution based on CO₂-production. The revision of a series of EN ISO standards related to petroleum and related products and automotive fuels will also be ongoing in 2019.



Food and agriculture



European standardization in the field of food and feed contributes to improving levels of food safety and protecting the health of consumers. CEN provides validated test methods that are used by the food industry and by the competent public authorities for official control purposes and by food and feed producing companies for internal checks.

Many of the standards adopted by CEN are developed in response to formal requests from the European Commission, and these standards play a valuable role in supporting the implementation of relevant European legislation.

The majority of European Standards in this field (around 70%) are identical to international

standards as a result of the close and continuous cooperation between CEN and ISO. Having test methods that are recognised internationally is especially important for food companies that want to sell their products in many different markets.

An emerging action in the field of food and feed in 2019 will be taken in the area of plant biostimulants, in support of the forthcoming EU regulation. This draft regulation is based on the New Legislative Framework, which means that the legislation will rely on harmonized standards to demonstrate conformity with the essential requirements of the regulation related to the safety and quality of the products.



14 Technical bodies responsible

CEN/TC 172	Pulp, paper and board
CEN/TC 194	Utensils in contact with food
CEN/TC 275	Food analysis - Horizontal methods
CEN/TC 302	Milk and milk products - Methods of sampling and analysis
CEN/TC 307	Oilseeds, vegetable and animal fats and oils and their by-products - Methods of sampling and analysis
CEN/TC 327	Animal feeding stuffs - Methods of sampling and analysis
CEN/TC 338	Cereal and cereal products
CEN/TC 415	Sustainable and Traceable Cocoa
CEN/TC 453	Dietary supplements and sports food free of doping substances
CEN/TC 455	Plant Biostimulants
CEN/SS C01	Food Products
CEN/WS 076	Batch-based Calculation of Sustainability Impact for Captured White Fish products Acronym: WhiteFish BCSI
CEN/WS 083	Mechanically Separated Poultry Meat (MSM)
CEN/WS 086	Authenticity in the feed and food chain - General principles and basic requirements

CEN & CENELEC portfolio of deliverables: 564 ENs + 75 other deliverables

Work items currently in the Work Programmes: 111 ENs + 10 other deliverables

Standardization requests from EC/EFTA

M/520 – Test methods for mycotoxins in food
M/521, M/522, M/523 – Test methods in the field of animal nutrition
M/XXX (anticipated) – Fertilizers (Plant biostimulants)

Relevant elements of EU Work Programme 2019

1. EU Action Plan for a Circular Economy, COM (2015) 614.

Further information

<https://www.cen.eu/work/areas/food/Pages/default.aspx>



TEST METHODS

In 2019, CEN/TC 275 will continue its work on the standardization of validated methods for a variety of species and substances.

One of the most important projects over the last year should be concluded soon. It relates to QuEChERS, a modular, very horizontal, broadly applicable and quick method for the determination of a high number of pesticides in many different foodstuffs of plant origin. The currently revised CEN Technical Specification (CEN/TS 17061) will support the European Standard EN 15662 in this area and will help for calibrating many other standards for the determination of residues and contaminants.

Moreover, the Technical Committee will publish several European Standards providing methods for the analysis of mycotoxins in food that have a potential deleterious effect on human health. Work on this area supports the European Commission's Mandate M/520 on 'Methods of analysis for mycotoxins in food'.

CEN/TC 275 will continue its collaboration with ISO on a high number of projects, which include for 2019 the publication of several parts of the EN ISO 16140 series on microbiological methods for the detection and enumeration of microbial contaminants, and the revision of the EN ISO 15216-2 for determination of hepatitis A virus and norovirus in food.

In 2019, a CEN Workshop Agreement is also expected to provide the mapping of the immediate standardization needs in the European paper and board value chain, and the identification of gaps in the existing standards.





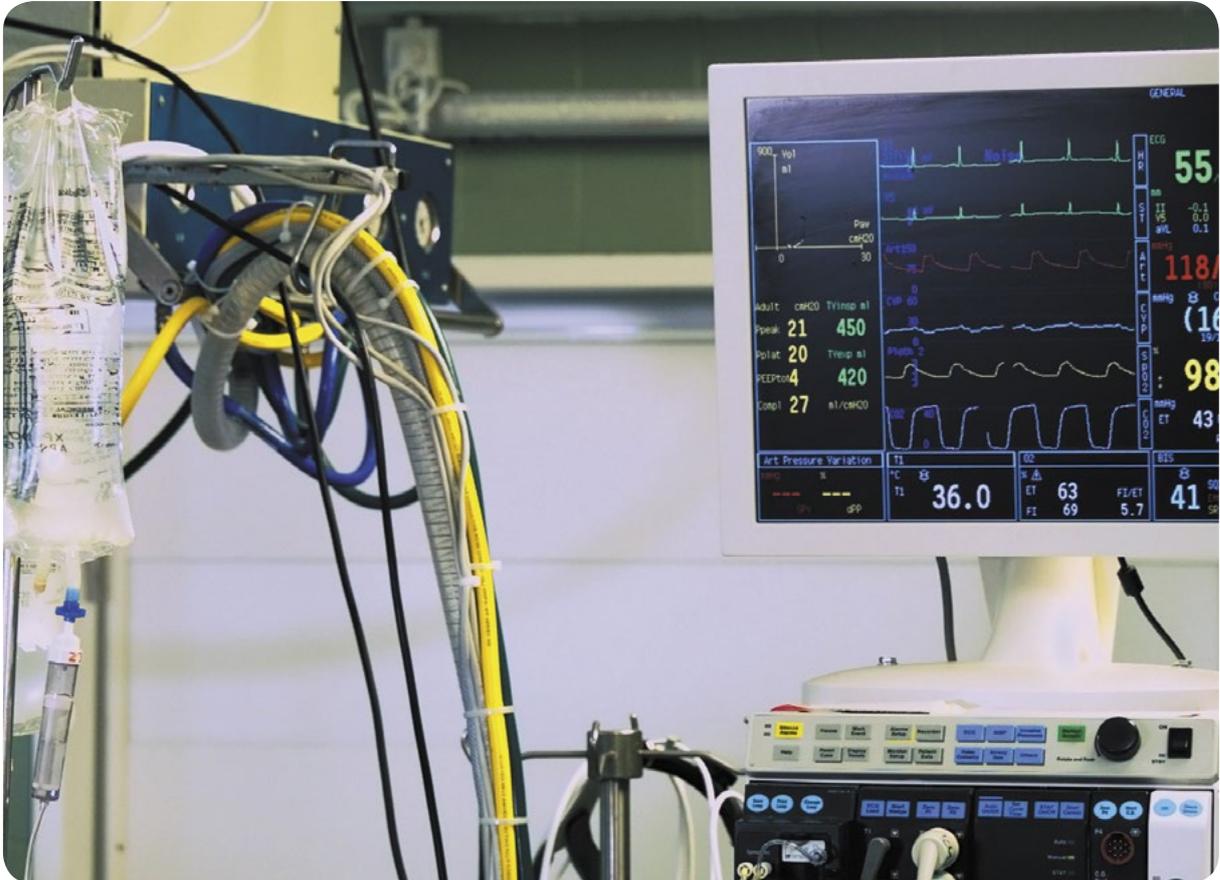
OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Doping prevention in sport - In 2019, the recently established CEN/TC 453 'Dietary supplements and sports food free of doping substances' will start working on a European Standard that sets out the requirements relative to the development and manufacture of food supplements and sports food. This document will specify a framework of good practices with the objective of ensuring absence of prohibited substances in processed products placed on the market.

Fertilizers - CEN/TC 455 'Plant biostimulants' should continue its collaboration and preparatory work with CEN/TC 223 'Soil improvers and growing media', CEN/TC 260 'Fertilizers and liming materials', CEN/TC 444 'Test methods for environmental characterization of solid matrices' and ISO/TC 134 'Fertilizers and soil conditioners', regarding the forthcoming standardization request on fertilizing products in support to the new EU regulation.



Healthcare and health & safety



CEN and CENELEC develop European Standards setting quality, performance and safety requirements for a wide variety of medical devices and associated products ranging from contact lenses to antiseptics and road ambulances, also including health informatics. Standardization plays a fundamental role in this sector, as it ensures a high level of safety for patients as well as users of medical devices, and it guarantees that a device used in one country can also be used in any other country with the same results.

The CEN and CENELEC Advisory Board for Healthcare Standards (ABHS) advises CEN and CENELEC on possible new standardization areas in the medical field. In 2019, its focus will be on guiding relevant Technical Committees (TCs) in the transition to the new landscape under the Medical Devices Regulation (2017/745/EU) and the In Vitro Medical Devices Regulation (2017/746/EU) and on contributing to the standardization requests.

Moreover, the standardization of individual protective products, such as helmets, ropes used to prevent falls from heights or footwear resistant to chemicals, is handled by TCs participating to the CEN-CENELEC Sector Forum on Personal Protective Equipment. One of the Sector Forum's priorities for 2019 is to pursue the alignment of existing standards with the new PPE Regulation 2016/425/EU. This would ensure a smooth citation of those standards in the Official Journal of the European Union, allowing manufacturers using these standards to benefit from a presumption of conformity to the essential requirements of the new PPE Regulation (2016/425/EU).

CEN's Strategic Advisory Board for Occupational Health and Safety (SAB OH&S) coordinates European standardization activities related to various kinds of hazards in the workplace and health-related issues such as noise, vibration, ergonomics and exposure to hazardous substances. In 2019, SAB OH&S will concentrate



on better identification of standardization projects that concern the prevention of occupational risks, health and safety protection, and the elimination of risk and accident factors by developing an early information system, involving experts as early as possible.

Standardization in the field of explosion prevention and protection is carried out by CEN/TC 305 'Potentially explosive atmospheres – Explosion prevention and protection' and CLC/TC 31 'Electrical apparatus for potentially explosive atmospheres'. In a majority of cases, the standards produced are harmonized. European Standards,

which provide technical solutions to enable manufacturers to demonstrate their compliance with the Essential Safety Requirements of the ATEX Directive (2014/34/EU).

Many standards in this sector are produced in response to standardization requests from the European Commission. However, CEN and CENELEC also develop standards initiated by the industry, which contain requirements based on the latest technology. These voluntary standards provide manufacturers with confidence that their products meet the highest safety and quality standards in Europe.

39 Technical bodies responsible

CEN/TC 55	Dentistry
CLC/TC 62	Electrical equipment in medical practice
CEN/TC 79	Respiratory protective devices
CEN/TC 85	Eye protective equipment
CEN/TC 102	Sterilizers and associated equipment for processing of medical devices
CEN/TC 122	Ergonomics
CEN/TC 137	Assessment of workplace exposure to chemical and biological agents
CEN/TC 140	In vitro diagnostic medical devices
CEN/TC 158	Head protection
CEN/TC 159	Hearing protectors
CEN/TC 160	Protection against falls from height including working belts
CEN/TC 161	Foot and leg protectors
CEN/TC 162	Protective clothing including hand and arm protection and lifejackets
CEN/TC 170	Ophthalmic optics
CEN/TC 204	Sterilization of medical devices
CEN/TC 205	Non-active medical devices
CEN/TC 206	Biological and clinical evaluation of medical devices
CEN/TC 215	Respiratory and anaesthetic equipment
CEN/TC 216	Chemical disinfectants and antiseptics
CEN/TC 231	Mechanical vibration and shock
CEN/TC 239	Rescue systems
CEN/TC 251	Health informatics
CEN/TC 285	Non-active surgical implants
CEN/TC 293	Assistive products for persons with disability
CEN/TC 305	Potentially explosive atmospheres - Explosion prevention and protection
CEN/TC 362	Healthcare services - Quality management systems
CEN/TC 392	Cosmetics
CEN/TC 403	Aesthetic surgery and aesthetic non-surgical medical services
CEN/TC 449	Quality of care for older people
CEN/TC 450	Patient involvement in person-centred care
CEN/SS S02	Transfusion equipment



CEN/SS S03	Syringes
CEN/SS S99	Health, environment and medical equipment - Undetermined
CEN/WS 068	Quality criteria for health checks
CEN/CLC/JTC 3	Quality management and corresponding general aspects for medical devices
CEN/CLC/JTC 16	CEN/CENELEC Joint Technical Committee on Active Implantable Medical Devices
CLC/TC 31	Electrical apparatus for potentially explosive atmospheres
CLC/TC 78	Equipment and tools for live working
CLC/SR 31G	Intrinsically-safe apparatus

CEN & CENELEC portfolio of deliverables: 1511 ENs + 112 other deliverables

Work items currently in the Work Programmes: 435 ENs + 19 other deliverables

Standardization requests from EC/EFTA

- M/023 and M/295 – Medical devices and active implantable medical devices
- M/252 – In vitro diagnostic medical devices
- M/375 – Cosmetic products (manufacturing)
- M/426 – Cosmetic products (microbiological analysis)
- M/467 – Medical beds
- M/BC/CEN/92/46 – Explosive atmospheres (ATEX)
- M/553 – Garments with integrated smart textiles and non-textiles elements for protection against heat and flame
- M/XXX (anticipated) – Explosive atmospheres (ATEX)
- M/XXX (anticipated) - Personal Protective Equipment (PPE)
- M/XXX (anticipated) – Medical Devices
- M/XXX (anticipated) – In vitro diagnostic medical devices

Relevant elements of EU Work Programme 2019

- 9. Personal protective equipment Regulation (EU) 2016/425
- 15. The introduction of measures to encourage improvements in the safety and health of workers at work (Directive 89/391/EEC)

Further information

- <https://www.cencenelec.eu/standards/Sectors/healthcare/Pages/default.aspx>
- <https://www.cencenelec.eu/standards/Sectors/healthSafety/Pages/default.aspx>



WELL-BEING APPS

Europe is experiencing a fast growing market of health and wellness apps in terms of output – i.e. the number of available health and wellness apps on the market.

At the same time, concerns about the apps' quality and safety have risen: for example, many health and wellness apps are being published on app stores without clinical evidence supporting the claimed benefits that they will deliver, and they are being developed without any documented risk management.

In the context of the EC ICT Rolling Plan for Standardisation 2017 recognizing the need for the development of a European guidance document that would address the concerns related to the apps' quality and reliability, CEN/TC 251 will start, under a project financed by DG GROW (Internal Market, Industry, Entrepreneurship and SMEs), the development of a Technical Specification (TS) on the topic.

More specifically, CEN/TC 251 will develop a TS providing a set of requirements for health and wellness app developers, and criteria that will help them and European bodies to assess the apps' quality and reliability, so that users can trust their products and services. Users will also be able to opt for verified health and wellness apps in line with the quality criteria detailed in the Technical Specification. Furthermore, it will provide app developers with a consistent way to approach and document what they have done, in order to deliver a reliable app of good quality.

For citizens, having an established and respected European quality framework in use will reduce the risk of failure of an untested low-quality app causing frustration or direct harm.

For the organisations and institutions certifying apps or selecting them for inclusion in a registry, the TS will provide an opportunity to collaborate and develop a single coherent set of criteria, eliminating the cost and time of developing and maintaining separate independent requirements.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

eHealth - CEN/TC 251 'Health informatics' manages the International Patient Summary project, funded by the European Commission. The project supports European players in their contribution to and participation in the creation of an International Patient Summary specification at a global level, and in turning this European knowledge into a European Standard.

In 2019, CEN/TC 251 is expected to publish a European Standard 'The patient summary for unscheduled, cross-border care' (EN17269) as well as a TS providing guidance for European implementation (TS 17288).

In order to respond to specific needs in 2019, CEN/TC 251 will be revising EN 1064 'Health informatics - Standard communication protocol - Computer-assisted electrocardiography' and will participate as partner in two European

Horizon 2020 innovative projects: Trillium II and eHealth Action (eHDSI) activities.

In addition CEN/TC 251 will finalise, together with its international counterpart, ISO/TC 215 'Health informatics, EN-ISO 13606 (5-part) 'Health informatics - Electronic health record communication' and EN ISO 13120 'Health informatics - Syntax to represent the content of healthcare classification systems - Classification Markup Language (ClAML)'. Both Committees will also further work on the current revision of EN ISO 12967 (3-part) 'Health informatics - Healthcare informatics service architecture' and EN ISO 17889 'Health informatics -- Audit trails for electronic health records'.

Lastly, CEN/TC 251 anticipates for 2019, in collaboration with ISO/TC 215 and other involved stakeholders, to discuss the topic and point out the areas where standardization activities can be embedded.





Electrical equipment in medical practice -

In 2019, CLC/TC 62 'Electrical equipment in medical practice ' will pursue its collaboration with IEC/TC 62 'Electrical equipment in medical practice' and ISO/TC 210 'Quality management and corresponding general aspects for medical devices'. The committees will jointly investigate the need for standardization activities on life cycle aspects of medical devices and/or medical equipment. The outcome of this investigation would be to address the issues of medical devices in the 'Green' circular economy including recycling, refurbishment and remanufacturing. The scope of this work is basic safety and essential performance in a life cycle perspective addressing use, maintenance, update, and rework, including the decommissioning of medical devices, with a main focus on availability of and access to quality healthcare.

Non-active medical devices - CEN/TC 205 'Non-active medical devices' will finalise a standard specifying requirements and test methods for

the antimicrobial activity of antimicrobial wound dressings. In addition, CEN/TC 205 will focus on the revision of several of its standards, including those on enteral feeding catheters and enteral giving sets (EN ISO 20695, under CEN lead). Finally, a major revision project is foreseen to start on test methods for primary wound dressings (EN 13726).

Quality management - The main objective of the CEN-CENELEC Joint Technical Committee 3 (CEN-CLC JTC 3) 'Quality management and corresponding general aspects for medical devices' is to contribute to a further global harmonization of standards on medical devices in close co-operation with ISO/TC 210 'Quality management and corresponding general aspects for medical devices'.

In 2019, in cooperation with ISO/TC 210, the Committee should finalise a Technical Report providing manufacturers with information on how to set up a post-market surveillance system



that is coherent with the related requirements of relevant international standards, such as ISO 13485 (Medical devices – Quality management systems – Requirements for regulatory purposes) and ISO 14971 (Medical devices – Application of risk management to medical devices). This informative document will be of great value for manufacturers and, indirectly, other stakeholders. Finally, the committee will continue with the revision of EN 14971 ‘Medical devices – Application of risk management to medical devices’.

In order to respond to specific needs, CEN-CLC JTC 3 will be involved in the assessment of possible new symbols, in the light of the new Medical Devices and In-vitro Diagnostic Medical Devices Regulations (respectively 2017/745/EU and 2017/746/EU), which could lead to the revision of EN-ISO 15223-1:2016 - Symbols to be used with medical device labels, labelling and information to be supplied - Part 1: General requirements.

The committee should also finalise the EN ISO 14971 ‘Medical devices – Application of risk management to medical devices’, which specifies the process for a manufacturer to identify the hazards associated with medical devices, to estimate and evaluate the associated risks, to control these risks, and to monitor the controls’ effectiveness. The committee will also further work on EN ISO 20417 ‘Medical devices – Information to be provided by the manufacturer’.

In-vitro diagnostic medical devices - CEN/TC 140 ‘In vitro diagnostic medical devices’ will continue the development of four TSs related to molecular in vitro diagnostic examinations, particularly the specifications for pre-examination processes for saliva and circulating tumour cells in venous whole blood.

Assistive products for persons with disability - CEN/TC 293 ‘Assistive products for persons with disability’ intends to finalise several important standards in 2019. More specifically, the committee intends to finalise, in cooperation with ISO/TC 173 ‘Assistive products’, standards on the terminology and classification of

Absorbent incontinence aids for urine and/or faeces (EN ISO 22748), but also on test methods for the determination of the absorption before leakage of urine absorbing aids using an adult mannequin (EN ISO 19331).

CEN/TC 193 also anticipate to work, in 2019, on the revision of standards on requirements and test methods of manual wheelchairs (EN 12183) and of electrically powered wheelchairs, scooters and their chargers (EN 12184).

Occupational clothing, special workwear and accessories - Protective clothing: CEN/TC 162 ‘Protective clothing including hand and arm protection and lifejackets’ covers a wide range of products. The committee will focus in 2019 on the alignment of their standards to the ‘new’ Protective Equipment Regulation (PPE - 2016/425/EU), in order to ensure that all relevant CEN/TC 162 standards take the relevant Essential Requirements of the new PPE regulation into consideration. This would allow the citation of these standards in the Official Journal of the European Union, ensuring manufacturers using these standards of a presumption of conformity with the PPE regulation. In particular, CEN/TC 162 will further work on the EN 17092 series, which concerns protective garments for motorcycle riders.

Foot and leg protectors: CEN/TC 161 ‘Foot and leg protectors’ will continue the major revision of several standards, improving test methods and better adapting requirements to praxis. One of the major topics concerned by the revision is non-metallic perforation-resistant inserts (e.g. revision of EN ISO 22568-3 on ‘Foot and leg protectors - Requirements and test methods for footwear components assessment’ is expected to be finalised in 2019). The test method for this component will improve the safety of the user. In addition, further improvements will be carried out on slip resistance (EN ISO 13287) and chemical resistance (EN ISO 13832 series) should also be finalised in 2019.

Garments for protection against heat and flame: In 2019, the CEN-CENELEC Sector Forum on personal protective equipment will further coordinate the work under



Standardization Request M/553 on garments with integrated smart textiles and non-textile elements for protection against heat and flame.

The work is carried out through the collaboration between different technical bodies: CEN/TC 162 'Protective clothing including hand and arm protection and lifejackets', CEN/TC 248 'Textiles and textile products', CEN/TC 122 'Ergonomics' and CLC/SR 124 'Wearable Electronic Devices and Technologies'. The aim of this collaboration is to ensure the development of a standard on declaration and measurement of properties and overall performance of such advanced garments.

The standard will deal with terms and definitions, guidance for selection, use, care and maintenance of protective clothing including smart garments against heat and flame and requirements, but also with test methods for garments offering protection against heat and flame with integrated smart textiles and non-textile elements.

Mechanical vibration and shock: In 2019, CEN/TC 231 'Mechanical vibration and shock' will continue developing European Standards in cooperation with its counterparts at the international level (ISO/TC 108 and, for the vibration emission of pneumatic tools and machines, ISO/TC 118). This work includes a series of European Standards on laboratory tests for the evaluation of the vibration of vehicle seats. The series of European Standards on test methods for the evaluation of the vibration emission of hand-held portable power tools will be improved.

For the first time a new amendment of EN ISO 28927-8, the standard for saws, polishing and filing machines with reciprocating action and small saws with oscillating or rotating action, will provide the requirements for oscillating knives (vibrating screen removal tools), a tool

widely used in car maintenance, to address hand-transmitted vibration.

In addition, CEN/TC 231 is revising its Technical Report CEN/TR 15350, which enables employers to use existing information provided by a tool manufacturer in a technical description for a risk analysis of the exposure of workers using this tool, without the need to carry out additional measurements.

CEN/TC 231 is also preparing a Technical Report, giving guidance on databases for human vibration with the aim of providing a common structure and conditions for taking measurements and for the maintenance of these kinds of databases.

Ergonomics - CEN/TC 122 'Ergonomics' should start, in 2019, the revision of the EN 614 series (safety of machinery – Ergonomic design principles). The ergonomic principles given in the series apply to all ranges of human abilities and characteristics to ensure safety, health and well-being and overall system performance. In addition, the CEN/TC 122, who is working in close cooperation with the ISO/TC 159 'Ergonomics', expects to deliver many standards in 2019. Here is a non-exhaustive list:

- EN ISO 27501 'The human-centred organization - Guidance for managers', providing requirements and recommendations for managers associated with various types of organizational activities;
- EN ISO 20685-1 'Ergonomics - 3-D scanning methodologies for internationally compatible anthropometric databases - Part 1: Evaluation protocol for body dimensions extracted from 3-D body scans';
- EN ISO 10551 'Ergonomics of the physical environment - Subjective judgement scales for assessing physical environments'.



Household appliances and HVAC



Household appliances and HVAC (Heating, Ventilation and Air Conditioning) are one of the areas where the use and importance of standards is noticed in everyday life. The standardization work in this field is very broad and covers a wide range of activities. From kitchen toasters to washing machines and central heating

boilers, more than 20 CEN and CENELEC Technical Committees are developing European Standards ensuring a high level of performance and safety for these and many other similar products, bearing in mind the diversity of their users (professionals, youngsters, elderly people, people with disabilities, to name only a few).



24 Technical bodies responsible

CEN/TC 44	Commercial and Professional Refrigerating Appliances and Systems, Performance and Energy Consumption
CEN/TC 46	Fireplaces for liquid fuels
CEN/TC 47	Atomizing oil burners and their components - Function - Safety - Testing
CEN/TC 48	Domestic gas-fired water heaters
CEN/TC 49	Gas cooking appliances
CEN/TC 57	Central heating boilers
CEN/TC 58	Safety and control devices for burners and appliances burning gaseous or liquid fuels
CEN/TC 62	Independent gas-fired space heaters
CEN/TC 106	Large kitchen appliances using gaseous fuels
CEN/TC 109	Central heating boilers using gaseous fuels
CEN/TC 110	Heat exchangers
CEN/TC 113	Heat pumps and air conditioning units
CEN/TC 130	Space heating appliances without integral heat sources
CEN/TC 131	Gas burners using fans
CEN/TC 171	Heat cost allocation
CEN/TC 180	Decentralized gas heating
CEN/TC 181	Appliances and leisure vehicle installations using liquefied petroleum gas and appliances using natural gas for outdoor use
CEN/TC 195	Air filters for general air cleaning
CEN/TC 238	Test gases, test pressures, appliance categories and gas appliance types
CEN/TC 295	Residential solid fuel burning appliances
CEN/TC 299	Gas-fired sorption appliances, indirect fired sorption appliances, gas-fired endothermic engine heat pumps and domestic gas-fired washing and drying appliances.
CLC/TC 59X	Performance of household and similar electrical appliances
CLC/TC 61	Safety of household and similar electrical appliances
CEN/CLC/JTC 17	Fuel cell gas appliances

CEN & CENELEC portfolio of deliverables: 639 ENs + 11 other deliverables

Work items currently in the Work Programmes: 238 ENs + 2 other deliverables

Standardization requests from EC/EFTA

M/BC/CEN/89/6	– Gas appliances
M/XXX (anticipated)	– Gas appliances Regulation
M/511	– Low Voltage Directive
M/536	– Radio Equipment Directive
M/552	– Electromagnetic Compatibility
M/396	– Machinery
M/534	– Water heaters
M/535	– Space heaters
M/550	– Local space heaters
M/551	– Solid fuel boilers

Relevant elements of EU Work Programme 2019

3. Ecodesign with regard to local space heaters Regulation (EU) 1188/2015 and solid fuel local space heaters Regulation (EU) 1185/2015.



4. Ecodesign with regard to air heating products, cooling products, high temperature process chillers and fan coil units
5. Ecodesign with regard to air conditioners Regulation (EU) 206/2012

Further information

<https://www.cenelec.eu/aboutcenelec/whatwedo/technologysectors/householdappliances.html>
<https://www.cen.eu/work/areas/construction/hvac/Pages/default.aspx>

SAFETY OF HOUSEHOLD APPLIANCES (ELECTRICAL)

The standardization work on the safety of household appliances is assigned to CLC/TC 61 that develops, in parallel and close cooperation with its international counterpart IEC/TC 61, standards containing safety requirements for electrical appliances intended primarily for household use, but also for appliances for commercial use, such as those used in professional kitchens.

European Standards on the safety of household and similar electrical appliances (contained in the EN 60335 multi-part series) are continuously adapted in order to fit with the latest technological changes.





OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Safety of household appliances - In 2019, CEN/TC 49 will continue its revision of the series dealing with domestic cooking appliances burning gas (EN 30 series). The ENs specify the construction, the characteristics, the requirements and the test methods for the safety and marking of freestanding and built-in domestic cooking appliances burning combustible gases (e.g. table cookers, griddles, hobs and grills, etc.). These projects are intended to support the Gas Appliances Regulation (2016/426/EU).

In 2019, CEN/TC 109 will pursue its work on the EN 13203 series concerning the assessment of energy consumption of gas-fired domestic appliances producing hot water.

Heating, cooling, ventilation and air conditioning (HVAC) - The HVAC sector includes applications ranging from appliances burning gas or oil and solid fuels through refrigeration, heat pumps and heat exchanger for ventilation. In the same sector, CEN and CENELEC are developing European Standards supporting Ecodesign and Energy Labelling Regulations. In 2019, the relevant CEN and CENELEC Technical Committees will start develop standards under the standardization request on 'Ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coils'.



Mechanical and machinery



The CEN and CENELEC mechanical and machinery sector brings together about 50 technical bodies dealing with different types of machinery for use in agriculture, industrial manufacturing, mining, construction and by consumers (such as lifts and electric tools). The sector further includes 10 technical bodies dealing with laboratory, optical and precision equipment (excluding glasses), 3 technical bodies producing standards on welding and a further 13 that handle the standardization work on tanks and pressure equipment. All these bodies are mainly composed of manufacturers, notified bodies, national health and safety institutes, as well as market surveillance organizations from interested Member States.

A considerable proportion of the documents produced in the sector are harmonized standards giving presumption of conformity with

the EU Directives on machinery (2006/42/EC), lifts (2014/33/EU), pressure equipment (2014/68/EU), simple pressure vessels (2014/29/EU) and measuring instruments (2014/32/EU).

Many CEN and CENELEC standards for machinery, pressure equipment and measuring instruments are identical to international standards: this has a particular relevance, as the markets for these products tend to be wider than national or European markets. Therefore, the sector is a good example of CEN and CENELEC continuing effort in bringing together European requirements with an international approach.

Finally, the CEN-CENELEC Sector Forum on Machinery Safety facilitates the exchange of information between different stakeholders, coordinates between them and identifies standardization needs.



74 Technical bodies responsible

CEN/TC 10	Lifts, escalators and moving walks
CEN/TC 12	Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries
CEN/TC 23	Transportable gas cylinders
CEN/TC 54	Unfired pressure vessels
CEN/TC 69	Industrial valves
CEN/TC 74	Flanges and their joints
CEN/TC 92	Water meters
CEN/TC 98	Lifting platforms
CEN/TC 114	Safety of machinery
CEN/TC 121	Welding and allied processes
CEN/TC 123	Lasers and photonics
CEN/TC 142	Woodworking machines - Safety
CEN/TC 143	Machine tools - Safety
CEN/TC 144	Tractors and machinery for agriculture and forestry
CEN/TC 145	Plastics and rubber machines
CEN/TC 146	Packaging machines - Safety
CEN/TC 147	Cranes - Safety
CEN/TC 148	Continuous handling equipment and systems - Safety
CEN/TC 149	Power-operated warehouse equipment
CEN/TC 150	Industrial Trucks - Safety
CEN/TC 151	Construction equipment and building material machines - Safety
CEN/TC 152	Fairground and amusement park machinery and structures - Safety
CEN/TC 153	Machinery intended for use with foodstuffs and feed
CEN/TC 168	Chains, ropes, webbing, slings and accessories - Safety
CEN/TC 176	Thermal energy meters
CEN/TC 182	Refrigerating systems, safety and environmental requirements
CEN/TC 186	Industrial thermoprocessing - Safety
CEN/TC 188	Conveyor belts
CEN/TC 190	Foundry technology
CEN/TC 196	Mining machinery and equipment - Safety
CEN/TC 197	Pumps
CEN/TC 198	Printing and paper machinery - Safety
CEN/TC 202	Foundry machinery
CEN/TC 210	GRP tanks and vessels
CEN/TC 211	Acoustics
CEN/TC 213	Cartridge operated hand-held tools - Safety
CEN/TC 214	Textile machinery and accessories
CEN/TC 232	Compressors, vacuum pumps and their systems
CEN/TC 236	Non industrial manually operated shut-off valves for gas and particular combinations valves-other products
CEN/TC 237	Gas meters
CEN/TC 240	Thermal spraying and thermally sprayed coatings
CEN/TC 255	Hand-held, non-electric power tools - Safety
CEN/TC 265	Metallic tanks for the storage of liquids
CEN/TC 266	Thermoplastic static tanks
CEN/TC 267	Industrial piping and pipelines



CEN/TC 268	Cryogenic vessels and specific hydrogen technologies applications
CEN/TC 269	Shell and water-tube boilers
CEN/TC 270	Internal combustion engines
CEN/TC 271	Surface treatment equipment - Safety
CEN/TC 286	Liquefied petroleum gas equipment and accessories
CEN/TC 310	Advanced automation technologies and their applications
CEN/TC 313	Centrifuges
CEN/TC 318	Hydrometry
CEN/TC 322	Equipments for making and shaping of metals - Safety requirements
CEN/TC 332	Laboratory equipment
CEN/TC 334	Irrigation techniques
CEN/TC 344	Steel static storage systems
CEN/TC 393	Equipment for storage tanks and for filling stations
CEN/TC 397	Baling presses - Safety requirements
CEN/TC 399	Gas Turbines applications - Safety
CEN/TC 406	Mechanical products - Ecodesign methodology
CEN/TC 423	Means of measuring and/or recording temperature in the cold chain
CEN/TC 429	Food hygiene - Commercial warewashing machines - Hygiene requirements and testing
CEN/TC 433	Entertainment Technology - Machinery, equipment and installations
CEN/TC 438	Additive Manufacturing
CEN/TC 458	Industrial rotating mixing systems
CEN/WS 093	Industrial Symbiosis
CLC/TC 2	Rotating machinery
CLC/TC 26A	Electric arc welding equipment
CLC/TC 26B	Electric resistance welding
CLC/TC 44X	Safety of machinery: electrotechnical aspects
CLC/TC 116	Safety of motor-operated electric tools
CLC/BTTF 128-2	Erection and operation of electrical test equipment
CEN-CLC/JWG NAWI	Non automatic weighing instruments

Deliverables published by CEN & CENELEC: 2130 ENs + 98 other deliverables

Work items currently in the Work Programmes: 553 ENs + 15 other deliverables

Standardization requests from EC/EFTA

- M/071 – Pressure equipment
- M/396 – Machinery
- M/435 – Inspection of pesticide application equipment in use
- M/471 – Machinery for pesticide application
- M/541 - Measuring instruments
- M/549 - Lifts
- M/XXX (Anticipated) – Machinery
- M/XXX (Anticipated) – Machinery used in the offshore oil and gas industry

Relevant elements of EU Work Programme 2019

- 13. Machinery (Directive 2006/42/EC).

Further information

www.cencenelec.eu/go/machinery

www.cen.eu/go/pressure



MACHINERY FOR USE WITH FOODSTUFFS AND FEED

CEN/TC 153 'Machinery intended for use with foodstuffs and feed' develops European Standards that contribute to ensuring high levels of safety and hygiene in the food processing sector. The vast majority of its deliverables are harmonized standards that provide presumption of conformity with the essential requirements of the Machinery Directive (2006/42/EC). The lack of international standards makes the standards prepared by CEN/TC 153 increasingly important globally.

In 2019, CEN/TC 153 will initiate the work on two completely new standards. The standard on craft bakery and pastry depositors will apply to machinery which is intended to be used to deposit pasty food (i.e: cream, dough, batter, etc.) on a tray and involves manual loading and unloading of a tray on the conveyor. The second new standard will address the safety hazards related to meat tenderizers for industrial meat processing factories and butcheries.

In addition, CEN/TC 153 will create a new working group (WG 14) which will deal with machinery and equipment for slaughterhouses, in response to the needs for standardization for these special types of machines strongly expressed by various stakeholders. The resulting deliverables will bring benefits to manufacturers, workers and work safety authorities by ensuring work safety and legal certainty as regards the compliance with the Machinery Directive (2006/42/EC). They will also bring a clear added value to consumers as they address hygiene safety, which has an important effect on safety of food products being processed.

Furthermore, in 2019, CEN/TC 153 will continue revising or amending several standards setting safety and hygiene requirements for food processing machinery, among which EN 1974 on slicing machines; EN 12331 on mincing machines; EN 1673 on rotary rack oven; EN 15467:2014/A1 on fish heading and filleting machines.



ENTERTAINMENT TECHNOLOGY - MACHINERY, EQUIPMENT & INSTALLATIONS

CEN/TC 433 'Entertainment Technology - Machinery, equipment and installations' is a relatively new TC responsible for producing standards for machinery used within the entertainment industry. In 2019, CEN/TC 433 will finalise EN 17206 'Entertainment Technology - Lifting and Load-bearing Equipment for Stages and other Production Areas within the Entertainment Industry - Specifications for general requirements (excluding aluminium and steel trusses and towers', superseding CWA 15902-1:2008.

The deliverable will provide a common safety level for machinery equipment used in Europe's entertainment industry. Simultaneously, a brand new standard will be developed on 'Entertainment Technology - Codes of Practice - Part 5: Lifting and motion Operations in the Event Industry'. It will provide the guidelines for the use of machinery and it will be the first one within a forthcoming dedicated series.

CEN/TC 433 will also start the process to develop a standard for 'Entertainment technology - Specifications for design and manufacture of Aluminium stage decks and frames' that shall provide common safety requirements for planning, selection, production, intended use as well as testing of stage decks which are not part of a building to be used for any kind of events (concerts, theatres etc.).

In 2019, CEN/TC 433 will consider the needs for standardization addressing new technologies used in the entertainment industry and will also strengthen cooperation with technical bodies working in related fields.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Safety of machinery - CEN/TC 114 'Safety of machinery' produces standards and other documents on general principles for the safety of machinery, including terminology and methodology. Nearly 100% of the standards published by CEN/TC 114 are developed in cooperation with ISO/TC 199, and most of them support the Machinery Directive (2006/42/EC).

In 2019, CEN/TC 114, in cooperation with ISO/TC 199, will finalise the work on EN ISO 20607 'Safety of machinery - Instruction handbook - General drafting principles'. The aim of the standard is to explain to manufacturers how to ensure that instruction handbooks comply with the Machinery Directive (2006/42/EC), thus closing an important 'standardization gap' in the field of machinery safety. The standard will provide the requirements on content, structure and

presentation of an instruction handbook taking into account all phases of a machine life cycle.

Laboratory, optical and precision equipment (excl. glasses) - The activities on measuring instruments, laboratory and lasers equipment are partially undertaken to support Directive 2014/32/EU on Measuring Instruments (MID). In this respect, CEN/TC 237 'Gas meters' will work on the revisions of EN 14236 on 'Ultrasonic domestic gas meters' and of EN 12405-1 on 'Conversion devices - Volume conversion'. Moreover, CEN/TC 176 'Thermal energy meters' will start a full revision of the EN 1434 series on requirements and tests for heat meters, in order to update it in line with new knowledge in the field.

As far as other activities of this subsector are concerned, CEN/TC 318 'Hydrometry' will continue to work on the new standard EN 17277 on 'Measurement requirements and classification of rainfall intensity measuring instruments'.



CEN/TC 123 'Lasers and photonics', together with ISO/TC 172, will finalise the revisions of two standards:

- EN ISO 14880-1 'Optics and photonics -- Microlens arrays -- Part 1: Vocabulary' that will bring corrections to the formulas;
- EN ISO 11551:2003 'Optics and photonics -- Lasers and laser-related equipment -- Test method for absorptance of optical laser components' to take into account the new experimental data.

CEN/TC 332 'Laboratory equipment' with its new Working Group will start working on the revision of EN 12469 'Biotechnology - Performance criteria for microbiological safety cabinets' in order to bring it to the current state of the art.

A new CLC/TC 66x 'Safety of measuring, control, and laboratory equipment', which is a successor of CLC/SR 66, will work on the inclusion of aspects relating to machinery safety in the EN 61010 series on 'Safety requirements for electrical equipment for measurement, control, and laboratory use' in order to achieve harmonisation of the standards with the Machinery Directive (2006/42/EC)

Agriculture machinery & motor-operated electric tools - In the last 30 years, CEN/TC 144 'Tractors and machinery for agriculture and forestry' has been producing standards in the service of agriculture, forestry and gardening activities. Currently, CEN/TC 144 is developing about 40 projects that are geared towards machine safety and operator protection, taking into account the protection of the environment, technological innovations and the need for efficiency.

In 2019, CEN/TC 144, which is composed of the representatives of manufacturers, public authorities, farmers, research and testing organizations, consumers, will actively work on several topics, in particular on:

- Stability of equipment, which is important for the safety of operators during work, maintenance and service. The Amendment

to EN 1853 'Agricultural machinery - Trailers - Safety' will define a reliable requirement to measure stability of high-tip trailer in elevated position. Moreover, the revision of EN 13525 'Forestry machinery - Wood chippers - Safety' will identify the factors affecting stability, such as angle of slope, ground conditions and size of material being chipped.

- A general framework for visibility is being developed in EN ISO 4254-1 'Agricultural machinery - Safety - Part 1: General requirements'. The amendment will address both direct and indirect visibility of an operator.
- The finalisation of the revision of the EN ISO 25119 series 'Tractors and machinery for agriculture and forestry - Safety-related parts of control systems' in cooperation with ISO/TC 23. The series, which consists of four parts, takes into account new technologies used in machines. The new technologies contribute among others to better anticipation of risks for operators.

The main role of CLC/TC 116 'Safety of motor-operated electric tools' is to adapt the standards of its counterpart, IEC/TC 116, to the requirements of the Machinery Directive (2006/42/EC). In 2019, CLC/TC 116 will continue working on the development of a series of harmonized European Standards for the safety of various electric motor-operated hand-held tools, transportable tools, and lawn and garden machinery which will include EN IEC 62841-2-3:2018 'Particular requirements for hand-held grinders, disc-type polishers and disc-type sanders', and EN 62841-3-7:2018 'Particular requirements for transportable wall saws'.

Industrial machinery & lifts - CEN/TC 147 'Cranes - Safety' will finalise the brand new standard 'Tower cranes - Anti-collision systems - Safety requirements' under the Machinery Directive (2006/42/EC) and will continue working on a new Technical Specification on 'Cranes - Interface between loader crane and work platform', which will define how safely work platforms fit to cranes and specify instructions for their use.



In 2019, CEN/TC 145 'Plastics and rubber machines' will finalise the revision, in support of Machinery Directive (2006/42/EC), of EN 1612 on safety requirements for 'Reaction moulding machines and plants' and of EN 12012-4 'Size reduction machines - Part 4: Safety requirements for agglomerators'. Workers, manufacturers, health and safety inspectors will benefit from these publications as they will increase safety on the workplace.

CLC/TC 44X 'Safety of machinery: electrotechnical aspects' will further work on the revision of EN 62061 'Functional safety of safety-related electrical, electronic and programmable electronic control systems' under the Machinery Directive 2006/42/EC, as well as on the two amendments on 'Electro-sensitive protective equipment': EN 61496-1:2013/A1 for 'General requirements and tests' and EN 61496-2:2013/A1 on 'Particular requirements for equipment using active optoelectronic protective devices (AOPDs)'.

CEN/TC 271 'Surface treatment equipment – Safety' will start the revision of the EN 12921 series dedicated to 'Machines for surface cleaning and pre-treatment of industrial items using liquids or vapours' in support of the Machinery Directive (2006/42/EC).

CEN/TC 422 'Side curtains ventilation systems – safety' will finalise its first standard EN 17088. The document will address safety aspects, performance and sustainability related to the use of side curtain ventilation systems supplied for environmental control and installed on farm buildings, and will increase safety of work for farmers and other persons present at farms.

CEN/TC 10 'Lifts, escalators and moving walks' will start the development of two brand new standards. EN 81-44 'Lifting appliances for wind turbines' will address safe access to workplaces on wind turbines by authorized persons. EN 81-76 'Evacuation of disabled persons using lifts' will specify requirements for the assisted



evacuation of persons with impaired mobility. The Committee, in cooperation with ISO/TC 178, will also start revising two important standards, i.e. EN 81-20 'Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 20: Passenger and goods passenger lifts' and EN 81-50 'Safety rules for the construction and installation of lifts - Examinations and tests - Part 50: Design rules, calculations, examinations and tests of lift components'.

Machinery for mining, quarrying, construction equipment - In 2019, CEN/TC 196 'Mining machinery and equipment - Safety' plans to finalise the revision of the EN 1804 series in support of the Machinery Directive (2006/42/EC) on 'Safety requirements for hydraulic powered roof supports' which consists of three parts:

- EN 1804-1 'Support units and general requirements'
- EN 1804-2 'Power set legs and rams'
- EN 1804-3 'Hydraulic and electro hydraulic control systems'

The revision of Part 1 and Part 2 will address the practical requirements of the test procedures, whereas Part 3 will introduce requirements

for electro hydraulic control systems, thus reflecting the introduction of new technologies.

Tanks, reservoirs, containers and pressure vessels - CEN continues to support ongoing standardization activities in relation to pressure equipment, including the regular revision and maintenance of more than 200 harmonized European Standards supporting the implementation of the new EU Pressure Equipment Directive (2014/68/EU).

In 2019, CEN/TC 54 will proceed with the finalisation of a new version of the EN 13445 series on 'Unfired pressure vessels', while CEN/TC 267 will work on adjusting the EN 13480 series of standards for 'Metallic industrial piping' and CEN/TC 269 will work on EN 12953 series of standards for 'Shell boilers'. Further activities will be undertaken by various Technical Committees in relation to standards for Flanges, Pressure testing and Creep.

In order to support the Simple Pressure Vessels Directive (2014/29/EU), CEN/TC 54 is preparing a revision of the four first parts of EN 286 on 'Simple unfired pressure vessels designed to contain air or nitrogen'.



Mining and metals



The standards within the sector of mining and metals address definition, classification, testing, analysis and technical delivery requirements of the products of the metal industry.

In the past, these standardization activities were performed by the 12 Technical Committees (TCs) of the European Committee for Iron and Steel Standardization (ECISS), and coordinated by its Coordinating Commission (COCOR). In 2018, under the approval of the CEN Technical Board, all ECISS TCs were integrated into one technical body (CEN/TC 459) whose focus will be on the definition, classification, testing, chemical analysis and technical delivery requirements of the products of the iron and steel industry.

Stakeholders involved in standardization in the metals and mining sector comprise national standardization bodies, producers and users

of metallic products. Due to the omnipresent nature of metallic products, the Technical Committees involved in the sector develops standards in support of multiple legislations such as the Pressure Equipment Directive, the Simple Pressure Vessels Directive and the CPR (Construction Products Regulation). European standardization in the sector is also characterised by extensive collaboration at the international level: about 30% of iron- and steel-related standards are adopted from, or developed in collaboration with, ISO - the international standardization organisation. In the scheme of supporting the Circular Economy Action plan, the sector also contributes to the development of generic standards on reusability, recyclability and documentation on material efficiency aspects (including the use of Critical Raw Materials) of certain products.



10 Technical bodies responsible

CEN/TC 132	Aluminium and aluminium alloys
CEN/TC 133	Copper and copper alloys
CEN/TC 184	Advanced technical ceramics
CEN/TC 209	Zinc and zinc alloys
CEN/TC 219	Cathodic protection
CEN/TC 262	Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys
CEN/TC 342	Metal hoses, hose assemblies, bellows and expansion joints
CEN/TC 459	ECISS activities
CEN/WS MODA	Materials modelling terminology, classification and metadata
CLC/WS SGRM	Specifications for Graphene Related Material

CEN & CENELEC portfolio of deliverables: 950 ENs + 38 other deliverables

Work items currently in the Work Programmes: 129 ENs + 3 other deliverables

Standardization requests from EC/EFTA

- M/120 – Structural metallic products
- M/131 – Pipes, tanks not in contact with drinking water

Relevant elements of EU Work Programme 2019

- 1 A New Boost for Jobs, Growth and Investment
- 2.3. Action in support of the circular economy action plan

Further information

<https://www.cen.eu/work/areas/Materials/Pages/default.aspx>

GENERAL ISSUES FOR IRON AND STEEL PRODUCTS

The Sub-Committee (SC) 12 of CEN/TC 459 'General issues' (previously ECISS/TC 100) will continue developing a new standard with methods for the validation of models for the estimation of property data in steel. Since the proposed approach involves modelling, rather than measuring mechanical properties, it is non-destructive and it substantially reduces cost and lead times. The new standard can be very attractive to both producers and end users. It can also provide property information throughout the product, rather than at specific sites, as is the case for conventional testing. Finally, real-time property information allows continuous process optimisation, thus reducing production of sub-prime material with consequent efficiency in cost, energy and material resources.





OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Metal hoses, hose assemblies, bellows and expansion joints - CEN/TC 342 'Metal hoses, hose assemblies, bellows and expansion joints' will develop three standards (EN 14800, EN 15266 and EN 14585), all of which specifically focused on hose assemblies.

Aluminium and aluminium alloys - CEN/TC 132 'Aluminium and aluminium alloys' will work on four existing standards:

- EN 14726 'Aluminium and aluminium alloys - Determination of the chemical composition of aluminium and aluminium alloys by spark optical emission spectrometry';
- EN 12392 'Aluminium and aluminium alloys - Wrought products and cast products - Special requirements for products intended for the production of pressure equipment';
- EN 573-3 'Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products';
- EN 1676 'Aluminium and aluminium alloys - Alloyed ingots for remelting - Specifications' and prEN 1706 'Aluminium and aluminium alloys - Castings - Chemical composition and mechanical properties'.

Chemical analysis for iron and steel - The SC 12 of CEN/TC 459 (previously ECISS TC 102) will develop three standards (EN 10136, EN 10177 and EN 10181) in 2019, providing test methods for measuring the content of nickel, calcium and lead in steel using the flame atomic absorption spectrometric method.



Services account for 70% of the economic activity and a similar proportion of total employment in Europe. The number of European standards in the area of services has increased in recent years; nevertheless, their number remains small (around 2% of total standards) in comparison to the total number of European standards and the economic importance of the service sector in Europe. This means that there is a significant untapped potential from the development and use of European service standards.

Service standards are a useful tool to promote best practices, to spread knowledge throughout the market and to define a common terminology relevant to different services' sectors. Standardization is increasingly being used to support the development of the Single Market for services. The creation and use of European standards can contribute to fostering cross-border trade, as well as enhancing safety and performance and ensuring the protection of consumers and the environment.

Standards can set benchmarks against which businesses can measure the quality and performance of their own services or the services they are purchasing, thus improving transparency, competitiveness and increasing efficiency.

The 'CEN Strategic Advisory Board on Services (CEN/SAGS)' will continue the work started in 2017 and continued in 2018 on the implementation of the 'Strategic Plan on services standardization', providing a strong and clear framework to further engage with service stakeholders in view of better understanding their needs. The aim of CEN and its members for 2019 is to better understand the service sector's needs and how businesses cope with the new trends and business models in the provision of services in Europe.



22 Technical bodies responsible

CEN/TC 138	Non-destructive testing
CEN/TC 279	Value management - Value analysis, function analysis
CEN/TC 290	Dimensional and geometrical product specification and verification
CEN/TC 319	Maintenance
CEN/TC 329	Tourism services
CEN/TC 331	Postal services
CEN/TC 348	Facility Management
CEN/TC 381	Management consultancy services
CEN/TC 389	Innovation Management
CEN/TC 409	Beauty Salon Services
CEN/TC 431	Service Chain for Social Care Alarms
CEN/TC 435	Tattooing services
CEN/TC 445	Digital information Interchange in the Insurance Industry
CEN/TC 447	Horizontal standards for the provision of services
CEN/TC 448	Funeral services
CEN/TC 452	Assistance Dogs
CEN/TC 456	Reporting in support of online gambling supervision
CEN/TC 457	Digital preservation of cinematographic works
CEN-CLC/JTC 1	Criteria for conformity assessment bodies
CEN-CLC/TC 4	Services for fire and security systems
CEN/WS 094	Competences of hotel general manager
CEN/WS 095	Quality framework for Student Internships

CEN & CENELEC portfolio of deliverables: 281 ENs + 63 other deliverables

Work items currently in the Work Programmes: 65 ENs + 4 other deliverables

Standardization requests from EC/EFTA

M/517 - Horizontal Service Standards

M/548 - Postal services and the improvement of quality of service in support of Directive 97/67/EC

M/558 - Reporting in support of supervision of online gambling services by the gambling regulatory authorities of the Member States

Relevant elements of EU Work Programme 2019

2.1. Action in support of the Digital Single Market strategy

Further information

<https://www.cen.eu/work/areas/services/Pages/default.aspx>



CEN/CA SAGS (STRATEGIC ADVISORY GROUP ON SERVICES)

In recognition of the strategic importance of services, the CEN/CA Strategic Advisory Group on Services (SAGS) developed a Strategic Plan on services standardization.

The Strategic Plan is part of the actions agreed under the 'Joint Initiative on Standardisation' (JIS), especially Action 12, which refers to encouraging a greater development and usage of European service standards to help integrate Europe's service markets. The strategy also builds on the Commission's Staff Working Document on 'European service standardization' that was published on 1st June 2016 as part of the Commission Standardization package.

CEN SAGS defined and implemented a methodology for the prioritisation of sectors, drawing on the criteria set out in the CEN Strategic Plan (Action 5), and providing a shortlist of five 'high priority' sectors that might benefit from service standardization. Based on this work, CEN will initiate dialogue with the following sectors: waste management, wholesale and retail markets and movie and advertisement production.

Previous studies on services standardization have emphasised that 'standards' implementation fosters a common understanding on the service process, the increased quality of services provision and a higher organisational performance. Raising awareness on the benefits of implementing standards is a priority for CEN and its members; for this reason, in 2019 a communication campaign on service standards will be rolled out at the European and national level.

POSTAL SERVICES

For more than a decade, CEN has been developing standards in support of the Postal Services Directive (97/67/EC and its amendments). The EU policy objective consists of completing the internal market ensuring that efficient, reliable and good-quality postal services are available throughout the EU to all consumers at affordable prices.

In 2019, CEN/TC 331 'Postal services' will continue the development of standards and other deliverables in response to the European mandate M/548 'Postal services and the improvement of quality of service'. The topics covered by the request include the measurement of the quality of postal services, the interoperability of postal operations, digital postal services and labelling, and the exchange of data.

In terms of digitisation, TC 331 will develop standards compliant with security and customs requirements for electronic advanced data, with the aim of promoting the interoperability of parcel-delivery operations.

CEN will also publish a new standard on 'Postal services - Quality of service - Complaints handling principles' (EN 14012).

These new standards will support the EC roadmap for completing the Single Market for parcel delivery (COM (2013)886) and the creation of a Digital Single Market. Most of the requested work is expected to be completed by August 2020.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

FinTech - FinTech is defined as technology-enabled finance, and it includes payments, lending, capital and investment management, foreign exchange and money transfer, and robot advisers. It also includes the application of digital technology to insurance (InsurTech), and its application to regulatory compliance (RegTech).

In 2019, CEN intends to finalise the report prepared by CEN/BT WG 220 'FinTech' on a mapping of challenges and standardization needs in the field. Through its standardization platform, CEN will foster dialogue among technology developers, banks and consumers on how standards can boost trust in new digital products and services.

Facility management services - CEN/TC 348 'Facility management' has been developing a series of standards related to the operational, tactical and strategic levels with the aim to support primary facility management processes in Europe. In 2019, a new version of the EN 15221 series will be finalised by the Committee experts: 'Taxonomy, classification and structures' (Part 4), 'Guidance on facility management processes' (Part 5) and 'Area and space measurement' (Part 6).

Horizontal services - Horizontal services cover the common elements in the provision of services, such as service contracts, performance measurements or terminology.

CEN/TC 447 'Horizontal service standards' concentrates primarily on developing a series of horizontal standards in response to standardization request M/517. The new standards will guarantee flexible application across the wide range of services related to the provision of services, such as guidance for the design and structure of contracts, performance measurement and assessment of the capacity of service providers. The three draft standards will be submitted to public enquiry in 2019.

Insurance services - The insurance business is rapidly migrating from paper-based processes to electronic processes through digitalisation and automation. Such changes require standardization of information interchange,

especially when electronic business processes connect independent organizations.

The European standards to be developed by CEN/TC 445 'Digital information interchange' will facilitate the flows among insurance companies, their customers and their market partners, e.g. brokers, sales organizations, portals, service providers, and other insurers.

The new standard on interfaces for document transfer and processing will benefit the insurance industry by reduced costs for printing, paper and physical transportation, and secure transfer will strongly support consumer privacy protection.

Online gambling services - The scale of reporting obligations for online gambling providers, namely on their type, format and frequency, varies from one Member State to another. The different reporting obligations will continue to increase as more Member States review their national gambling legislations to take account of developments in the online environment.

CEN/TC 456 'Reporting in support of online gambling supervision' gathers gambling operators, software providers and consumer organizations. Work is underway to develop a standard on the core elements for the reporting of data for supervision purposes to the competent gambling regulatory authorities in Europe. The upcoming standard will answer the Standardization Request 'Reporting in support of supervision of online gambling services by the gambling regulatory authorities' (M/558).

Tattooing services - In 2019, CEN/TC 435 will publish a European standard (EN 17169) setting requirements for the safe and hygienic practice of tattooing services. The upcoming standard will increase trust in the tattooing services across Europe.

Funeral services - In 2019, CEN will make available the revised version of the standard on requirements for funeral services (EN 15017). The revision covers new requirements on improvements in international transport provisions of deceased persons, improvements in the cremation service provisions, as well as minimum equipment needed for good funeral service provisions.



Transport and vehicles



Maintaining a safe and efficient transport system is of vital importance for Europe's economy. Many European companies are world leaders in infrastructure, logistics and the manufacturing of transport equipment and traffic management systems.

CEN and CENELEC develop standards for various transport modes (aerospace, road, rail, maritime, etc.), and for horizontal topics such as interoperability, intermodal transport, the transport of dangerous goods and Intelligent Transport Systems (ITS).

Many of the standards developed and adopted by CEN and CENELEC in this sector respond to Standardization Requests by the European

Commission. These Harmonized Standards support the implementation of relevant European legislation, including the EU Directives relating to the interoperability of Europe's rail system (2008/57/EC), cableway installations designed to carry passengers (2016/424/EU), recreational craft and personal watercraft (2013/53/EU) and the deployment of alternative fuels infrastructure (2014/94/EU). CEN and CENELEC's standardization activities on the field count on the support of a wide range of professional associations.



29 Technical bodies responsible

CEN/TC 15	Inland navigation vessels
CEN/TC 119	Intermodal Loading Units and Cargo Securing
CEN/TC 226	Road equipment
CEN/TC 242	Safety requirements for passenger transportation by rope
CEN/TC 245	Leisure accommodation vehicles
CEN/TC 256	Railway applications
CEN/TC 261	Packaging
CEN/TC 274	Aircraft ground support equipment
CEN/TC 278	Intelligent transport systems
CEN/TC 296	Tanks for the transport of dangerous goods
CEN/TC 301	Road vehicles
CEN/TC 320	Transport - Logistics and services
CEN/TC 326	Natural Gas Vehicles - Fuelling and Operation
CEN/TC 333	Cycles
CEN/TC 337	Road operation equipment and products
CEN/TC 354	Non-type approved light motorized vehicles for the transportation of persons and goods and related facilities
CEN/TC 377	Air Traffic Management
CEN/TC 413	Insulated means of transport for temperature sensitive goods with or without cooling and/or heating device
CEN/TC 436	Cabin Air Quality on civil aircraft - Chemical Agents
CEN/WS 069	Car-Adaptations for Drivers and Passengers of Motor Vehicles
CEN/WS 090	Real drive test method for collecting emission
CEN/WS CORE	Multiconstellation based services for goods transport tracking & tracing applications
CLC/BTTF 116-2	Alcohol interlocks
CLC/BTTF 69-3	Road traffic signal systems
CLC/TC 9X	Electrical and electronic applications for railways
CLC/TC 18X	Electrical installations of ships and of mobile and fixed offshore units
CLC/TC 69X	Electrical systems for electric road vehicles
CEN-CLC/JTC 5	Space
ASD-STAN	Aerospace *

**ASD-STAN is an Associated Body of CEN*

CEN & CENELEC portfolio of deliverables: 1234 ENs + 168 other deliverables

Work items currently in the Work Programmes: 344 ENs + 60 other deliverables

ASD-STAN portfolio: 2378 ENs

ASD-STAN Work Programme: 673 ENs + 3 other deliverables

Standardization requests from EC/EFTA

- M/086 – Transport of Dangerous Goods
- M/300 – Cableway installations
- M/421 – On-board diagnosis and information management
- M/468 – Charging of electric vehicles
- M/483 – Interoperability of the rail system
- M/486 – Urban Rail



M/496 – Space Industry
M/524 – Air Traffic Management
M/533 – Alternative Fuels Infrastructure
M/542 – Recreational craft II
M/557 – Marine equipment
M/XXX – Drones
M/YYY – PEMS

Relevant elements of EU Work Programme 2019

2.6. Action in support of the of the space strategy for Europe

1. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions, A European Strategy for Plastics in a Circular Economy, COM (2018) 28 final & SWD (2018) 16 final, Brussels 16/1/2018. EU Action Plan for a Circular Economy, COM (2015) 614 (perspective of Packaging Industry).
8. The European Strategy for Low-Emission Mobility (07/2016). The use of alternative fuels (e.g. LNG (possibly synthetic natural gas (SNG) and liquefied biogas (LBG)), electricity, hydrogen) for waterborne application is stimulated e.g. through the deployment of alternative fuels infrastructure (Directive 2014/94/EU).
11. Inland transport of dangerous goods (Directive 2008/68/EC).
12. The interoperability of the rail system within the European Union (Directive (EU) 2016/797) (recast).

Further information

www.cencenelec.eu/go/transport
www.cen.eu/work/areas/transport

AIRCRAFT AND SPACECRAFT, AND RELATED EQUIPMENT

CEN and CENELEC are coordinating with ETSI the development of harmonized standards (hENs) for small (<25 kg) 'buy and fly' drones, as requested by the European Aviation Safety Agency's (EASA) Opinion 2018/001. The work will be performed under a Delegated Act within the frame of a specific Standardization Request, published by the European Commission at the end of 2018.

CEN and CENELEC will continue the development of standards for space products and applications with CEN-CENELEC JTC5, managed by the European Coordination for Space Standardisation (ECSS). Standards developed in this context will support the new EU-Space Programme, as tasked by DG-GROW Mandate M/496, in the course of renewal.

CEN-CENELEC will also continue its fruitful collaboration with ASD-STAN as Associated Body. An improved EN-production protocol with ASD-STAN started being implemented mid-2018 and it will continue being reviewed in 2019.

On the specific subject of cabin air quality, CEN continues to cooperate with all relevant stakeholders in the frame of CEN/TC 436, including EASA in the frame of the CEN/EASA MoU signed in 2018. This MoU between CEN and EASA could be extended to other major subjects of cooperation such as air drones/UAS.



RAILWAY AND TRAMWAY LOCOMOTIVES AND ROLLING STOCK AND ASSOCIATED PARTS

In the railways sector, CEN and CENELEC, together with ETSI, maintain the Sector Forum Rail (previously known as JPC Rail), which brings together representatives from the railway industry, relevant European and international organizations (such as UIC, UNIFE, UITP), Technical Committee chairs and project leaders.

Most European Standards relating to the rail transport sector are developed in CEN/TC 256 'Railway applications' and in CLC/TC 9X 'Electrical and electronic applications for railways'. These TCs collaborate with the European Railway Agency (ERA) in order to ensure that European standards are compatible with the latest Technical Specifications for Interoperability (TSI).

In order to maintain the competitiveness of the sector, it is important to incorporate the relevant elements of research into existing or new standards. In order to achieve this, CEN and CENELEC work in close collaboration with the Joint Undertaking 'Shift2Rail'.

The main task for 2019 will be the update of numerous existing standards to take account of the industry needs or of changes in TSIs. Nevertheless, some brand new standards will be finalised, including:

- prEN 13230-6 'Railway applications - Track - Concrete sleepers and bearers' - Part 6: Design
- FprEN 15654-2 'Railway applications - Measurement of vertical forces on wheels and wheelsets' - Part 2: Test in workshop for new, modified and maintained vehicles
- FprEN 17069-1 'Railway applications - Systems and procedures for change of track gauge' - Part 1: Automatic Variable Gauge Systems
- FprEN 17084 'Railway applications - Fire protection on railway vehicles - Toxicity test of materials and components'
- FprEN 16729-4 'Railway applications - Infrastructure - Non-destructive testing on rails in track' - Part 4: Qualification of personnel for non-destructive testing on rails
- FprEN 50591:2018 'Railway Applications - Rolling Stock - Specification and verification of energy consumption'
- prEN 50238-1:2017 'Railway applications - Compatibility between rolling stock and train detection systems' - Part 1: General
- prEN 50119:2017 'Railway applications - Fixed installations - Electric traction overhead contact lines'.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Motor vehicles, vehicle bodies, trailers or semi-trailers, parts and accessories for vehicles and their engines - CEN/TC 301 'Road vehicles' is developing standards in response to various EC mandates including M/421 and M/533.

Expecting a Standardization Request on the subject, the TC has initiated a project to draft a standard on 'Portable Emission Measuring Systems' for vehicles.

After having developed a series of standards to support 'Alternative Fuel Installations' for natural gas and for hydrogen propulsion, CEN

and CENELEC will be finalising the standards needed for the deployment of Electric buses.

Cable-supported transport systems with cabins - CEN/TC 242 'Safety requirements for passenger transportation by rope will finalise standards on cables ('Ropes') and on 'Precommissioning inspection and instructions for maintenance and operational inspection'.

Ships, boats and related equipment - CEN/SS T01 'Shipbuilding and maritime structures' is collaborating with its international counterpart, ISO/TC 188 'Small Craft', to review and revise its Harmonized Standards in line with the requirements of the latest EU Directive on recreational craft and personal watercraft (2013/53/EU).



New activities will be initiated in the field of 'Waste water treatment' and Steering Systems.

In support to Marine Equipment (2014/90/EU), CEN and CENELEC are respectively developing a standard on 'Fire Hose for marine use' and on 'Public address and general emergency alarm systems'.

Inland navigation vessels - CEN/TC 15 'Inland navigation vessels' is addressing standardization in the field of shipbuilding for inland waterway vessels and inland waterway navigation. It expects to finalise, among others, the following standards:

- prEN 15869-1 'Inland navigation vessels - Electrical shore connection, three phase current 400 V, 50 Hz, up to 125 A' - Part 1: General requirements
- prEN 15869-2 'Inland navigation vessels - Electrical shore connection, three phase

current 400 V, 50 Hz, up to 125 A' - Part 2: On-shore unit, additional requirements

- prEN 15869-3 'Inland navigation vessels - Electrical shore connection, three phase current 400 V, 50 Hz, up to 125 A' - Part 3: On-board unit, additional requirements
- FprEN 14504 'Inland navigation vessels - Floating landing stages and floating bridges on inland waters - Requirements, tests

Aviation Ground Support Equipment - In 2019, CEN/TC 274 will develop standards on Aviation Ground Support Equipment (GSE):

- prEN 12312-5 rev 'Aircraft ground support equipment - Specific requirements' - Part 5: Aircraft fuelling equipment
- prEN 12312-15 'Aircraft ground support equipment - Specific requirements' - Part 15: Baggage and equipment tractors.



Accessibility



While many EU Member States already have some form of accessibility legislation, there is no EU law on accessibility. The awaited European Accessibility Act (COM 2015 615 final) will be a big step forward to promote the inclusion of the 80 million persons with disabilities in Europe. This will include common accessibility requirements for a wide range of products and services. European standardization has a role to play and will certainly contribute to improve the proper functioning of the EU internal market for accessible products and services, by developing consensus-based requirements and specifications.

European Standards are powerful tools to promote accessible products and services that persons with functional limitations, including persons with disabilities, can use, operate and

understand on an equal basis with others. Persons with disabilities and ageing people, among others, benefit directly from a product, good or service when it is easy to access, understand and use.

Accessibility is also recognised as a human right by the UN Convention on the Rights of Persons with Disabilities, and is at the core of the European Disability Strategy 2010-2020.

CEN/BT/WG 213, the Strategic Advisory Group on Accessibility (SAGA), is an advisory body to the CEN and CENELEC Technical Boards on political and strategic matters related to accessibility. It is working to promote further accessibility throughout the process of developing European Standards, from the early stages.



7 Technical bodies responsible

CEN/TC 10	Lifts, escalators and moving walks
CEN/TC 293	Assistive products and accessibility
CEN/TC 315	Spectator facilities
CEN/TC 452	Assistance Dogs
CEN-CLC/JTC 11	Accessibility in the built environment
CEN-CLC/JTC 12	Design for All
CEN-CLC-ETSI/JWG eAcc	eAccessibility

Standardization requests from EC/EFTA

M/473 – Design for all

M/420 – Accessibility in the built environment

M/554 – Requirements on the accessibility of the websites and mobile applications in support of Directive (EU) 2016/2102 on the accessibility of the websites and mobile applications of public sector bodies

Relevant elements of EU Work Programme 2019

2.1. Action in support of the digital single market strategy

Further information

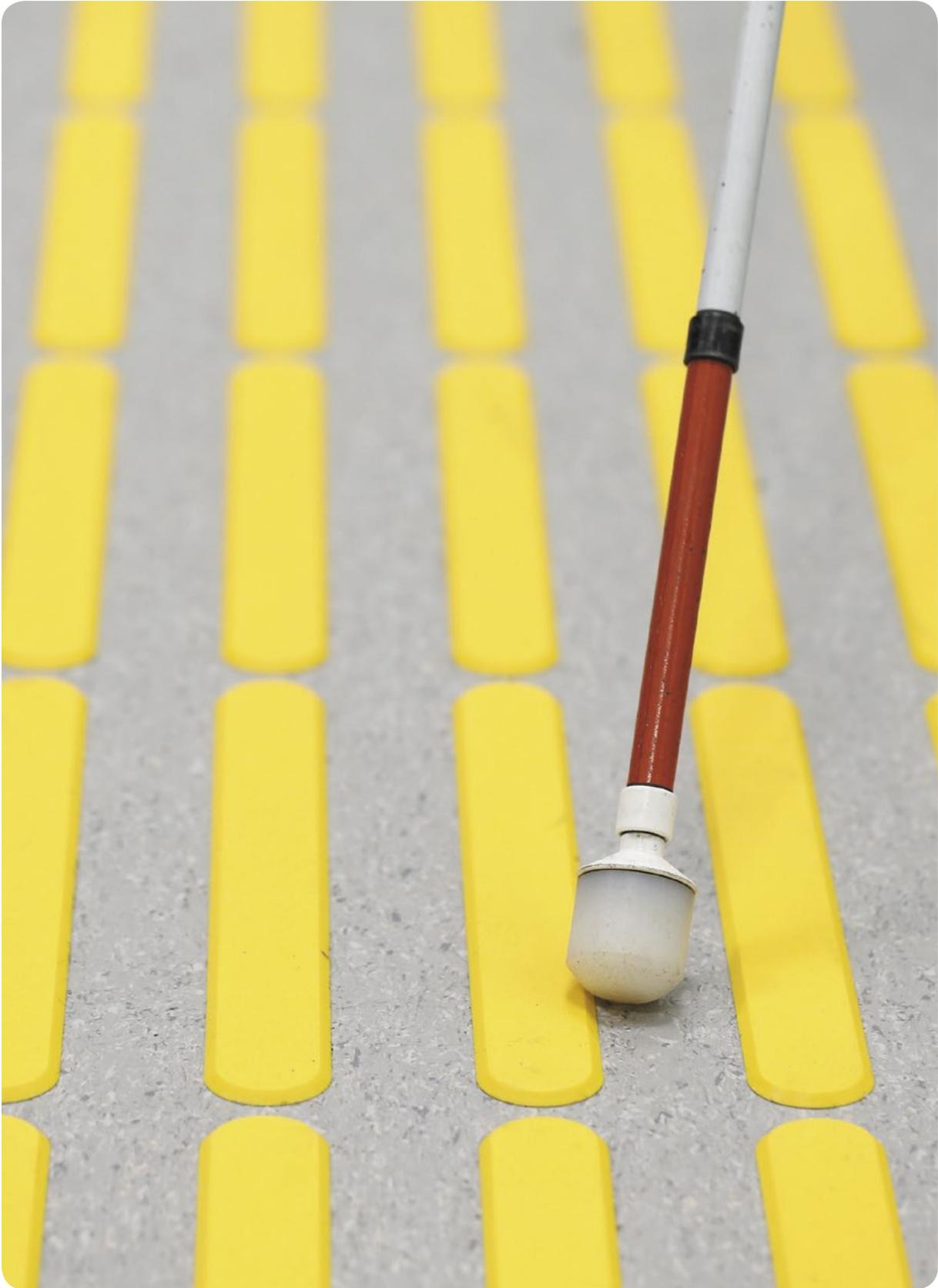
www.cencenelec.eu/go/accessibility

DESIGN FOR ALL

The execution of mandate M/473 'Design for all' is now in its finalisation. Among others, a new European standard EN 17161 'Design for All - Accessibility following a Design for All approach in products, goods and services - Extending the range of users' is due for publication over the course of 2019. In addition, a useful tool (the so-called Protocol) is available to help all Technical Committees decide if accessibility is an issue that has to be taken into account or not in all new standardization projects (or in the revision of standards).

eACCESSIBILITY

Following the release of the second version of EN 301549 'Accessibility requirements for ICT products and services' in 2018, the CEN-CENELEC-ETSI Joint Working Group on eAccessibility will work on the third version of this European standard. The project will also be candidate for citation in the Official Journal of the European Union (OJEU) to provide presumption of conformity with the requirements of Directive 2016/2102/EU (relevant to the accessibility of websites and mobile applications of public sector bodies). Both EN 301549:2018 and its future third revision ensure the alignment of requirements with the specification WCAG 2.1 from W3C.





OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Accessibility in the built environment - CEN-CLC/TC 11 'Accessibility in the built environment' is working on a European standard setting out accessibility requirements for public procurement in the built environment (in response to Standardization Request M/420).

In 2019, European standard prEN 17210 'Accessibility and Usability of the Built Environment: Functional Requirements' for the accessibility and usability of the built environment will be finalised. At the same time, CEN-CLC/TC 11 will prepare the Technical Report on Technical performance criteria and specifications for accessibility in the built environment.



Environment



CEN and CENELEC's work in the environmental sector involves not only the development of standards for the protection of the environment, mainly in support of European environmental and related legislation, but also acting in an advisory role. In this capacity, the two standardization bodies provide help to standard writers to include considerations about environmental and climate change adaptation in standards in all sectors where this has relevance.

All technical bodies in CEN and CENELEC are expected to take such considerations into account. A set of tools and support services (such as CEN's environmental helpdesk) are also available to help Technical Committees (TCs) in all sectors address these aspects in standards.

With the CEN and CENELEC work invested in greening the European standardization process, companies and organizations using European standards are contributing to the protection of the environment. The use of these standards not only helps companies meet legal requirements. It also provides companies with financial advantages as they are able to reduce their use of resources such as energy and water, produce less waste, prevent accidents, improve resilience to climate impacts and avoid clean-up costs

and fines. In addition, by demonstrating their commitment to the environment, companies and organizations can be perceived in a more positive way by their current and potential customers, thus guaranteeing easier access to new business opportunities.

The Strategic Advisory Body on Environment (SABE) in CEN and CLC/TC 111X 'Environment' provide advice and recommendations to their respective Technical Boards and TCs on how best to address environmental aspects such as sustainability, resource efficiency and climate resilience in standardization. SABE also maintain close cooperation with the European Commission and regularly discusses with policy-makers how standards can support the implementation of environmental and climate policies.

The CEN-CENELEC Adaptation to Climate Change Co-ordination Group coordinates the delivery of the standardization request related to climate change adaptation.

CEN and CENELEC closely collaborate with ISO and the IEC respectively, in order to avoid duplication of work, w through the adoption of each other's standards as appropriate.



8 Technical bodies responsible

CEN/TC 230	Water analysis
CEN/TC 264	Air quality
CEN/TC 292	Characterization of waste
CEN/TC 308	Characterization and management of sludge
CEN/TC 345	Characterization of soils
CEN/TC 366	Materials obtained from End-of-Life Tyres (ELT)
CEN/TC 444	Test methods for environmental characterization of solid matrices
CLC/TC 111X	Environment

Standardization requests from EC/EFTA

- M/513 – Gaseous hydrogen chloride (HCl) emissions
- M/514 – Volatile organic compounds (VOC) emissions
- M/518 – Waste electrical and electronic equipment (WEEE)
- M/526 – Adaptation to climate change

Relevant elements of EU Work Programme 2019

- 2.2. Actions in support of the Energy union and climate
- 2.3. Action in support of the circular economy action plan

Further information

<https://www.cen.eu/work/areas/env/Pages/default.aspx>

https://www.cenelec.eu/dyn/www/f?p=104:7:1549404979927101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

<https://www.cencenelec.eu/standards/sectors/climatechange/pages/default.aspx>

ADAPTATION TO CLIMATE CHANGE

In 2019, CEN and CENELEC will continue to work on the development and revision of the standards identified in 2017 and listed in the preliminary Work Programme for Standardization, in support of the EU Strategy on Adaptation to Climate Change. The objective is to make European infrastructures resilient to the impact of a changing climate.

The revision and development of the 14 priority standards are carried out by the Technical Committees (TCs) working in the priority sectors, such as transport, energy and construction and the supporting ICT.

The first set of standards published will represent best practice examples for making the standards resilient to the adverse effects of climate change within other sectors. The development of a tailored guidance on vulnerability assessment for TCs, which started in 2017, will continue in 2019.



IMPROVED PARTICIPATION IN ENVIRONMENTAL ASPECTS OF STANDARDIZATION

At the end of 2017, CEN, with the support of the European Commission, launched a project that helps less active members and national environmental organisations to engage in the strategic discussions and standardization work of CEN related to environmental protection. The project, entitled 'Engaging more standard bodies and national environmental organizations in the environmental aspects of standardization', will run for three years.





OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Air quality - CEN/TC 264 'Air quality' closely follows the latest technical research and policy developments related to the identification of air pollutants and continuously develops and revises standards that allow the measurement and comparison of known pollutants across the EU, in line with the current European legislation.

In 2019, CEN/TC 264 will finalise standards on 'Stationary source emissions - Data acquisition and handling systems - Part 1: Specification of requirements for the handling and reporting of data' (EN 17255-1) and 'Ambient air - Sampling and analysis of airborne pollen grains and fungal spores for networks related to allergy - Volumetric Hirst method' (EN 16868).

It will also start working on the revision of EN 15267 Part 1- 3 'Air quality - Certification of automated measuring systems' and EN 13725 'Stationary source emissions - Dynamic olfactometry for the determination of odour concentration'.

Following the completion of the validation process, the development of the standards under M/513 and M/514 is expected to start in 2019.

TC 264 also works on the development of a series of standardization requests with the European Commission.

Circular economy and plastics - In 2019, CEN BT WG 219 'SABE' will elaborate a CEN strategy on the Circular Economy with a focus on plastics. Furthermore, it is expected to start to investigate possible further coordination of the CEN-CENELEC activities around the Circular Economy with other relevant groups.

End-of-Life Tyres - CEN/TC 366 'Materials obtained from End-of-Life Tyres' develops standards with the aim of improving the potential for the re-cycling of end-of-life tyres (ELT), that is becoming a significant recovery activity, with a positive impact on both the economy and the environment.

In 2019 CEN/TC 366 will finalise EN 14243 Parts 1-3 on 'General definitions related to the methods for determining ELT material's dimension(s) and impurities', 'Methods for determining the particle size distribution and impurities for Granulates and powders' and 'Methods for determining the dimension(s) of shreds, cuts and chips'.

Two Technical Specifications, one on 'Elastomers identification in granulates and powders' (CEN/TS 17307) and another on 'Determination of the non-metallic content of the steel wire' (CEN/TS 17308) will be published in 2019.

Waste electrical and electronic equipment - In 2019, CLC/TC 111X 'Environment' will finalise EN 50693 on a 'Method for quantitative eco design via life cycle assessment and environmental declarations through product category rules for EEE'.



Smart technologies



Technologies are becoming 'smarter' every day and capable of adapting and modifying their behaviour to fit the environment through wireless access, databases and sensors. The Internet of Things (IoT) is, for example, one of the enablers of the current Industrial revolution, known as Industry 4.0, fostering the automation and data exchange in manufacturing technologies.

Standardization needs to adapt quickly in order to cope with the rapid development of the markets, their increased levels of complexity, the changing business environment, as well as a more participatory society. Lines between traditional standardization areas are blurred, thus requiring effective action to break down the traditional 'vertical silos' approach. The concepts of 'smartness' and 'digitalization' should not only be addressed in terms of technology performance, but they should also be embedded in the process of long-term sustainable development.

Standards provide a basis for integrating technologies into complex systems, preventing vendor lock-in, and facilitating interoperability and data exchange. Standards play a crucial role in the consolidation of the European Digital Single

Market and contribute to the competitiveness of the European Industry.

CEN and CENELEC are engaged in multiple technical sectors such as smart grids, smart meters, smart cities, IoT, smart appliances and smart homes. They work together to develop standards supporting the development of an open and competitive market and actively cooperate with ISO and IEC to reach agreements on common standards that can be applied throughout the world, thereby facilitating international trade.

CEN and CENELEC are also involved in the Joint Initiative on Standardization (JIS) and its Action 14, which addresses the digital transformation of the European Industry. Together with the European Commission, ETSI, some Member States and industry representatives, CEN and CENELEC work towards leveraging and further improving the effective standardization environment to provide standards enabling and promoting the digital transformation of Europe's industry.



24 Technical bodies responsible

CEN/TC 92	Water meters
CEN/TC 171	Heat cost allocation
CEN/TC 176	Heat meters
CEN/TC 224	Personal identification and related personal devices with secure element, systems, operations and privacy in a multi sectorial environment
CEN/TC 225	AIDC technologies
CEN/TC 234	Gas infrastructure
CEN/TC 237	Gas meters
CEN/TC 247	Building Automation, Controls and Building Management
CEN/TC 251	Health informatics
CEN/TC 278	Intelligent transport systems
CEN/TC 287	Geographic Information
CEN/TC 294	Communication systems for meters
CEN/TC 318	Hydrometry
CEN/TC 365	Internet Filtering
CEN/TC 428	Digital competences and ICT Professionalism
CEN/TC 434	Electronic Invoicing
CEN/TC 440	Electronic Public Procurement
CEN/TC 445	Digital information Interchange in the Insurance Industry
CLC/TC 8X	System aspects of electrical energy supply
CLC/TC 13	Electrical energy measurement and control
CLC/TC 59X	Performance of household and similar electrical appliances
CLC/TC 205	Home and Building Electronic Systems (HBES)
CLC/TC 210	Electromagnetic Compatibility (EMC)
CLC/TC 215	Electrotechnical aspects of telecommunication equipment

Standardization requests from EC/EFTA

M/536: Radio Equipment in support of Directive 2014/53/EU

M/576: Intelligent Transport Systems (ITS) in urban areas in support of Directive 2010/40/EU

Relevant elements of EU Work Programme 2019

Actions of the 2018 Rolling Plan for ICT Standardisation addressed to the European standardization organisations

2.1. Action in support of the digital single market strategy

Further information

<https://www.cencenelec.eu/standards/Sectors/ICT/Pages/default.aspx>



SMART GRIDS AND SMART METERS

Ensuring a smooth and sustainable energy transition and fostering the adaptation to climate change are two of the most critical developmental challenges of our time. In order to tackle them, the transition to a low carbon and circular economy has already started. In November 2016, the European Commission published the 'Clean Energy for All Europeans' package, setting an energy efficiency target of 30% and at least 27% for the share of renewable energy consumed in the European Union in 2030.

In this context, smart grids mark a new development on the path towards greater consumer empowerment and the integration of renewable energy sources - wind, solar, biomass, biofuels, geothermal, hydropower, and ocean energy - into the grid and higher energy efficiency, whereas making a considerable contribution to reducing greenhouse emissions. It is clear that the energy transition goes hand in hand with the digitalization of the industry. Accordingly, CEN and CENELEC continue working on breaking down technical barriers that prevent the creation of a single market for energy, the reduction of energy costs and the further deployment of new technologies that can support the energy transition.

In 2019, the Smart Energy Grids Coordination Group will continue advising on European requirements relating to Smart Energy Grids standardization, especially in respect to the set of requirements resulting from the European Commission's proposal of new rules for a consumer-centred clean energy transition, known as the 'Clean Energy Package'.

In the field of smart meters, the Coordination Group on Smart Meters will advise on European requirements relating to standardization. It will also continue to monitor, coordinate and provide input to the development of new, and the maintenance of, existing standards for advanced metering infrastructures and promote further identification of standards supporting the roll-out of smart meters in Europe, which is expected to be massive: by 2020, at least 80% of consumers shall be equipped with intelligent metering systems. Moreover, the Coordination Group will continue addressing other relevant aspects such as cybersecurity, data protection and privacy, in particular by monitoring the activities of the European Commission Smart Grids Task Force Expert Group 2, with the objective to ensure security and privacy matters.

The two Coordination Groups will continue working to ensure interoperability within smart metering and smart grids systems (as well as smart appliances, smart home systems, buildings, etc.). In light of this, back in 2015, the European Commission funded the development of a study aiming at bringing together semantics and data from smart appliances in buildings and households. This information was gathered in a Smart Appliances Reference Ontology, known as SAREF, whose intention is to link information coming from different smart appliances to reach interoperability. In 2019, CEN-CENELEC will work on the alignment of the mapped data models in order to ensure a single point of reference in Europe.

Finally, the Coordination Groups will promote the industry's wider implementation of standards for smart grids and meters and liaise with the international standardization organizations ISO and, mainly, IEC. The collaboration aims to achieve consistency between European and international standards, to avoid the duplication of work and to ensure that a consolidated view is taken into account at the international level. In particular, the Coordination Group on Smart Energy Grid will formalize its relationship with the IEC SyC - Smart Energy.



INTELLIGENT TRANSPORT SYSTEMS

European Standards and Technical Specifications within the domain of Intelligent Transport Systems (ITS) are being developed by CEN/TC 278 'Intelligent transport systems', as a response to relevant Standardization Requests (such as M/338, M/453 and M/546). These standards cover aspects that include cooperative systems, travel and traffic information, route guidance and navigation, public transport, emergency vehicles and electronic fee collection. CEN cooperates closely with CENELEC, ETSI and ISO to ensure a coherent approach to standardization.

The most promising field of activities is in Intelligent Transport Systems (ITS) in Urban areas (M546): work has been initiated within the new WG 17 of CEN/TC 278 and the first deliverables will reach publication in 2019. A series of new projects for an 'eCall' system for automatic notification of road accidents will also be finalised in 2019.





OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2019

Home and Building Electronic Systems (HBES)

- CLC/TC 205 focusses on European Standards for all aspects of home and building electronic systems in relation to the information society. It develops standards to ensure the integration of a wide spectrum of control applications and the control and management aspects of all applications in and around homes and buildings. CLC/TC 205 does not prepare device standards, but the necessary performance requirements and necessary hardware and software interfaces. In 2019, the Committee will work on electrical safety and EMC requirements for radio equipment (prEN 50698) and on an IoT (Internet of Things) ontology model description (prEN 50090-6-2), which will explain the HBES IoT model structures, with the goal to improve the semantic information of HBES IoT gateways or HBES IoT devices.

Advanced Manufacturing - The development of an inclusive European digital society also concerns the uptake of innovative technologies by the European industry. CEN/TC 310 'Advanced automation technologies and their applications', CEN/TC 438 'Additive manufacturing' and CLC/TC 65X 'Industrial-process measurement, control and automation' will continue their collaboration with ISO and IEC, to develop European Standards that will contribute to the digital transformation of the European industry. In 2019, the following standards will be released: EN ISO 10218-1 and 10218-2 on the safety requirements for industrial robots, EN ISO/ASTM 52902 on geometric capability assessment of additive manufacturing systems, EN 62443-3-2 on security risk assessment and system design.

Smart and Sustainable Cities and Communities

- In 2019, the CEN-CENELEC-ETSI Sector Forum on 'Smart and Sustainable Cities and Communities' will continue to act as the joint ESOs' advisory and coordination body for all standardization activities related to smart and sustainable cities. The Sector Forum promotes the standardization work in answer to cities' needs, seek alignment with international SDOs and strengthen its collaboration with European and national authorities and in particular the European Innovation Partnership on Smart Cities

and Communities. The Sector Forum will finalise the development of a specific tool for cities and communities, to help them find and implement the standards that best suit their needs.

Blockchain and Distributed Ledger Technologies

- Blockchain and Distributed Ledger Technologies (DLT) are promising new developments in ICT for sharing data and managing transactions in a decentralised controlled manner. CEN and CENELEC have created a Focus Group to identify specific European standardization needs, in order to map these needs with the current work items in ISO/TC 307 'Blockchain and distributed ledger technologies' and to encourage more European countries' participation in the ISO Technical Committee. In 2019, the Focus Group will further identify specific European needs and release a new version of its technical white paper for the successful implementation of Blockchain and DLT technologies in Europe.

Strategic highlights

Digital transformation

Industry is currently undergoing the fourth industrial revolution: digital transformation is deeply revolutionising all aspects of business and society through the uptake of a new generation of digital technologies including the Internet of things, Big Data and Cloud Computing. The digitization of industrial systems, processes and supply chains gives rise to a wealth of opportunities, but also brings new challenges and threats in data security, privacy and trust.

Traditional sectors of the economy are increasingly employing digital technologies, which means that CEN's and CENELEC's industry stakeholders are looking for support, including standardization solutions from recognised and trusted providers.

CEN and CENELEC respond to key European initiatives; among them, the Digitising European Industry High-Level Group, under the leadership of the European Commission, and the joint Multi-Stakeholder Platform on ICT (MSP-ICT) / Digitising European Industry (DEI) Working Group on standardization in support of the industry's digital transformation.

To guarantee a flexible and timely response supported by European standardization, CEN and CENELEC have adopted in 2017 a Strategic Plan for Digital Transformation with two key focuses:

- make standards for the digital economy;
- digitally transform CEN and CENELEC.

To address the priorities defined in the plan, CEN and CENELEC will continue working on the following projects launched in 2018:

Online standardization - engaging ISO and IEC in order to develop a seamless, user-friendly environment for an efficient and collaborative authoring of standards, ensuring the timely delivery to the market and initiating a pilot project with CEN and CENELEC Technical Committees in 2019.

Standards of the future - building on initiatives to deliver XML-format standards (national, European and international) to enable the flexible exploitation of standards' content, customer-defined application and downstream activities including smart compliance and smart CE marking.

Initiating, in 2019, pilot projects in two business sectors on structuring data content to make it machine-interpretable.

Strategic alliances - establishing alliances with identified priority partners in relation to the manufacturing industry through a customer-focused approach, taking into account proper value propositions and selection criteria. In 2019, CEN and CENELEC will look for additional target partners, even beyond manufacturing.

Open source innovation - identifying opportunities for standardization to support market uptake of 'open source' and connecting standardization and open source activities, with the aim to leverage complementary strengths and synergies, maximise innovation and efficiency, and minimise time to market based on a bottom-up approach. This objective will be achieved through pilot projects with CEN and CENELEC Technical Committees that will be launched in 2019.

Research and innovation

Standardization is vital to support innovation at the European level. Through standards, research can get access to the market and enable the scale-up of innovative products and services.

Under the leadership of the joint CEN-CENELEC Working Group on Standardization, Innovation and Research (STAIR), the standardization community has invested substantial resources to promote the inclusion of standardization work packages in Research & Innovation projects and to ensure members build up the expertise to participate in these projects.

As part of their Innovation Strategic Plan, during 2019 CEN and CENELEC will focus their efforts on fully engaging the Research &



Innovation community in standardization. This can only happen through case studies and success stories that will convince the Research & Innovation community that contributing to standardization can be as effective as patenting for creating impact for their work and monetizing it.

Another element to get the Research & Innovation community on board is by acknowledging its contribution to the standardization work. Contributions to standardization should be recognised through assessment schemes and individual researchers should be valued and rewarded for their standardization involvement through annual awards. With regard to their employers, research-intensive organizations and companies, a closer cooperation will be promoted in order to facilitate their access to the standardization world.

Efforts within Horizon Europe (FP9) will continue to consolidate the role of standardization as a recommended impact-creating process.

Also in 2019, CEN-CENELEC's Technology Market Watch process will become operational. The tool will allow to gather information on, analyse and propose responses to promising new topics for standardization.

Towards the end of 2019, a major conference will be organized in Brussels to exchange experiences between the Standardization and Research & Innovation communities and to showcase the successful interactions between them.

Inclusiveness of the European Standardization System

CEN and CENELEC, with their members, the national standardization organizations, are fully committed to supporting organisations representing small and medium-sized enterprises (SMEs), consumers, workers and environmental interests in standardization. These stakeholder organisations are encouraged to engage with the national standardization

organizations and, through them, to take part in the European and international standardization system.

To reinforce further the representativeness of societal stakeholders in the process of developing standards, CEN and CENELEC encourage and facilitate their appropriate representation and effective participation at the different stages of the development of European standards or other European standardization deliverables. In particular, the European stakeholder organisations – the European Association for the Co-ordination of Consumer Representation in Standardisation (ANEC), the European Environmental Citizens Organization for Standardization (ECOS), the European Trade Union Confederation (ETUC) and Small Business Standards (SBS) – receive Union financing in accordance with European Regulation 1025/2012.

ANEC (representing the interests of consumers in standardization), ECOS (representing environmental interests) and SBS (representing SMEs) have signed partnership agreements with CEN and CENELEC, while ETUC (representing social interests) has signed a partnership agreement with CEN only. In line with CEN-CENELEC Guide 25 “The concept of partnership with European organizations and other stakeholders”, partnerships with stakeholder organisations are developed taking into account their complementary roles and are respectful of the different levels at which such cooperation may take place, be it at national or European level. However, partnerships developed under Guide 25 do not remove the need for the members of the partner organisations to participate in the work of their national standard bodies and national electrotechnical committees, where national opinions are formed, votes are decided and consensus has to be reached.

Supporting SME participation

CEN and CENELEC, in close cooperation with SBS, in the framework of the implementation

of Regulation 1025 with regards to Annex III organisations, facilitate SMEs' participation in standardization at the national and European levels and promote awareness amongst SMEs of the added value standardization brings for their business. Together with their national members, and in close cooperation with SBS, CEN and CENELEC have developed a range of tools and means to make it easier for SMEs to learn about standardization, to access and apply standards, and to get involved in standardization activities at all levels. These tools include the following:

- An interactive educational tool providing an interactive environment for entrepreneurs, managers and employees who work for SMEs to learn about standards and standardization in a way that corresponds with their own needs. This 'e-Learning Tool for SMEs' is available in 23 languages, and can be accessed (free of charge) via the CEN-CENELEC website.
- An online 'SME Toolbox of Solutions' describes the benefits of standards, how to find the right standards and where to obtain relevant information.
- The CEN-CENELEC (European) SME helpdesk and 42 national SME helpdesks are service centres that provide direct support to SMEs.
- CEN-CENELEC Guide 17 'Guidance document for standard writers taking into account SME needs' has been published by CEN and CENELEC to give advice and recommendation to standard writers on how to take into account SMEs needs. The Guide has also been jointly adopted by ISO and IEC and published as ISO/IEC Guide 17.

Furthermore, the majority of CEN and CENELEC members provide user-friendly online platforms for public commenting, which can be accessed in the national language of the country concerned and make it easy for representatives of SMEs and other stakeholders to access the texts of draft European Standards and submit their comments via the internet.

All the above mentioned tools, and many others, will be used in 2019 to reach CEN and CENELEC's objective to facilitate SMEs' participation in standardization at national and European level. In order to achieve that, thanks to their close cooperation with SBS, CEN and CENELEC will reach out to trade associations as intermediaries between standardization and SMEs, in order to ensure that more SMEs benefit from standardization and participate in it.

Including societal stakeholders

Standards can have a broad impact on society, in particular on the safety and well-being of citizens, the efficiency of networks, the environment, workers' safety and working conditions, accessibility and other public policy fields.

For this reason, it is crucial that all those who have an interest in a particular standard contribute to its development. This is why CEN and CENELEC encourage and facilitate an appropriate representation and effective participation of consumer organizations and environmental and social stakeholders in their standardization activities, in particular through the so-called Annex III organizations i.e. ANEC (representing consumer interest), ECOS (representing environmental interests) and ETUC (representing workers' interests).

Together with the members of CEN and CENELEC, these organizations have set up a Societal Stakeholders Group (SSG), which provides a framework for ongoing cooperation and dialogue. Furthermore, similar to the toolbox for SMEs, a toolbox for societal stakeholders is already available on the CEN CENELEC website. CEN and CENELEC also launched in 2018 "Standards for all", an eLearning course for societal stakeholders on standardization.

CEN and CENELEC's effort to include societal stakeholders in standardization will continue also in 2019. In particular, a particular focus will be dedicated to fostering inclusion at the national level through the continuing

implementation of the “Engage” project, in collaboration with ECOS. The aim of Engage is to help smaller and newer countries overcome the disadvantage they experience on environmental matters, for lack of resources or know-how. The project started in 2018 and will last for 3 years and a half, during which each country will send two members, one from the National Standardization Body and one societal stakeholder representative, to participate to each SABE meeting.

International Cooperation

In 2019, CEN and CENELEC’s global outreach focus will be firmly dedicated to the development of the international partnerships with the priority regional and national organizations identified, namely GSO (The Gulf), BIS (India), JISC (Japan), SAC (China) and ARSO and AFSEC (Africa). The newly created CEN-CENELEC Task Forces Gulf, India, Japan, China and Africa will act as the focal point and lead the activities with the respective international partners. Among these activities, the Task Forces will develop Roadmaps with long-term objectives, specifying commonly agreed aims and outcomes with the partner organizations. Together with this, ad hoc yearly action plans for 2019 will identify the agreed first steps to achieve the mutually beneficial objectives.

Together with promoting the uptake of ISO and IEC standards among all partners, the activities undertaken in the framework of these partnerships will be varied, depending on the areas of interest identified for each partner. These activities will include: evaluating adoption of international standards and identifying standardization gaps (with BIS and JISC); ensuring the continued relevance of specific European standards, including for lifts and elevators (with SAC); concluding a licence agreement permitting the adoption of European standards (with GSO); and identifying opportunities to strengthen the understanding and take-up of standardization by stakeholders such as regulators and consumers (ARSO and AFSEC).

In 2019, CEN and CENELEC will follow more closely the ongoing EU trade negotiations with the relevant European Commission services, such as DG GROW and DG TRADE. In this context, CEN and CENELEC will provide input on standardization, including providing guidance on how trade discussions and agreements can better reflect the benefits of standardization and incorporate European standards and standardization activities.

European Standardization presence in China and India

CEN and CENELEC, together with ETSI, EFTA and the EC, will continue supporting the two visibility projects Seconded European Standardization Expert in China (SESEC) and Seconded European Standardization Expert in India (SESEI). Those projects share the success of the European Standardization model to inspire those countries, provide intelligence on standards-related matters, and facilitate bilateral cooperation on standardization matters, thereby supporting European companies in accessing those markets.

China

CEN, as leader of the SESEC project, will continue to work jointly with the project partners, focussing more on concrete sectoral and market needs, while also monitoring and influencing regulatory developments in China to foster increased alignment with Europe.

India

In 2019, the fourth phase of the SESEI project (SESEI IV) will build on the previous phases to influence the alignment of key activities of common interest for India and Europe. Project partners will agree on the specific priority sectors and topics at the official launch of the fourth phase in mid-2019. Among the other areas of cooperation, the organisation of a large common event is foreseen during the lifetime of the project.

Seminars and Workshops

Providing guidelines on the different aspects of standardization to stakeholders and raising awareness on the European standardization system is a core focus of CEN and CENELEC's activities. For this reason, also in 2019 CEN and CENELEC will maintain the tradition of organising seminars and workshops dedicated to interested stakeholders, such as staff, members of the Technical Committees or the wider public, on a wide array of topics. CEN and CENELEC will continue the following recurrent trainings:

- **10-10 webinars:** during the year, CEN and CENELEC will continue with the organisation of **30 minutes-webinars** on specific topics that will take place at the 10th of every month. The precise agenda will be out soon.
- **Webinars for Standard Drafters:** they consist of **webinars for Technical Body Secretaries** and TC Working Group convenors. These webinars aim at a common understanding of the drafting rules and the related procedures. At the same time, it is an excellent opportunity for CCMC editors to better understand TCs' expectations and strengthen working relationships with Technical Bodies.
- **IT Tools trainings:** they consist of **one training per quarter** on recurrent CEN and/or CENELEC IT Tools, depending on the updates of the tools or needs of the customers

Other one-time trainings and seminars are in preparation and foreseen to take place in the course of 2019. Even if the list will be updated and completed in the course of the year, it can be relevant to provide an overview of some of them as an example of their variety and outreach:

- A **Workshop on Drafting Standards under the Gas Appliances Regulation** (2016/426/EU), open to Technical Body Officers, is foreseen for the first quarter of 2019.
- Still in spring 2019, CEN and CENELEC will organise an **in-house training** for their own

staff to present the ISO activities and way of working, in order to foster the cooperation at the international level.

- CEN and CENELEC will co-organise with ECOS, the European Environmental Citizens' Organisation for Standardisation, a one-day **yearly training for the environmental experts of the societal stakeholders**, that is expected to take place on the fourth quarter of 2019.
- Finally, on the fourth quarter of 2019, a **training on the CEN-CENELEC policy on Standard Essential Patents (SEPs)** is expected to take place, with the aim of informing members, technical body officers and experts about the CEN-CENELEC Policy on SEP, the good practices therein, the latest developments in the area from regulatory and policy perspectives, and market needs, linking with the work of the Digital Transformation Strategy Projects.

Events

The organisation of events is one of the most effective and relevant ways for CEN and CENELEC to proceed with their stated objectives of raising awareness on the European standardization process and creating lasting networks among all stakeholders involved in the standardization process. For 2019, CEN and CENELEC foresee to organise a series of important events, both in their headquarters in Brussels and in their members' locations. The preliminary list of events proposed for 2019 contains a variety of concepts, focussing on the priorities of CEN and CENELEC for their way forward. Among them, it might be interesting to give a glimpse of some of the most relevant events expected for 2019:

- **Putting Science into Standards Workshop on Quantum Technologies** (March 2019): the event will be an opportunity to foresight on Industry standardization needs for uptake of Quantum Technologies.

- **CEN-CENELEC StandarDays** (29-30 April 2019): the event is the yearly occasion in which standardization is open to the public. Its aim is to provide a clear and structured overview of the European Standardization System and of the CEN and CENELEC products and processes, as well as the benefits of involvement to potential stakeholders.
- **Stakeholder engagement workshop on 'Space'** (May 2019): the aim of the workshop is to provide to CEN, CENELEC as well as key stakeholders (European Space Agency) a timely opportunity to identify industry challenges, link to EU-funded programmes (e.g.: Copernicus, EGNOS, Galileo) and address opportunities for space standardization to feed CEN-CENELEC JTC5 'Space'.
- **Stakeholder Engagement workshop on 'Circular Economy – Plastics'** (Q3/2019): this workshop is linked to the proposal of the European Commission for a 'European Strategy for Plastics', part of their Circular Economy Package. It will be an opportunity for CEN and CENELEC an opportunity to engage with the plastics industry, assess the current policy initiatives and identify opportunities for new standardization work.
- **Bridgit II Conference** (13 November 2019): the event will bring together stakeholders from the industry, the research world and the institutions to communicate on the results of the Bridgit II – project, which bridges the gap between Innovation/Research and Standardization.
- **CPR – Joint Initiative on Standardization - Action 5 – Final outcomes** (Q4/2019): this meeting will be dedicated to presenting the final achievements of JIS Action 5, aiming at giving an overview of the general agreements to support the development of standards under the CPR (Construction Products Regulation).

Members of CEN and CENELEC

For more information about standards and how you can participate in standardization, please contact the National Standards Body or National Electrotechnical Committee in your country.

Austria

AS - Austrian Standards International
Standardization and Innovation
www.austrian-standards.at

OVE - Österreichischer Verband
für Elektrotechnik
www.ove.at

Belgium

NBN - Bureau de Normalisation /
Bureau voor Normalisatie
www.nbn.be

CEB/BEC - Comité Electrotechnique Belge / Belgisch
Elektrotechnisch Comité
www.ceb-bec.be

Bulgaria

BDS - БДС – Български институт за стандартизация
www.bds-bg.org

Croatia

HZN - Hrvatski zavod za norme
www.hzn.hr

Cyprus

CYS - Κυπριακός Οργανισμός Τυποποίησης
www.cys.org.cy

Czech Republic

ÚNMZ - Úřad pro technickou normalizaci, metrologii a
státní zkušebnictví
www.unmz.cz

Denmark

DS - Dansk Standard
www.ds.dk

Estonia

EVS - Eesti Standardikeskus
www.evs.ee

Finland

SFS - Suomen Standardisoimisliitto SFS ry
www.sfs.fi

SESKO - Suomen Sähköteknillinen
Standardisoimisjärjestö
www.sesko.fi

France

AFNOR - Association française de normalisation
UTE (Union Technique de l'Electricité)
www.afnor.org

Germany

DIN - Deutsches Institut für Normung
www.din.de

DKE - Deutsche Kommission Elektrotechnik Elektronik
Informationstechnik im DIN und VDE
www.dke.de

Greece

ΕΣΥΠ/ΕΛΟΤ - Ελληνικός Οργανισμός Τυποποίησης
www.elot.gr

Hungary

MSZT - Magyar Szabványügyi Testület
www.mszt.hu

Iceland

IST - Staðlaráð Íslands
www.stadlar.is

Ireland

NSAI - National Standards Authority of Ireland
www.nsai.ie

Italy

UNI - Ente Italiano di Normazione
www.uni.com
CEI - Comitato Elettrotecnico Italiano
www.ceiweb.it

Latvia

LVS - Latvijas standarts
www.lvs.lv

Lithuania

LST - Lietuvos standartizacijos departamentas
www.lsd.lt

Luxembourg

ILNAS - Organisme luxembourgeois de normalisation
www.portail-qualite.public.lu

The former Yugoslav Republic of Macedonia

ISRM - Институт за стандардизација на Република Македонија
www.isrm.gov.mk

Malta

MCCAA - Malta Competition and Consumer Affairs Authority
www.mccaa.org.mt

The Netherlands

NEN - Nederlands Normalisatie-instituut
NEC - Nederlands Elektrotechnisch Comité
www.nen.nl

Norway

SN - Standard Norge
www.standard.no
NEK - Norsk Elektroteknisk Komite
www.nek.no

Poland

PKN - Polski Komitet Normalizacyjny
www.pkn.pl

Portugal

IPQ - Instituto Português da Qualidade
www.ipq.pt

Romania

ASRO - Asociația de Standardizare din România
www.asro.ro

Serbia

ISS - Institute for Standardization of Serbia
www.iss.rs

Slovakia

UNMS SR - Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky
www.unms.sk

Slovenia

SIST - Slovenski inštitut za standardizacijo
www.sist.si

Spain

UNE - Asociación Española de Normalización
www.une.org

Sweden

SIS - Swedish Standards Institute
www.sis.se
SEK - Svensk Elstandard
www.elstandard.se

Switzerland

SNV - Schweizerische Normen-Vereinigung
www.snv.ch
Electrosuisse
www.electrosuisse.ch

Turkey

TSE - Türk Standardları Enstitüsü
www.tse.org.tr

United Kingdom

BSI - British Standards Institution
www.bsigroup.com

CEN (European Committee for Standardization) and **CENELEC** (European Committee for Electrotechnical Standardization) are recognized by the European Union (EU) and the European Free Trade Association (EFTA) as European Standardization Organizations responsible for developing standards at European level. These standards set out specifications and procedures in relation to a wide range of materials, processes, products and services.

The members of CEN and CENELEC are the National Standardization Bodies and National Electrotechnical Committees of 34* European countries. European Standards (ENs) and other standardization deliverables adopted by CEN and CENELEC, are accepted and recognized in all of these countries.

European Standards contribute to enhancing safety, improving quality, facilitating cross-border trade and strengthening the European Single Market. They are developed through a process of collaboration among experts nominated by business and industry, research institutes, consumer and environmental organizations, trade unions and other stakeholders.

CEN and CENELEC work to promote the international alignment of standards in the framework of technical cooperation agreements with ISO (International Organization for Standardization) and the IEC (International Electrotechnical Commission).

** Number of full members in December 2018*



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