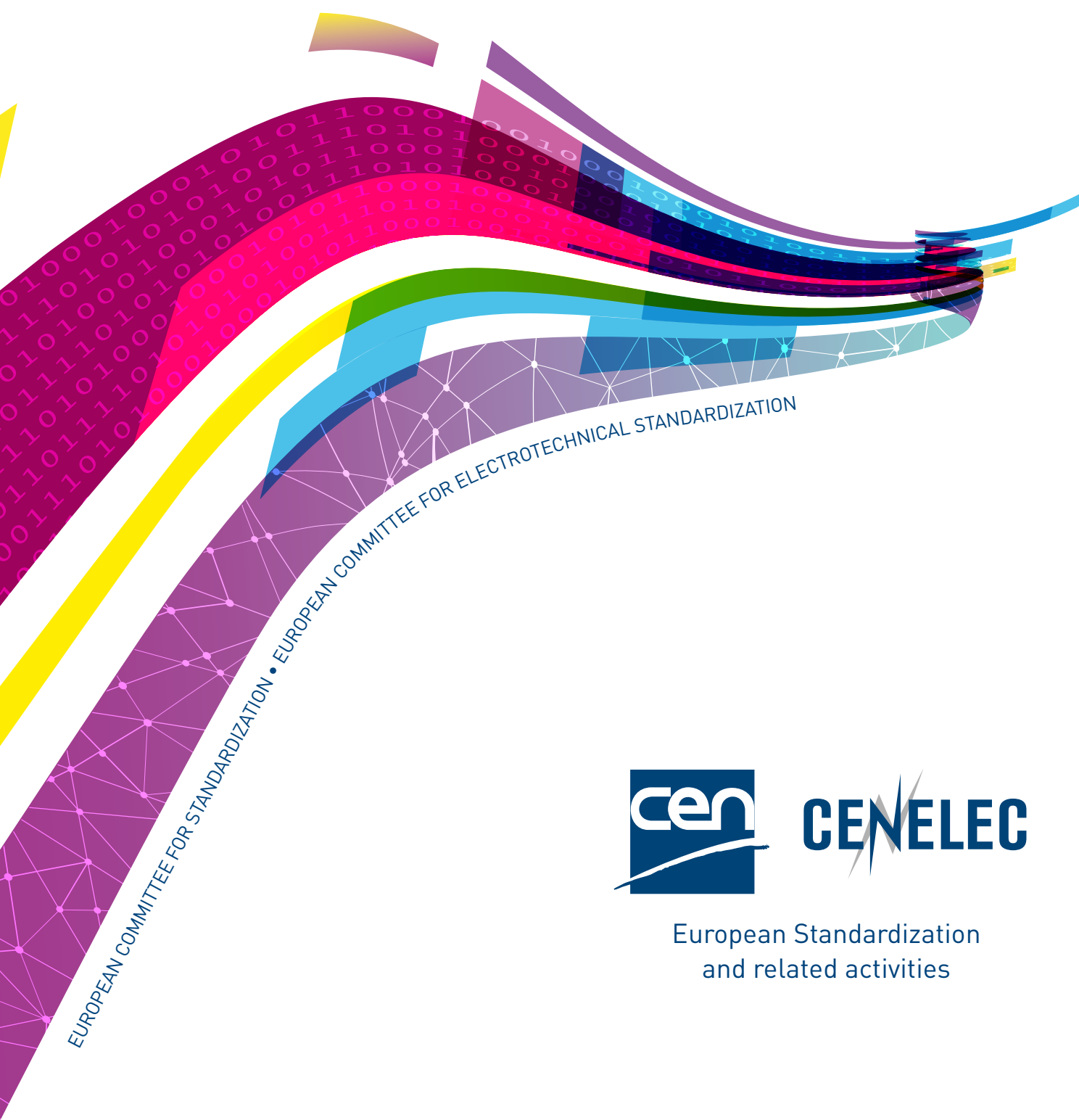
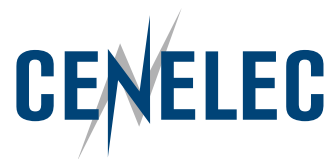


WORK PROGRAMME 2018



EUROPEAN COMMITTEE FOR STANDARDIZATION • EUROPEAN COMMITTEE FOR ELECTROTECHNICAL STANDARDIZATION



European Standardization
and related activities

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All facts and figures in this publication were correct on 6 December 2017



Introduction

With the digitization of processes, systems and supply chains transforming European industry and the lives of European consumers, industry stakeholders are continuously looking towards European and international standards as a reliable reference for support.

CEN and CENELEC, thanks to a strong and committed membership in 34 countries, confirm their engagement to support industry in developing market-driven solutions, integrating new technologies into businesses and daily life. Our modern and ever-evolving European Standardization System will further embrace digital transformation in 2018 and support the participation of large numbers of experts in standardization activities by engaging them with the right digital solutions including online collaborative standards-making and delivering the standards of the future (machine-readable standards, standards as software, etc.). The CEN and CENELEC Strategic Plan for Digital Transformation is being implemented through pilot projects. As well as delivering online collaborative authoring for the 'standards of the future', many projects will establish key partnerships and cross-fertilization between industry sectors and horizontal digital domains, and ensure engagement with the next generation of experts.

We will progress the work programmes of the CEN and CENELEC technical bodies, and continue the development of harmonized standards supporting EU/EFTA policies and legislation, as requested by the Annual Union Work Programme and the information and communication technology (ICT) rolling plan, combined with a strong commitment to the international standards organizations ISO and IEC.

The services sector is dynamic and multi-faceted. A number of emerging trends, such as digitization, new business models and changing buyer patterns, affect how services are being delivered and consumed. European Standards can make services more secure, accessible and inclusive for vulnerable consumers, as well as help both manufacturers and service providers to manage complex service relationships and global supply chains. The number of European Standards on services has increased in recent years. This has made CEN and its members set even more ambitious goals for 2018 to increase awareness about services standardization and to engage further with the different service sectors to better understand their needs. In 2017, CEN started implementing the Strategic Plan on Services

Standardization, which listed 10 actions to identify priority sectors with higher potential than others to benefit from standardization and to facilitate the cross-border provision of services within the single market.

The objective of CEN and CENELEC is also to strengthen strategic alliances, with the aims of enhancing the competitiveness of European industries in global markets and of contributing to the removal of technical barriers to trade worldwide. Given the increased importance of inter-regional collaboration in the field of research and innovation, in 2018 CEN and CENELEC, together with their international partners, will identify priority pre-standardization topics. The European research framework Horizon 2020 identifies opportunities for collaboration with countries such as the United States, Japan, India, Australia and African nations, among others. Our focus will be to identify opportunities and engage with our partners in these countries on research activities that could use standardization as a tool for innovation.

In the context of the development of the African Continental Free Trade Area (CFTA), CEN and CENELEC will continue to work with their regional African counterparts (ARSO and AFSEC) to finalise and kick off the implementation of their standardization strategy. It aims to foster economic development in Africa by setting up a strong quality infrastructure. The success of this initiative will depend on the level of engagement of all relevant stakeholders in Africa and in Europe, mainly industry and the respective regulators. Therefore, some of the main activities in 2018 will include stakeholder engagement and awareness-raising events in both continents, as well as the preparation of specific projects at continental, regional and national levels.

With all of the above, 2018 promises to be an important year for strengthening the European Standardization System. We thank all our stakeholders in Europe and worldwide for their vision, dedication, enthusiasm and commitment to making European Standards. I wish you good reading and look forward to your active participation in standardization in 2018 and beyond!

Elena SANTIAGO CID
Director General of CEN and CENELEC



The chemical industry is one of Europe's largest manufacturing sectors, producing 14.7% of the world's chemicals and contributing some €519 billion to the EU economy. Chemical companies in the European Union in 2016 employed a total staff of about 1.2 million people[1].

The chemical industry is a highly regulated sector in Europe and a large part of its production supplies other sectors of the economy (e.g. manufacturing, construction, health, agriculture). The chemical industry also plays an essential role in providing innovative materials and solutions.

Standards are essential to create a single market for products and to ensure that those products are safe and take into account environmental aspects. Standards can also support the take-up of new products, and they can help to increase market transparency by providing common reference methods and requirements that enable the verification of claims (e.g. in relation to safety, bio-based content, environmental sustainability or toxicity) about different products.

The majority of CEN's work in the area of chemical and bio-based products is undertaken in response to standardization requests from the European Commission. In this context, CEN cooperates actively with industry, research institutes, environmental NGOs and public agencies. Some of the work is also done in cooperation with ISO under the Vienna Agreement (e.g. in the area of paints and varnishes, surface active agents or laboratory equipment).

Standardization can support the implementation of European legislation including Regulation (EC) 2003/2003 (to be revised in 2018) on fertilizers, Directive 93/15/EEC on explosives for civil uses, and Directive 2007/23/EC and the recast Directive 2013/29/EU on the placing on the market of pyrotechnic articles. CEN's work in this area also supports EU policies such as the Action Plan for the Circular Economy (COM (2015) 614).

Source: CEFIC www.cefic.org/Facts-and-Figures/



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 382	PFOS
CEN/TC 386	Photocatalysis
CEN/TC 401	Reduced Ignition Propensity Cigarettes
CEN/TC 416	Health risk assessment of chemicals
CEN/TC 421	Emission safety of combustible air fresheners
CEN/TC 437	Electronic cigarettes and e-liquids
CEN/SS C10	Starch
CEN/SS C20	Explosives and firework
CEN/WS MERLIN-EXPO	Standard documentation of large chemical exposure models
CEN-CLC/BTWG 11	Sustainable Chemicals
CEN-CLC/BTWG 13	Polycyclic Aromatic Hydrocarbons (PAHs) in rubber and plastic

Standards published by CEN & CENELEC: 1163

Work Items currently in the Work Programmes: 235

Standardization requests from EC/EFTA

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/491 – Bio-surfactants and bio-solvents
M/492 – Bio-based products
M/547 – Algae and algae-based products or intermediaries
M/XXX (anticipated) – PAH in rubber and plastic
M/XXX (anticipated) – Fertilizers

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

2.4. Action in support of the circular economy action plan
2.7. Action in support of a deeper and fairer internal market with a strengthened industrial base

Further information

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



FERTILIZERS

Standardization request linked to the new regulation on fertilizers

The reuse of raw materials that are now disposed as waste is one of the key principles of the Circular Economy Package adopted in December 2015.

In the same line, the main purpose of the new proposed regulation is to provide organic-based and other fertilizing products with free and unrestricted access to the single market, thereby creating a level playing field with the mineral fertilizers already benefiting from free movement on the single market.

Standards will be required to implement the new Regulation, in particular for analytical test methods. Therefore, the Commission is finalizing a standardization request asking the ESOs to develop/improve many standards for test methods, particularly for organic and organo-mineral fertilizers, that could be used for the control of CE-marked fertilizing products.

In 2018, four CEN TCs are expected to work in response to this standardization request, which will involve the revision and/or development of numerous standards. The TCs are 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 CEN/TC 455 'Plant biostimulants and agricultural micro-organisms'.





OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Bio-based products - Standards are essential in encouraging consumer demand for new bio-based products and green public procurement. In particular, they help to increase market transparency by providing common reference methods and requirements in order to verify claims related to the bio-based content, biodegradability, recyclability or environmental sustainability of bio-based products.

In response to Standardization Requests M/491 and M/492, CEN/TC 411 'Bio-based products' is developing a series of standards covering horizontal aspects of bio-based products as well as specific types of bio-based products.

In relation to M/492, CEN/TC 411 will publish EN 16785-2 regarding the determination of the bio-based content of products using the material balance applied to a representative product batch in a production unit, together with a Technical Specification specifying a method for the determination of the oxygen content in bio-based products using an elemental analyser. The TC will also publish a Technical Report on the overview of relevant existing applications regarding the use of stable isotope ratios of carbon, hydrogen, oxygen and nitrogen as tools for verification of the origin of bio-based feedstock and characteristics of production processes. Finally, the TC will launch work on a Technical Report on the sustainability criteria, lifecycle analysis and related issues of bio-based products. As it is important to inform the public and stakeholders about the work being done, CEN/TC 411 will focus on dissemination and communication on the standards developed.

In response to M/547 on Algae and algae-based products or intermediates, the newly created CEN/TC 454 'Algae and algae products' will focus on the development of the proposed new standards and other deliverables, which are to be finalized by 2021.

Sustainable chemicals from primary and secondary raw materials

- In 2018, CEN-CLC/BTWG 11 'Sustainable chemicals' will finalize its work in response to the EC's Ancillary Action on Sustainable Chemicals from Primary and Secondary Raw Materials with the objective of identifying and prioritizing needs. The final report will include a mapping of existing standardization work at national, European and international levels, together with a gap analysis and a proposal on how to close the gaps. A workshop will be organized in the second half of 2018 to discuss the findings with relevant stakeholders and the EC before the publication of the final report, which is planned for Q4 2018.

Polycyclic aromatic hydrocarbons (PAHs) in rubber and plastic components of articles

In 2018, the newly created CEN-CLC/BTWG 13 'Polycyclic Aromatic Hydrocarbons (PAHs) in rubber and plastic' will develop a preliminary work programme in response to the standardization request as regards compliance with maximum content criteria of PAHs in rubber and plastic components of articles. The BTWG will start work on the scoping study directed towards the identification of existing methods to determine the total content for PAHs in articles, and the associated sample preparation and extraction methodologies.

Fertilizers and liming materials

- CEN/TC 260 'Fertilizers and liming materials' will publish, at the beginning of 2018, a new European Standard, EN 13368-3 'Determination of chelating agents in fertilizers by chromatography – Part 3: Determination of [S,S]-EDDS'. Moreover, M/335, concerning methods of sampling and analysis for fertilizers under Regulation (EC) No 2003/2003 on fertilizers, will be completed in 2018, with the publication of the following deliverables: EN 16962, EN 16963, EN 16964, EN 16965, EN 17041, EN 17042 and EN 17043.

CEN/TC 260 is also discussing the development of analytical methods for the determination of perchlorate in fertilizers (prEN 00260 186 Fertilizers – Determination of perchlorate in mineral fertilizers – Determination by IC-DC).



CEN/TC 260 will also develop the required deliverables from the expected standardization request from the EC/EFTA concerning the elaboration of harmonized standards in the frame of the expected new Regulation on fertilizing materials.

Surface active agents - CEN/TC 276 'Surface active agents' intends to develop a new European Standard based on CEN/TS 17035 'Surface active agents – Bio-based surfactants – Requirements and test methods', which was published in early 2017. The TC will also develop a new Technical Report providing an overview of surfactants containing biomass. Moreover, the following ongoing standardization activities will be further developed in 2018:

- method of analysis – Quantification of alkyl phosphate ester, esters of phosphate distribution by ^{31}P -qNMR;
- method of analysis – Quantification of nitrosamines in surfactants by HPLC-MRM-MS method.

Laboratory equipment - CEN/TC 332 'Laboratory equipment' collaborates with its counterpart ISO/TC 48 to facilitate the adoption of European Standards identical to ISO standards for various types of glass and plastic ware used in laboratories. In 2018, CEN/TC 332 and ISO/TC 48 will evaluate the existing standards and identify appropriate future actions.

In 2018, CEN/TC 332 will start the revision of EN 12469:2000 'Biotechnology – Performance criteria for microbiological safety cabinets' (transferred from CEN/TC 233 'Biotechnology'), which is widely used and urgently needs a revision to bring it up to the state of the art. For this purpose, CEN/TC 332 has set up a new Working Group, focusing on microbiological safety cabinets.

Coating systems - CEN/TC 360 'Coating systems for chemical apparatus and plants against corrosion' will start the revision of EN 14879 'Organic coating systems and linings for protection of industrial apparatus and plants against corrosion caused by aggressive media'.

Explosives - It is necessary to revise the current harmonised standards to include new products and new technologies in their scope. Therefore, in 2018, CEN/TC 321 'Explosives for civil uses' will undertake the revision of various standards such as EN 13630 'Explosives for civil uses – Detonating cords and safety fuses', EN ISO 13631 'Petroleum and natural gas industries – Packaged reciprocating gas compressors', EN 13763 'Explosives for civil uses – Detonators and relays', EN 13857 'Explosives for civil uses' and EN 13938 'Explosives for civil uses – Propellants and rocket propellants', as well as the development of a new standard for electronic detonators.



Construction



The majority of CEN's work in the construction sector involves the development of European Standards to assess the performance of construction products and to provide the requisite testing and/or calculation methods for them. These harmonized European Standards are an essential tool for the application of the Construction Products Regulation (CPR) (EU) No 305/2011 and for the fulfilment of national building regulations. 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.

Work in this sector is driven by its main stakeholders: manufacturers, national/European industry associations, laboratories and notified bodies, engineers, structural designers, the scientific community and the European Commission.

Some products are also affected by a number of European directives that do not regulate the product itself, but instead place requirements on the industry with regard to chemicals, the environment and safety in the workplace.



Technical bodies responsible

CEN-CLC/TC 11	Accessibility in the built environment
CEN/TC 33	Doors, windows, shutters, building hardware and curtain walling
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 135	Execution of steel structures and aluminium structures
CEN/TC 154	Aggregates
CEN/TC 155	Plastics piping systems and ducting systems
CEN/TC 156	Ventilation for buildings
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 228	Heating systems and water based cooling systems in buildings
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 325	Crime prevention through building, facility and area design
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 38	Durability of wood and wood-based products
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
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 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	Construction Sector Network Core Group



Standards published by CEN & CENELEC: 3238

Work Items currently in the Work Programmes: 688

Standardization requests from EC/EFTA

43 active Standardization Requests (including amendments and revisions)

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

3. A Resilient Energy Union with a Forward-Looking Climate Change Policy
12. Communication on Green Infrastructure COM (2013)249, COM (2013)216 on adaptation to climate change and referring to COM (2014)445 on resource efficiency opportunities in the building sector
19. Regulation (EU) 305/2011, in conjunction with Drinking Water Directive 98/83/EC, and related to Regulation (EC) No 1935/2004 including Regulation 10/2011

Further information

www.cen.eu/work/areas/construction

STRUCTURAL EUROCODES

The 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 also 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).

A series of project teams has been established under M/515, with the first phase of the work programme to be completed in April 2018. Work is under way for Phase 2, with a call for project teams yet to be launched for the last two phases.

CEN/TC 250 is also finalizing the draft of a new EN 1992-4 'Design of concrete structures – Part 4: Design of fastenings for use in concrete' on the design of fastenings for use in concrete to replace the existing series of Technical Specifications, with a number of supporting Technical Specifications to be published concurrently.



CONSTRUCTION PRODUCTS

In 2018, CEN will further adapt various standards to the requirements of the Construction Product Regulation. New European Standards will also be prepared to support the implementation of the Regulation. CEN/TC 88 'Thermal insulating materials and products' expects to finalize the amendments to the building package European Standards. The standards will be amended to include the essential characteristic 'propensity to undergo continuous smouldering' and the latest developments on the release of dangerous substances.

CEN/TC 134 'Resilient, textile and laminate floor coverings' will finalize the revision of EN 14041 'Resilient, textile, laminate and modular multilayer floor coverings' to include new developments in the flooring sector.

CEN/TC 189 'Geosynthetics' will finalize the revision of the product standards for geosynthetics and the new developments, which include containment applications for chemicals, polluted water and other liquids and underground structures (other than tunnels and associated structures).

SUSTAINABILITY OF CONSTRUCTION WORKS

CEN/TC 350 'Sustainability of construction works' will further revise its European Standards, which provide a standardized approach for the delivery of environmental information on construction products, the assessment of the environmental, social and economic performance of buildings and civil engineering works, and more generally the sustainability performance of construction works.

The work will be prepared in response to the amendment to M/350, and the main focus in 2018 will be the finalization of the amendment to EN 15804 'Environmental product declarations – Product category rules'.

In Recommendation 2013/179/EU of 9 April 2013, the Commission set out methodological requirements of the Product Environmental Footprint (PEF). These methods were also evaluated in pilot projects for certain construction products in 2014-2016. The work programme of CEN/TC 350 will contribute to align the work developed by CEN with those requirements included in the PEF methodology as well as the outcome of the pilot projects.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Other developments - CEN/TC 88 'Thermal insulating materials and products' expects to finalize new European Standards on factory-made vacuum insulation panels (VIP) and factory-made calcium silicate (CS) products. In addition, it will start a new work item for advanced porous materials.

CEN/TC 125 'Masonry' will work further on the conversion of its Technical Specification CEN/TS 722 22 'Methods of test for masonry units – Part 22: Determination of freeze/thaw resistance of clay masonry units' into a European Standard.

CEN/TC 127 'Fire safety in buildings' will continue its work to revise the existing set of test methods. The following standards will be finalized in 2018: EN 1364 6 'Fire resistance



tests for non-loadbearing elements – Part 6’, EN 1366 13 ‘Cavity barriers, fire resistance tests for service installations – Part 13: Chimneys’ and EN 15269 6 ‘Extended application of test results for fire resistance and/or smoke control for door, shutter and openable window assemblies, including their elements of building hardware – Part 6: Fire resistance of sliding timber doorsets’.

CEN/TC 134 ‘Resilient, textile and laminate floor coverings’ will continue its activities in the new development of methods for modular multilayer products.

Dangerous substances - CEN/TC 351 ‘Construction products – Assessment of release of dangerous substances’ will continue developing Technical Specifications addressing

aspects such as analysis of inorganic substances. CEN/TC 351 will also continue the validation of the test methods for leaching to soil, groundwater and surface water.

The development of assessment methods for the release of dangerous substances will support the fulfilment of the Basic Requirements for Construction Works (BRCW) under the Construction Products Regulation (CPR – 305/2011).

Smart CE marking - In 2018, CEN will develop a CEN Workshop Agreement (CWA) on smart CE marking. This CWA should be a reference document and serve as a basis for the implementation of the smart CE marking concept into harmonised standards under the CPR.





Consumer



European Standards can contribute to protecting consumers by setting safety requirements for products for everyday use. They are developed across a wide range of sectors within CEN. More than 20 Technical Committees are carrying out standardization activities in this field. It falls mainly in the area of the General Product Safety Directive (2001/95/EC), but is also concerned by a number of other pieces of European legislation such as the Toys 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.

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 TCs work independently of one another but exchange information through liaison officers and sometimes cooperate on topics of common interest, such as harmonized application of anthropometric data in standards

or access to incident and injury data to inform standards development.

European companies are very prominent globally, especially in the areas of toys and childcare products, clothing and accessories, footwear and sports articles. Whenever possible, global harmonization, through cooperation with ISO and IEC, is established; however, identical European and international standards are not always easily achievable because most countries have different national legal frameworks regulating consumer safety.

By providing tools for compliance with EU legislation, CEN and CENELEC standards allow manufacturers to meet market entry requirements in Europe and ensure safe products for consumers. To reach this goal, industry cooperates closely with authorities, laboratories and consumer representatives in the European Standards development process.



Technical bodies responsible

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 use and 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 45X	Preservation of Digital cinema
CEN/TC 52	Safety of toys
CEN/TC 93	Ladders
CEN/SS H22	Smokers' lighters
CEN/SS M21	Precious metals - Applications in jewellery and associated products
CEN/BT WG 213	Strategic Advisory Group on Accessibility (SAGA)
CEN-CLC/TC 12	Design for All

Standards published by CEN & CENELEC: 822

Work Items currently in the Work Programmes: 168

Standardization requests from EC/EFTA

M/464 – Safety of childcare articles (bath rings, bath aids, bath tubs, etc.)
M/497 – Safety of childcare articles – Risks in the sleeping environment
M/527 – Certain seats for children
M/445 – Safety of toys
M/XXX (anticipated) – Barbecuing appliances and firelighters
M/XXX (anticipated) – Candles
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 the 'Annual Work Programme for European Standardisation 2018'

Action 25: Development of standards to improve safety of consumer products not covered by Union harmonisation legislation. European standards developed and referenced under GPSD improve safety of consumers, help Member States to enforce the general safety requirement

Further information

www.cen.eu/work/areas/consumerproducts



SMART TEXTILES

In 2018, CEN will work further on European Standards in support of Mandate M/553 on 'Advanced garments and ensembles of garments that provide protection against heat and flame with integrated smart textiles and non-textile elements', which was accepted in 2017. Notably, CEN/TC 248 'Textiles' will continue elaborating further standards on textiles containing phase change materials (EN 16806-series), to complete the existing CEN/TC 16298:2016 on smart textiles and EN 16812:2016 on electrically conductive textiles. This work in an innovative, cross-cutting field is expected to benefit manufacturers and laboratories in their quest of ensuring and checking product compliance with the legal safety requirements in Europe, as well as provide a tool to be used in public procurement of garments to be used, for example, by firefighters. CEN committees involved are cooperating with CENELEC experts and the activities take place only at European level.

SAFETY OF TOYS – NEW HARMONIZED STANDARDS FOR NEW CHEMICAL REQUIREMENTS

A new Standardization Request from the European Commission in the context of Directive 2009/48/EC on safety of toys is expected in 2018. In anticipation, the CEN and CENELEC technical bodies concerned will be developing new and revised European Standards in this field. CEN/TC 52 'Safety of toys' will work on five new harmonized European standards on chemical requirements to provide the stakeholders with a tool for compliance with new legal requirements specified in Appendix C of Directive 2009/48/EC. The industry is particularly awaiting the future standards, which are also expected to raise the safety levels for consumers as well as facilitate market surveillance by public authorities. The last two categories of stakeholders cooperate closely with the industry in the elaboration of these five new standards.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Safety of candles - In 2018, CEN/TC 369 'Candle fire safety' will publish a revised European Standard on sooting behaviour of candles (EN 15426) in anticipation of a Standardization Request from the European Commission in support of the implementation of the EU Directive on general product safety (2001/95/EC). The expected Standardization Request will relate to the safety requirements for candles, candle supports, containers and accessories. CEN/TC 369 involves consumer representatives in this work, alongside product manufacturers and suppliers of raw materials.

Playing field equipment - CEN/TC 136 'Sports equipment' will publish in 2018 new and revised European Standards for playing field equipment,

covering functional and safety requirements and test methods for portable and fixed goalposts and football goalposts. The European Commission is considering requesting European Standards in this area in support of the implementation of the EU Directive on general product safety (2001/95/EC). These standards are mainly addressed to manufacturers of the products covered but also to testing houses that verify compliance. They are expected to be used by public authorities as a market surveillance tool and as a reference document in public procurement. They are expected to benefit the consumers by ensuring high levels of safety for the users. This work takes place at the European level with the involvement of a variety of stakeholders: industry, laboratories, authorities and consumer representatives.





Defence and security



European societies face an increasing frequency and intensity of hazards and disasters, which are exacerbated by climate change and social dynamics, such as migration, demographic change and an ageing population. These threats do not respect national boundaries and as well as endangering individuals and their assets, they may target the economy and the critical infrastructures and services on which they rely.

Since many critical infrastructures in Europe have a cross-border dimension and there are interdependencies between sectors, an agreed minimum level of security compliance is required. Critical infrastructure protection seeks to ensure that services vital to society, such as health, water, transport, energy and communications, continue to work. At the same time, interconnections of critical infrastructures make it difficult for emergency services to respond effectively to incidents or other threats. Security practitioners need to share a common terminology and take benefit of highly performant security systems and new technologies used by first responders, law enforcement authorities as new security

challenges and/or risks continue to emerge.

Creating EU-wide standards and promoting them on a worldwide level is also a vital component of the global competitiveness of the EU security industry. Standards also play a vital role in the harmonization of processes and procedures for risk management across Europe, and in boosting both performance and reliability of security products, services and systems.

The significant use of ICT by both citizens and businesses means that society is more exposed to cyber threats. A high level of information security across Europe and good privacy management practices are also essential to ensure more consumer confidence in new security products and systems and support the growth of the European security industry. Standards are a means of achieving a common understanding of ways to define and implement new systems that ensure privacy/security by design and by default, principles which underpin the EU's specific legislation (the 'GDPR reform').



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 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 PFT	Police firearms technologies
CEN/WS TER-CDM	Terminologies in Crisis and Disaster Management
CEN-CLC/TC 4	Services for fire safety and security systems
CEN-CLC/WS	Holistic and multi-actor framework for surveillance of wide-area infrastructure zones
CEN-CLC/WS CRISP	Guidelines for the evaluation of installed security systems, based on S-T-E-Fi criteria
CLC/BTTF 133-1	Sound systems for emergency purposes which are not part of fire detection and alarm systems
CLC/TC 79	Alarm systems
CEN-CENELEC-ETSI	Coordination Group on Defence Standardization

Standards published by CEN & CENELEC: 282

Work Items currently in the Work Programmes: 71

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

2.6. Action in support of the European agenda on security

Further information

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



ALARM SYSTEMS

CENELEC provides standards which share best practice among fire and alarm industries on performance indicators of the various types of systems and interoperability of the alarms systems worldwide key stakeholders such as alarms manufacturers association EURALARM are actively participating the standards setting work. By collaborating with the IEC, European standards are also aligned with international standards as closely as possible.

In 2018, CLC/TC 79 'Alarm systems' intends to publish a new standard on Intrusion and hold-up systems setting out requirements lock state contacts (EN 50131-2-10) and define a new Technical Specification on IP communication protocol for the social alarms.

SOCIETAL AND CITIZEN SECURITY (CEN/TC 391)

The fruitful cooperation between CEN and the JRC made it possible to develop a consistent glossary of about 600 terms used by the security industry, emergency services, public institutions and law enforcement agencies in their daily work. Many of the terms and definitions listed have been widely used for many years, while others are the result of cross-cutting experience of areas of chemical, biological, radiological and nuclear explosives (CBRNE). The recently-published standard on the glossary of security terminology will help security responders and security service providers respond effectively to security threats.

In 2018, CEN will publish the first guidance document for top management officials to best equip them for managing crisis within their organizations. This technical specification sets out the principles of and good practice for the provision of a crisis management response, delivered by strategic decision makers of any organization of any size in the public or private sector.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

CEN/TC 419 'Forensic science services' members have contributed to the development of new standards setting out requirements for collecting and processing of crime evidence by forensic labs. In 2018, CEN will endorse two ISO standards on forensic analysis setting out the requirements for the recognition, recording of forensic evidence, its collection, transport and storage of forensic material and for its examination within the forensic labs.

CEN/WS City Resilience Development - Maturity Model - In 2018, CEN will publish a CEN Workshop Agreement setting out a framework defining the ideal path in the resilience-building process of a city. This publication is meant to guide policy and decision makers at city level

and councillors working for resilience in their city, as well as any other city stakeholders working on resilience (e.g. critical infrastructure providers, emergency services, citizens, media, non-governmental organizations, academic and research institutions).

CEN/WS City Resilience Development - Operational Model - The workshop will propose a definition of 'city resilience' and will set out steps to follow for the practical implementation and operationalization of city resilience at local level and tools and guidance for the resilience-building process.

The CEN Workshop Agreement may be helpful for local administration staff members engaged in sustainability, climate adaptation, resilience, environmental planning and strategic planning. The upcoming publication will collect guidance material about training staff on resilience topics.



Information and communication technology (ICT) has become increasingly important in our daily lives and for all kinds of business. Having access to the latest ICTs is therefore essential for social and economic development. In the ICT sector, it is especially important that products and services be 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 made by different companies are able to work together seamlessly.

CEN and CENELEC are working together to develop standards that support the development of open and competitive markets, meeting the needs of business, consumers and other stakeholders in the ICT sector. CEN and CENELEC bring a major contribution to ICT standardization through their broad footprint in vertical sectors (energy management and energy efficiency, electrotechnology, transport, healthcare, manufacturing, machinery, construction, etc.) that are embracing ICT more

and more, and in combination with their long-standing cooperation with ISO and IEC.

In 2018, CEN-CLC/BTWG 6 'ICT standardization policy' will continue supporting the development, and the implementation by the CEN and CENELEC governing bodies, of the CEN and CENELEC strategy for ICT.

The group has notably established a clear strategy on the possible adoption of ISO IEC JTC 1 standards as European Standards, thereby capitalizing on international efforts, to support the European Digital Agenda in achieving its ICT standardization goals. In 2018, CEN CLC/BTWG 6 will further monitor and coordinate the adoption of JTC 1 standards as European Standards. CEN-CLC/BTWG 6 will continue collaborating to the development of the 'Joint Initiative on Standardisation' (JIS) Action 14 'Standardisation to support digitisation of European industry'. In this context, CEN-CLC/BTWG 6 will also further coordinate the participation of CEN and CENELEC in the European Commission's Multi-Stakeholder



Platform (MSP) on ICT standardization and position CEN and CENELEC on this domain.

CEN and CENELEC activities support the European Digital Single Market in many electronic activities (eActivities) including eInvoicing, eProcurement, eSignature, ePrivacy, eSkills, eLearning, eAccessibility, eHealth and eTolling. Other related ICT activities supported by CEN and CENELEC include the following

sectors: smart grids and smart metering; smart and sustainable cities and communities; intelligent transport systems (ITS); and advanced manufacturing,

Moreover, CEN and CENELEC standards support the uptake of office and computing machinery, ICT services, software packages and information systems, and radio and telecommunications equipment.

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	Digital competences and ICT Professionalism
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 IS/ÆN)
CEN/WS BDA	Big Data
CEN/WS BII3	Business Interoperability Interfaces on public procurement in Europe phase 3
CEN/WS eBES	e-Business Board for European Standardization (EBES)
CEN/WS eCAT	eCataloguing (Multilingual catalogue strategies for ecommerce and ebusiness)
CEN/WS FATEDA	Standards-Compliant Formats for Fatigue Test Data
CEN/WS GITB2	Global eBusiness test bed methodologies phase2
CEN/WS GITB3	Global eBusiness test bed methodologies phase3
CEN/WS ICT	ICT/SKILLS Workshop (IT profiles and curricula)
CEN/WS JXF	XFS for the Java Platform
CEN/WS METEDA	Mechanical Test Data
CEN/WS RACS	Requirements and recommendations for Assurance in the Cloud
CEN/WS SERES	Standards for Electronic Reporting in the Engineering Sector
CEN/WS XBRL	Improving transparency in financial and business reporting
CEN/WS XFS	eXtensions for Financial Services
CEN-CLC/WS EGNOSDK	Workshop on EGNOS enabled labelling and SDK validation
CEN-CLC/TC 8	Privacy management in products and services
CEN-CLC/BTWG 6	ICT Standardization Policy
CEN-CLC/FG	Cybersecurity
CEN-CLC-ETSI/JWG	Green Data Centres



CEN-CLC-ETSI/JWG	eAccessibility
CEN-CLC-ETSI/SF	Smart and Sustainable Cities and Communities
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/SR 103	Transmitting equipment for radiocommunication
CLC/SR 110	Flat panel display devices
CLC/WS 04	Interoperability framework requirements specification for services to the home (IFRS)
CLC-ETSI/JWG DD	Joint WG Digital Dividend

Standards published by CEN & CENELEC: 1889

Work Items currently in the Work Programmes: 253

Standardization requests from EC/EFTA

- M/536 – Radio Equipment Directive
- M/460 – Electronic signatures
- M/528 – Electronic invoicing in public procurement

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

- 2.3 A connected digital single market
- 5. Increase interoperability and easy data sharing between operators across value chains, notably on product lifecycle management and logistics
- 16. Standardise public procurement bidding systems, platforms, forms and data
- 17. Harmonise safety standards for 3D printers, robots, autonomous vehicles, wind turbines, automated machines and food machines

Further information

- <https://www.cen.eu/work/areas/ICT/Pages/default.aspx>
- www.cenelec.eu/go/ICT
- <https://www.cenelec.eu/standards/Sectors/ICT/Pages/default.aspx>



CYBERSECURITY AND DATA PROTECTION

Cybersecurity is becoming relevant to all industry sectors, not just the 'natively digital' but also traditional industries as they digitally transform their processes, systems and supply chains. The security of information and communication systems is an area of increasing concern, both for public authorities (from local governments to international organizations) and for private companies (micro-enterprises to large multinationals). While this shift opens up opportunities, it also creates threats to operational safety, robustness and resilience.

Cyber threats and risks know no borders, are common to all and therefore need to be addressed collectively. European Standards are meant to build foundations for a culture of security across sectors that are vital for our economy and society. The ability of the responsible public authorities and emergency services to respond to such threats depends on having common terminology and procedures, and compatible equipment and communication systems. Standardization can contribute to overcoming fragmentation in this field by increasing the interoperability and compatibility of systems and products.

This is why CEN and CENELEC created, in June 2017, a new Technical Committee on 'Cybersecurity and data protection' (CEN-CLC/TC 13). The lack of interoperable solutions, practices (process standards) and trustworthy ICT solutions is among the gaps affecting the European single market. On this basis, cybersecurity was identified as one of the ICT standardization priorities for the Digital Single Market. The creation of CEN-CLC/TC 13 aims to address the growing demand for standards in this field.

In 2018, CEN-CLC/TC 13 will develop standards for data protection, information protection and security techniques with specific focus on cybersecurity, covering all concurrent aspects of the evolving information society, including:

- organizational frameworks and methodologies, including ICT management systems;
- data protection and privacy guidelines;
- process and product evaluation schemes;
- ICT security and physical security technical guidelines;
- smart technology, connected objects, distributed computing devices and data services.

This includes identification and possible adoption of standards already available or under development that could support the EU Digital Single Market, the implementation of the General Data Protection Regulation (GDPR), the Directive on the security of network and information systems (NIS Directive) and the proposal for a Regulation on privacy and electronic communications code (ePrivacy). Special attention will be paid to ISO/IEC JTC 1 standards, but will not be limited to them. Other standards developing organizations (SDOs) and international bodies will also be taken into account, such as ISO, IEC, the International Telecommunication Union (ITU), the Institute of Electrical and Electronics Engineers (IEEE), the US National Institute of Standards and Technology (NIST) and industrial fora.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Advanced automation technologies - In 2018, CEN/TC 310 'Advanced automation technologies and their applications' will continue working on the revision of EN ISO 10218 1 'Robots and robotic devices – Safety requirements for industrial robots – Part 1: Robots' and EN ISO 10218 2 'Robots and robotic devices – Safety requirements for industrial robots – Part 2: Robot systems and integration'. Moreover, CEN/TC 310 plans to create a new work item for the revision of EN ISO 19440 'Enterprise integration – Constructs for enterprise modelling'.

Personal identification - CEN/TC 224 'Personal identification and related personal devices with secure element, systems, operations and privacy in a multi sectorial environment' develops standards for strengthening the interoperability and security of personal identification and its related personal devices, systems, operations and privacy. The multi-sectoral environment of CEN/TC 224 involves sectors such as government/citizen interactions, transport, banking and e-health, as well as consumers and providers from the supply side such as card manufacturers, security technology firms, conformity assessment bodies and software manufacturers.

In 2018, CEN/TC 224 will continue the development of European Standards, especially on trustworthy systems supporting server signing (prEN 419241-1), protection profile for trust service provider cryptographic modules (prEN 419221-5), biometrics multilingual vocabulary (prEN 17054) and breeder documents.

eProcurement - CEN/TC 440 'Electronic public procurement' was created to facilitate efficient and effective exchange of electronic information between buyer and seller in (public) procurement processes. In 2018, CEN/TC 440 will develop standards based on the equivalent deliverables from the CEN workshop on business interoperability interfaces (CEN WS BII), in alignment with the deliverables

of CEN/TC 434 (eInvoicing). The objective is to support electronic information exchange in public procurement and in business-to-business (B2B) transactions. The deliverables to be developed by CEN/TC 440 will be made available as a series of multi-part technical specifications: e-Procurement Business Term Vocabulary, e-Notification Business Interoperability Specifications, e-Tendering Business Interoperability Specifications, e-Catalogue Business Interoperability Specifications, e-Ordering Business Interoperability Specifications and e-Fulfilment Business Interoperability Specifications.

AIDC and RFID technologies - CEN/TC 225 'AIDC technologies' is about automatic identification and data capture techniques such as 1D and 2D optical data carriers, radio frequency identification (RFID) and real-time locating systems (RTLs). These technologies are widely used as end points, allowing today the connection of billions of objects. The majority of Internet of Things (IoT) applications are based on these technologies, and more and more scenarios involve the capture and processing of sensitive and personal data. In 2018, CEN/TC 225 will assess the way EN 16570 (Public awareness) and EN 16571 (Privacy impact assessment) could be revised to embrace new consumer privacy and security issues linked to upcoming IoT applications.

eInvoicing - CEN/TC 434 was established to provide standardization for e-Invoicing and undertakes the standardization activities required by the Directive 2014/55/EU. In 2018, following the publication of the first European Standard on electronic invoicing (EN 16931-1:2017), CEN/TC 434 will continue its work which will include the following aspects and standardization deliverables: maintenance activities, development of documents that facilitate the uptake of European Standards and its ancillaries, development of documents that describe the governance and rules framework for Core Invoice Usage Specifications (CIUS) and extensions to the core invoice management, as well as specifications for common extensions



and for the creation and management of registry services in support of eInvoicing (e.g. for extensions, CIUSs and code lists).

Geographic information - CEN/TC 287 'Geographic information' collaborates with ISO/TC 211 to facilitate the adoption of European Standards identical to ISO standards in the field of digital geographical information. In 2018, CEN/TC 287 will continue the development of a structured framework of standards and guidelines, specifying a methodology to define, describe and transfer geographic data and services. The standards will support the consistent use of geographical information throughout Europe in a manner that is compatible with international usage.

Mechanical test data - The CEN Workshop on Mechanical Test Data (MeTeDa), a component of the International Nuclear Energy Research Initiative project on a digital infrastructure for advanced structural materials data, was launched in November 2016. In the course of 2018, the workshop will deliver a CEN Workshop Agreement (CWA) on data formats for testing creep, creep crack growth, creep-fatigue and creep-fatigue crack growth, in addition to providing primarily the nuclear energy sector with an effective means of collecting, exchanging and reporting test data.

Radio Equipment Directive - The Radio Equipment Directive (2014/53/EU, RED) has a significant impact on industry and standardization, as it not only affects (combined) equipment covered by CENELEC, but also has an influence on a series of products in the scope of CEN. Accordingly, CEN-CLC BT Working Group 10 (BTWG 10), which mirrors legal developments around the RED, will continue advising the CEN and CENELEC community on the topic in 2018.

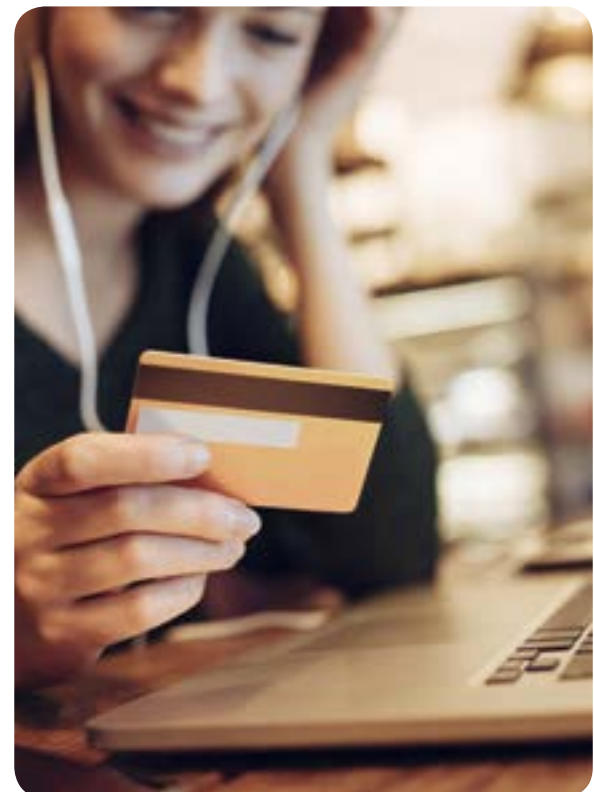
In particular, the group will ensure a smooth and efficient communication channel with the European Commission to ensure the listing of CENELEC (and CEN) standards under the RED.

Radio, television, communication, telecommunication and related equipment -

Data centres are highly complex systems, the design and operation of which is influenced by a variety of parameters including business purpose, and demand is changing over time.

Therefore, CLC/TC 215 'Electrotechnical aspects of telecommunication equipment' expects to finalize the 50173 series 'Generic cabling systems'. The series is composed of a Technical Report that provides the user with a helpful guide (parameters selection) on how to use the standards of the EN 50600 series (Data centre facilities and infrastructures), as well as several European Standards dedicated to the generic cabling systems of different facilities (homes, office spaces, etc.).

Stakeholders concerned in the design, procurement, installation and operation of data centres will benefit from the 50173 series. The series is addressed to (among others) planners and system integrators of ICT cabling.





European standardization in the electrotechnical sector is managed and supported by CENELEC. A wide range of CENELEC Technical Committees, Task Forces and Working Groups deal with different topics and types of products, but common to all of their standardization activities is a strong commitment to ensuring the highest possible levels of safety and performance and the most efficient use of energy.

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.

As a result 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.



Technical bodies responsible

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 142-1	Product requirements for low voltage cold cathode and LED installations
CLC/BTTF 146-1	Losses of small transformers : methods of measurement, marking and other requirements related to eco-design regulation
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 outlets for d.c. and for the charging of electrical vehicles including their connectors
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 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/SR 1	Terminology
CLC/SR 10	Fluids for electrotechnical applications
CLC/SR 15	Solid electrical insulating materials
CLC/SR 16	Basic and safety principles for man-machine interface, marking and identification



CLC/SR 23	Electrical accessories
CLC/SR 23B	Plugs, socket-outlets and switches
CLC/SR 23G	Appliance couplers
CLC/SR 23J	Switches for appliances
CLC/SR 23K	Electrical energy efficiency products
CLC/SR 25	Quantities and units
CLC/SR 27	Industrial electroheating and electromagnetic processing
CLC/SR 29	Electroacoustics
CLC/SR 32B	Low-voltage fuses
CLC/SR 32C	Miniature fuses
CLC/SR 33	Power capacitors and their applications
CLC/SR 35	Primary cells and batteries
CLC/SR 3C	Graphical symbols for use on equipment
CLC/SR 3D	Product properties and classes and their identification
CLC/SR 40	Capacitors and resistors for electronic equipment
CLC/SR 46F	RF and microwave passive components
CLC/SR 47	Semiconductor devices
CLC/SR 47A	Integrated circuits
CLC/SR 47D	Mechanical standardization of semiconductor devices
CLC/SR 47E	Discrete semiconductor devices
CLC/SR 48	Electromechanical components and mechanical structures for electronic equipment
CLC/SR 48B	Connectors
CLC/SR 48D	Mechanical structures for electronic equipment
CLC/SR 49	Piezoelectric and dielectric devices for frequency control and selection
CLC/SR 51	Magnetic components and ferrite materials
CLC/SR 56	Dependability
CLC/SR 70	Degrees of protection provided by enclosures
CLC/SR 87	Ultrasonics
CLC/SR 89	Fire hazard testing
CLC/SR 91	Electronics assembly technology
CLC/SR 94	All-or-nothing electrical relays
CLC/SR 96	Transformers, reactors, power supply units, and combinations thereof
CLC/SR 101	Electrostatics
CLC/SR 104	Environmental conditions, classification and methods of test
CLC/SR 109	Insulation co-ordination for low-voltage equipment
CLC/SR 112	Evaluation and qualification of electrical insulating materials and systems (to be defined)
CLC/SR 113	Nanotechnology standardization for electrical and electronics products and systems
CLC/SR 119	Printed electronics
CLC/SR 120	Electrical Energy Storage (EES) Systems
CLC/SR 121	Switchgear and controlgear and their assemblies for low voltage
CLC/SR 121B	Low-voltage switchgear and controlgear assemblies
CLC/WS 05	Flow batteries – Requirements and test methods
CLC-ETSI/JWG	EMC conducted transmission networks



Standards published by CEN & CENELEC: 3503

Work Items currently in the Work Programmes: 546

Standardization requests from EC/EFTA

- M/351 – Workers' exposure to magnetic and electromagnetic fields with frequencies from 0 Hz to 300 GHz
- M/485 – Fluorescent lamps, high-intensity discharge lamps, and ballasts and luminaires able to operate such lamps
- M/495 – Ecodesign
- M/511 – Low Voltage Directive
- M/519 – Light-emitting diodes (LEDs)
- M/533 – Alternative fuels infrastructure
- M/536 – Radio Equipment Directive
- M/552 – Electromagnetic compatibility
- M/531 – Consumer laser products

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

- 2.3 A connected digital single market
- 3. A resilient energy union with a forward-looking climate change policy

Further information

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

ELECTROMAGNETIC COMPATIBILITY

The multiplication of electronic devices in our everyday life and their interactions complicate the electromagnetic environment. This convergence in electronics lead to the development of electromagnetic compatibility (EMC) standards.

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

Based on CISPR activities, in 2018, CLC/TC 210 will continue amending its generic EMC standards, including standards on the limits for harmonic current emissions.

In addition, CLC/TC 210 will continue revising and amending its standards to comply with the Electromagnetic Compatibility (2014/30/EU) and Radio Equipment (2014/53/EU) Directives and their corresponding Standardization Requests (respectively M/552 and M/536).

To ensure a coherent and comprehensive scheme regarding EMC matters, CLC/TC 210 cooperates with CEN and ETSI.



ELECTROMAGNETIC FIELDS

CLC/TC 106X 'Electromagnetic fields in the human environment – EMF' develops standards that allow manufacturers and suppliers to show that their products are safe with respect to the effect on human health of the electromagnetic fields that they emit and also to ensure appropriate protection of the public and workers. In cooperation with its international counterpart, IEC/TC 106 'Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure', CLC/TC 106X will pursue the development of standards on new and emerging technologies, e.g. wireless vehicle charging and fifth-generation (5G) mobile phone networks.

In 2018, CLC/TC 106X will continue developing and maintaining European Standards in support of the Electromagnetic Fields Directive (2013/35/EU) and its corresponding Standardization Request M/351 (measurement and calculation of workers' exposure to static magnetic and varying electric, magnetic and electromagnetic fields), with a particular focus on definitions and examples of 'reasonably foreseeable conditions'.

In addition, CLC/TC 106X will continue developing European Standards in support of the Low Voltage (2014/35/EU) and Radio Equipment (2014/53/EU) Directives. These will be among the first safety standards cited under the Radio Equipment Directive.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Electronic, electromechanical and electrotechnical supplies - CLC/TC 76 'Optical radiation safety and laser equipment' will continue the development of the 60825-1 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).

In addition, 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.

Low-voltage electrical installations material

CLC/TC 64 'Electrical installations and protection against electric shock' will continue the development of European Standards related to protection against electric shock arising from equipment, from installations and from systems without voltage limitation. CLC/TC 64 will further develop its 60364 series 'Low-voltage electrical installations' and in particular its 60364-7 series on 'Requirements for special installations or locations'.

Based on international work, CLC/TC 121A 'Low-voltage switchgear and controlgear' will improve its 60947 series (harmonizing rules and requirements applicable to low-voltage switchgear and controlgear).

CLC/TC 23H 'Plugs, socket-outlets and couplers for industrial and similar applications, and for electric vehicles' is expected to adopt two standards from the IEC series 62613 on 'Plugs, socket-outlets and ship couplers for high-voltage shore connection systems (HVSC-systems)'.



Energy and utilities



The European Union has set a series of ambitious energy and climate policy objectives in relation to the security of supply and diversification of energy sources, energy efficiency and reduction of greenhouse gas emissions by 2020. More specifically, the EU has pledged to cut greenhouse gas emissions by 20%, improve energy efficiency by 20% and raise the proportion of renewable energy to 20%.

In addition, the European Union has agreed on a set of targets for 2030, with new ambitious objectives for energy efficiency and renewables: a binding EU target of at least a 40% reduction in greenhouse gas emissions by 2030, compared with 1990; at least 27% of renewable energy in the EU; an increase in energy efficiency of at least 27%, to be reviewed by 2020 with the option of raising the target to 30% by 2030; and

the completion of the internal energy market by reaching an electricity interconnection target of 15% between EU countries by 2030, and pushing forward important infrastructure projects.

Meeting these objectives is a challenge for companies, consumers and public authorities. Standardization can contribute to meeting these objectives by promoting best practices, helping the introduction of new technologies, and providing authorities and private organisations with the tools to implement – and sometimes even go beyond – existing legislation, design sound policies and improve energy efficiency. Over 65 CEN and CENELEC Technical Bodies develop and adopt European Standards to support the implementation of European legislation and policies and the implementation of the EU's climate and energy targets.



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 165	Waste water engineering
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	Geothermal and water boreholes
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 056	Fuel quality specification – Towards pure plant oil application in diesel engines
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 080	Humanitarian Mine Action
CEN/WS 082	AquaVir
CEN-CLC/WS	EINSTEIN - Good Practice Thermal Energy Audits (GPTEA)
CEN-CLC/WS	REEMAIN Methodology for Resource and Energy Efficient Manufacturing



CEN-CLC/TC 6	Hydrogen
CEN-CLC/TC 10	Energy-related products – Material Efficiency Aspects for Ecodesign
CEN-CLC/JWG 1	Energy audits
CEN-CLC/JWG 3	Energy Management and related services – General requirements and qualification procedures
CEN-CLC/JWG 4	Energy efficiency and saving calculation
CEN-CLC/JWG 9	Energy measurement plan for organisations
CLC/TC 7X	Overhead electrical conductors
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 controlgear
CLC/TC 36A	Insulated bushings
CLC/TC 45AX	Instrumentation, control and electrical systems of nuclear facilities
CLC/TC 45B	Radiation protection instrumentation
CLC/TC 82	Solar photovoltaic energy systems
CLC/TC 88	Wind turbines
CLC/TC 8X	System aspects of electrical energy supply
CLC/TC 99X	Power installations exceeding 1 kV a.c. (1.5 kV d.c.)
CLC/TC 111X	Environment
CLC/SR 4	Hydraulic turbines
CLC/SR 5	Steam turbines
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	Specific components for surge arresters and surge protective devices
CLC/SR 42	High-voltage testing techniques
CLC/SR 45	Nuclear instrumentation
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 115	High Voltage Direct Current (HVDC) Transmission for DC voltages above 100kV
CLC/SR 117	Solar thermal electric plants
CLC/SR 118	Smart grid user interface
CLC/SR 122	UHV AC transmission systems
CEN/SABE	Strategic Advisory Body on Environment
CEN-CLC-ETSI Coordination	Group on Smart Energy Grids
CEN-CLC-ETSI Coordination	Group on Smart Meters
CEN-CLC Ecodesign Coordination Group	
CEN-CLC SFEM	Sector Forum Energy Management
	Sector Forum Gas Infrastructure and Gas Utilization
	Adaptation to Climate Change Coordination Group



Standards published by CEN & CENELEC: 1775

Work Items currently in the Work Programmes: 360

Standardization requests from EC/EFTA

M/400 – Gas quality

M/533 – Alternative fuels infrastructure

M/543 – Material efficiency aspects

M/XXX (anticipated) – Hydrogen

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

3. A resilient energy union with a forward-looking climate change policy

Further information

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

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

MATERIAL EFFICIENCY ASPECTS OF ENERGY-RELATED PRODUCTS

In response to M/543 on 'Material efficiency aspects of energy-related products', CEN-CLC/TC 10 'Energy-related products – Material efficiency aspects for ecodesign' and its six dedicated Working Groups will continue developing standardization deliverables, which will be published by March 2019. Ten cross-cutting deliverables will be developed in the course of 2018, covering aspects such as the durability, recyclability and recoverability of energy-related products; the ability to repair, reuse, upgrade and remanufacture energy-related products; or the use of critical raw materials and information on material efficiency aspects. The aim is for manufacturers to use these standards for their specific products whenever an Ecodesign Regulation imposes requirements on material efficiency.

OTHER SOURCES OF ENERGY SUPPLIES AND DISTRIBUTION

In 2018, CEN-CLC/TC 6 'Hydrogen in energy systems' will launch new activities related to terms and definitions, guarantee of origin and hydrogen safety in confined environments. This Technical Committee will also consider taking up work on Multi fuelling stations in coordination with ISO/TC 197. Lastly, progress on the draft Standardization Request on Hydrogen (still under development) will affect the work programme of CEN-CLC/TC 6.

NUCLEAR ENERGY AND RELATED EQUIPMENT

Despite the focus on renewable energy, nuclear power plants generate almost 30% of the electricity produced in the EU. For this reason, it is essential to guarantee their safety. CEN and CENELEC are active in the efforts, at both European and international levels, to harmonize the requirements related to safety, as well as environmental and technical aspects in the field of nuclear energy.



The key Technical Committees in this field, CEN/TC 430 'Nuclear energy, nuclear technologies, and radiological protection', CLC/TC 45B 'Radiation protection instrumentation' and CLC/TC 45AX 'Instrumentation, control and electrical power system of nuclear facilities', endorse international standards developed by ISO and IEC at European level.

The key milestone of 2018 will be the publication of the CEN Workshop Agreement (CWA) of CEN Workshop 64 Phase 2. Since 2015, European national competent authorities, manufacturers, operators, laboratories, academia and the European Commission's Joint Research Centre (JRC) have been discussing the necessary modifications to existing French codes for the design and construction of Generation II to IV nuclear power plants for them to be harmonized across Europe. The future CWA will initiate the harmonization of the safety requirements applied during the construction and maintenance of nuclear power plants.

CLC/TC 45AX 'Instrumentation, control and electrical power system of nuclear facilities' will adopt as a European Standard IEC/IEEE 60780 323 'Nuclear facilities – Electrical equipment – Qualification'. This adoption of an IEC/IEEE dual logo standard as a European Standard is a first of its kind for CENELEC.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Ecodesign - In the fields of ecodesign (2009/125/EC) and energy labelling (2010/30/EU), at the request of the European Commission, CEN and CENELEC develop European Standards that provide manufacturers with dedicated methods of measuring the energy performance of their products against the compulsory values set in the European Regulations.

To coordinate ecodesign technical work and to avoid overlap of activities, the CEN-CENELEC Ecodesign Coordination Group acts as a discussion, coordination and communication platform, bringing together all parties involved, including the relevant Technical Committees, societal stakeholders and the European Commission.

Electricity distribution and equipment - In 2018, CLC/TC 8X 'System aspects of electrical energy supply' will continue the development of the EN 50549 series on 'Requirements for generating plants to be connected in parallel with distribution networks'. The standards developed in that series are important, as they can be used as a technical reference for connection agreements between Distributed Networks Operators and electricity producers.

In addition, these standards support Regulation 2016/631/EU (Requirements for generators).

Energy management - The CEN-CENELEC Sector Forum on Energy Management (SFEM) provides advice on standardization-related issues and coordinates policy and strategic issues in relation to it. In its discussions on critical issues, the Sector Forum consults a wide range of stakeholders including the European Commission, European professional federations and associations, consumers, users, NGOs and academia. Moreover, it seeks to ensure active participation in and substantial European contribution to international standardization by acting as a platform of exchange between the different European stakeholders in relation to standardization activities at international level. In 2018, the SFEM Working Group on Financing tools will start developing a CEN-CENELEC roadmap to provide tools to manage and de-risk energy efficiency improvement actions. In addition to launching a new WG on energy storage, the Sector Forum will discuss launching a joint WG on behaviour change with the Strategic Advisory Body on Environment (SABE) and it will consider extending its scope of work to issues related to energy transition. In 2018, SFEM will organize its annual workshop with a focus on energy management for small



and medium-sized enterprises (SMEs).

In addition, the three CEN-CENELEC Joint Working Groups CEN-CLC/JWG 1 'Energy audits', CEN-CLC/JWG 3 'Energy management and related services – General requirements and qualification procedures' and CEN-CLC/JWG 4 'Energy efficiency and saving calculation' will merge their activities into one Joint Technical Committee 'Energy management, energy audits, and energy savings'. Meanwhile, CEN-CLC/JWG 9 'Energy measurement plan for organizations' will finalize a standard that specifies the requirements and methodology for the design and implementation of an energy measurement plan for organizations to improve their energy efficiency.

Gas distribution and related services

Gas quality – The composition of natural gas (and thus its quality) varies from one country to another. Quality standards are necessary to ensure the safe and secure delivery and use of gas 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 2018, 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.

In 2018, CEN/TC 234 should finalize 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'.

CEN-CENELEC REEMAIN Workshop - The CEN-CENELEC Workshop on Methodology for Resource and Energy Efficient Manufacturing (REEMAIN) will publish a CWA consisting of a developed and verified methodology for enabling resource-efficient production. The CWA will serve as a guide for users to identify efficiency potentials and implement the methodology within their organizations.

Smart grids and smart metering - A smart grid is an electricity network that uses ICT to integrate the behaviours and actions of all users

connected to it (generators and/or consumers) in a cost-efficient manner to deliver sustainable, economic and secure electricity supplies efficiently. When coupled with smart metering systems, smart grids provide consumers and suppliers with information on real-time consumption. With smart meters, consumers can adapt – in time and volume – their energy usage to different energy prices throughout the day, saving money on their energy bills by consuming more energy in lower-price periods. In 2018, the Coordination Groups on Smart Energy Grids (CG-SEG) and Smart Meters (CG-SM) will continue advising on European requirements relating to smart energy standardization, identifying and prioritizing gaps that could prevent the deployment of smart grids and smart meters in Europe, addressing cybersecurity, data protection and privacy aspects and ensuring interoperability within smart metering and smart grids systems (as well as smart appliances, smart home systems, buildings, etc.). The groups will also promote the industry's wider implementation of standards for smart grids and meters and liaise with other international standardization organizations (particularly the IEC) to achieve consistency between European and international standards, to avoid the duplication of work and to ensure that a consolidated European view is taken into account within the IEC.

Moreover, the Coordination Group on Smart Energy Grids has created a new ad-hoc group 'Clean Energy Package' to ensure that the European Standardization Organizations will support the implementation of the outcome of the European Commission's proposals for new rules for consumer-centred clean energy transition ('Clean Energy Package') by providing the adequate set of standards. In addition, the ad-hoc group will receive input from and provide input to the European Commission's Smart Grids Task Force and associated Expert Groups (Single data format and procedures to exchange data; Cybersecurity; Demand response).



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 recognized internationally is especially important for food companies that want to sell their products in many different markets.



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	Nutritional Supplements compatible with doping prevention
CEN/TC 455	Plant Biostimulants and Agricultural Micro-Organisms
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 Food Authenticity Coordination Group	

Standards published by CEN & CENELEC: 657

Work Items currently in the Work Programmes: 93

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) – Plant biostimulants
- M/XXX (anticipated) – Materials and articles intended to come into contact with food

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

Action 1 in relation to Biostimulants:

"CEN will be requested to develop harmonised standards for the control of CE marked fertilising products. A preliminary screening exercise on available test methods has allowed to identify relevant EN or ISO standards and where gaps need to be filled in."

Further information

www.cen.eu/work/areas/food



FOOD AND FEED AUTHENTICITY

Food authenticity has been identified as a new area of interest for most of the CEN Technical Committees working in the food and feed safety field. In 2017, CEN established a Food Authenticity Coordination Group (FACG) including representatives of various committees involved, in order to map existing methods, determine their degree of validation and identify European standardization needs. The long-term goal will be standardization of the methods required both by the industry and by the official control laboratories, with the aim of preventing and combating food fraud newly defined by European legislation.

Another parallel initiative is an ongoing CEN Workshop on Authenticity in the feed and food chain, which is expected to publish in 2018 a CEN Workshop Agreement (CWA) on recommendations for definitions of key terms and concepts, and to outline principles and basic requirements related to food authenticity. The resulting CWA will include 'best practices' underlying future communication and work related to food authenticity, and will aim to ensure the authenticity of feed and food products. This workshop is related to the AUTHENT-NET project co-funded by the European Commission as part of the H2020 initiative.

ANTI-DOPING

In 2017, CEN established CEN/TC 453 'Doping prevention in sport – Dietary supplements and sports food without relevant doping substances'. This technical committee will work on a standard that sets requirements for how to ensure that none of the substances prohibited by the World Anti-Doping Association (WADA) are present in dietary supplements for people practising sports and in sports food. This is a completely new area of work in CEN. The standard will be mainly addressed to sports food and supplements manufacturers, which are behind the proposal, but the work is generating a lot of interest and support from public authorities who are responsible for preventing and fighting doping in recreational and professional sport.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Plant biostimulants - In 2017, CEN/TC 455 'Plant biostimulants and agricultural micro-organisms' was created to develop the necessary European Standards for 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 that products be safe and of good quality.

The standards that CEN/TC 455 will start developing in 2018 are intended to cover

characterization, contaminant levels, (un) declared contents and claims about the products. In addition, defining common methods for verifying quality and safety will also promote exports of plant biostimulants outside Europe. The future standards will provide a tool for compliance with the legal and market requirements and will be addressed to manufacturers, control authorities and laboratories.

CEN/TC 455 will collaborate 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'.



Animal nutrition - In 2018, CEN will publish 20 new or revised standardized methods of analysis in the field of animal nutrition to underpin the implementation of Regulation (EC) No 882/2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. The methods are keenly awaited both by the

manufacturers of feed and by the official control authorities; these two groups of stakeholders are closely cooperating in the process of developing standards. This work is supported by an official request and financing supplied by the European Commission (Mandates M/521 and M/522 on Animal Nutrition).





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 through antiseptics to road ambulances and 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 2018, its focus will

be on guiding relevant Technical Committees (TCs) in the transition to the new landscape under the Medical Devices Regulation 2017/745 and the In Vitro Medical Devices Regulation 2017/746, and on contributing to the future standardization requests.

In addition, CEN/TC 392 'Cosmetics and cosmetic products' focuses on the establishment of methods for detecting and identifying different substances present in cosmetics, as well as methods for determining sunscreen protection and analytical methods in support of microbiological safety. Its standards help the cosmetics industry and the consumer products authorities to avoid generating conflicting results when using different methods.

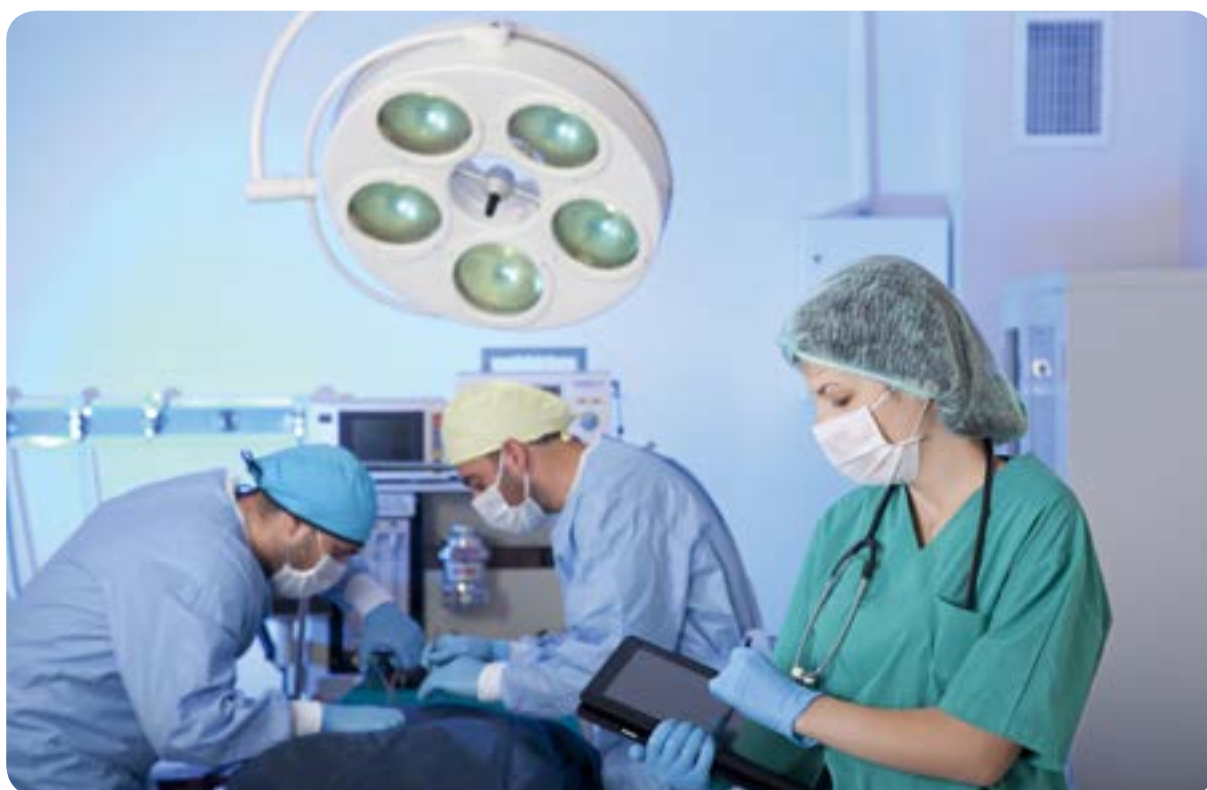


Moreover, the standardization of individual protective products, such as helmets, ropes used to prevent falls from a height or footwear resistant to chemicals, is handled by TCs of the CEN-CENELEC Sector Forum on Personal Protective Equipment. One of the Sector Forum's priorities for 2018 is to further align the existing standards with the new PPE Regulation (EU) 2016/425, which will become applicable on 21 April 2018.

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 2018, 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 so that experts become involved in OH&S 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.





Technical bodies responsible

CEN/TC 55	Dentistry
CEN/TC 79	Respiratory protective devices
CEN/TC 85	Eye protective equipment
CEN/TC 102	Sterilizers for medical purposes
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 316	Medical products utilizing cells, tissues and/or their derivatives
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 427	Services of Medical Doctors with additional qualification in Homeopathy
CEN/TC 449	Quality of care for elderly people in ordinary or residential care facilities
CEN/TC 450	Minimum requirements of patient involvement in person-centred care
CEN/SS S02	Transfusion equipment
CEN/SS S03	Syringes
CEN/WS 068	Quality criteria for health checks
CLC/TC 31	Electrical apparatus for potentially explosive atmospheres
CLC/TC 62	Electrical equipment in medical practice
CLC/TC 78	Equipment and tools for live working
CLC/SR 31G	Intrinsically safe apparatus
CEN-CLC/TC 3	Quality management and corresponding general aspects for medical devices
CEN-CLC ABHS	Advisory Board on Healthcare Standards
CEN-CLC/JWG 7	PPE against electrostatic risks
CEN-CLC/JWG	Active Implantable Medical Devices
PPE Sector Forum	
SAB OH&S	



Standards published by CEN & CENELEC: 1721

Work Items currently in the Work Programmes: 436

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/031 – Personal protective equipment
M/BC/CEN/92/46 – Explosive atmospheres (ATEX)
M/553 – Garments with integrated smart textiles and non-textile elements for protection against heat and flame
Standardization requests expected in 2018:
M/XXX (anticipated) – Medical devices
M/XXX (anticipated) – In vitro diagnostic medical devices
M/XXX (anticipated) – Personal protective equipment

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

2.7 Deeper and fairer internal market with a strengthened industrial base:
Strengthen safety and performance requirements for medical devices and for in vitro diagnostic medical devices.
Expected standardization request for explosive atmospheres (ATEX) to improve the legal and technical base for the work to be developed by the European Standardization Organizations.

Further information

<https://www.cenelec.eu/standards/Sectors/healthSafety/Pages/default.aspx>
<https://www.cenelec.eu/standards/Sectors/healthcare/Pages/default.aspx>
www.cenelec.eu/aboutcenelec/whatwedo/technologysectors/medicalequipment.html

MOLECULAR IN VITRO DIAGNOSTIC EXAMINATIONS

CEN/TC 140 'In vitro diagnostic medical devices' plans to publish CEN/TS 16826-3 'Molecular in vitro diagnostic examinations – Specifications for pre-examination processes for frozen tissue – Part 3: Isolated DNA'. Molecular in vitro diagnostics has enabled significant progress in medicine, and further progress is expected as a result of new technologies. However, the integrity of molecules can change during collection, transport, storage and processing, thus making the outcome of the diagnostics and research unreliable or even impossible. The purpose of this Technical Specification (TS) is therefore to codify and standardize the entire process from specimen collection to the DNA examination, in what is referred to as the pre-examination phase. It gives recommendations for the handling, documentation, storage and processing of frozen tissue specimens intended for DNA examination during the pre-examination phase before a molecular assay is performed. The TS is applicable for any molecular in vitro diagnostic examination performed by medical laboratories and molecular pathology laboratories that evaluate DNA extracted from frozen tissue. In addition, it is intended to be used by laboratory customers, in vitro diagnostics developers and



manufacturers, as well as institutions and commercial organisations performing biomedical research, biobanks and regulatory authorities. The drivers behind the development of the document are members of the SPIDIA4P project, funded under Horizon 2020.

PROTECTIVE GLOVES AGAINST THERMAL RISKS

CEN/TC 162 'Protective clothing including hand and arm protection and lifejackets' will finalize the revision of EN 407 'Protective gloves against thermal risks (heat and/or fire)'. The standard will cover not only protective gloves against heat and/or flame but also other protective equipment for hands, including thumb and finger protection devices. Manufacturers, notified bodies and consumers in particular will benefit from the revision of the standard, as it will now specifically address domestic thermal risks by providing the requirements, test methods, marking and information for this kind of products. A future harmonised standard will support Regulation (EU) 2016/425, which extended the scope of the PPE legislation to products for private use against heat. will be mainly addressed to sports food and supplements manufacturers, who are behind the proposal, but the work is generating a lot of interest and support from public authorities who are responsible for preventing and fighting doping in recreational and professional sport.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

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 2018, the project team will progress with the development and finalization of the draft European Standard 'The patient summary for unscheduled, cross-border care' as well as of the TS providing guidance for European implementation.

In 2018, CEN/TC 251 will complete the revision of EN-ISO 11238 as part of the Identification of Medicinal Products (IDMP) standards, together with the revision of EN 1064 'Health informatics – Standard communication protocol – Computer-assisted electrocardiography'.

Lastly, CEN/TC 251 aims to contribute actively to the new standardization request in relation to the General Data Protection Regulation

(GDPR) in collaboration with the new joint CEN-CENELEC/TC 8 'Privacy management in products and services'.

Health and social work services - The CEN Healthcare Services Focus Group was set up to explore if and how European standardization could support quality, efficiency and safety in complex healthcare services throughout Europe. It will continue developing a common understanding and criteria to consider when preparing proposals for standardization in healthcare services; an overall approach towards and methodology for standardization in the area of healthcare services; and tools to support the standardization strategy, such as a specific CEN Guide on healthcare service including guidelines on terminology.

Medical equipment, pharmaceuticals and personal care products

Quality management - In preparation for the transition to the Regulations on medical devices and in vitro medical devices, CEN-CLC/TC 3 'Quality management and corresponding



general aspects for medical devices' will develop a guidance document on the relationship between EN ISO 13485: 2016 'Medical devices – Quality management systems – Requirements for regulatory purposes' and the new Regulations. In the light of the new Regulations, the TC will also need to make decisions on the future of CEN-CLC/TR 14060:2014 'Medical device traceability enabled by Unique Device Identification (UDI)' and to contribute to the discussion and assessment of possible new symbols that could lead to the revision of EN ISO 15223-1:2016.

In cooperation with ISO, the TC will produce a Technical Report which will provide manufacturers with information on how to set up a post-market surveillance system that is coherent with related requirements of relevant international standards, such as ISO 13485 and ISO 14971. This informative document will be of great value for manufacturers and, indirectly, for other stakeholders. Finally, the revision of EN 14971 'Medical devices – Application of risk management to medical devices' will be ongoing.

Surgical implants - In 2017, CEN launched a workshop on novel methods for isolating wear particles from joint replacements and related devices and for evaluating their biological impact invitro (CEN/WS87). The workshop was proposed by the European Commission's FP7 RTD project 'LifeLongJoints'. Its focus is to develop a new ceramic coating system for use in hip prostheses that will have very low wear and whose wear particles, when produced, will be bio-resorbable and biocompatible. The deliverables, to be published in Q1 2018, will include a new method for isolating wear particles generated from extremely low-wearing surfaces of implantable devices not amenable to existing international protocols, e.g. ISO 17853:2011; and a novel tiered approach to the in vitro assessment of the biological impact of such wear particles based on a number of existing methodologies.

Non-active medical devices - CEN/TC 205 'Non-active medical devices' will start drafting a standard specifying requirements and test methods for the antimicrobial activity of

antimicrobial wound dressings. In addition, the TC will focus on the revision of several of its standards, including those on surgical clothing and drapes and on medical face masks.

Rescue systems - CEN/TC 239 'Rescue systems' will focus on the revision of EN 1789, which specifies the requirements for the design, testing, performance and equipping of road ambulances used for the transport, monitoring, treatment and care of patients.

Assistive products for persons with disability

- CEN/TC 293 'Assistive products for persons with disability' plans to adopt a new work item on the terminology and classification of absorbent incontinence aids for urine and/or faeces. Other work intended to start in 2018 is the revision of EN 12182 'Assistive products for persons with disability – General requirements and test methods'.

In vitro diagnostic medical devices - CEN/TC 140 'In vitro diagnostic medical devices' will work on 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.

Sterilization - CEN/TC 204 'Sterilization of medical devices' will develop a standard on validation and routine control of sterilization using vaporized hydrogen peroxide, which will be developed under the Vienna Agreement, with ISO as the lead.

Chemical disinfectants and antiseptics - CEN/TC 216 'Chemical disinfectants and antiseptics' will engage in a major revision of EN 14885 'Chemical disinfectants and antiseptics – Application of European Standards for chemical disinfectants and antiseptics'. The TC will continue amending the widely used EN 13697, which specifies a test method and the minimum requirements for bactericidal and/or fungicidal or yeasticidal activity of chemical disinfectants that form a homogeneous physically stable preparation in hard water or – in the case of ready-to-use products – with water in food, industrial, domestic and institutional areas.



Dentistry - CEN/TC 55 'Dentistry' will revise four standards related to medical devices for dentistry: EN 1639 on instruments, EN 1640 on equipment, EN 1641 on materials and EN 1642 on dental implants.

Occupational clothing, special workwear and accessories

Personal fall protection - CEN/TC 160 'Protection against falls from height including working belts' will continue to revise its standards to adapt them to technical progress and new working practices in the area of personal fall protection. The revisions of EN 358 on belts and lanyards for work positioning or restraint and EN 363 on personal fall protection systems are likely to be finalized. The revisions of EN 360 on retractable-type fall arresters, EN 12841 on rope adjustment devices, EN 813 on sit harnesses and the EN 353 series on guided-type fall arresters will continue. Another objective of this work is to ensure consistency of the requirements and test methods in the field of personal fall protection equipment.

Foot and leg protectors - CEN/TC 161 'Foot and leg protectors' will continue a major revision of its standards, improving test methods and better adapting requirements to praxis. One of the major topics is non-metallic perforation-resistant inserts. The new test method for this component will increase the safety of the user and concerns all types of job-related foot protection. Further improvements will be carried out on slip resistance and chemical resistance. CEN/TC 161 will also work on the development of a standard for overboots, overshoes and accessories.

Garments for protection against heat and flame - In 2018, the CEN-CENELEC Sector Forum on PPE 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 cooperation of different technical

bodies, in particular CEN/TC 162 'Protective clothing including hand and arm protection and lifejackets' and CEN/TC 248 'Textiles and textile products' with experts on electronics and sensors with the aim of delivering a standard on declaration and measurement of properties and overall performance of such advanced garments.





Household appliances and HVAC (Heating, Ventilation and Air Conditioning) are one of the most obvious areas where the application of standards is perceptible in everyday life. The standardization work in this field is very broad and covers a wide range of activities. From the kitchen toaster 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 of safety of these products, bearing in mind the diversity of the users (professionals, youngsters, elderly people, people with disabilities, etc.).

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	Dedicated liquefied petroleum gas appliances
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.
CEN/SS H99	Products for household and leisure use
CLC/TC 59X	Performance of household and similar electrical appliances
CLC/TC 61	Safety of household and similar electrical appliances
CEN-CLC/JWG	FCGA - Fuel cell gas appliances

Standards published by CEN & CENELEC: 707

Work Items currently in the Work Programmes: 239

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 Directive
M/396	Machinery
M/458	Household washing machines
M/459	Household refrigerating appliances
M/470	Electric motors
M/481	Household dishwashers
M/485	Fluorescent lamps, high-intensity discharge lamps, and ballasts and luminaires able to operate such lamps
M/488	Air conditioners and comfort fans
M/495	Amendment 1 – Ecodesign of professional storage cabinets, blast cabinets, condensing units and process chillers
M/495	Amendment 2 – Ecodesign of large, medium and small power transformers
M/495	Amendment 3 – Ecodesign of electrical lamps and related equipment
M/498	Pumps
M/500	Fans
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/544 – Networked standby
M/545 – Computers and computer servers
M/550 – Local space heaters
M/551 – Solid fuel boilers

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

3.8 and 3.9 A resilient energy union with a forward-looking climate change policy

Further information

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

PERFORMANCE OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

In response to M/458 on washing machines, CLC/TC 59X 'Performance of household and similar electrical appliances' is developing standards for methods to measure temperature and rinsing efficiency for washing machines and washer-dryers, which are important parameters for consumers. CLC/TC 59X will also develop a standard that specifies a measurement device and defines the measurement procedure that shall be used to assess the compatibility of cookware and induction hobs. This work will offer a common platform for houseware and household appliance industries and will enable them to guarantee that consumers can use cookware on induction hobs at a high performance level without safety restrictions. The TC will, in cooperation with its international counterpart, IEC/TC 59 'Performance of household and similar electrical appliances', also carry on the development of EN 60436 'Electric dishwashers for household use – Methods for measuring the performance'.

Furthermore, CLC/TC 59X recognizes that consumer relevance is a major driver for the development of standards and has for this reason set up a Working Group (WG) on consumer-relevant product testing. In 2018, the WG will continue discussing ways of developing measurement standards that would reflect 'real-life conditions' and would at the same time allow the repeatability and reproducibility that are necessary to support ecodesign and energy labelling legislation.

SAFETY OF HOUSEHOLD APPLIANCES (ELECTRICAL)

The standardization of the safety of household appliances is assigned to CLC/TC 61, which develops standards containing safety requirements for electrical appliances intended primarily for household use, but also for appliances for commercial use, such as appliances used in professional kitchens.

The European Standards on the safety of household and similar electrical appliances (embodied by the EN 60335 multi-part series) are continuously adapted to the latest technological changes. In addition, CLC/TC 61 is also considering the development of new products using radio frequencies (linked to the Radio Equipment Directive, 2014/53/EU).



CLC/TC 61 experts are also working on the alignment of CENELEC standards with the health and safety requirements and objectives of several European directives, such as the Low Voltage (2014/35/EU), Machinery (2006/42/EC), Electromagnetic Compatibility (2014/30/EU) and Radio Equipment (2014/53/EU) Directives.

Under the Frankfurt Agreement between IEC and CENELEC, CLC/TC 61 actively monitors the work of its international counterpart, IEC/TC 61, in view of keeping the European standards aligned with the international ones as far as possible.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Safety of household appliances (gas) - The standardization of the conversion of gaseous fuels and their uses in various types of installations, components and materials to be incorporated in (or linked to) applications and installations is dealt with by several CEN Technical Committees. Experts work to ensure the alignment of standards with new innovative technologies (also considering the increased use of gaseous fuels from renewable sources).

In addition, experts are also working on the alignment of CEN standards with the health and safety requirements of the Gas Appliances Regulation (2016/426/EC).

In 2018, CEN/TC 106 'Large kitchen appliances using gaseous fuels' will further improve the EN 203 series on 'Gas heated catering equipment' by specifying safety-related requirements for the construction and operation of large kitchen appliances.



Household appliances and HVAC



The CEN and CENELEC mechanical and engineering sector brings together about 50 technical bodies dealing with agricultural machinery, industrial machinery, mining and quarrying machinery, and construction equipment as well as 15 technical bodies dealing with laboratory, optical and precision equipment (excluding glasses), and a further 13 that are developing standards for tanks and pressure equipment. These committees are mainly composed of industry representatives (manufacturers), together with notified bodies, national health and safety institutes and market surveillance organizations from interested Member States.

A considerable proportion of the standards produced are harmonized standards that give the 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, which is particularly important since the markets for these products tend to be wider than national or European markets.

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



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	Heat 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	Machines for underground mines – 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 – Safety requirements
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/SS F05	Measuring Instruments
CEN/SS H10	Sewing machines
CEN/SS I03	Limits and fits
CEN/SS I09	Small tools
CLC/SR 66	Safety of measuring, control and laboratory equipment
CLC/SR 85	Measuring equipment for electrical and electromagnetic quantities
CLC/TC 116	Safety of motor-operated electric tools
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/BTTF 128-2	Erection and operation of electrical test equipment
Sector Forum	Machinery Safety
CEN/CLC/JWG CMI	Continuous measuring instruments
CEN/CLC/JWG NAWI	Non-automatic weighing instruments

Standards published by CEN & CENELEC: 2195

Work Items currently in the Work Programmes: 583

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 the 'Annual Work Programme for European Standardisation 2018'

Expected Standardization Requests for harmonised standards for specific types of machinery:

1) additive manufacturing machinery (3D printing), 2) collaborative robots; 3) automated machines and vehicles; 4) wind turbines; and 5) food machines.

The aim of the forthcoming Standardization Requests is to fill in the existing gap for such innovative products, which are developed at a fast pace and whose spread on the European market is becoming wider.

Further information

www.cencenelec.eu/standards/Sectors/MID/Pages/default.aspx

www.cencenelec.eu/go/machinery

www.cen.eu/go/pressure

OFFSHORE OIL AND GAS

Cooperation between CEN/TC 12 and ISO/TC 67 on standardization for offshore oil and gas

The main role of CEN/TC 12 'Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries' is to transpose the standards developed by the corresponding ISO/TC 67 to CEN. In this way, CEN/TC 12 strongly supports the vision of the oil and gas industry: 'International standards used locally worldwide'.

CEN and ISO TCs will continue to update standards and develop the new deliverables as part of the action plan adopted in response to some serious incidents that took place some years ago. In 2018, CEN/TC 12 will further study how the sector can develop harmonised European Standards in response to the forthcoming mandate for equipment used in the offshore oil and gas industry, while meeting its vision. Ahead of this, EN 16808 on manual elevators will be published in 2018, the first harmonised European Standard of CEN/TC 12 that is intended to be incorporated in the next edition of EN ISO 13535 on hoisting equipment.

In the field of offshore structures, several revised standards should be published in 2018, taking into account the latest research and developments in this area as well the experience of hundreds of experts. These standards include EN ISO 19900 with general requirements, EN ISO 19902 on fixed steel offshore structures, EN ISO 19903 on fixed concrete offshore structures, EN ISO 19904-1 on floating offshore structures and EN ISO 19906 on Arctic offshore structures. In addition, a new standard on structural integrity management of offshore structures will be published as EN ISO 19901-9 acknowledging that integrity is becoming increasingly important in view of lifetime extension and potential reuse of offshore structures.

With the changing climate, the Arctic region is attracting interest for economic activities including oil and gas operations. International standards, which take into account the specific environmental conditions and help define acceptable levels of safety and security for all facilities and processes associated with Arctic operations, are considered key by the oil



and gas industry. In 2018, ISO/TC 67 will publish the first five standards in the field of Arctic operations, including on the working environment, and on metocean, ice and seabed data. CEN/TC 12 members contributed to these standards and the committee will adopt these as European Standards.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Sector in general - 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 related to the safety of machinery are developed in cooperation with ISO/TC 199. Most of them support the Machinery Directive (2006/42/EC).

In 2018, CEN/TC 114 will continue work on the standard on general drafting principles for instruction handbooks. The aim of this document is to explain to machine manufacturers how to ensure that instruction handbooks comply with the Machinery Directive (2006/42/EC).

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 2018, 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.

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 that should support the implementation of the new EU Pressure Equipment Directive (2014/68/EU), which entered into force in July 2016.

In 2018, CEN/TC 54 will proceed with work to maintain and revise European Standards for unfired pressure vessels (EN 13445 series), while CEN/TC 267 will work on standards for metallic industrial piping (EN 13480:2017 series was published at the end of 2017) and CEN/TC 269 will work on standards for shell boilers (EN 12953 series). Further work will be undertaken by various Technical Committees in relation to standards for flanges, pressure testing and creep.

To support the Simple Pressure Vessels Directive (2014/29/EU), CEN/TC 54 is active in revising some parts of the EN 286 series on simple unfired pressure vessels designed to contain air or nitrogen.

CEN/TC 182 'Refrigerating systems, safety and environmental requirements' will develop two standards: Part 1 on general requirements for vessels and Part 2 on general requirements for piping.

Safety of measuring, control and laboratory equipment - CLC/SR 66 develops safety standards for test and measurement equipment, industrial-process control equipment and laboratory equipment wherever they are used. CLC/SR 66 works closely with the IEC to adopt international standards at the European level, and to possibly adapt these standards to the relevant EU legislation (Low Voltage Directive, Machinery Directive, In Vitro Diagnostic). In 2018, CLC/SR 66 will continue its work on safety requirements for electrical equipment, especially on the particular requirements for X-ray systems and for hand-held and hand-manipulated probe assemblies for electrical test and measurement.



Hydrometry - CEN/TC 318 will continue to develop standards on measurement requirements and classification of rainfall intensity measuring instruments, and a technical specification giving guidance on the management of observed hydrometric data, including raw data and other data and statistics derived from these observations. Snow height and snow depth are important parameters in the assessment of snow cover and solid precipitation. Solid precipitation has a significant effect on human life, as it can lead to hazards such as flooding, avalanches and building collapses. A technical report covering on-site measurements of new snow height and snow depth, together with guidance on manual and automatic measuring techniques, is expected to be published towards the end of 2018.

Laboratory, optical and precision equipment (excl. glasses) - CEN/TC 92 'Water meters', CEN/TC 176 'Heat meters', CEN/TC 237 'Gas meters' and CLC/TC 13 'Electrical energy measurement and control' develop standards in response to Standardization Request M/541 in the context of the Directive on measuring instruments (2014/32/EU).

In 2018, these technical committees will finalize the revisions of the standards on the following topics:

- the series on water meters for cold potable water and hot water (CEN/TC 92);
- the series on heat meters (CEN/TC 176);
- the standard on ultrasonic domestic gas meters (CEN/TC 237);
- the standard on electricity metering equipment (CLC/TC 13).

CEN/TC 423 'Means of measuring and/or recording temperature in the cold chain' will finalize the standard on tests, performance and suitability for temperature recorders for the transport, storage and distribution of temperature-sensitive goods.

Optical components can be damaged by laser irradiation of sufficiently high energy or power. Hence, in 2018, in collaboration with its

international counterpart, ISO/TC 172 'Optics and photonics', CEN/TC 123 'Lasers and photonics' will further develop series EN 21254 on 'Lasers and laser-related equipment – Test methods for laser-induced damage threshold'. This series deals with determining irreversible damage caused by a laser beam to optical surfaces and the bulk of an optical component.

CEN/TC 332 'Laboratory equipment' collaborates with its counterpart, ISO/TC 48, on the adoption of European Standards for various types of glass and plastic ware used in laboratories. The content of the European Standards is identical to the ISO standards. In 2018, CEN/TC 332 and ISO/TC 48 will work on 'Recirculatory filtration fume cupboards', 'Fume cupboards – Part 3: Type test methods' and 'Emergency safety showers'.

Agricultural machinery - The main activity of CEN/TC 144 'Tractors and machinery for agriculture and forestry' is standardization of tractors and machines used in agriculture and forestry as well as in gardening, landscaping, irrigation and other related areas.

CEN/TC 144 is working on more than 40 standards. About 50% of them are being developed in cooperation with its counterpart, ISO/TC 23. Most of these standards are listed in the Official Journal of the European Union in support of the Machinery Directive (2006/42/EC) and the Pesticides Directive (2009/128/EC) and therefore are good examples of bringing together European requirements with an internationally accepted approach. In 2018, CEN and ISO will finalise the work on EN ISO 16119-5 on environmental requirements for aerial spray systems. The standard will specify requirements, and the means for their verification, for the design and performance of aerial fixed wing and rotary aircraft platforms for agriculture, forestry and human health. Aerial application is used in difficult terrain or crops (forests) as well as for timely application to large areas. The main aim of the new standard is to maximize efficient use of crop protection products and minimize the risk of environmental contamination.

**Industrial machinery excluding machinery for the production and use of mechanical power -**

CEN/TC 98 'Lifting platforms' is responsible for 10 harmonized European Standards in support of the Machinery Directive. This Technical Committee deals with safety requirements for the safe use of a wide range of lifting working platforms (e.g. mobile elevating work platforms, lifting tables, dock levellers, mast-climbing work platforms or equipment for power-driven parking of motor vehicles). In 2018, the harmonized standard for mobile elevating work platforms will be split up into Part 1 on general safety requirements and Part 2 on additional requirements for load-lifting appliances on the extending lifting structure and/or on the work platform. While Part 1 is subject to a revision of the existing standard, the new Part 2 will accommodate the growing demand from users for lifting additional tools and/or goods while working on the elevated platform.

The scheduled activity of CEN/TC 145 'Plastics and rubber machines – Safety' for 2018 includes the revision of the safety standards concerning film-converting machines for bags and sacks, concerning winding machines for film or sheet plastic and concerning thermoforming machines. The TC will continue to update the 19 standards regarding safety devices for the main types of machines for working on plastics and rubber in support of the Machinery Directive. Furthermore, CEN/TC 145 also focuses on its direct participation in the definition of new standards on injection moulding machines, extruders and magnetic clamping systems by ISO/TC 270. The future ISO standards will very often be based on the existing CEN harmonized standards.

In 2018, CEN/TC 310 'Advanced automation technologies and their applications' will continue to work on the revision of the EN ISO series of standards on safety requirements for industrial robots. Moreover, CEN/TC 310 plans to create a new work item for the revision of an EN ISO standard on 'Enterprise integration – Constructs for enterprise modelling'.

To ensure consistency and harmonization with international standards, CEN/TC 438 'Additive manufacturing' (AM) has to date developed three EN ISO and three EN ISO/ASTM standards by applying the Vienna Agreement, with its counterpart, ISO/TC 261, taking over ISO and ISO/ASTM standards as European ones. In 2018, its plans are to continue working on another six EN ISO/ASTM standards and to further strengthen the link with the AM research communities through collaboration with H2020 AM-motion and the AM European Technology Platform in Additive Manufacturing.

CEN/TC 153 'Machinery intended for use with foodstuffs and feed' develops European Standards that help ensure high levels of safety and hygiene in the food- and feed-processing sector. Most of these standards are harmonized standards in support of the Machinery Directive (2006/42/EC). The importance of the standardization work is also recognized by the leading international trade fairs in the sector. The lack of international standards makes the standards prepared by CEN/TC 153 increasingly important in the world. In 2018, CEN/TC 153 will work on four new European Standards setting out safety and hygiene requirements for bakery (dropping machines, self-service bread-slicing machines) and meat-processing machinery (meat-pressing machines, steakers/strip cutters and meat tenderizers). The TC will continue or begin revising 10 other standards, setting out safety and hygiene requirements for bakery equipment, meat-processing machinery and pasta machinery.

Following the result of the systematic review of CEN/TS 16524 on 'Mechanical products – Methodology for reduction of environmental impacts in product design and development', in 2018 CEN/TC 406 'Mechanical products – Ecodesign methodology' will revise the Technical Specification and develop it into a European Standard.

Machinery for mining, quarrying, construction equipment - In 2018, CEN/TC 151 'Construction equipment and building material machines' will continue to revise the series of standards



on safety of earth-moving machinery. Some documents are expected to be finalised as a result, i.e. Part 1 on general requirements, and the documents dedicated to tractor-dozers, backhoe loaders, dumpers, and hydraulic excavators and trenchers.

CEN/TC 196 'Machines for underground mines – Safety' together with its counterpart, ISO/TC 82, will further work on European harmonized standards on mining machinery and equipment in support of the Machinery Directive (2006/42/EC).





The standards in this sector deal with the definition, classification, testing, analysis and technical delivery requirements of the products of the metal industry.

The technical work for iron and steel standardization is developed by the 12 technical committees of the European Committee for Iron and Steel Standardization (ECISS) and coordinated by its Coordinating Commission (COCOR).

The main stakeholders involved in the standardization work are the national standards

bodies, the producers and the users of metallic products.

This sector produces standards that support several pieces of legislation, such as the new Pressure Equipment Directive and Simple Pressure Vessels Directive (since 2016) and the Construction Products Regulation.

There is close collaboration between this European sector and international standardization. In particular, around 30% of iron- and steel-related standards are adopted from or developed in collaboration with ISO.



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
CLC/WS SGRM	Specifications for Graphene Related Material
CEN/SS M11	Powder metallurgy
CEN/SS M14	Nickel
CLC/SR 68	Magnetic alloys and steels
ECISS/TC 100	General issues
ECISS/TC 101	Test methods for steel (other than chemical analysis)
ECISS/TC 102	Methods of chemical analysis for iron and steel
ECISS/TC 105	Steels for heat treatment, alloy steels, free-cutting steels and stainless steels
ECISS/TC 106	Wire rod and wires
ECISS/TC 107	Steels for pressure purposes
ECISS/TC 108	Steel sheet and strip for electrical applications
ECISS/TC 109	Coated and uncoated flat products to be used for cold forming
ECISS/TC 110	Steel tubes, and iron and steel fittings
ECISS/TC 111	Steel castings and forgings

Standards published by CEN & CENELEC: 976

Work Items currently in the Work Programmes: 148

Standardization requests from EC/EFTA

M/120 – Structural metallic products

M/131 – Pipes, tanks not in contact with drinking water

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

2.4. Action in support of the circular economy action plan:

"In its Report on the implementation of the Circular Economy Action Plan, the Commission asked ESOs to develop generic standards on the durability, reusability, recyclability and documentation on material efficiency aspects (including use of Critical Raw Materials) of certain products."

The European Committee for Iron and Steel Standardization (ECISS) is currently discussing the development of a new standard for metals in building products under EN 15804. This will facilitate the development of Environmental Product Declarations (EPDs) for building products with a high content of metals.

Further information

<https://www.cen.eu/work/areas/materials/pages/ecissinformation.aspx>



COPPER AND COPPER ALLOYS

In 2018, CEN/TC 133 'Copper and copper alloys' will further develop the revision of EN 12861 'Copper and copper alloys – Scrap'; this European Standard specifies the requirements for characteristics, condition, moisture, composition, metal content, metal yield and test procedures of metallic raw materials for direct melting (melting grades) in the form of copper and copper alloy scrap. This is among the projects to be listed in the Circular Economy Action Plan.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Many of the standards adopted from ISO are the international test methods that are used as reference in the European Standards. In particular, in 2018, ECISS/TC 101 'Test methods for steel (other than chemical analysis)' will

adopt the new versions of the Knoop (EN ISO 4545 series) and Vickers (EN ISO 6507 series) hardness tests, replacing the previous ones published as European Standards in 2005.





Services



Services account for 70% of 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 the total number of standards) in comparison with 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 for the development and use of European standards by the services industries.

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 the creation of a single market for services, foster cross-border trade, enhance safety and performance, and ensure 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 and competitiveness and increasing efficiency. Service standards are a useful tool to promote best practices, to spread knowledge throughout the market and to define common terminologies relevant to different service sectors.

The CEN Strategic Advisory Board on Services (CEN/SAGS) will continue the work started in 2017 on the implementation of the 'Strategic Plan on services standardization', providing a strong and clear framework to further engage with service stakeholders by better understanding their needs. The strategy was developed in the context of the Joint Initiative on Standardization (Action 12). The aim of CEN and its members for 2018 is to better understand service sector needs and how businesses cope with the new trends and business models in the provision of services in Europe.



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 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	Services – Procurement, contracts and performance assessment
CEN/TC 448	Funeral services
CEN/TC 452	Assistance Dog & Guide Dog Teams Standards and Instructors Competences
CEN/WS 065	European Guide Dog Mobility Instructor Training
CEN/WS 067	General Framework and Guidelines for Early Recognition, Monitoring and Integrated Management of Emerging New Technology Related Risks (iNTeg-Risk)
CEN/WS 072	Framework for SustainValue – Sustainable Value Creation in manufacturing networks
CEN/WS 075	Terminology Policy to support generic applications of Management Systems with focus on small Organisations and in a Multilingual Environment (PromisLingua)
CEN/WS 078	Competences for dog training professionals
CEN/WS 081	Postal supply chain security (SAFEPOST)
CEN/WS 085	Methodology for Improving the Resource Efficiency of Energy Intensive Industrial Processes
CEN/WS 087	Novel methods for isolating wear particles from joint replacements and related devices and for evaluating their biological impact in vitro
CEN/WS SATORI	Ethical impact assessment framework for research and innovation
CEN/BT WG 220	FINTECH
CEN/SS A03	Postal services
CEN/SS A07	Translation and Interpretation services
CEN/SS A08	Funeral services
CEN/SS A10	Services of Real Estate Agents
CEN/SS A11	Security services
CEN/SS F17	Administrative documents
CEN/SS F20	Quality assurance
CEN/SAGS	Strategic Advisory Group on Services
CEN-CLC/TC 1	Criteria for conformity assessment bodies



Standards published by CEN & CENELEC: 326

Work Items currently in the Work Programmes: 64

Standardization requests from EC/EFTA

M/548 – Postal services and the improvement of quality of services

M/517 – Horizontal service standards

M/XXX (anticipated) – Reporting in support of supervision of online gambling services by the gambling regulatory authorities

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

5. Delivering on the 'Joint Initiative on Standardisation' (JIS) Action 12:

"The action formulated in the standardisation package of June 2016 ²⁸ and the JIS should be developed further and implemented..."

²⁸ Tapping the potential of European service standards to help Europe's consumers and businesses, dedicated guidance on service standards (SWD(2016) 186)

Further information

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

ONLINE GAMBLING

The newly established CEN/TC 456 'Reporting in support of online gambling supervision' will develop standards related to requirements for the core elements of the reporting done for supervision purposes by online gambling service providers to the competent gambling regulatory authorities in the different Member States. These standards will answer the Standardization Request on 'Reporting in support of supervision of online gambling services by the gambling regulatory authorities'(M/555).

FINTECH

With the establishment of CEN/BT WG 220 'FinTech', CEN confirmed its interest in further investigating the potential for the European Standardization system to facilitate dialogue between technology developers and financial service providers to maintain the trust of consumers in new products and services, and also to enable compliance with financial laws and regulations in force in Europe. Therefore, the mapping of the existing standards landscape around FinTech was deemed critical to identifying gaps and defining terminology (definitions and vocabulary) to share a common understanding among stakeholders and a consistent approach on FinTech rollout in Europe. The mapping exercise is to be finalized by June 2018.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Postal services - CEN/TC 331 'Postal services' will continue the development of standards and other deliverables requested under M/548. In 2018, a feasibility study will be launched to explore the use of real mail data in measuring the transit time of end-to-end services for single piece cross-border priority mail; requirements for connecting, accessing, participating in and further developing open global networks and systems, for postal operators and players in the wider postal sector; and requirements for electronic advanced data (EDA) in postal operations, specifically that it be compliant with security and customs requirements. In addition, standardization work is planned on standards associated with the quality of services provided, in particular those measuring complaints, to make them fit for e-commerce.

Maintenance - Maintenance is a cross-cutting discipline which has an impact on several activity sectors, both civil and industrial (industrial plants, buildings, machines and devices, infrastructures, etc.), in the way that complex systems have to operate by responding to specific needs and to be sustainable in the future. CEN/TC 319 'Maintenance' is working on standardization of key performance indicators for both maintenance management and maintenance, maintenance of buildings and condition assessment. The benefits of the standardization work in the field include proper handling of the health and safety aspects, increased productivity of maintenance resources, and extended operational lifetime of manufacturing and process plants, facilities and infrastructure. CEN/TC 319 'Maintenance' will keep working



on standards for maintenance, in particular on finalizing the standards related to maintenance key performance indicators and risk-based inspection framework, and a new technical specification on condition assessment methodologies will be initiated.

Tattooing services - In 2018, a first European Standard on safe and hygienic practice for tattooing is expected to be published. This standard specifies hygiene requirements before and during tattooing and in aftercare. It provides guidance for tattooists and their routine interactions with clients and public authorities. It gives guidance for the correct procedures to use to ensure optimum protection of the client, the tattooist and others in the tattoo workspace.

Insurance - In 2018, CEN/TC 445 'Digital information interchange in the insurance industry' is expected to finalize the standard on the 'Transfer of electronic documents', setting out the semantic process for the transfer of documents (e.g. insurance policy, claim notification, correspondence), and a limited number of metadata describing the document (e.g. type of document, identification of insurer, policy number, claim number).

Tourism - Standards related to tourism services are being developed at international level by ISO/TC 228 'Tourism and related services'. In 2018, its counterpart CEN/TC 329 'Tourism services' is expected to start working with ISO/TC 228 under the Vienna Agreement (with ISO as the lead) on two new projects: one on requirements and guidance on sustainable practices in recreational diving, and the other on requirements for training on environmental awareness for recreational divers.

Horizontal standards for the provision of services - CEN/TC 447 'Horizontal standards for the provision of services' will start the development of two European Standards:

- The first one will cover performance management. Performance management already starts at the beginning of the sourcing process by identifying the criteria and parameters that will be used to measure the quality of the

services. During the provision of the services, the quality shall be measured, based on a well-defined mechanism and the criteria agreed in the contract. This will increase transparency and productivity, and improve confidence in cross-border services. The proposed European Standard will be part of a set of standards for the provision of services and it will increase the transparency and communication between the demand and supply sides. It will provide guidance on setting up the mechanism for performance management as a part of an entire service contract.

- The second one will focus on service contracts, by providing guidance for drafting service contracts in various sectors of the service industry. It will offer a checklist and a menu of model clauses, which parties can use as tools for contracting and procurement. The purpose is to facilitate communication between the parties and prevent misunderstandings and disputes. Those guidelines will be designed for business-to-business (B2B) contracts only.





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 (road, rail and maritime) and for cross-cutting 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 EC mandates. Some of these are harmonized European Standards that 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 (2000/9/EC), recreational craft and personal watercraft (2013/53/EU) and the deployment of alternative fuels infrastructure (2014/94/EU).

In the space area, CEN and CENELEC collaborate with the European Cooperation for Space Standardization (ECSS), which brings together the European Space Agency (ESA), several national space agencies and Eurospace (representing the European space industry).

Standards and technical specifications for the aerospace industry are developed by the Aerospace and Defence Industries Association of Europe – Standardization (ASD-STAN), which is an associated body of CEN. ASD-STAN is responsible for the technical content of standards defining products, materials, and test methods and procedures for the construction, maintenance and use of aircraft and space vehicles.



Technical bodies responsible

CEN/TC 15	Inland navigation vessels
CEN/TC 119	Intermodal Loading Units and Cargo Securing (ILUCS)
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/BTWG 69	Small Craft
CEN/SS T01	Shipbuilding and maritime structures
CEN/SS T03	Road Vehicles
CEN/SS T14	Packaging
CEN/WS 069	Car-Adaptations for Drivers and Passengers of Motor Vehicles
CEN/WS 077	Modules for Electro-Mechanical Actuators in Aircraft
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 18X	Electrical installations of ships and of mobile and fixed offshore units
CLC/TC 69X	Electrical systems for electric road vehicles
CLC/TC 9X	Electrical and electronic applications for railways
CLC/SR 18A	Electric cables for ships and mobile and fixed offshore units
CLC/SR 80	Maritime navigation and radiocommunication equipment and systems
CLC/SR 97	Electrical installations for lighting and beaconing of aerodromes
CLC/SR 107	Process management for avionics
EASCG	European Air Traffic Management Standardization Coordination Group
CEN-CLC/TC 5	Space
CEN-CLC CG	eMobility
CEN-CLC-ETSI	Sector Forum Rail
ITS Forum	



Standards published by CEN & CENELEC: 3752

Work Items currently in the Work Programmes: 1024

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 (ATM) interoperability
- M/533 – Alternative fuels infrastructure
- M/542 – Recreational craft II

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

- 5. COM(2011)144 final: White Paper Roadmap to a Single European Transport Area
- 13. Inland navigation legislation
- 14. CEN and CENELEC will facilitate the development of transport applications aiming to use GNSS
- 15. Increase the interoperability of Galileo services with the aviation market

Further information

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

AIRCRAFT, SPACECRAFT AND RELATED EQUIPMENT

CEN develops standards to ensure the interoperability of the European Air Traffic Management Network (EATMN) in the context of the Single European Sky (SES). Standardization work in this area is managed by CEN/TC 377 'Air traffic management'. In 2018, CEN/TC 377 will focus on the revision of EN 16495 'Information security for organisations supporting civil aviation operations'.

Moreover, the European Organization for Civil Aviation Equipment (Eurocae) should sign a renewed Cooperation Agreement with CEN and CENELEC, with the aim of collaborating further in the development and promotion of ATM standards.

CEN will continue its collaboration with ASD-STAN for the publication of several new European Standards in 2018. These will address issues such as Registration, Evaluation, Authorisation and restriction of Chemicals (REACH)-related standards, unmanned aircraft systems and additive manufacturing. ASD-STAN was recognized as an associated body of CEN in 1986. In 2018, CEN and ASD-STAN will implement their new Cooperation Agreement, which will introduce new modalities of coordination, notably regarding the CEN enquiry process.

SHIPS, BOATS AND RELATED EQUIPMENT

In the small craft area, CEN is collaborating with ISO/TC 188 'Small craft' to review and revise harmonized European Standards in line with the requirements of the latest EU Directive on recreational craft and personal watercraft (2013/53/EU).



CEN/TC 15 'Inland navigation vessels' is addressing standardization in the field of shipbuilding for inland waterway vessels and inland waterway navigation. It will, among other things, finalize standards on 'Plate with instructions for rescue, resuscitation and first aid for drowning persons' and on 'Electrical shore connection'.

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 standardization requests including M/533. The committee is also developing standards on access to automotive repair and maintenance information (RMI), in response to M/421, and on electrical vehicles in collaboration with CLC/TC 69X 'Electrical systems for electric road vehicles'.

There is a high potential for development of new standards in the field of automated vehicles.

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, which brings together representatives from the railway industry (supply industry and networks), relevant European and international organizations (such as Union Internationale des Chemins de Fer (UIC), European Rail Industry Association (UNIFE) and Union Internationale des Transports Publics (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 Technical Committees collaborate with the European Union Agency for Railways (EUAR) to ensure that European Standards are compatible with the latest Technical Specifications for Interoperability (TSIs).

The main task for 2018 will be the updating of numerous existing standards to take into account the needs of industry or changes in the TSIs. In addition, new standards will be finalized including 'Equipment and components on board rolling stock', 'Fire safety', 'Ballastless track systems' and 'Creation and modification of maintenance plan'.

ROAD EQUIPMENT AND MISCELLANEOUS TRANSPORT EQUIPMENT

Pursuant to the Standardization Request on Alternative Fuels Infrastructure, M/533 (supporting the building up of alternative fuel stations across Europe), CEN/TC 326 'Natural gas vehicles – Fuelling and operation', in cooperation with ISO/PC 252 'Natural gas fuelling stations for vehicles', is expected to adopt two standards, which will cover the design, construction, operation, inspection and maintenance of stations for fuelling vehicles with compressed natural gas (CNG) and liquefied natural gas (LNG), including equipment, safety and control devices.

In the field of hydrogen supply, two standards related to the 'Fuelling station' and to the 'Product specification and quality assurance of hydrogen for proton exchange membrane' are being developed.



According to Eurostat, 80 million EU citizens are affected by some kind of disability. This number is projected to increase to 120 million by 2020, considering the increase in the elderly population. This means that millions of people in Europe may be excluded from using basic products and services such as entering a public building, withdrawing money from a cash dispenser, using city transport, reading e-books and using mobile applications. Accessibility is a precondition to enjoy other fundamental rights, such as access to the workplace, education, public services, free movement, leisure, etc., which persons with disabilities should enjoy on an equal basis with others.

European Standards are powerful tools to promote accessible products and services that persons with functional limitations, including persons with disabilities, can perceive, operate and understand on an equal basis with others. Persons with disabilities and ageing population, among others, benefit directly from a product, good or service when it is easy to access, understand and use.

Accessibility is a human right recognized by the UN Convention on the Rights of Persons with

Disabilities, and is at the core of the European Disability Strategy 2010-2020. Moreover, once adopted, the proposed EU Directive on accessibility requirements for products and services (COM2015615final) will lead to common accessibility requirements covering specific products and services (e.g. smartphones, tablets and computers, ticketing machines, televisions and TV programmes, banking and ATMs, e-books, online shopping websites, air, bus, rail and waterborne passenger transport services) across all EU Member States. To support upcoming and existing EU legislation, European standardization can certainly contribute to improving the proper functioning of the EU internal market for accessible products and services, by developing consensus-based requirements and specifications.

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 through the processes of developing European Standards, from the early stages.



Technical bodies responsible

CEN/TC 10	Lifts, escalators and moving walks
CEN/TC 315	Spectator facilities
CEN/TC 293	Assistive products for persons with disability
CEN/TC 452	Assistance Dog & Guide Dog Teams Standards and Instructors Competences
CEN-CLC/TC 12	Design for All
CEN-CLC/JWG 6	Accessibility in the built environment
CEN-CLC-ETSI/JWG	eAccessibility

Standards published by CEN & CENELEC: 70

Work Items currently in the Work Programmes: 28

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 the 'Annual Work Programme for European Standardisation 2018'

2.1. Action in support of the digital single market strategy

Further information

www.cencenelec.eu/go/accessibility

DESIGN FOR ALL

In 2018, CEN-CLC/TC 12 'Design for all' will work on the finalization of the draft European Standard on requirements that enable an organization to design, develop and provide products, goods or services so that they can be accessed, understood and used by the widest range of users. The requirements set out are generic and intended to be applicable to all relevant parts of all organizations, regardless of type, size, or products, goods or services provided. This standard will promote accessibility following a Design for All approach in mainstream products, goods and services, and in their interoperability with assistive technologies.

eACCESSIBILITY

In 2018, the European Standardization Organizations are expected to publish a European Standard setting up requirements on the accessibility of websites and mobile applications in support of Directive (EU) 2016/2102 on the accessibility of the websites and mobile applications of public sector bodies, as requested by M/554. This activity will support the Web Accessibility Directive to improve the functioning of the internal market, thereby enabling the websites and mobile applications of public sector bodies to be more accessible to users, in particular to persons with disabilities.



This requires an adaptation of EN 301 549:2015 to create a harmonized standard that includes additional normative specifications related to the accessibility of mobile applications and their compliance with the essential requirements of perceivability, operability, understandability and robustness as defined in Directive (EU) 2016/2102. In addition, this work will complete M/376's activity on better harmonizing accessibility requirements and facilitating public procurement for accessible ICT products and services.

The revision of EN 301 549 will then be followed by further global cooperation on and possible alignment of web accessibility standardization based on the work of W3C/WCAG (WCAG 2.1), by addressing specifically the aspects relating to mobile applications.

ACCESSIBILITY IN THE BUILT ENVIRONMENT

CEN-CLC/TC 12 '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 EC Standardization Request M/420). In 2018, the European Standard on functional requirements for the accessibility and usability of the built environment and the Technical Report on technical performance criteria and specifications will be sent to approval procedures.

ASSISTANCE DOGS

An assistance dog helps a person with sensory, physical, mobility impairments or other medical, mental health or development impairments to be more independent in daily tasks, and improves the quality of the person's life. In 2018, CEN/TC 452 'Assistance dogs' will work on a terminology standard for assistance dogs, which can be used to cover both the training of such dogs and the way to assign them to users, but also the ongoing assessment of this partnership (user and dog together).





Technical Committees (TCs) in this sector develop standards for the protection of the environment, mainly in support of European environmental and related legislation.

CEN's and CENELEC's work in the environmental sector involves not only the development of standards but also an advisory role that helps writers to include environmental and climate change adaptation considerations in standards in all sectors where adaptation has relevance. Thanks to the work that CEN and CENELEC have invested in the greening of the European Standards (ENs), companies and organizations using these standards are contributing to the protection of the environment. The use of these standards not only helps companies in meeting legal requirements, but can also benefit them financially by reducing their use of valuable resources such as energy and water, producing less waste, preventing accidents, improving resilience to climate impacts and avoiding clean-up and compensation costs. In addition, by demonstrating their commitment to the environment, companies and organizations may be perceived in a more positive way by their current and potential customers, as well as by their employees and other stakeholders.

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

The Strategic Advisory Body for 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. They also maintain close cooperation with the European Commission and regularly discuss with policy-makers how standards can support the implementation of environmental and climate policies.

The CEN-CENELEC Adaptation to Climate Change Co-ordination Group will continue to coordinate the standardization work associated with the standardization request on adaptation to climate change.



Technical bodies responsible

CEN/TC 54	Unfired pressure vessels
CEN/TC 164	Water supply
CEN/TC 165	Waste water engineering
CEN/TC 183	Waste management
CEN/TC 260	Fertilizers and liming materials
CEN/TC 335	Solid biofuels
CEN/TC 343	Solid Recovered Fuels
CEN/TC 351	Construction Products – Assessment of release of dangerous substances
CEN/TC 406	Mechanical products – Ecodesign methodology
CEN/TC 411	Bio-based products
CEN/TC 223	Soil improvers and growing media
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
CEN/WS 072	Framework for SustainValue – Sustainable Value Creation in manufacturing networks
CEN/WS 076	Batch-based Calculation of Sustainability Impact for Captured White Fish products Acronym: WhiteFish BCSl
CEN/WS 082	AquaVir
CLC/TC 111X	Environment
CEN/SABE	Strategic Advisory Body on Environment
Adaptation to Climate Change Coordination Group	

Standards published by CEN & CENELEC: 1103

Work Items currently in the Work Programmes: 181

Standardization requests from EC/EFTA

- M/503 – Ambient air quality legislation
- 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 the 'Annual Work Programme for European Standardisation 2018'

6. establish new sensors and measurement methods to assess ambient air quality
7. monitor ammonia (NH₃), chlorine and chlorine dioxide emissions to the air and emissions of hydrogen fluoride or total gaseous fluorides from industrial sectors

Further information

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

www.cenelec.eu/go/TC111X

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



ADAPTATION TO CLIMATE CHANGE

CEN and CENELEC finalized the preliminary work programme for standardization in support of the EU Strategy on Adaptation to Climate Change. The work programme includes a list of 13 high-priority standards that need to be developed or revised by the TCs working in the priority sectors, transport, energy and construction, along with the supporting ICT. The objective of the work is to make European infrastructure resilient to the impacts of the changing climate. The revision of the first standards of the list starts at the end of 2017 and will continue in

IMPROVED PARTICIPATION IN ENVIRONMENTAL ASPECTS OF STANDARDIZATION

In 2018, CEN, with the support of the European Commission, will launch a project that will help members and national environmental organizations to enhance their engagement in the strategic discussions and standardization work of CEN related to environmental protection.

AIR QUALITY

The quality of air is very important for a healthy life and environment. CEN/TC 264 'Air quality' closely follows the latest technical research and policy developments related to the identification of the air pollutants and continuously develops and revises standards that allow the measurement of known pollutants across the EU and the comparison of the measurement results, in line with current European legislation.

In 2018, CEN/TC 264 will finalize the Technical Specification on Predictive Emission Monitoring Systems (PEMS) – Applicability, execution and quality assurance (CEN/TS 17198). It will then start work on standards related to mercury monitoring using sorbent traps and determination of the concentration of total mercury for emissions from stationary sources.

END-OF-LIFE TYRES

CEN/TC 366 'Materials obtained from end-of-life tyres' is developing standards with the aim of improving the potential for the recycling of end-of-life tyres (ELT), which is becoming a significant recovery activity, with a positive impact on both economy and environment. In 2018, CEN/TC 366 will finalize two Technical Specifications, one on a sampling method for granulates and powders stored in big-bags (CEN/TS 17188) and another one on determination of the true density of granulates – method based on water pycnometry (CEN/TS 17189).



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Environmental characterization of solid matrices - CEN/TC 444 'Test methods for the environmental characterization of solid matrices' deals with the standardization of test methods for the environmental characterization of soil, solid and liquid waste, biowaste and sludge, covering digestion/extraction, chemical analysis, physical methods, quality assurance and quality control (laboratories). CEN/TC 444 cooperates closely with other TCs in the environmental sector by inviting them to investigate the possibility of developing multi-matrix standards, thus improving the efficiency of the standardization process.

In 2018, CEN/TC 444 will work on the development and revision of a series of ENs/ISO standards related to soil quality. The TC will work on converting TS 16190 on the determination of dioxins and furans and

dioxin-like polychlorinated biphenyls by gas chromatography with high resolution mass selective detection (HR GC-MS) into an EN, upgrading TS 16181 on determination of polycyclic aromatic hydrocarbons (PAH) by gas chromatography (GC) and high-performance liquid chromatography (HPLC) to an EN and revising prEN 16167 on the determination of polychlorinated biphenyls (PCB) by gas chromatography with mass selective detection (GC-MS) and gas chromatography with electron-capture detection (GC-ECD).

Waste electrical and electronic equipment - CLC/TC 111X 'Environment' will start working on TR 50625 6 'Report on the alignment between Directive 2012/19/EU and EN 50625 series standards' and EN 50614. It will finalise EN 50614 'Requirements for the preparing for re-use of waste electrical and electronic equipment'. Both of these deliverables are part of the series of standards developed in support of the WEEE Directive.





Smart technologies



In the context of the digital revolution that we are experiencing, technologies are becoming smarter every day and capable of adapting automatically and modifying behaviour to fit the environment through wireless access, databases and sensors. The Internet of Things (IoT), for example, is considered the enabler of the next industrial revolution, changing the way companies engage in business activities and people interact with their environment. Standardization needs to adapt quickly to cope with the rapid development of the market and its increased degree of complexity, the changing business environment and a more participatory society. Utilities companies, for example, are working closely with information and communication technology (ICT) companies in smart grid development, distributors of electricity are also selling gas,

and citizens are involved in cities' strategic planning. Dividing lines between traditional areas of standardization work are blurred, and they break the traditional 'vertical silos' approach. The concept of smartness is not only addressed in terms of technology performance but also embedded in the process of long-term sustainable development. Standards provide a basis for the integration of technologies into complex systems, prevent vendor lock-in, and facilitate interoperability and data exchange. Moreover, standards play a role in the consolidation of a digital single market and enhance the competitiveness of European companies and service providers. CEN and CENELEC are engaged in several 'smart' fields such as smart grids, smart meters, smart cities, IoT, smart appliances and smart homes.



Technical bodies responsible

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
CEN/TC 92	Water meters
CLC/SR 118	Smart grid user interface
CLC/TC 13	Electrical energy measurement and control
CLC/TC 205	Home and Building Electronic Systems (HBES)
CLC/TC 210	Electromagnetic Compatibility (EMC)
CLC/TC 215	Electrotechnical aspects of telecommunication equipment
CLC/TC 59X	Performance of household and similar electrical appliances
CLC/TC 8X	System aspects of electrical energy supply
CEN-CLC-ETSI/CG	Smart Energy Grids
CEN-CLC-ETSI/CG	Smart Meters
CEN-CLC-ETSI/SF	Smart and Sustainable Cities and Communities

Standards published by CEN & CENELEC: 943

Work Items currently in the Work Programmes: 274

Standardization requests from EC/EFTA

M/338 – Electronic Fee Collection in support of Interoperability of electronic road toll systems in the Community

M/403 – Information and Communication Technologies applied to eHealth

M/453 – Co-operative systems for Intelligent Transport in the field of information and communication technologies to support interoperability of cooperative systems for intelligent transport in the European Community

Relevant elements of the 'Annual Work Programme for European Standardisation 2018'

62.1 Action in support of the digital single market strategy

Further information

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

<http://www.cen.eu/work/areas/transport/ITS/Pages/default.aspx>

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



CEN AND CENELEC DIGITAL TRANSFORMATION INITIATIVE

The digitization of process, systems and supply chains is transforming European industry and the lives of European consumers. Traditional sectors of the economy are increasingly employing digital technologies and this means that CEN and CENELEC industry stakeholders are looking for support including standardization solutions from recognized and trusted providers.

To guarantee a flexible and timely response supported by European standardization, CEN and CENELEC have adopted 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, supporting pilot projects will be launched in 2018:

- ensuring CEN and CENELEC meet industry needs for digital transformation;
- digitizing our standards-making process and deliverables;
- marking the CEN and CENELEC system more agile and adaptable to market and technology innovations;
- engaging digital natives and professionals.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2018

Smart cities - Today, 78% of EU citizens live in cities and 85% of the European GDP is generated in cities. By 2050, 85% of the population of Europe is forecast to be living in urban areas. The development of sustainable and smart urban living is a key societal challenge. In 2018, the Smart and Sustainable Cities and Communities Sector Forum will continue to act as a joint European Standardization Organizations (ESOs) advisory and coordination body for all standardization activities related to smart and sustainable cities. Following the outcome of the event organized in October 2017 together with cities, municipalities, service providers, institutional partners and relevant stakeholders, the Sector Forum will promote standardization work in answer to cities' needs, seek alignment with international SDOs and strengthen its collaboration with the European Innovation Partnership on Smart Cities and Communities (EIP-SCC).

Smart grids and smart meters - A smart grid is an electricity network that uses ICT to integrate the behaviours and actions of all users connected to it (generators and/or consumers) in a cost-efficient manner to deliver sustainable, economic and secure electricity supplies efficiently. When coupled with smart metering systems, smart grids provide consumers and suppliers with information on real-time consumption. With smart meters, consumers can adapt – in time and volume – their energy usage to different energy prices throughout the day, saving money on their energy bills by consuming more energy in lower price periods. In 2018, the coordination groups on Smart Energy Grids (CG-SEG) and Smart Meters (CG-SM) will continue to advise on European requirements relating to smart energy standardization, identify and prioritize gaps that could prevent the deployment of smart grids and smart meters in Europe, address cybersecurity, data protection and privacy aspects, and continue to ensure interoperability within smart



metering and smart grids systems (as well as smart appliances, smart home systems, smart buildings, etc.). The groups will also promote the wider implementation of standards for smart grids and meters by the industry and liaise with other international standardization organizations (particularly the IEC) to achieve consistency between European and international standards, to avoid the duplication of work and to ensure that a consolidated European view is taken into account within the IEC.

Moreover, CG-SEG has created a new ad hoc 'Clean Energy Package' group to ensure the ESOs' support to the deployment of the outcome of the European Commission's proposals for new rules for consumer-centred transition to clean energy (the Clean Energy Package) by providing an adequate set of standards. In addition, the ad hoc group will receive input from and provide input to the European Commission's Smart Grids Task force and associated Expert Groups (Single data format and procedures to exchange data; Cybersecurity; Demand response).

Intelligent transport systems - Intelligent transport systems (ITS) can contribute to a cleaner, safer and more efficient transport system. They use ICT to control traffic flow, collect road tolls (electronic fee collection), provide timely traffic and safety information, notify accidents (e-Call) and give priority to emergency vehicles. A new Standardization Request on ITS in urban areas was accepted in 2017 and several projects will be in progress in 2018:

- location-referencing harmonization;
- mixed vendor environments;
- traffic management system status, fault and quality standards;
- emissions management in urban areas;
- traffic management data models and infrastructure.

The European Commission has laid down the legal framework to accelerate the deployment of ITS across Europe (Directive 2010/40/EU) and has requested that the ESOs develop and adopt European Standards in support of this framework (M/453), to ensure interoperability across countries.

These standards developed by CEN/TC 278 cover a variety of aspects including cooperative systems, travel and traffic information, route guidance and navigation, public transport, emergency vehicles and electronic fee collection (M/338).

CEN-CLC/TC 5 'Space' is working in support of M/496. One aim is to facilitate the large-scale deployment of global navigation satellite system (GNSS)-based ITS in Europe, especially liability-critical and safety-critical systems. There is a particular emphasis on systems based upon the European Geostationary Navigation Overlay Service (EGNOS) and Galileo.

In 2018, CEN-CLC/TC 5 will continue and possibly complete its work on the use of GNSS-based positioning for ITS. New parts will be added to the existing European Standards on the assessment field tests for basic and security performances of GNSS-based positioning terminals. In addition, CEN-CLC/TC 5 will continue the development of European Standards for Space Situational Awareness (SSA) monitoring and the definition of image levels for Earth observation.

The European Commission launched in 2017 a study on 'the overview of EGNSS [European global navigation satellite system] downstream standardization and assessment of gaps and future needs', with the final objective of proposing a comprehensive long-term strategy for standardization activities, to facilitate the integration of Galileo and EGNOS into different user applications. In 2018, CEN-CLC/TC 5 will continue to collaborate with the European Commission to develop such activities further. Standardization plays an important role in the market take-up of Galileo and EGNOS. Standards support safety-of-life services that EGNSS offer, and ensure the operability and market penetration of Galileo and EGNOS products and services.

Inclusiveness of the European Standardization System

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

These stakeholder organizations are encouraged to engage with the national standardization organizations and, through them, to take part in the European and international standardization system. However, many countries lack the expertise needed to represent societal stakeholders effectively in the process of developing standards at national level.

Therefore, CEN and CENELEC encourage and facilitate the appropriate representation and effective participation of these stakeholders at the different stages of the development of European standards or other European standardization deliverables. In particular, the European stakeholder organizations – 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”, these partnerships are developed taking into account the complementary roles of each partner 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 organization 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

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. These tools include the following:

- An online ‘SME Toolbox of Solutions’ can be accessed via the CEN-CENELEC website. It describes the benefits of standards, how to find the right standards and where to obtain relevant information. It also invites SMEs to get involved in standardization activities, and outlines the ways in which they can influence the development of standards at national, European and international levels.
- An interactive educational tool enables entrepreneurs and people 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. The tool provides an interactive environment for entrepreneurs, managers and employees to learn about standards and standardization. It also offers users the possibility to test their knowledge and obtain a Certificate of Achievement to show how much they have learned.
- 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' is one of the reference documents that have been published by CEN and CENELEC to give advice and recommendation on standardization principles and policies. It gives guidance to standard writers. The Guide has also been jointly adopted by ISO and IEC and published as ISO/IEC Guide 17.

- 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. These platforms are designed to 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.
- Several CEN and CENELEC members provide a 'tailor made' alert system to inform SMEs of developments within their field of interest, such as new topics for standardization, development of standards evolution, outlook, etc.
- There are also brochures, web pages, SME newsletters, social media (LinkedIn) feeds, etc.

In 2018, the SME toolbox will be complemented with a video, 'Standards, a business tool for SMEs', addressing SMEs on the importance of standards for them. The video invites SMEs to take part in standardization and to contribute to the writing of standards. Being involved in the development of standards will ensure that standards are fully compatible with SME requirements.

In 2018, CEN and CENELEC and the national standardization organizations, in close cooperation with SBS, will continue their support to SMEs to facilitate their participation in standardization at the national and European levels, promote awareness and take-up of the existing tools, measure their implementation and evaluate their effectiveness. The 2018 focus will be on cooperation with trade associations as intermediaries between standardization and SMEs and on engaging them in supporting SMEs on standardization.

Including societal stakeholders

With standards playing a key role in protecting consumers, workers and the environment, it is easy to see why civil society needs to take part in their development. Add to this the ability that standards have to support the implementation of laws and policies, including in areas of public interest, and it quickly becomes clear that societal stakeholders must be involved in standardization.

Societal stakeholders are represented through the dedicated umbrella organizations ANEC (the 'European Consumer Voice in Standardization'), ECOS and ETUC. 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.

The Societal Stakeholder Toolbox is already available on the CEN CENELEC website. It provides information to consumer groups, environmental organizations and trade unions on the benefits of getting actively involved in standards development and helps them understand better how they can participate in the process.

In 2018, the Societal Stakeholder Toolbox will be complemented with an eLearning module on consumers' interest in standardization, soon to be followed with additional modules on environmental and social interests. These 'education about standardization' materials address everyone who participates in writing standards and has an interest in standardization. The materials explain how standards benefit society and how we ensure that societal interests are taken in account in developing them.

Also in 2018, CEN and CENELEC, with the societal stakeholder organizations, will highlight the importance of the participation and contributions of societal stakeholder organizations at international level. Through a brochure, the aim is to raise awareness of their role and to promote their inclusion

Further information

<https://www.cencenelec.eu/sme/Pages/default.aspx>

at international level, in particular in standardization work being developed under the Vienna and Frankfurt Agreements and in response to European Commission/EFTA requests. This brochure will complement the one launched in 2017 entitled 'Civil society – Improving, strengthening and legitimizing the European standardization system', which raises awareness of the role that ANEC, ECOS and ETUC have in promoting the interests of civil society in the development of standards.

Further information

<https://www.cenelec.eu/societal/Pages/default.aspx>

Education about standardization

Education has a crucial role to play in preparing students to work with standards as a major tool in their future professional lives. If they have already encountered and learned about standards during their studies, they will be much more quickly able to deal with any situation in which the knowledge of standards and standardization might be needed.

The CEN and CENELEC members are active in promoting understanding about standardization benefits, applications and development processes. They encourage universities and other educational institutions to ensure that their students have at least a basic understanding of standards and standardization. Students should know what standards are, why they are needed, who is developing them and how they are being used, for their fields of study.

The repository of materials provides documents related to education about standardization, including some education material, in several languages.

In 2018, CEN and CENELEC will concentrate on sharing best practices amongst the members to identify the best way to reach out to students and the people on the work floor. Members will be asked to share information about how they are organized to provide education about

standardization, how they collaborate with universities, what can be done to provide training on standardization on the work floor, etc. They will also be asked to share their teaching material. The information provided by the members will be collated and will appear on the CEN–CENELEC website.

Digital transformation

The digitization of processes, systems and supply chains is transforming European industry and the lives of European consumers. Traditional sectors of the economy are increasingly employing digital technologies and this means that CEN's and CENELEC's industry stakeholders are looking for support, including standardization solutions from recognised and trusted providers.

Stakeholders expect standardization solutions from recognised and trusted providers that allow them to integrate a range of new technologies in their businesses.

CEN and CENELEC are continuing with key projects including the joint leadership with ETSI of Action 14 'Standardization to support digitization of industry' of the 'Joint Initiative on Standardisation' and in the follow-up to the joint response with ETSI to the EC Communication on 'ICT Standardisation Priorities for the Digital Single Market'.

To guarantee a flexible and timely response, supported by European standardization, CEN and CENELEC have adopted 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, supporting pilot projects will be launched in 2018:

Online standardization – engaging ISO and IEC to develop a common, seamless, user-friendly environment for efficient collaborative authoring of standards, ensuring timely delivery to the market.

21st-century standards content – building on initiatives to deliver XML-format standards (national, European and international) to enable flexible exploitation of standards' content, customer-defined application and downstream activities including smart compliance and smart CE marking.

Digital transformation of CEN and CENELEC – adapting decision-making and development processes to match the latest business practices, to give stakeholders more agile and flexible standardization responses with updated interfaces, information delivery and communication channels.

Establishing strategic alliances – identifying and partnering with organizations that can support the delivery of standardization solutions to industry, including national platforms (e.g. Industrie du Futur, Plattform Industrie 4.0) and public-private partnerships such as the Alliance for Internet of Things Innovation (AIOTI), the European Cyber Security Organisation (ECSO) and the Big Data Value Association (BDVA).

Exploring open source innovation – identifying opportunities for standardization to support market uptake of 'open source'; connecting standardization and open source activities to leverage complementary strengths and synergies, maximizing innovation and efficiency, and minimizing time to market.

Engaging the next generation – attracting digital experts and digital natives to standardization, bringing novel technologies and close-to-market innovations, and supporting the renaissance of European industry.

Research and innovation

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

The joint CEN-CENELEC Working Group on Standardization, Innovation and Research (STAIR) coordinates the CEN and CENELEC activities in support of innovation. Now that

Horizon 2020 (H2020) projects include a standardization work package as standard, CEN and CENELEC will during 2018 launch a proactive approach to identifying the technologies of the future in need of standardization, to ensure that Europe gains a first-mover advantage through launching the standardization process early.

There are many reasons why using existing standards or even shaping future standards will benefit researcher and innovation projects:

- Using standards as a knowledge source in the earliest possible stages of research and innovation avoids duplication of work and provides a basis for marketable products and services.
- Validating research findings with the standardization community ensures that innovations to be deployed will be market ready.
- Building upon standards ensures compliance with market conditions and increases transparency for prospective customers.
- Being involved in standardization and shaping future standards helps to translate new findings, including intellectual property rights, into marketable solutions and helps lower future R&D risks and costs.

Under the leadership of STAIR, the standardization community has invested substantial resources to help proposers of H2020 projects address standardization successfully right from the start

The role of standards as a tool to deploy innovation is set to increase in the 2018 calls for proposals under H2020. To meet the demand for direct involvement in H2020 projects, CEN and CENELEC are launching a project to share experiences and lessons learnt and strengthen relationships with the research and innovation communities at national level.

Also in 2018, CEN and CENELEC will launch a Technology Market Watch Function to gather information on, analyse and propose responses to promising new topics for standardization.

CEN and CENELEC cooperate with national (NSBs) and regional standardization bodies (RSBs) around the world with the aim of achieving market harmonization and contributing to the removal of technical barriers to trade (TBTs) between Europe and its trade partners. These efforts towards technical alignment with foreign markets also contribute to enhancing interoperability worldwide, thereby supporting trade in goods and services beyond the European borders.

The different agreements signed with NSBs and RSBs complement their activities developed in the framework of ISO and IEC for sectors that are more regionally or nationally focused, and aim to strengthen further the recognition of ISO and IEC, and the adoption of their respective standards – a commitment that is at the heart of the European standardization model.

Further information

<https://www.cencenelec.eu/research/Pages/default.aspx>

International cooperation

Expanding the penetration of international and European standards worldwide

From European Neighbourhood to Oceania

Following the revision of their foreign partnerships, in 2017 CEN and CENELEC ensured a smooth transition from existing partners' agreements to the new partnership frameworks, the Affiliation Agreement and Companion Standardization Body (CSB) Agreement. Offering extensive benefits, and facilitating technical cooperation and the adoption of 'homegrown' European Standards, the new foreign partnership triggered the interest of several NSBs around the world interested in working closely with CEN and CENELEC. In 2018, CEN and CENELEC will continue the dialogue with those 22 NSBs, which range from the immediate European neighbourhood to Oceania, with the aim of ensuring their proper integration in the CEN and CENELEC community of partners and facilitating further

technical exchanges and alignment with them by improved communication, transfer of know-how and dedicated training.

India and Mexico

Building on progress made in 2017, CEN, CENELEC and the NSBs from Mexico (DGN) and India (BIS) are expected to conclude Cooperation Agreements to facilitate the exchange of information in key sectors, foster the adoption of the same standards in areas of shared interest and cooperate at international level.

The Cooperation Agreement between CEN, CENELEC and DGN will contribute to the removal of technical barriers to trade; improve economic, scientific and technical relations; ensure that products supplied are compatible, interchangeable and safe for human life, health and private property; and promote environmental protection. It will form the basis for a cooperative relationship enabling the interested parties to undertake actions to deepen the exchange of information on standardization.

The Agreement with BIS will open up opportunities for discussion on how to facilitate the adoption of 'homegrown' European Standards in Europe.

Promoting the success of the European integration model and supporting the quality infrastructure of other regions

One of the tools used by CEN and CENELEC to promote the benefits of the European Standardization system is to conclude Memoranda of Understanding (MoUs) with other RSBs around the world.

Eurasia

In 2017, CEN and CENELEC have concluded an MoU with the Eurasian Economic Commission (EEC) aiming to foster greater technical alignment between Europe and Eurasian Economic Union (EAEU) countries, most of which already have strong links and a formal partnership with CEN and CENELEC (Affiliates and CSBs). In 2018, the implementation of this

MoU will focus on areas of shared interest such as electrical and electronic products, chemicals and toys. CEN and CENELEC will work closely with its industry partners in this respect in order to ensure that activities target real market needs and tackle identified challenges. This will be further strengthened by a close cooperation with the EASC (Eurasian Interstate Council for Standardization, Certification and Metrology), which brings together all members of the EEC as well as other countries from the Commonwealth of Independent States (CIS) region.

South Asia

In October 2017, CEN and CENELEC also signed a MoU with the South Asian Regional Standardization Organization (SARSO) promoting the European Standardization model in the region, including the European experience of public-private partnership based on voluntary European Standards supporting the implementation of European regulations and policies. This MoU also promotes international standards (ISO and IEC) as a powerful tool to support market integration at regional level. Based on European industry input, the toys sector has been identified as a priority sector to be addressed with SARSO in 2018 with the goal of achieving harmonization and facilitating market access.

The Gulf

Toys will also be a focus under the cooperation with the GCC Standardization Organization (GSO). The GSO enables the adoption of home-grown European Standards in the Gulf region as a tool to complement regulatory convergence. In 2017, CEN and CENELEC started a technical cooperation with GSO on toys, aiming to find a solution for the benefit of consumers in general and representing the interests of all concerned stakeholders. This will continue in 2018 in close cooperation with key players of the European toy sector with the aim of addressing toy standardization-related issues to reduce the TBTs between the two regions.

Africa

The European-African standardization strategy will be further fine-tuned and its implementation

will be kicked off in 2018. The latter will rely on a close partnership with African and European stakeholders, including regulators, and aim to support the creation of the African Continental Free Trade Area (CFTA) based on the European New Approach principles and a single-standard model strongly relying on ISO and IEC standards. CEN and CENELEC and their regional partners in Africa – ARSO and AFSEC – will lead the standardization pillar of this strategy, and will continue to seek the European Union's and the African Union's support to lead its legislative component. Activities in 2018 will include several awareness-raising events in Europe and in Africa, and the promotion of the value of standardization to African decision-makers, as well as to African market players in identified target sectors.

Those region-to-region cooperations are also fully in line with the European Commission's (EC's) Communication COM(2016) 358 on European Standards for the 21st Century, in which the EC states that, at international level, Europe's trade and investment potential is strengthened by pursuing the promotion of the European regulatory model in third countries. In the same Communication, reference is also made to the Joint Initiative on Standardization (JIS), which, as planned under the Single Market Strategy, sets out a vision and aims to modernize the way standards are produced in Europe, and to focus on key elements, including a stronger international presence. CENELEC will continue to lead the JIS action on the promotion of the European regulatory model supported by voluntary standards and its close link to international standardization in third countries.

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 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 set the fourth phase in motion in 2018 jointly with the project partners. The project will be further refined to provide more focus on concrete sectoral and market needs, while also ensuring that continuous efforts are placed on monitoring and influencing regulatory developments in China, attempting to foster increased alignment with Europe. For this new phase, priority sectors will be identified as a primary focus, based on a thorough consultation with the CEN, CENELEC and ETSI members and partners.

India

In 2018, the SESEI expert will focus on better engaging with the European stakeholders that have an interest in India. The expert will organize the development of study reports for European industry in the following project priority sectors: automotive (covering intelligent transport systems and eMobility), smart energy (covering smart grids, smart meters, low voltage direct current, micro grids) and smart cities. These study reports will be presented during the third EU-India conference, to be held in the first half of 2018.

The expert will also support CEN and CENELEC in their negotiation of a formal cooperation with the Bureau of Indian Standards (BIS).

Further information

<https://www.cencenelec.eu/intcoop/Pages/default.aspxdefault.aspx>

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 Institute
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 - Българският 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
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 - Úrad pre normalizáciu, metrológiu a skúšobníctvo
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.

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** Number of full members in December 2017*



CEN – European Committee for Standardization
CENELEC – European Committee for Electrotechnical Standardization
Rue de la Science 23 - 1040 Brussels - Belgium | info@cencenelec.eu

www.cen.eu | www.cenelec.eu | www.cencenelec.eu

