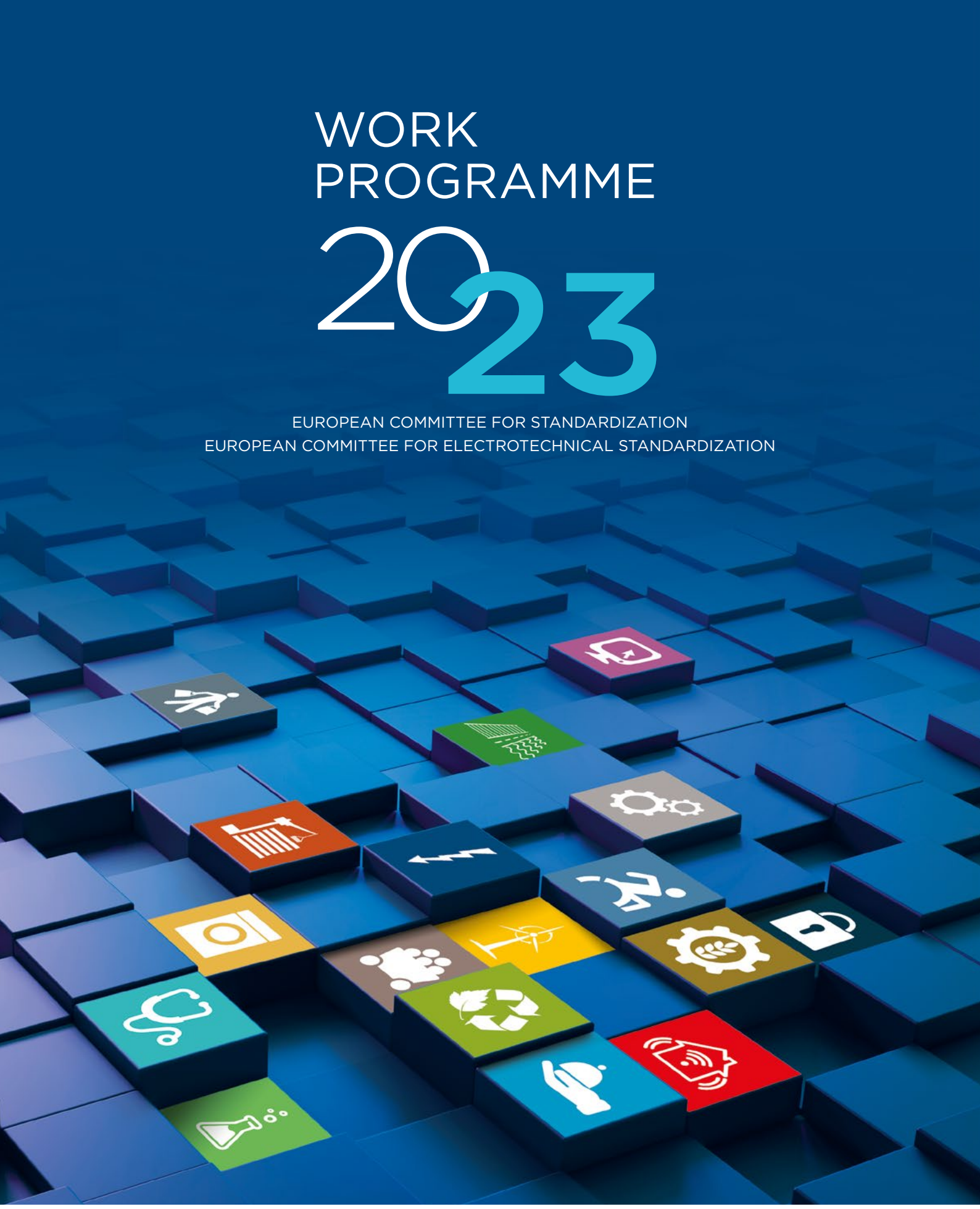
WORK PROGRAMME 2023

EUROPEAN COMMITTEE FOR STANDARDIZATION
EUROPEAN COMMITTEE FOR ELECTROTECHNICAL STANDARDIZATION



CEN CENELEC

European Standardization
and related activities

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All facts and figures in this publication were correct on 31 December 2022

Introduction

In the past years, a series of unprecedented global shocks have hit the world and hence Europe. A mix of sanitary, energy, economic and security crises, on the background of the worsening impact of climate change, have deeply changed the global context around us.

To respond to this new world, Europe is undertaking a process of renewal: from the fight against global warming to creating a thriving digital ecosystem, from fostering a sustained and fair economic recovery to the quest for strategic autonomy, **2023 is shaping up to be a decisive year for designing Europe's future** – not least as it marks the 30th anniversary of the Single Market.

In this context, CEN and CENELEC believe in the potential of European standards to play a strategic role. As the already long history of the Single Market attests, they can serve as key tools to provide trustworthy and market-based solutions to present and future challenges.

More importantly, European standards are instrumental to support the EU's priorities, such as the twin green and digital transitions and the search to secure a strategic autonomy. This is thanks to a strong, consensus-oriented and inclusive standardization system, unique in the world.

In particular, two priority areas will be particularly relevant for CEN and CENELEC in 2023, as they are at the heart of our **Strategy 2030.**

The first one is **sustainability.** Our experts and Members are working diligently to include climate considerations throughout all our standardization work and anticipate industry and societal needs. In 2023, particular focus will be put on the following actions: achieving a fully circular economy, based on a new Standardization Request for circular plastics; supporting clean technologies and the "Cleantech Act" recently proposed by the European Commission for a net-zero industry; continuing with our project to identify European standards supporting the UN's Sustainable Development Goals (SDGs); and joining our international sister organizations ISO and IEC in the commitment towards climate action.

Furthermore, as current market shocks show, a big part of the success of Europe's ambitions passes through a rethinking of our **energy system.** This means, on the one hand, reducing our consumption and increasing the energy efficiency of our products; on the other, investing in new clean energy sources. CEN and CENELEC, in 2023, plan to continue providing actionable solutions, from hydrogen and renewables to batteries and Ecodesign.

Our second big priority is the **digital transition.** Many standards are under development to support the implementation of the many new pieces of digital legislation, on domains as varied as Artificial Intelligence, cybersecurity, and industrial data. Furthermore, as these are quintessentially global issues, we are willing to collaborate at the international level, to help define the rules for our common digital future, while safeguarding fundamental social values and rights.

While developing standards for the digital world, we are also engaged in the digitalisation of our own standards and processes, as reflected in our **Strategy 2030.** We are working – together with ISO and IEC – on two projects, "*Online Standards Development*" and "*Smart standards*". Our ability to deliver "standards of the future" and develop an innovative digital workplace will be critical for our dual ambition to address user needs and facilitate business transformation.

The strategic value of standards has been recognised in the new **European Standardization Strategy.** This important document has brought a welcome new strategic dimension to our work and to our vital public-private partnership with the European institutions: that will allow us to work better together in the same direction.

2023 promises to be **a year of change,** in which CEN and CENELEC will play a leading role: we will engage with the Chief Standardization Officer, Maive Rute, and with the High-Level Forum to anticipate standardization needs and identify innovative solutions, while intensifying our efforts to ensure the timely citation of Harmonised Standards. We also look forward to collaborating closely with the European Commission on some of the priorities already identified as strategic, such as Cleantech and critical raw materials. Strengthening the Single Market is the best way to achieve a resilient European economy, and European standards are undisputable tools to this end.

In this letter, I have sketched the main strategic lines that will guide our work this year. The following pages will illustrate them more in detail. As you will see, 2023 promises to be an exciting, deeply transformative year for CEN and CENELEC. I am sure that, by working together as a community, we will build a European Standardization system that is effective, inclusive and future-oriented, to the benefit of Europe's economy, industry and citizens.

Elena SANTIAGO CID
Director General of CEN and CENELEC

Chemicals

The chemical sector is a pillar of the EU economy: according to the European Commission, it accounts for 7,5% of the EU manufacturing turnover, provides 1,2 million direct highly skilled jobs, and its sales amount to €565 billion (2018).

During the past two years of pandemic, the chemical industry has played a crucial role in meeting the pressing demand of health care materials and equipment. At the same time, it has highlighted the need of strengthening its supply chains and raw material procurement.

Being at the very base of many other industries – and having an impact on safety, health, and environment - the chemical sector is highly regulated. Within Europe, chemicals are predominantly subjected to comprehensive legislative texts. Among them, the most relevant are the Regulation on 'Registration, Evaluation, Authorisation and Restriction of Chemicals' (REACH) and the Regulation on 'Classification, Labelling and Packaging of chemical substances' (CLP).

REACH (EC 1907/2006) aims at improving the protection of human health and the environment, together with enhancing innovation and competitiveness of the EU chemicals industry. Currently, more than 26.000 substances have been submitted to the European Chemicals Agency (ECHA) under REACH. Other groups of chemicals such as fertilisers, explosives, biocides, pesticides, pharmaceuticals, and cosmetics are addressed by specific pieces of legislation.

The EU Chemicals Strategy for Sustainability – published in 2020 – increases the efforts towards the protection of citizens and the environment, while boosting innovation for safe and sustainable chemicals.

23 technical bodies responsible

CEN/SS C10	Starch
CEN/SS C20	Explosives and firework
CEN/TC 139	Paints and varnishes
CEN/TC 193	Adhesives
CEN/TC 223	Soil improvers and growing media
CEN/TC 249	Plastics
CEN/TC 260	Fertilizers and liming materials
CEN/TC 276	Surface active agents
CEN/TC 298	Pigments and extenders
CEN/TC 317	Derivatives from coal pyrolysis
CEN/TC 321	Explosives for civil uses
CEN/TC 347	Methods for analysis of allergens
CEN/TC 352	Nanotechnologies
CEN/TC 360	Coating systems for chemical apparatus and plants against corrosion
CEN/TC 363	Organic contaminants (tar) in biomass producer gases
CEN/TC 366	Materials obtained from End-of-Life Tyres (ELT)
CEN/TC 386	Photocatalysis
CEN/TC 401	Reduced Ignition Propensity Cigarettes
CEN/TC 421	Emission safety of combustible air fresheners
CEN/TC 437	Electronic cigarettes and e-liquids
CEN/TC 462	Regulated chemicals in products
CEN/WS 089	Platform - Guidelines and best practices for sustainable production of carbon nanotube-based nano-enabled products (CNT-based NEPs)
CEN/WS SNF	Sustainable Nanomanufacturing Framework

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 1339 ENs + 139 other deliverables
Work Items currently in the Work Programme: 212 ENs + 11 other deliverables

Standardization requests from EC/EFTA

M/556 – Polycyclic Aromatic Hydrocarbons (PAH)
M/562 – Explosives for civil use
M/564 and M/564 Amd 1 – Fertilizers
M/583 – Pyrotechnical articles
M/584 – Plastics recycling and recycled plastics

PLASTICS

In August 2022, the European Commission notified to CEN and CENELEC the new Standardization Request on plastics recycling and recycled plastics, in support of the European Strategy for Plastics in a Circular Economy (M/584).

The Standardization Request mandates CEN and CENELEC to revise eleven European Standards and develop around 45 new deliverables. Topics covered by the Request include quality grades for sorted plastic waste, characterisation of recyclates, and design-for-recycling guidelines for a wide range of products used in different applications – such as packaging, construction, electronic and electrical equipment, road vehicles, and agriculture.

Work on this Standardization Request will involve seven CEN Technical Committees and two CENELEC Technical Committees.

CEN/TC 249 'Plastics' will be revising and developing most deliverables, including a standard on quality grades for sorted plastics wastes (HDPE, LDPE, PP, PET, PVC, PS, EPS) and a standard on quality assessment of plastic recyclates for use in products (rHDPE, rLDPE, rPP, rPET, rPVC, rPS, rEPS, rABS).

Independently of the Standardization Request, CEN/TC 249 will keep collaborating closely with ISO on various testing methods.

PYROTECHNIC ARTICLES

Directive 2013/29/EU on pyrotechnic articles is a recast of Directive 2007/23/EC of the European Parliament and of the Council, which introduces some changes to the essential safety requirements applicable to pyrotechnic articles.

Through the Standardization Request on pyrotechnic articles (M/583), published in May 2022, the European Commission asked CEN to revise the relevant harmonised standards in support of Directive 2013/29/EU. The objective of this revision is to update the references currently published in the Official Journal of the EU (OJEU) which allow the presumption of conformity of pyrotechnic articles.

Therefore, in 2023, CEN/TC 212 'Pyrotechnic articles' will start the revision of 31 among ENs and EN ISO standards. The revision will ensure full alignment of the standards with Directive 2013/29/EU, detailing technical specifications related to the Essential Safety Requirements. It will be based on risk assessment and risk reduction methodologies and reflect the generally acknowledged state of the art. The revision will also introduce new elements compared to the previous editions, such as the environmental requirements (biodegradability) on F1-F4 articles.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Fertilising products - Following the publication in 2022 of 84 Technical Specifications (TS), CEN/TC 223 'Soil improvers and growing media', CEN/TC 260 'Fertilizers and liming material', and CEN/TC 455 'Plant biostimulants' will validate the test methods described in those TS by means of interlaboratory studies. This exercise will see the involvement of many testing bodies all over Europe.

The validated methods, that will be included in European Standards, will allow manufacturer to analyse their products and prove their compliance with relevant requirements under the Fertilising Product Regulation (Reg (EU) 2019/1009). These ENs are mandated under the Standardization Request M/564.

Explosives for civil use - Based on the Standardization Request M/562 on explosives for civil uses in support of Directive 2014/28/EU, CEN/TC 321 'Explosives for civil use' is expected to publish more than fifty European Standards (ENs) and one Technical Specification dealing with safety requirements, terminology, categorisation and test methods. The new ENs will address the Essential Safety Requirements as listed in the Directive to ensure more safety during production, handling, and usage of explosives for civil uses. At the same time, the harmonised standards will also foster EU cross-border trade and strengthen the European Single Market. Many stakeholders are involved in the standardization activities in the field of explosives, such as manufacturers, distributors, demolition companies, and research institutions.

Nanotechnologies - As mandated by M/461, CEN/TC 352 'Nanotechnologies' will continue working on two Technical Specifications on nanotechnologies and nanomaterials: CEN/ TS 'Nanotechnologies - Guidelines for the characterization of nano-objects-containing additives in food products' and CEN/TS 'Nanotechnologies - Guidance on the determination of aggregation and agglomeration state of nano-objects'.

The same TC will also adopt various EN ISO deliverables, including EN ISO 80004-1 'Nanotechnologies - Vocabulary - Part 1: Core terms and definitions' and EN ISO 19749

'Nanotechnologies - Measurements of particle size and shape distributions by scanning electron microscopy'.

PAHs in plastics and rubber - In 2023, CEN/TC 462 'Regulated chemicals in products' will complete a new standard on 'Determination of the content of polycyclic aromatic hydrocarbons (PAH) by gas chromatography in plastic and rubber in articles supplied to the general public that come into direct contact with human skin and oral cavity'.

This project is carried out under Standardization Request M/556 as regards compliance with maximum content criteria of PAH in rubber and plastic components of articles placed on the market for supply to the general public, in support of Regulation (EC) No. 1907/2006.

The standard will support Annex XVII of REACH (entry 50) on eight carcinogenic PAHs, harmonising the analytical methods for determining their individual concentration in the plastic and rubber components of articles falling within the scope of the restriction. In this way, the new standard will help ensure that only articles that do not pose an unacceptable risk to human health or the environment can be legally placed on the EU market for supply to the general public.

Adhesives - CEN/TC 193 'Adhesives', through its Subcommittee SC 1 'Adhesives for wood and derived timber products', will continue the revision of several standards related to classification and tests methods for adhesives used in load-bearing timber structures (EN 301, EN 302-1 to EN 302-8, EN 15425, and EN 16254).

The TC will also revise EN 923:2015 'Adhesives - Terms and definitions', to reflect the state of the art and the current industry common language.

These revisions will bring benefit to the whole sector and value chain, from manufacturers and testing labs to distributors and consumers.

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Chemicals

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Construction

The construction sector is one of Europe's biggest industries and, as such, is of vital importance to the European economy. With more than 18 million EU citizens and approximately 26 million workers directly or indirectly depending on it, the construction sector generates about 9% of the EU's GDP and 50,5% of its Gross Fixed Capital formation.

CEN and CENELEC develop harmonised European standards supporting the Construction Products Regulation (Regulation EU 305/2011 - CPR) and contributing to the CPR Technical Acquis.

Harmonised standards provide a common technical language which is used by a wide array of stakeholders for different purposes: by manufacturers to express the technical performance of their construction products, by regulators to express their requirements, and by designers, contractors and other construction stakeholders to exchange information efficiently. Harmonised standards play a key role in the implementation of the CPR because they do not only contain the assessment methods for determining the performance of construction products in relation to their essential characteristics, but also include provisions for their declaration and the clauses on assessment and verification of constancy of performance (AVCP).

The construction sector is fundamental in ensuring that the ambitions of the Recovery Plan and the Green Deal become reality, contributing to a stronger and more sustainable Europe. This is the case for instance of the Renovation Wave issued by the European Commission, which calls specifically for climate resilient building standards.

Given its importance and broad applicability, stakeholders working on standards in the sector include manufacturers of construction products, national and European industry associations, laboratories and notified bodies, engineers, structural designers, the scientific community, and the European Commission.

84 technical bodies responsible

CEN/CLC/Guides	Group for CEN-CENELEC Guides
CEN/CLC/JTC 11	'Accessibility in the built environment'
CEN/SS B02	'Structures'
CEN/SS F01	'Technical drawings'
CEN/SS F02	'Units and symbols'
CEN/SS F16	'Graphical symbols'
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, laminate and modular mechanical locked 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 33	'Doors, windows, shutters, building hardware and curtain wallin'
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'
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)'
CEN/TC 459/SC 3	'Structural steels other than reinforcements'
CEN/TC 459/SC 4	'Concrete reinforcing and prestressing steels'
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/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 107	'Mitigation of Urban Heat Island effects with cool materials'
CEN/WS 115	'Test method for the evaluation of the adhesive properties of fibre reinforced polymer composite joints'
CEN/WS BRESAER	'Innovative and adaptable envelopes in building refurbishment. Design, economic assessment, logistics and installation guidelines'
CEN/WS GEOFIT	'Design and installation guidelines for a building retrofitting concept based on EGS (enhanced geothermal systems)'
CEN/WS Smart-CE-Marking	'Smart CE marking for the construction industry'
CEN/WS SUSTINROADS	'Sustainability assessment of roads'
CEN/WS TRAIN4SUSTAIN	'TRAIN4SUSTAIN Competence Quality Standard'
CLC/SR 3	'Information structures, documentation and graphical symbols'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 3073 ENs + 333 other deliverables
Work Items currently in the Work Programme: 448 ENs + 41 other deliverables

Standardization requests from EC/EFTA

- M/350 - Performance of buildings
- M/515 – Eurocodes
- M/577 – Space heating appliances

STRUCTURAL EUROCODES

Structural Eurocodes are a comprehensive set of standards dedicated to the design of building and civil engineering works. The 59 Structural Eurocodes parts produced by CEN/TC 250 'Structural Eurocodes' provide rules on principles of design, actions on structures, geotechnical design and structural design rules for the use of all major materials, such as concrete, steel, composite steel and concrete, timber, masonry, and aluminium. Structural Eurocodes are equally applicable to both whole structures and individual elements (products). They are widely used in the construction and civil engineering industry across Europe and beyond.

The Eurocodes are being revised to incorporate improvements to the existing suite to reflect the state of the art. The revision will enhance user-friendliness, without reducing applicability. This change will assist new entrants to the market and small and medium-sized enterprises (SMEs). Other developments in new areas include the assessment of existing structures and the use of new materials, such as structural glass, fibre-reinforced polymers, and membrane structures.

In the frame of Standardization Request M/515 (Eurocodes), CEN has been requested to revise existing Eurocodes standards to incorporate improvements that reflect the state of the art and the needs of the market. This work is being carried out by CEN/TC 250 in cooperation with a wide array of stakeholders, including structural design companies, the scientific community, industry associations and engineers, with the support of the European Commission and its Joint Research Centre (JRC).

In 2023, CEN/TC 250 will continue the revision of more than 35 standards. It will also finalise the following standards:

- EN 1990 'Eurocode – Basis of structural and geotechnical design'
- EN 1999-1-1 'Eurocode 9 – Design of aluminium structures – Part 1-1: General structural rules'
- EN 1999-1-2 'Eurocode 9 – Design of aluminium structures – Part 1-2: Structural fire design'
- EN 1999-1-3 'Eurocode 9 – Design of aluminium structures – Part 1-3: Structures susceptible to fatigue'
- EN 1999-1-4 'Eurocode 9 – Design of aluminium structures – Part 1-4: Cold-formed structural sheeting'
- EN 1999-1-5 'Eurocode 9 – Design of aluminium structures – Part 1-5: Shell structures'

SUSTAINABILITY IN CONSTRUCTION

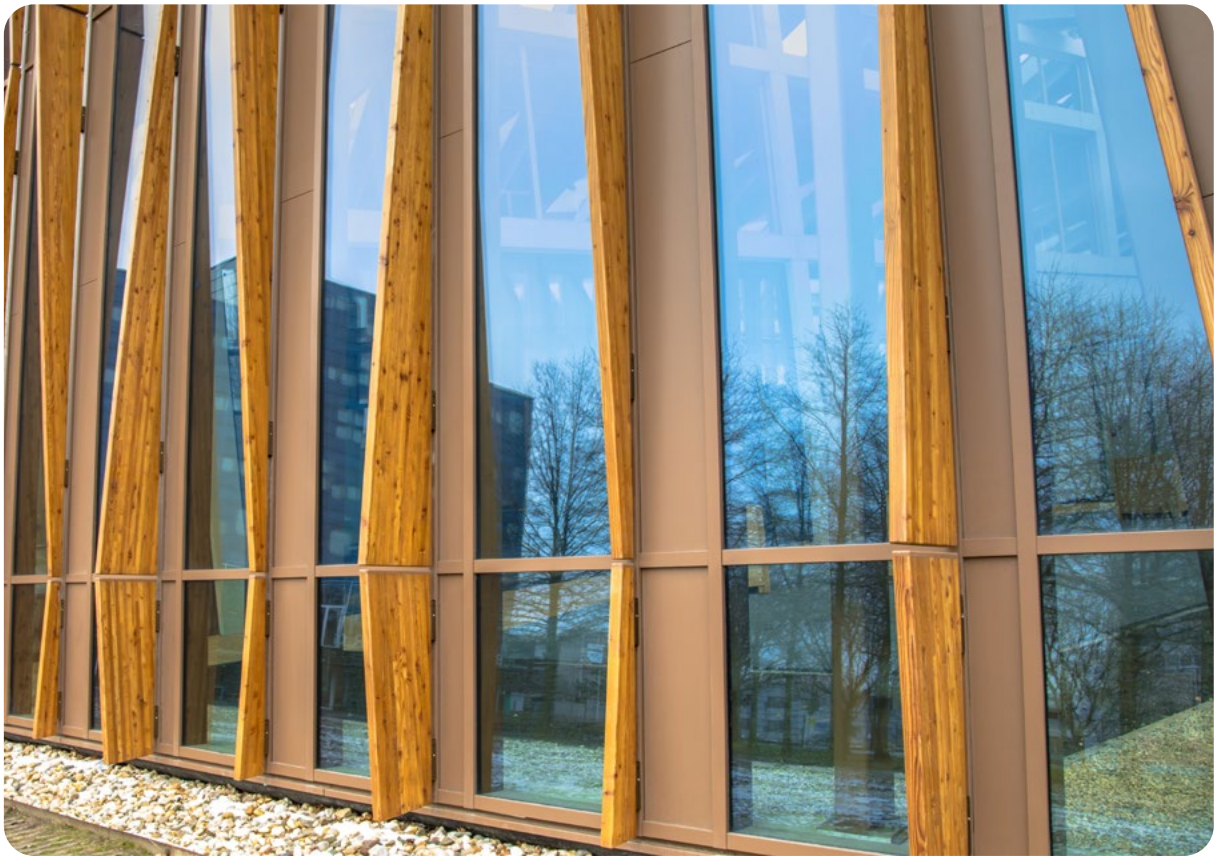
CEN/TC 350 'Sustainability of construction works' is responsible for the development of horizontal standardized methods for the assessment of sustainability aspects of new and existing construction works (buildings and civil engineering works), including standards for environmental product declarations (EPD, B2B and B2C).

CEN/TC 350 elaborates its standards in the context of the UN Sustainable Development Goals and of the circular economy principles. Its work is based on the Life Cycles Assessment (LCA) and takes into account the current needs in terms of mitigation, adaptation, and resilience to climate change.

CEN/TC 350 will continue developing standards in response to the Standardization Request M/350 'Performance of buildings'. Among the new standards, it is worth to highlight here EN 15978-1 'Sustainability of construction works - Methodology for the assessment of performance of buildings - Part 1: Environmental Performance', and EN 17680 'Sustainability of construction works - Evaluation of the potential for sustainable refurbishment of buildings'.

CEN/TC 350 will also contribute to the CPR Technical Acquis, through a Subgroup dedicated to the definition of construction product environmental requirements.

Finally, CEN/TC 350/SC 1 'Circular Economy in the Construction Sector' will continue its work on the definition of a common framework and a gap analysis as a first step to frame future work.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Release of dangerous substances - CEN/TC 351 'Construction Products - Assessment of release of dangerous substances' develops harmonised test methods to monitor the release of dangerous substances from construction products.

Following the validation of the methods included in existing TS, CEN/TC 351 will publish three standards on leaching (EN 16637-1, EN 16637-2, and EN 16637-3).

The same TC will also publish nine standards about content and analysis of organic and inorganic substances in eluates and digests (EN 17195, EN 17196, EN 17197, EN 17200, EN 17201, EN 17331, EN 17332, EN 17884, EN 17885).

Additionally, TC/351 will publish EN 16687 'Construction products: Assessment of release of dangerous substances – Terminology'.

Building information modelling (BIM) - Standards on Building Information Modelling (BIM) contribute to the effective management of information during the design, construction, and operational phases of an asset's lifecycle. The development of BIM is advancing rapidly and requires the application of common standards to ensure future compatibility of information exchange and use.

In 2023, CEN/TC 442 will continue working towards the development of EN 17632-2 'Building Information Modelling (BIM) - Semantic Modelling and Linking (SML), Part 2: Domain-specific modelling patterns'. In parallel, CEN/TC 442 will also focus on the finalisation of a CEN/TR on a framework for the implementation of Common Data Environment Solutions, in accordance with EN ISO 19650.

In cooperation with ISO under the Vienna Agreement, CEN/TC 442 will continue to work on EN ISO 19650-6 on 'Organization and digitization of information about buildings and civil engineering works, including building information modelling - Information management using building information modelling – Part 6: Health and Safety', EN ISO 22014 on 'Library objects for architecture, engineering, and construction' and EN ISO 16757 part 4 'Product catalogue exchange format' and part 5 'Dictionaries for product catalogues'.

Moreover, CEN/TC 442 will strengthen its links with more CEN Technical Committees and the CENELEC communities on topics of common interest.

Residential solid fuel burning appliances - Based on Standardization Request M/577 on space heating appliances in support of Regulation (EU) No 305/2011, CEN/TC 295 'Residential solid fuel burning appliances' will continue working on two standards: EN 16510-2-5 'Residential solid fuel burning appliances - Part 2-5: Slow heat release appliances', which specifies the measurement of the performance of appliances burning wood or pellet and safety tests burning wood or pellet and in transitory from one fuel to another, and EN 16510-2-7 'Residential solid fuel burning appliances – Part 2-7: Combination appliances fired by wood logs and pellets' which provides requirements on the design, manufacture, construction, safety and performance, associated test methods and test fuels for residential slow heat release appliances fired by solid fuel.

Building Automation, Controls and Building Management - CEN/TC 247 'Building Automation, Controls and Building Management' will continue working on standards targeted at achieving the desired level of automation in smart zero-emission building (ZEB). It will also finalise the following two deliverables on control accuracy:

- CEN/TR 17689-1 'Quality and performance Assessment of the Components for BAC Control Loop – Umbrella Document';
- EN 17690-1 'Components for BAC Control Loop - Sensors - Part 1: Room temperature sensors'.

Additionally, the TC will continue collaborating with ISO on the development of EN ISO standards on building automation and control systems (BACS), leveraging the recently established collaboration with CLC/TC 205 'Home and Building Electronic Systems (HBES)'.

Accessibility in the built environment - CEN/CLC/JTC 11 'Accessibility in the built environment' will start the revision of EN 17210 'Accessibility and usability of the built environment - Functional requirements', in response to the Standardization Request on accessibility requirements of products and services in support of Directive (EU) 2019/882, issued by the European Commission in 2022. This document describes basic, minimum functional requirements and recommendations for an accessible and usable built environment, following 'Design for All' and 'Universal Design' principles which will facilitate equitable and safe use for a wide range of users, including persons with disabilities.

Fire safety in buildings - In 2023, CEN/TC 127 'Fire safety in buildings' will publish EN 15725 'Extended application on the fire performance of construction products and building elements: principle of EXAP standards and EXAP reports', which gives the procedures for preparing standards and reports following the extended application (EXAP) process. The same TC will also proceed with the revision of standards and other deliverables in its work programme, such as EN 15080-12 'Extended application of results from fire resistance tests - Part 12: Loadbearing masonry walls', which provides guidance for variations of certain parameters and factors associated with the design of internal and external loadbearing walls.

Resilient, textile and laminate floor coverings - CEN/TC 134 'Resilient, textile and laminate floor coverings' will finalise the document 'Resilient, textile, laminate and modular mechanical locked floor coverings — Circular Economy and Sustainability — Recommendations/ Guidelines for Design'. It will also continue working on the following standards, to the benefit of floor covering stakeholders working on new or renovated buildings:

- EN 17861 'Resilient, textile, laminate and multilayer modular Floor coverings – Circular Economy – Terms and definitions'
- EN 17903 ' Definition and declaration of recycled content (organic and inorganic) in textile floor coverings'.

Precast concrete products - CEN/TC 229 'Precast concrete products' will finalise the revision of EN 13369 'Common rules for precast concrete products'. This standard specifies the requirements, basic performance criteria and the Assessment and Verification of Constancy of Performance (AVCP) for specific concrete products.

Gypsum and gypsum-based products - CEN/TC 241 'Gypsum and gypsum-based products' will continue working on EN 17328. This standard will provide product category rules (c-PCR) for Type III environmental declarations for gypsum-based products for the construction industry.

MORE INFORMATION
Construction

Consumer

Standards are used every day by businesses, manufacturers, public bodies and other organizations as a tool for ensuring consumer products are safe. For this reason, European standards are continuously improving, with the ambition to mitigate risks that can be reasonably foreseen with existing and new types of products.

24 CEN and CENELEC Technical Committees are currently carrying out standardization activities in consumer products. Their work mainly falls in the area of the General Product Safety Directive (2001/95/EC), but it also covers a number of other pieces of European legislation (Toy Safety Directive 2009/48/EC, etc.).

A large proportion of the standards in this sector are thus drafted at the request of the European Commission in response to Standardization Requests. Nevertheless, some standards are also developed in parallel with ISO in sectors such as footwear, sport equipment or textiles, leading to the publication of identical European and international Standards.

Given the variety of topics covered, ranging from child and toy safety, through clothing and accessories, textiles and leather, sports goods, furniture, up to furnishings and cleaning, the relevant technical bodies work independently of one another but exchange information through liaison officers and sometimes cooperate on topics of common interest. This exchange of information in the consumer sector will become more important in the coming years, as horizontal topics such as accessibility will increasingly be addressed in all new standardization activities.

24 technical bodies responsible

CEN/CLC/JTC 12	'Design for All'
CEN/SS H22	'Smokers' lighters'
CEN/SS M21	'Precious metals - Applications in jewellery and associated products'
CEN/TC 136	'Sports, playground and other recreational facilities and equipment'
CEN/TC 207	'Furniture'
CEN/TC 212	'Pyrotechnic articles'
CEN/TC 248	'Textiles and textile products'
CEN/TC 252	'Child care articles'
CEN/TC 281	'Appliances, solid fuels and firelighters for barbecuing'
CEN/TC 289	'Leather'
CEN/TC 309	'Footwear'
CEN/TC 355	'Lighters'
CEN/TC 364	'High chairs and learning towers'
CEN/TC 369	'Candle fire safety'
CEN/TC 398	'Child Protective Products'
CEN/TC 402	'Domestic Pools and Spas'
CEN/TC 410	'Jewellery and precious metals'
CEN/TC 426	'Domestic appliances used for water treatment not connected to water supply'
CEN/TC 443	'Feather and down'
CEN/TC 456	'Online gambling'
CEN/TC 457	'Digital preservation of cinematographic works'
CEN/TC 52	'Safety of toys'
CEN/TC 93	'Ladders'
CEN/WS CFCM	'Response to Covid 19 - Community face coverings (Masks)'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 894 ENs + 67 other deliverables
Work Items currently in the Work Programme: 143 ENs + 20 other deliverables

Standardization requests from EC/EFTA

M/253	Baby walking frames
M/259	Consumer Safety for oil lamps
M/264	Childcare articles
M/266	Safety of consumers and children – lighters
M/285	Ladders
M/309	Draw strings on children's clothing
M/372	Floating leisure products
M/425	Fire safety
M/427	Cigarettes lighters
M/452	Safety of music players
M/464	Safety of childcare articles (bath rings, bath aids, bathtubs, etc.)
M/465	Safety of locking devices
M/497	Childcare articles 'risks in the sleeping environment'
M/505	Window blinds

M/506 Stationary training equipment
M/507 Gymnastic equipment
M/508 Bicycles
M/527 Children's seats
M/531 Laser products
M/538 Alcohol-powered flueless fireplaces
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
M/574 Circularity of fishing gear
M/XXX Safety of Toys
M/XXX Safety of Childcare Articles

SAFETY OF TOYS

Since the new Standardization Request for Toys is expected to be published soon, several activities are anticipated starting in 2023. This will include the revision of 10 harmonised standards (hENs), including EN 71-1 'Safety of toys – Part 1: Mechanical and physical properties', and the development of five new hENs which will allow the users to test for the presence of chemicals in certain types of toys, specifically:

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

SLIME-TYPE MATERIALS

A new CEN Technical Specification (TS) on the categorisation of slime-type materials will be developed in 2023. The purpose of this document is to give some clarification on slimes and their behavior, on the methodology for their characterisation and on the approach to follow for a suitable categorization. It offers an easy-to-use procedure using non-complex equipment or surroundings and provides good precision for an appropriate categorisation.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Childcare articles - CEN/TC 252 'Childcare articles' will continue in 2023 with the development of a new European standard, prEN 17826 'Child care articles - Chemical hazards - Requirements and test methods'. This new standard aims to provide horizontal requirements for chemicals in childcare articles. It will be a candidate for citation under M/264 in support of General Product Safety Directive (2001/95/EC).

Sports - CEN/TC 136 'Sports, playground and other recreational facilities and equipment' should finalise the revision of the prEN ISO 25649 series (Parts 1-7) 'Floating leisure articles for use on and in the water', developed under the corresponding M/372 in support of the General Product Safety Directive (2001/95/EC). The committee undertakes this work in collaboration with ISO/TC 83 'Sports and other recreational facilities and equipment'.

Circular fishing gear and aquaculture - In 2023, CEN/TC 466 'Circularity and recyclability of fishing gear and aquaculture equipment' will continue addressing the requirements of Standardization Request M/574 in support of Directive (EU) 2019/904' on the reduction of the impact of certain plastic products on the environment, with the aim to encourage re-use and facilitate recyclability at end of life. The standard(s) for circular design of fishing gear will provide a level playing field for the industry to develop higher quality and environmentally friendly fishing gear that is easily reused or recycled. As a consequence, these new standards will provide the industry with the opportunity to act sustainably for a healthier planet.

Textile and textile products - In 2023, CEN/TC 248 'Textiles and textile products' will finalise the standardization work on the prevention of micro-plastic release from textile sources, in cooperation with ISO (prEN ISO 4484 parts 1, 2 and 3). By using the first part of the standards series, for instance, manufacturers will be able to use textile articles to make an informed choice about the type of fabric to use to reduce/ minimise shedding of microplastics into the aquatic environment after washing. This work will contribute to the EU strategy for sustainable textiles.

Still in 2023, CEN/TC 248 will also develop a new European Technical Specification on 'Circular Textiles Chain – Requirements and categories' (WI 00248731). This project will describe categories of circular textile products. It will set requirements for input flows and the circular strategies applied to be able to report on categories of circular textile products. This will contribute to the EU Circular Economy Action Plan and should help define environmental and circular criteria for this sector.

Fireplaces for liquid fuels - CEN/TC 46 'Fireplaces for liquid fuels' is expected to start the revision of EN 14059:2002 'Decorative oil lamps — Safety requirements and test methods'. The revision has become necessary to reflect market changes and protect consumers, especially children. This standard will be a candidate for citation under M/259 in support of General Product Safety Directive (2001/95/EC).

Additionally, due to innovations in the field of decorative ethanol fireplaces, CEN/TC 46 will also start the revision of EN 16647:2015, developed under M/538 (Flueless fireplaces) in support of the General Product Safety Directive (2001/95/EC). The revision will cover both technologies on the market today (manual and automatically operated fireplaces) and should result in the development of two European standards.

MORE INFORMATION
Consumer

Defence and security

Traditionally, societal resilience used to be put to the test when terrorist attacks, public security incidents or natural disasters hit. More recently, these more traditional risks saw the addition of the unprecedented effects of a global pandemic on our societies. The acknowledgment of such a mix of old and new challenges has motivated the definition of the priorities for Europe's recovery and its focus on climate action and digitalisation.

Especially in the transition towards a Digital Europe, security will be a major challenge, with standardization playing a key role. Security in a digital world is going to be a horizontal subject, embracing many aspects, including cybersecurity, security of cyber-physical and Internet-of-Things systems, security of critical infrastructures, but also the protection of privacy and human rights, the fight against fake news, and much more.

32 technical bodies responsible

CEN/CLC/JTC 4	'Services for fire safety and security systems'
CEN/CLC/WS 018	'Assessment of the resilience of transport infrastructure to potentially disruptive events'
CEN/CLC/WS HECTOS	'CEN-CENELEC Workshop on Guidelines on evaluation systems and schemes for physical security products'
CEN/CLC/WS ZONeSEC	'Interoperability of security systems for the surveillance of widezones'
CEN/TC 191	'Fixed firefighting systems'
CEN/TC 192	'Fire and Rescue Service Equipment'
CEN/TC 263	'Secure storage of cash, valuables and data media'
CEN/TC 325	'Crime prevention through building, facility and area design'
CEN/TC 367	'Breath-alcohol testers'
CEN/TC 368	'Product Identification'
CEN/TC 391	'Societal and Citizen Security'
CEN/TC 419	'Forensic Science Processes'
CEN/TC 439	'Private security services'
CEN/TC 70	'Manual means of fire fighting equipment'
CEN/TC 72	'Fire detection and fire alarm systems'
CEN/WS 099	'CEN Workshop on the Semantic and Syntactical Interoperability for Crisis and Disaster Management'
CEN/WS 100	'CEN Workshop Trial Guidance Methodology (TGM)'
CEN/WS 101	'CEN WS Crisis management - Building a Common Simulation Space'
CEN/WS 104	'Societal and Social Impact Assessment Framework to Support Adoption of New Capabilities in Crisis Management'
CEN/WS ARCH	'City Resilience Development - Framework and guidance for implementation in historic areas'
CEN/WS CBRN	'Basic CBRN training curriculum for first responders and medical staff including first receivers'
CEN/WS CMEx	'Implementation Guidelines for evaluation and assessment reporting of exercises for crisis management'
CEN/WS CURSOR	'Urban search and rescue - Guideline for the application of a test method for innovative technologies to detect victims in debris'
CEN/WS D-Box	'Demining tool-box for humanitarian clearing of large scale areas from anti-personnel landmines and cluster munitions'
CEN/WS DigScen	'Specifications for Digital Scenarios for Crisis Management Exercises'
CEN/WS DIV	'Requirements for acquiring digital information from victims during Search and Rescue operations'
CEN/WS FORMOBILE	'Requirements and Guidelines for a complete end-to-end mobile forensic investigation chain'
CEN/WS SMCD	'Guidelines for effective social media messages in crisis and disaster management'
CEN/WS TER-CDM	'Terminologies in Crisis and Disaster Management'
CLC/BTTF 133-1	'Sound systems for emergency purposes which are not part of fire detection and alarm systems'

CLC/BTTF 157-1 'Public address and general emergency alarm systems'
CLC/TC 79 'Alarm systems'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 260 ENs + 62 other deliverables
Work Items currently in the Work Programme: 45 ENs + 7 other deliverables

SECTOR FORUM ON SECURITY

To meet the new needs deriving from the evolution of society, CEN and CENELEC created the Sector Forum on Security (SF-SEC). The primary purpose of the body is to provide on what directions should be taken in security standardization. It gathers an extended community of experts from different sectors (transport, environment, innovative technologies, cybersecurity, construction, protective equipment, energy, chemicals etc.) that could potentially be impacted by security events. One aspect that remains relevant is that security often requires an international approach. In the digital world, this is self-evident, but there are also plenty of real-world examples in other sectors: among them, border security, the fight against international crime and terrorist attacks.

SOCIETAL AND CITIZEN SECURITY

Crises may arise from failures to effectively manage security of assets, information, reputations or sovereign risks to governments or organizations or to provide of members of society with the necessary protection from personal injury, loss or harm. In 2023, CEN/TC 391 'Societal and Citizen Security', together with ISO/TC 292 'Security and resilience', will progress on EN ISO 22360 'Security and resilience - Crisis management - Concept, principles and framework'. The development of a Crisis Management Framework which will oversee all standards related to crisis management provides a logical and consistent approach to successfully tackle such events.

CRIME PREVENTION

Modern crime includes terrorism and other new types of crimes. For this reason, CEN/TC 325 'Crime prevention through building, facility and area design' will finalise CEN/TS 14383-2 'Crime prevention through building design, urban planning and city maintenance - Principles and process'. This new technical specification will offer guidelines, measures, procedures and processes for assessing and mitigating the risk of crime and/or feelings of insecurity. It will give design guidelines for specific types of environments to prevent or counteract different crime problems in the context of building design, urban planning and city maintenance documents. This Technical Specification will be based on innovative practical, evidence-based tools that meet the needs of designers, planners, maintenance people but also police, law enforcement and the security industry in their operational contexts.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Private security services - In 2023, CEN/TC 439 'Private security services' will publish two important standards dealing with 'Private security services - Protection of critical infrastructure': EN 17483-2, on airport and aviation security services; and EN 17483-3, on maritime and port security services. The objective is to have a series of standards, beginning with EN 17483-1, covering the basic and common requirements for all sectors of critical infrastructure. The need of these standards arises from the necessity to aim for high quality criteria for private security services providers, thus contributing to the professionalisation of clients and providers of private security services.

Forensic examinations - While time is an important factor for the successful outcome of crime investigations, the traditional forensic examinations are usually time consuming. It can be very problematic when investigations are underway and quick results are needed: traces must be detected on-site as soon as possible before they degrade and lose forensic information important for criminal investigation.

The development of a set of real-time contactless sensors for the optimisation of trace detection, visualisation, identification, and interpretation on site during crime scene investigations is therefore crucial. In 2023, the CEN workshop 'CBRNe Sensor Application Programming Interface (API)' will finalise a CEN Workshop Agreement on 'CBRNe SENSOR API - Network Protocols, Data Formats and Interfaces' that intends to facilitate analyst data interpretation by using familiar, well-defined, and consistent sensor data formats, improve operational autonomy and efficiency with digitalisation of traces and evidence, and enable forensics data sharing between practitioners.

MORE INFORMATION
Defence and security

Digital society

CEN and CENELEC are involved in multiple sectors that contribute to an inclusive digital society and a shared ecosystem of trust. To name a few, Cybersecurity, Artificial Intelligence, ICT skills, eBusiness, eAccessibility, Blockchain, Distributed ledger and Quantum Technologies. In doing this, CEN and CENELEC collaborate with ISO and IEC, and other relevant European and international organizations, to develop common standards that can be applied worldwide.

Cooperation with European stakeholders is crucial to make available the most relevant, market-driven, and inclusive standards: trade and industry associations, research projects, standards developing organizations (SDOs), the European Commission and various European institutions. This cooperation is represented by the Multi-Stakeholder Platform on ICT standardization, which supports the European standardization agenda in the field.

For standardization in the digital world, ETSI represents a key partner for CEN and CENELEC: joint activities take place in the cybersecurity and accessibility domains.

Finally, the Rolling Plan on ICT standardization, which CEN and CENELEC contribute to, provides each year an overview of policy actions and supporting ICT standardization activities.

47 technical bodies responsible

CEN/CLC/ETSI/JWG eAcc	'eAccessibility'
CEN/CLC/ETSI/SF-SSCC	'CEN-CENELEC-ETSI Sector Forum on Smart and Sustainable Cities and Communities'
CEN/CLC/JTC 13	'Cybersecurity and Data Protection'
CEN/CLC/JTC 19	'Blockchain and Distributed Ledger Technologies'
CEN/CLC/JTC 21	'Artificial Intelligence'
CEN/CLC/WS 017	'Development of a GALILEO enabled label'
CEN/CLC/WS INACHUS	'Urban search and rescue (USaR) robotic platform technical and procedural interoperability'
CEN/CLC/WS SEP2	'Industry Best Practices and an Industry Code of Conduct for Licensing of Standard Essential Patents in the field of 5G and Internet of Things'
CEN/CLC/WS SEP-IoT	'Workshop on Best Practices and a Code of Conduct for Licensing Industry Standard Essential Patents in 5G and the Internet of Things (IoT), including the Industrial Internet'
CEN/SS F12	'Information Processing Systems'
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 353	'Technologies supporting education and learning processes'
CEN/TC 365	'Internet Filtering'
CEN/TC 428	'ICT Professionalism and Digital Competences'
CEN/TC 434	'Electronic Invoicing'
CEN/TC 440	'Electronic Public Procurement'
CEN/TC 465	'Sustainable Cities and Communities'
CEN/TC 468	'Preservation of digital information'
CEN/WS 084	'Self-Sovereign Identifier for Personal Data Ownership and Usage Control (CEN WS ISÆN)'
CEN/WS FATEDA	'Standards-Compliant Formats for Fatigue Test Data'
CEN/WS ICT	'ICT/SKILLS Workshop (IT profiles and curricula)'
CEN/WS IHAN	'Elements of fair and functioning data economy: identity, consent and logging'
CEN/WS JXF	'XFS for the Java Platform'
CEN/WS METEDA	'Mechanical Test Data'
CEN/WS SCS	'Description and Assessment of Good Practices for Smart City Solutions'
CEN/WS XFS	'eXtensions for Financial Services'
CLC/ETSI/JWG DD	'ETSI-CENELEC Joint Working Group Digital Dividend'
CLC/SR 100	'Audio, video and multimedia systems and equipment'
CLC/SR 110	'Flat panel display devices'
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/SS V24	'Information technology equipment and audio, video and audio-visual equipment and systems'

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 service's
CLC/TC 215	'Electrotechnical aspects of telecommunication equipment'
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/WS 04	'Interoperability framework requirements specification for services to the home (IFRS)'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 1967 ENs + 572 other deliverables
Work Items currently in the Work Programme: 302 ENs + 40 other deliverables

ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is fast progressing and affects the industry under a wide variety of aspects: for instance, automation, data management, or the integration of smart technology. It also impacts society, as AI changes the way businesses operate, streamlines production, transforms workers' skillsets and the day-to-day life of consumers.

Finally, AI involves a variety of sectors where standardization is of high relevance: smart manufacturing, robotics, autonomous transportation (including cars, trains, etc.), virtual reality, healthcare, visual recognition, data analysis/manipulation, AI assisted decision-making, home appliances, cybersecurity or spatial programming, and so on.

The European Commission, through the publication of Communication COM(2018) 237 and COM(2020)65 (EC White Paper on AI), has identified a series of challenges which refer to the deployment, interoperability, scalability, societal acceptability/concerns, safety and liability of AI, which create a need for standardization. Based on this, in 2021 the European Commission has released a proposal for an AI Regulation laying down harmonised rules for the EU, the implementation thereof will rely on European Standards.

The Joint CEN-CENELEC Technical Committee 21 (CEN-CLC/JTC 21) was established in 2021 to address the European market and policy needs on AI. In 2023, the Committee will start the development of European Standards in support of the upcoming Standardization Request on Artificial Intelligence by adopting relevant International Standards as ENs and supplement these with European Standards to underpin a European Standard policies.

CEN-CLC/JTC 21 has already started working on an EN related to AI-enhanced nudging to support existing legislations and allow industry to deal with AI-enhanced Nudging Mechanisms. The work of CEN-CLC/JTC 21 will continue to implement the CEN and CENELEC Roadmap on AI.

CYBERSECURITY AND DATA PROTECTION

The relevance of information security is not limited to 'digitally native' businesses: it is increasingly relevant to all sectors, including traditional industries. The security of information and communication systems is an area of increasing concern, both for public authorities and for private companies. While ICT technologies open up new opportunities, they also create threats to operational safety, robustness and resilience. Standards can help mitigate this kind of cyber risks. Part of CEN and CENELEC's work on the subject consists of collecting the new best practices that allow manufacturers and service providers to improve the security features of products, services and processes and boost consumers' trust in the digital environment.

CEN and CENELEC's Joint Technical Committee 13 (CEN-CLC/JTC 13) 'Cybersecurity and Data Protection' will continue the development of harmonised European Standards in support of the Radio Equipment Directive (2014/53/EU), in particular its cybersecurity-related articles 3.3(d), (e) and (f), to become applicable in 2024. These standards will provide a baseline for cybersecurity for all internet-connected radio equipment. In cooperation with the European Commission, these standards are planned to be cited in the Official Journal of the European Union, thereby guaranteeing manufacturers complying with these standards conformity with the related European legislation.

CLC/TC 65X 'Industrial-process measurement, control and automation' will continue to work, in parallel to the IEC, on the development and update of the EN IEC 62443-series 'Security for industrial automation and control systems'. The series provides security-related requirements that could be made applicable across different sectors, fostering a common approach that can be replicated in different ecosystems. In 2023, CLC/TC 65X will also continue the development of EN IEC 63278-series 'Asset Administration Shell (AAS) for industrial application', intended for industrial applications, but also applicable to other sectors. It will present a potential format for the data representation of a Digital Product Passport.

Finally, CLC/TC 65X expects to address the harmonisation of EN IEC 61326-1 'Electrical equipment for measurement, control, and laboratory use - EMC requirements - Part 1: General requirements' under the Electromagnetic Compatibility (EMC) Directive via a new European amendment which will include the European requirements.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Green Data Centres - The spread of the digital economy has led to an increasing demand for data, supported by the continuous construction, across Europe, of data centres of all sizes serving a large variety of business applications.

This development has resulted in increased energy demand, which requires proper management and a careful consideration of its environmental and economic impacts. A data centre encompasses a great variety of products and systems. Therefore, its design and operation see the involvement of many different industries. There is a need to give guidance to stakeholders in the industry for energy management and environmental viability by providing a foundation of standards on data centres. In 2023, the CEN-CENELEC-ETSI Coordination Group on Green Data Centres will develop and update two documents: the *Review of standardization activities for Data Centres,* which summarises the standardization landscape and references relevant standards; and the *Standardization landscape for the energy management and environmental viability of data centres,* which provides an in-depth analysis of standardization activities.

Furthermore, in 2023, CLC/TC 215 'Electrotechnical aspects of telecommunication equipment' will continue revising the existing documents in the EN 50600 series on Data Centres. It also expects to finalise the second edition of the Data Centre Maturity Model for Energy Management and Environmental Sustainability (CLC/TS 50600-5-1) and start the revision of EN 50600-3-1 on data centre management and operational information. CLC/TC 215 will also discuss updates to its standards on generic cabling design (EN 50173 series) and IT cabling installation (EN 50174 series).

Blockchain and Distributed Ledger Technologies - Blockchain and Distributed Ledger Technologies (DLTs) are promising developments in ICT for sharing data and managing transactions in a decentralised, controlled manner. The use of Blockchain and Distributed Ledger Technologies continues to grow rapidly, with many applications and systems being developed, notably in the context of Industry 4.0, with use cases in the energy, health, manufacturing, finance sectors, among others.

In 2023, CEN-CLC/JTC 19 'Blockchain and Distributed Ledger Technologies' will continue to mirror the activities of ISO TC 307 to develop a dedicated architecture of standards in Europe, taking policy-related developments into account. The committee will notably address the topics of electronic identification and cybersecurity, in cooperation with CEN/TC 224 'Personal identification and related personal devices' and CEN-CLC/JTC 13 'Cybersecurity and Data protection'. It will also finalise work on a generic reference framework, which will be the first deliverable in a series on a decentralised identity management model based on blockchain and DLTs.

Information and Communication Technologies for Learning, Education and Training - CEN/TC 353 'Technologies supporting education and learning processes' focuses on the need for standards in the educational sector, ranging from kindergartens and schools to higher education and lifelong learning. After the COVID-19 outbreak, the educational sector needs to change its paradigm and contemplate the use of digital tools, because advanced learning technologies will have an enormous impact on the education of children. The use of technology in education (EdTech) is still in its infancy, and tremendous development within the domain in the years to come is to be expected. In this context, CEN/TC 353 aims to create a set of basic rules and guidelines on how European educational institutions can develop and use technology in order to achieve their educational and pedagogical goals. At the same time, standards developed by the TC will ensure that the requirements are implementable by the EdTech industry.

Building information modelling (BIM) - The standardization of Building Information Modelling (BIM) contributes to the effective management of information during the design, construction and operational phases of an asset's lifecycle. The development of BIM is advancing rapidly and requires the application of common standards to ensure future compatibility of information exchange and use.

In 2023, CEN/TC 442 'Building Information Modelling (BIM)' will work on the EN 17632 series, notably part 1 on Generic modelling patterns and part 2 on Domain-specific modelling patterns.

CEN/TC 442 will also work to publish EN 17549-1 'Information structure based on EN ISO 16739-1 to exchange data templates and data sheets for construction objects'. In parallel, it will focus on the development of the EN 17632 series on Semantic Modelling and Linking (SML).

Finally, in cooperation with ISO under the Vienna Agreement, CEN/TC 442 will work on part 4 and 5 of EN ISO 16757. The focus of this standard series is the support of manufacturers to provide their product data in electronic product catalogues. Part 4 and 5 of the series respectively focus on dictionaries for product catalogues and a product catalogue exchange format.

Quantum Technologies - Quantum Technologies (QT) promise to be of the key technologies of the coming decades. To support its uptake, the European Commission launched the QT Flagship, a 1-billion-euro initiative which will fund leading scientists and engineers over the next ten years as part of the FET (Future and Emerging Technologies) program. This initiative is highlighted as a very important and urgent action to place and keep Europe at the forefront of the second quantum revolution, which is unfolding worldwide and is transforming science, economy and society. This will create new commercial opportunities, provide strategic capabilities for security and seed yet unimagined applications for the future.

The CEN and CENELEC Focus Group on Quantum Technologies (FGQT) will address the challenges Europe faces from a standardization perspective. The Focus Group aims to establish an active dialogue between stakeholders and discuss the needs and challenges for bringing inventions to the market. In 2023, the Focus Group will release the first edition of the European standardization roadmap on Quantum Technologies. With its Standardization Roadmap, the FGQT will be among the pioneers to identify standardization needs for all aspects of QT. In doing so, the FGQT is entering new territory and can help coordinate a coherent framework for the standardization needs of QT, relevant also for other international standardization efforts. In this way, the work of FGQT will pave the way for a coordinated European voice in international standardization.

MORE INFORMATION
Digital society (CENELEC)
Digital society (CEN)
Artificial intelligence
Quantum technology

Electrotechnology

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

CENELEC develops standards in the electrotechnology field also in support of EU legislations, notably the Low-Voltage Directive (LVD), the Electro-magnetic compatibility Directive (EMCD) and the Radio Equipment Directive (RED). When such CENELEC harmonised standards are cited in the Official Journal of the European Union (OJEU), they can be used by manufacturers, other economic operators, or conformity assessment bodies to demonstrate that products, services, or processes comply with relevant EU legislation.

The coordination of activities under LVD, EMC and RED takes place in the following Working Groups:

- CLC/BTWG 143-1 'LVD standardization in the EU regulatory framework': CLC/BTWG 1431 addresses horizontal issues in relation to standardization surrounding LVD Directive 2014/35/EU and its corresponding standardization request (M/511). The BTWG offers a platform to prepare and/or mirror the LVD working party and LVD ADCO and coordinates matters related to the LVD work programme and sectoral agreements. In 2023, the BTWG will continue to provide support to Technical Committees for any issue they may have related to LVD, including providing an analysis of LVD HAS assessments from a horizontal perspective leading to non-citation of harmonised standards, as well as offering solutions and providing (individual) guidance and sector specific training. BTWG 143-1 does not undertake any standardization work, but it works closely with Technical Bodies that work under mandate M/511.

- CLC/BTWG 154-1 'EMC standardization in the EU regulatory framework': in coordination with and as a complement to the work within CLC/TC 210 'EMC', CLC/BTWG 154-1 will continue, in 2023, to address horizontal issues in relation to standardization surrounding EMC Directive 2014/30/EU and offers a platform to prepare and/or mirror the activities of the EMC Working Party. BTWG 154-1 does not undertake any standardization work, but it works closely with Technical Bodies that work under the EMC mandate M/552. BTWG 154-1 will continue to focus on improving the Technical Bodies' understanding of the concerns and requests of the European Commission with regards to standardization, and to seek solutions for obstacles hindering the citation of harmonised standards (such as the use of statistical methods, manufacturer defined performance criteria and measurement uncertainty in standards).
- CEN-CLC/BTWG 10 'RED standardization impact': BTWG 10 mirrors the evolution of the Radio Equipment Directive (RED, 2014/53/EU) in the various European Commission services and will continue to assess the impact on CEN and CENELEC standardization activities, eventually proposing solutions for identified problems. Its tasks include: interaction with other directives/regulations (mainly EMCD/LVD, but also other); ensuring coordination with the European Commission, especially on the OJEU listings; coordinating with ETSI; and dealing with potential overlaps in work. BTWG 10 does not undertake any standardization work. However, it provides guidance on addressing specific aspects of the RED.

86 technical bodies responsible

CEN/WS 110	'Performance test method for lower limb wearable robots for walking on irregular terrains'
CLC/BTTF 129-1	'Thermal resistant aluminium alloy wire for overhead line conductor'
CLC/BTTF 132-1	'Aluminium conductors steel supported (ACSS type) for overhead electrical lines'
CLC/BTTF 132-2	'Revision of EN 50156 "Electrical equipment for furnaces and ancillary equipment"'
CLC/BTTF 146-1	'Losses of small transformers : methods of measurement, marking and other requirements related to eco-design regulation'
CLC/BTTF 160-1	'Recurrent Test of Electrical Equipment'
CLC/BTTF 170-1	'Common modifications to EN IEC 61439-1:2021 and EN IEC 61439-2:2021'
CLC/BTTF 60-1	'Assembly of electronic equipment'
CLC/BTTF 62-3	'Operation of electrical installations'
CLC/BTWG 128-3	'BT efficiency'
CLC/BTWG 143-1	'LVD standardization in the EU regulatory framework'
CLC/BTWG 154-1	'EMC standardization in the EU regulatory framework'
CLC/Guides	'Group for CENELEC Guides'
CLC/SR 1	'Terminology'
CLC/SR 10	'Fluids for electrotechnical applications'
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/SR 124	'Wearable Electronic Devices and Technologies'
CLC/SR 15	'Solid electrical insulating materials'
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	'Electrical 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/SS Z99	'Undetermined'
CLC/TC 106X	'Electromagnetic fields in the human environment'
CLC/TC 121A	'Low-voltage switchgear and controlgear'
CLC/TC 20	'Electric cables'
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/TC 219	'Mains communicating systems'
CLC/TC 21X	'Secondary cells and batteries'
CLC/TC 22X	'Power electronics'
CLC/TC 23BX	'Switches, boxes and enclosures for household and similar purposes, plugs and socket outlet for D.C.'
CLC/TC 23E	'Circuit breakers and similar devices for household and similar applications'
CLC/TC 23H	'Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles'
CLC/TC 34	'Lighting'
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 electrical controls'
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/WS 05	'Flow batteries - Requirements and test methods'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 3314 ENs + 209 other deliverables
Work Items currently in the Work Programme: 632 ENs + 37 other deliverables

Standardization requests from EC/EFTA

M/511 – Low Voltage
M/552 – EMC
M/536 – Radio Equipment
M/351 – EMF
M/443 – Cables
M/468 – Charging of electric vehicles
M/495 – Small, medium and large power transformers
M/585 – RED delegated regulation
M/579 – Batteries

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES

Every day, millions of Europeans use household appliances: dishwashers, kitchen and washing machines, tumble dryers, warming plates, etc. In close cooperation with its IEC counterpart, CLC/TC 61 'Safety of household and similar electrical appliances' develops safety requirements for electrical appliances primarily for household purposes, but also for other equipment and appliances in similar fields where there is no IEC or CENELEC Technical Committee in existence.

The work of CLC/TC 61 proceeds at a rapid pace due to the growing world-wide use of international safety standards, the increased interest in certification and the rising number of appliances falling under its scope. The value of trade in electrical appliances in Europe amounts to billions of euros. The regulatory environment applied to electrical appliances varies from country to country, but manufacturers usually must contend with either a performance-based regulatory environment or a pre-market intervention regulatory environment. In both cases, standards are vital for the appliance industry to manage the risks associated with electricity. CLC/TC 61 has an important portfolio of standards cited in the Official Journal of the European Union under the Low-voltage and Machinery directives.

Furthermore, the use of electronic circuits (including programmable elements) to provide a safety-related function and the effects of electromagnetic phenomena on them significantly impacts the design of future appliances. In addition, manufacturers are increasingly using the telecommunications network to enable remote control and servicing of appliances that incorporate programmed electronic circuits - an aspect of appliance usage that is expected to grow. The development of more powerful and compact batteries has led to their use for powering an ever-increasing range of appliances. All these aspects have a significant impact in the development of appliance safety.

Based on this, in 2023, CLC/TC 61 will continue the development of safety standards as part of the EN IEC 60335 series on the safety of household appliances. The TC will finalise the work on general requirements, particular requirements for kitchen machines, cooking pans, electric griddles, whirlpool baths and microwave appliances.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Electrical installations - CLC/TC 64 'Electrical installations and protection against electric shock' is responsible for standardization on the protection against electric shock arising from equipment, installations and systems without limit of voltage. In 2023, the TC will continue to work on several projects in the frame of the HD 60364 series.

For its part, CLC/TC 23 E 'Circuit breakers and similar devices for household and similar applications' will further develop, in parallel with IEC, FprEN IEC 61543 'Residual current-operated protective devices (RCDs) for household and similar use - Electromagnetic compatibility' which will be offered for citation under the EMC Directive.

In 2023, CLC/TC 121A 'Low-voltage switchgear and controlgear' will continue developing prEN IEC 60947-10 'Low-voltage switchgear and controlgear – Part 10: Semiconductor Circuit-Breakers'.

This sector is also addressed by CLC/TC 23BX 'Switches, boxes and enclosures for household and similar purposes, plugs and socket outlet for D.C.'. In 2023, the TC will finalise parts of the European EN 60670 series on boxes and enclosures for electrical accessories for household and similar fixed electrical installations, in the frame of the LVD. The TC will also start working on the EN IEC 60669-2 series on switches for household and similar fixed electrical installations.

Batteries - In 2023, CLC/TC 21X 'Secondary cells and batteries', will start the development of a number of standards in response to the recent standardization request (M/579) to European standardization organizations regarding the performance, safety and sustainability requirements of batteries.

Power Transformers - CLC/TC 14 'Power Transformers' is responsible for standards on power transformers, tap-changers and reactors for use in power generation, transmission and distribution. In 2023, the TC will continue working on prEN 50708-1-1 'Power transformers – additional European requirements – part 1-1: Common part – General requirements'. This standard is intended to be offered for citation

under the Commission Regulation on small, medium, and large power transformers (eco-design). CLC/TC 14 will also work on prEN IEC/IEEE 60076-57-1202 'Power transformers - Part 57-1202: Liquid immersed phase-shifting transformers'.

Lighting - CLC/TC 34 'Lighting' develop European Standards on electrical light sources including lamps, lamps caps and holders, lamp control gear and luminaires. In 2023, CLC/TC 34 will further work on the new edition of prEN IEC 60598-1 'Luminaires - Part 1: General requirements and tests', which will be offered for citation under the LV Directive.

Electrical energy measurement and control - In 2023, in the electrical equipment and apparatus sector, CLC/TC 13 'Electrical energy measurement and control' will continue working, in parallel with IEC, on the development of different parts of the EN IEC 62056-series 'Electricity metering data exchange'. New communication technologies will be considered by the DLMS/Cosem suite Wi-SUN and LPWAN, extending the range of communication technologies managed by this EN IEC 62056 series.

With regards to the DC meters, CLC/TC 13 will finalise the development of two standards, EN IEC 62053-41 and EN 50470-4. The former will provide elements to comply with the requirements of Electromagnetic Compatibility Directive (EMCD), while the latter is expected to provide a mean for DC meters to apply Measuring Instruments Directive (MID) requirements with the intention to help the market of electrical vehicle charging stations.

Additionally, CLC/TC 13 will develop a new standard 'EN 50732' intending to establish common metrological requirements for the electrical vehicle charging station with regard to their compliance with MID. This standard can enhance European consumer protection during the charging process and the payment process.

Operation of electrical installations - CLC/BTTF 62-3 'Operation of electrical installations' is finalising EN 50110-1/2 'Operation of electrical installations', a general standard with a broad field of application on the operation of electrical installations in a variety of contexts, from private households up to industrial distribution grids. This European Standard sets out requirements for the safe operation of and work activity on, with, or near these electrical installations. The requirements are focused on workers' safety and apply to all operational, working and maintenance procedures. They also apply to non-electrical work activities, such as constructions near overhead lines or underground cables, as well as electrical work activities, when there is a risk of electrical danger.

CLC/BTTF 62-3 is working on an update of this standard to increase understandability, practicability, and application of new regulations on the part of practitioners. A further goal is to broaden the common basis of this standard for all European countries.

In 2023, work will also continue in support of IEC PC 128, which was established on the initiative of the German and French NCs to develop a technical specification at IEC level based on EN 50110.

MORE INFORMATION
Electrotechnology general
Accumulators, primary cells and primary batteries
Electric motors and transformers
Electric equipment and apparatus
Lighting equipment and electric lamps
Electronic, electromechanical and electrotechnical supplies

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Energy and utilities

The current geopolitical reality requires the EU to drastically accelerate the clean energy transition and increase Europe's independence. For this reason, in response to the current disruptions on the global energy market, in May 2022 the European Commission presented the REPowerEU Plan. The focus of the plan is to save energy, produce it through sustainable sources and diversify supplies.

CEN and CENELEC have a long experience of working with a wide range of stakeholders to develop actionable solutions responding to the needs of Europe's economy and society. Standardization plays an important role in meeting EU targets by promoting best practices, improving energy efficiency and safety, providing tools to optimise installations and systems and developing innovative technologies that can support sustainability objectives (Cleantech).

Today there are more than 60 CEN and CENELEC Technical Committees involved to some extent in the energy sector. The standards they develop play a unique role: they help make home appliances, devices and infrastructures more energy-efficient, define ways to reuse and recycle waste, and set incentives to produce more sustainably. For example, they set requirements to product quality, transparency, production and processing methods that meet the needs of the present without compromising the future.

Overall, European standards support policy objectives and provide stakeholders with clear, up-to-date and market-oriented guidance that is based on the consensus of a wide array of experts coming from all around Europe and from different backgrounds. This is what makes standards one of the most efficient tools to support the journey towards the digitalisation and sustainability of the energy industry.

79 technical bodies responsible

CEN/CLC/ETSI/CG-SG	'CEN-CENELEC-ETSI Coordination Group on Smart Grids (CG-SG)'
CEN/CLC/JTC 10	'Material efficiency aspects for products in scope of Ecodesign legislation'
CEN/CLC/JTC 14	'Energy management and energy efficiency in the framework of energy transition'
CEN/CLC/JTC 2	'Power Engineering'
CEN/CLC/JTC 6	'Hydrogen in energy systems'
CEN/CLC/WS EINSTEIN	'Good Practice Thermal Energy Audits (GPTEA)'
CEN/CLC/WS REEMAIN	'CEN/CENELEC Workshop on REEMAIN Methodology for Resource and Energy Efficiency Manufacturing'
CEN/CLC/WS SEA-TITAN	'Modular and cross-cutting Power Take-Off units for wave energy converters. Recommendations and laboratory testing'
CEN/CLC/WS WiseGRID	'Reference model for distribution application for microgrids'
CEN/SS F23	'Energy'
CEN/SS N02	'Solid fuels'
CEN/SS S12	'Gas analysis'
CEN/SS S26	'Environmental management'
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 19	'Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin'
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 308	'Characterization and management of sludge'
CEN/TC 312	'Thermal solar systems and components'
CEN/TC 335	'Solid biofuels'
CEN/TC 343	'Solid recovered materials, including solid recovered fuels'
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	'Environmental characterization of solid matrices'
CEN/TC 451	'Water wells and borehole heat exchangers'
CEN/TC 454	'Algae and algae products'
CEN/TC 467	'Climate Change'
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 064 Phase 3	'Design and Construction Codes for Gen II, III and IV nuclear facilities'
CEN/WS 066	'Clean harbours - Best practices'
CEN/WS 073	'Eco-efficient Substations'
CEN/WS 079	'Sustainable Integrated Water Use & Treatment in Process Industries "SustainWATER"'
CEN/WS 082	'AquaVir'
CEN/WS 108	'Mapping of the mandatory and voluntary Carbon Management framework in the EU'
CEN/WS DEEP PURPLE	'Extraction, production and purification of added value products from urban wastes'
CEN/WS Energy Retrofit	'Sustainable Energy Retrofit Process Management for Multi-Occupancy Residential Buildings with Owner Communities'
CEN/WS EvaVOLATILE	'Anaerobic digestion plants - Feasibility as-sessment methodology for integrating a Volatile Fatty Acid Platform Technology'
CEN/WS KEY-BIOWASTE	'KEY-BIOWASTE'
CEN/WS NEXTOWER	'High temperature accelerated ageing of advanced ceramic specimens for solar receivers and other applications under concentrated solar radiation'
CEN/WS RUAP	'CEN Workshop on 'Rooting undesired (alien) aquatic plants – Control by means of rake method with a boat"
CLC/SR 105	'Fuel cell technologies'
CLC/SR 114	'Marine energy - Wave and tidal energy converters'
CLC/SR 117	'Solar thermal electric plants'
CLC/SR 122	'UHV AC transmission systems'
CLC/SR 123	'Management of network assets in power systems'
CLC/SR 129	'Robotics for electricity generation, transmission and distribution systems'
CLC/SR 32	'Fuses'
CLC/SR 32A	'High-voltage fuses'
CLC/SR 36	'Insulators'
CLC/SR 37	'Surge arresters'
CLC/SR 37B	'Components for low-voltage surge protection'
CLC/SR 4	'Hydraulic turbines'
CLC/SR 42	'High-voltage and high-current test techniques'
CLC/SR 5	'Steam turbines'
CLC/SR 73	'Short-circuit currents'
CLC/SR 90	'Superconductivity'
CLC/TC 11	'Overhead electrical lines exceeding 1 kV a.c. (1,5 kV d.c.)'
CLC/TC 111X	'Environment'
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 power systems of nuclear facilities'
CLC/TC 45B	'Radiation protection instrumentation'
CLC/TC 7X	'Overhead electrical conductors'

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.)'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 1994 ENs + 227 other deliverables
Work Items currently in the Work Programme: 355 ENs + 14 other deliverables

Standardization requests from EC/EFTA

M/495 – Ecodesign
M/498 – Pumps
M/525 - standards on pyrolysis oils produced from biomass feedstocks
M/559 – Welding equipment
M/572 – Taps and showers
M/573 – Ecodesign servers and data storage products
M/579 – Batteries
M/XXX (Anticipated) - Ecodesign and energy labelling requirements for electronic display
M/XXX (Anticipated) – Hydrogen

HYDROGEN

Hydrogen can support the decarbonisation of industry, transport, power generation and buildings across Europe. It also facilitates the large-scale integration of renewables, enabling grid balancing and the decarbonisation of natural gas through innovative technologies.

In close collaboration with the European institutions, CEN and CENELEC experts across 20 Technical Committees (TCs) develop standards contributing to the wider deployment of hydrogen technologies in Europe all along the whole hydrogen value chain: safety, infrastructure, quality, application, and transport. This work aims at addressing the lack of standards in the sector, which has been identified by the industry as one of the barriers to the large-scale deployment of hydrogen.

In 2023, CEN and CENELEC expect to receive from the European Commission a Standardization Request defining urgent standardization priorities. The good cooperation with the European institutions on this matter ensures a rationalisation of resources and guarantees a common approach to the dissemination of hydrogen-based technologies.

ECODESIGN

In the European Union, energy-related products are regulated by the Ecodesign Framework Directive (2009/125/EC) and the Energy Labelling Framework Regulation (EU) 2017/1369. The former sets minimum requirements for such products, with the aim to ensure their free movement within the internal market. The latter, on the other hand, enables consumers to make a more rational use of energy by informing them about the energy efficiency of products.

In March 2022, the European Commission published its Sustainable Products Initiative (SPI). At its heart is the revision of the Directive 2009/125/EC on 'Ecodesign requirements for energy-related products', which will become a Regulation on Ecodesign on sustainable products (ESPR). In its new form, the Regulation will focus on sustainability requirements as one of the means to achieve the European Green Deal and Circular Economy Action Plan. The objective of the Commission is to have products that are durable, reliable, reusable, and repairable.

Standardization is one of the pillars that made the Ecodesign Directive a success over the years and CEN and CENELEC are committed, in 2023, to supporting the implementation of the new Regulation. Indeed, CEN and CENELEC produce European Standards that provide dedicated methods for measuring the energy performance of various energy related products against the compulsory values and thresholds laid down in the Regulations adopted by the European Commission.

The CEN and CENELEC Ecodesign Coordination Group (Eco-CG) coordinates standardization activities in the fields of Ecodesign and Energy Labelling. The group serves as a focal point for standardization issues related to the Ecodesign Standardization Requests delivered under framework Directive 2009/125/ EC on Ecodesign of energy-related products and framework Regulation (EU) 2017/1369 on the energy labelling of energy-related products and their future versions. In 2023, the group will closely follow the development of the Ecodesign regulatory framework (SPI context).

MATERIAL EFFICIENCY

In 2023, CEN-CLC/JTC 10 'Material efficiency aspects for products in scope of Ecodesign legislation' will focus on the development of EN 45560 'Method to achieve circular designs of products'. The document will specify requirements and guidance for integrating circularity into the design and development of products by an organization. It will focus on translating an organization's environment and circularity ambitions into strategies.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Fuels - The development of European Standards on methods of sampling and testing of fuels is important for ensuring that consumers and businesses have access to safe and reliable fuels. For years, CEN/TC 19 'Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin' has worked on standardizing the European fuel market. All this work aims, on the one hand, to support the industry's need (mainly on safety and precise test methods) and, on the other, the European Commission's requirements (such as fuels quality, emissions, allowance of biofuels, infrastructure for alternative energy carriers).

In 2023, CEN/TC 19 intends to publish a new standard that will specify requirements for two types of petrol fuel low in aromatics and sulphur: the first one for use in four-stroke engines with separate lubrication, and the second one, a mixed petrol fuel type, for use in mixture-lubricated engines (EN 17867 Petrol fuel for small internal combustion engines – Requirements and test methods).

In addition, the committee will also update EN 16709 'Automotive fuels - High FAME diesel fuel (B20 and B30) - Requirements and test methods'. CEN/TC 19 will also start the revision of EN 228 'Automotive fuels - Unleaded petrol - Requirements and test methods' and EN 589 'Automotive fuels - LPG - Requirements and test methods and for EN 14214 Liquid petroleum products - Fatty acid methyl esters (FAME) for use in diesel engines and heating applications - Requirements and test methods'.

Sector Forum on Energy Management Energy Transition - The CEN and CENELEC Sector Forum on Energy Management Energy Transition (SFEM) acts as an advisory and coordination body for policy and strategic matters related to standardization on energy management and efficiency. It continuously adapts its activity to the latest scientific and policy trends in the energy sector. SFEM gathers stakeholders from innovation to business, and from policy makers to consumers, with the aim to facilitate the access of innovation to the market. Looking at the key elements from the European Commission's policy ambitions, such as the 2030 Climate Target and Energy Plans, SFEM found

its current priorities confirmed, and will carry on working on these topics also in 2023.

Gas infrastructure - CEN/TCs develop standards dealing with the requirements for gas infrastructures to support safety and energy efficiency, the optimisation of installations and systems and the uptake of renewable gases and new technologies.

CEN/TC 234 'Gas infrastructure' is expected to finalise its series on injection stations (EN 17928). These standards will describe functional requirements for stations for the injection of biomethane, substitute natural gas (SNG) and hydrogen fuel gas into gas transmission and distribution systems operated with fuel gases, in accordance with European technical rules that ensure the interoperability of systems.

The same TC will also publish a Technical Report on the assessment of methane emissions in the gas transmission and distribution network. This report intends to provide technical guidance on how to assess and quantify methane emissions, together with ensuring transparency and comparability of data. The objective is to build a reliable basis for data analysis, identification and monitoring of systematic mitigation activities targeting the gas sector, authorities, and other interested parties.

CEN/TC 235 'Gas pressure regulators and associated safety devices for use in gas transmission and distribution' will finalise the revision of an important standard specifying constructional, functional, testing marking and sizing requirements and documentation of gas safety shut-off devices (EN 14382).

Renewables - Wind energy plays, and will continue playing, an important role to achieve the EU's renewable energy targets. Standardization in the field includes wind turbines, wind power plants onshore and offshore and interaction with the electrical system(s) to which energy is supplied.

CLC/TC 88 'Wind turbines' will continue working on the development of standards for wind

turbines under the framework of the Frankfurt Agreement. In particular, in 2023 the Committee will focus on the development of several parts of the EN IEC 60400 'Wind energy generation systems' series together with IEC/TC 88 (for example, on the assessment of obstacles and terrain or on measuring the power performance characteristics of a single wind turbine).

Solar Energy - CLC/TC 82 'Solar photovoltaic energy systems' develops standards related to all aspects of solar photovoltaic energy systems, from the conversion of light to the interfaces up to the public grid or users. In 2023, the Committee will work on developing the EN 61730 series. This series specifies the fundamental construction requirements for photovoltaic modules to provide safe electrical and mechanical operation. Standardization in this field is necessary to ensure high levels of product quality and product safety and to streamline the consideration of environmental aspects.

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

In 2023, CLC/TC 45B 'Radiation protection instrumentation' expects to adopt as European two international standards: IEC 62387 'Radiation protection instrumentation - Dosimetry systems with integrating passive detectors for individual, workplace and environmental monitoring of photon and beta radiation' and IEC 62372 'Nuclear instrumentation - Housed scintillators - Test methods of light output and intrinsic resolution'.

Also CEN/TC 430 'Nuclear energy, nuclear technologies, and radiological protection' expects to adopt several ISO standards developed by its international counterpart ISO/TC 85. Among them, ISO 23133 'Nuclear criticality safety - Nuclear criticality safety training for operations which specifies minimum nuclear criticality safety training requirements for operations staff, operations supervisors, and management or ISO 9978 'Radiation protection - Sealed sources - Leakage test methods'.

Electrical energy supply - CLC/TC 8X 'System aspects of electrical energy supply' develops standards to facilitate the functioning of electricity supply systems in open markets. In 2023, it will publish the revision of EN 50160 'Voltage characteristics of electricity supplied by public electricity networks'. In addition, it will pursue the development of EN 50549 Parts 1 and 2, that set requirements for generating plants to be connected in parallel with, respectively, Low Voltage and Medium Voltage distribution networks.

Biomass - CEN/TC 383 'Sustainably produced biomass for energy applications' will finalise two standards part of the EN16214 series on 'Sustainability and greenhouse gas emission saving criteria for biomass for energy applications'. These standards will be in line with Directive 2018/2001/EU, i.e. the Renewable Energy Directive (RED II), a part of the Clean Energy Package, which aims for the EU to meet its emissions reduction commitments under the Paris Agreement. The sustainability and greenhouse gas emission savings criteria must be met for biomass to be included in the overall target for renewable energy.

MORE INFORMATION
Energy and utilities (CEN)
Energy and utilities (CENELEC)
Energy efficiency and management
Ecodesign, energy labelling and material efficiency

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Food and agriculture

European standardization in the field of food and agriculture contributes to improving the levels of food safety and protecting the health of consumers. CEN provides validated test methods used by the food industry and the competent public authorities for official control purposes and by companies producing food and feed for internal checks. Many of the standards adopted by CEN are developed in response to formal requests from the European Commission, and they 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, thanks to the close cooperation between CEN and ISO. Relying on test methods that are recognised internationally is especially important for food companies that want to sell their products in different markets.

21 technical bodies responsible

CEN/SS C01	'Food Products'
CEN/TC 172	'Pulp, paper and board'
CEN/TC 194	'Utensils in contact with food'
CEN/TC 275	'Food analysis - Horizontal methods'
CEN/TC 302	'Milk and milk products - Methods of sampling and analysis'
CEN/TC 307	'Oilseeds, vegetable and animal fats and oils and their by-products - Methods of sampling and analysis'
CEN/TC 327	'Animal feeding stuffs - Methods of sampling and analysis'
CEN/TC 338	'Cereal and cereal products'
CEN/TC 415	'Sustainable and Traceable Cocoa'
CEN/TC 453	'Dietary supplements and sports food free of doping substances'
CEN/TC 455	'Plant Biostimulants'
CEN/TC 460	'Food Authenticity'
CEN/TC 463	'Microbiology of the food chain'
CEN/TC 466	'Circularity and recyclability of fishing gear and aquaculture equipment'
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/WS 096	'Mapping of future needs of standardisation in the paper and board sector'
CEN/WS 109	'Good practice recommendations for making management recommendations tailored for the EU fleet operating outside European waters'
CEN/WS ClimeFish	'CEN Workshop on ClimeFish'
CEN/WS CROP	'Methodology to quantify the global agricultural crop footprint including soil affection'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 650 ENs + 121 other deliverables
Work Items currently in the Work Programme: 114 ENs + 3 other deliverables

Standardization requests from EC/EFTA

M/547 – Algae and algae-based products or intermediaries
M/574 – Circular Design of Fishing Gear

FARM TO FORK STRATEGY

The EU's Farm to Fork Strategy is a key component of the European Green Deal. It aims to make food systems fair, healthy, and environmentally friendly, ensuring food security. Some of its main objectives are protecting and enhancing biodiversity and reducing the use of pesticides and antimicrobials.

The ambition to restructure the European food system calls for a collective effort. In this context, standards play an important role. Indeed, CEN is already undertaking some activities that share the objectives of the Strategy.

For example, one of the most relevant Technical Committees involved in the field is CEN/TC 275 'Food analysis - Horizontal methods'. The focus of the TC is to develop standards providing detection methods to estimate contaminants, pesticides, allergens and toxins, thus ensuring food security. In particular, TC 275's Working Group 3 'Pesticides' deals with testing methods on pesticides. These methods help evaluate and monitor pesticide levels in food stuffs and often contribute to keeping these levels below the limits usually set by legislative and environmental agencies. Ultimately, this supports the goal of reducing pesticide use: for instance, if someone wants to reduce their application in food products, one can monitor it by using these validated testing methods.

In 2023, CEN/TC 275 will finalise a series of standards dedicated to the detection of food allergens by molecular biological methods (i.e. EN 15634 series). The group will also publish EN 17855, which specifies minimum performance requirements for methods that quantify the food allergens (e.g., milk, egg, peanut, hazelnut, almond, brazil nut, etc) in raw and processed foodstuffs.

Another TC contributing to the objectives of the Farm to Fork strategy is CEN/TC 302 'Milk and milk products - Methods of sampling and analysis'. Mainly, TC 302 develops standards that contribute to ensuring that dairy products are nutritious. Some of its standards cover the characterisation and quality determination of dairy proteins, a highly topical issue, such as the determination of amino acids in infant formula and other dairy products and the determination of in vitro protein digestibility. In 2023, CEN/TC 302 will finalise the adoption of prEN ISO 5537 rev 'Dried milk - Determination of moisture content (Reference method)' at European level, a work jointly undertaken with ISO/TC 34, Food products, Subcommittee SC 5 'Milk and milk products'.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Cereal and cereal products - CEN/TC 338 'Cereal and cereal products' will continue, in parallel with ISO/TC 34 'Food products', the development of prEN ISO 7301 'Rice – Specification' which establishes the minimum specifications for rice that is subject to international trade. It applies to husked rice and milled rice (aromatic and not aromatic), parboiled or not, intended for direct human consumption.

The TC's experts will also finalise EN ISO 17715 'Flour from wheat (Triticum aestivum L.) - Amperometric method for starch damage measurement'. Indeed, damaged starch content is an important parameter in flour quality (and therefore its use in the agri-food industry). Therefore, it is important to have a harmonised method (using same principles and units of measurement) to estimate or compare content.

Paper and board - CEN/TC 172 'Pulp, paper and board' will develop EN 17917 'Paper and board - Paper and board intended to come into contact with foodstuffs - Determination of aluminium in aqueous extracts'. This document is part of a series of standards on the determination of metals in aqueous extracts of paper and board intended for contact with food. EN 17917 specifies the test method for the determination of aluminium in aqueous extracts.

TC 172, together with ISO/TC 6 'Paper, board and pulps', will also work on EN ISO 535 'Paper and board - Determination of water absorptiveness - Cobb method'. This new standard will permit the determination of the quantity of water that can be absorbed by the surface of paper or board in a given time.

Microbiology of the food chain - CEN/TC 463 'Microbiology of the food chain' will continue to develop standards in full cooperation with ISO, under the Vienna Agreement. In 2023, together with ISO/TC 34 'Food products', the TC will finalise EN ISO 7218 'Microbiology of the food chain - General requirements and guidance for microbiological examinations'. This standard offers good practice for food microbiological laboratories and guidance for their accreditation. The purpose of the document is also to help ensure the validity of food microbiology examinations, to assess that the general techniques used for conducting these examinations are the same in all laboratories, to help achieve homogeneous results in different laboratories, and to contribute towards the safety of the laboratory personnel by preventing risks of infection.

The same committee is also expected to publish parts 1 and 2 of EN ISO 10272 'Microbiology of the food chain - Horizontal method for detection and enumeration of Campylobacter spp.'

Algae - The interest in algae and algae-based products or intermediates has increased significantly in Europe as a valuable source including, but not limited to, carbohydrates, proteins, lipids, and several pigments. These materials are suitable for use in a wide range of applications from food and feed purposes to other sectors, such as textiles, cosmetics, biopolymers, biofuel and fertilizer/biostimulants. Standardization was identified as having an important role in promoting the use of algae and algae products.

CEN/TC 454 'Algae and algae products' is developing European Standards under Standardization Request M/547 on algae and algae-based products or intermediates. Following interlaboratory studies held in 2022, in 2023 the committee will finalise EN 17908, which specifies a laboratory method to determine the total lipid content in micro- and macroalgae using the Ryckebosch-Foubert method. The Ryckebosch - Foubert method, which makes use of an extraction protocol with chloroform-methanol 1:1 as a solvent, has already helped to achieve satisfactory results. Therefore, it will be used as starting protocol for the development of the new standard.

MORE INFORMATION
Food and agriculture

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 and users of medical devices. It also 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) will continue supporting CEN and CENELEC for the exploration of potential new areas for standardization in the medical field. In 2023, the ABHS will focus on guiding relevant Technical Committees (TCs) in the transition to the new landscape under the Medical Devices Regulation (MDR) (2017/745/EU) and the In Vitro Medical Devices Regulation (IVDR) (2017/746/EU). ABHS aims to facilitate discussions regarding harmonisation issues between stakeholders to reduce ongoing concerns.

In addition, standardization of Personal Protective Equipment (PPE), such as protective helmets, ropes used to prevent falls from a height or footwear resistant to chemicals, is handled by Technical Committees part of the CEN and CENELEC Sector Forum on Personal Protective Equipment. One of the Sector Forum's 2023 priorities is to further pursue the alignment of the existing standards with the PPE Regulation (EU) 2016/425 and coordinate the development and revision of standards supporting and listed in M/571 as regards the PPE Regulation (EU) 2016/425.

This would ensure the smooth citation of those standards in the Official Journal of the European Union (OJEU). In turn, it will allow manufacturers, notified bodies and other stakeholders to use these standards to benefit from a presumption of conformity against the essential requirements the PPE Regulation. Additionally, the PPE Sector Forum will follow up on the recommendations

from the 2021 Workshop 'Sustainability for PPE – addressing the challenges through standardization'. These activities will focus on how better to include sustainability aspects into standardization, such as life cycle considerations and business models, use of resources, energy efficiencies, traceability, longevity, repairability and preparing for the upcoming Eco-design for Sustainable Products Regulation.

Furthermore, the CEN Sector Forum on Occupational Health and Safety (SECT/SF OHS) is a platform for the exchange of information on European standardization activities related to various kinds of hazards in the workplace and health-related issues. It is closely linked to a variety of stakeholders: among them, the European Commission's DG Employment, Social Affairs and Inclusion, EU-OSHA (European Agency for Safety and Health at Work), European employer and employee associations, national occupational health and safety representatives, the Technical Committees (TCs) which develop European standards and other Sector Fora which are connected to product standards with occupational health and safety aspects. In 2023, SECT/SF OHS will concentrate on better identifying standardization projects that concern the prevention of occupational risks, health and safety protection and the elimination of risk and accident factors. The body will also publish a so-called European Early Information System, so that the SECT/SF OHS members will be informed about relevant new projects as early as possible. In this way, they will be able to give OH&S advice to the standardization committees at an early stage of standardization work and engage experts on Occupational Health and Safety in the standardization work.

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40 technical bodies responsible

CEN/CLC/JTC 16	'Active Implantable Medical Devices'
CEN/CLC/JTC 3	'Quality management and corresponding general aspects for medical devices'
CEN/SS S02	'Transfusion equipment'
CEN/SS S03	'Syringes'
CEN/SS S99	'Health, environment and medical equipment – Undetermined'
CEN/TC 102	'Sterilizers and associated equipment for processing of medical devices'
CEN/TC 122	'Ergonomics'
CEN/TC 137	'Assessment of workplace exposure to chemical and biological agents'
CEN/TC 140	'In vitro diagnostic medical devices'
CEN/TC 158	'Head protection'
CEN/TC 159	'Hearing protectors'
CEN/TC 160	'Protection against falls from height including working belts'
CEN/TC 161	'Foot and leg protectors'
CEN/TC 162	'Protective clothing including hand and arm protection and lifejackets'
CEN/TC 170	'Ophthalmic optics'
CEN/TC 204	'Sterilization of medical devices'
CEN/TC 205	'Non-active medical devices'
CEN/TC 206	'Biological and clinical evaluation of medical devices'
CEN/TC 215	'Respiratory and anaesthetic equipment'
CEN/TC 216	'Chemical disinfectants and antiseptics'
CEN/TC 231	'Mechanical vibration and shock'
CEN/TC 239	'Rescue systems'
CEN/TC 251	'Health informatics'
CEN/TC 285	'Non-active surgical implants'
CEN/TC 293	'Assistive products and accessibility'
CEN/TC 305	'Potentially explosive atmospheres - Explosion prevention and protection'
CEN/TC 362	'Healthcare services - Quality management systems'
CEN/TC 392	'Cosmetics'
CEN/TC 403	'Aesthetic surgery and aesthetic non-surgical medical services'
CEN/TC 469	'Animal health diagnostic analyses'
CEN/TC 55	'Dentistry'
CEN/TC 79	'Respiratory protective devices'
CEN/TC 85	'Eye protective equipment'
CEN/WS 068	'Quality criteria for health checks'
CEN/WS 102	'CEN Workshop on guidelines for introducing tele-medical and pervasive monitoring technologies balancing privacy protection against the need for oversight and care'
CEN/WS DHI	'Digital health innovations – Good practice guide for obtaining user consent for personal health information'
CEN/WS EXOSK	'Integration process of new technologies of physical assistance such as exoskeletons'
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'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 1727 ENs + 121 other deliverables
Work Items currently in the Work Programme: 403 ENs + 22 other deliverables

Standardization requests from EC/EFTA

M/553 – Advanced garments and ensembles of garments that provide protection against heat and flame
M/571 – Personal protective equipment
M/575 – Medical devices

PERSONAL PROTECTIVE EQUIPMENT (PPE)

CEN/TC 162 'Protective clothing including hand and arm protection and lifejackets' is looking forward to fulfilling the mandate for standardization activities under the PPE Regulation (EU) 2016/425 and achieving the citation of compliant standards on the Official Journal of the EU (OJEU). The Committee envisages several new revision projects to be started at the end of 2022 and at the beginning of 2023, especially regarding requirements from M/571.

Additionally, the TC will work closely together with ISO/TC 94/SC 13 'Protective clothing' to develop EN ISO standards. This includes projects on:

- EN ISO 16602-series of six standards on protective clothing for protection against chemicals, including modular concept by WG 3 'Protective clothing against chemicals, infective agents radioactive contamination';
- Standards on protective gloves, under the stewardship ofWG 8 'Protective gloves';
- Standard for equestrian activities and for fencers by WG 11 'Body protection for sports'.

CEN/TC 162 will also work on a new project on 'Warning clothing with active lighting' in addition to EN ISO 20471 'High visibility clothing - Test methods and requirements' and EN 17353 – Equipment for active luminous warning clothing – Test methods and requirements'. The TC will also continue to work on the revision of EN 1621 'Motorcyclists protective clothing against mechanical impact' different parts.

In 2023, CEN/TC 159 'Hearing protectors' will publish five amendments to the standard series EN 352 'Hearing protectors' and the respective testing standard series EN 13819 'Hearing protectors – Testing', which add requirements and tests on new technologies, such as DAB/DAB+, FM radio receivers, two-way radio for hearing protectors.

The revision of EN 458 'Hearing protectors – Recommendations for selection, use, care and maintenance – Guidance document' will also be launched, with the objective to align it to the new EN 17479:2021 'Hearing protectors - Guidance on selection of individual fit testing methods'. It is anticipated to activate this new project in 2023, which is currently in preliminary work item stage.

CEN/TC 160 'Protection against falls from height including working belts' aims to finalise and publish several European Standards. Specifically, it will launch the revision of:

- EN 360 'Personal fall protection equipment - Retractable type fall arresters';
- EN 813 'Personal fall protection equipment - Sit harnesses';
- EN 12841 'Personal fall protection equipment - Rope access systems - Rope adjustment devices';
- EN 353-2 'Personal fall protection equipment - Part 2: Guided type fall arresters including a flexible anchor line'.
- In addition, the technical committee will carry on with the ongoing revision of
- EN 795 'Personal fall protection equipment - Anchor devices';
- EN 341 'Personal fall protection equipment - Descender devices for rescue';
- EN 355 'Personal fall protection equipment - Energy absorbers'.

The TC is also expected to start the revision of EN 1868 'Personal protective equipment against falls from a height - List of equivalent terms'.

CEN/TC 122 'Ergonomics', through its WG 1 'Anthropometry', will continue working on a project, funded by the European Commission, on anthropometric and strength data of children. In 2023, the WG will still focus on conducting the related surveys in Spain and the Netherlands, as they had to be postponed due to COVID-19 restrictions. The resulting Technical Report (TR) on anthropometric and strength data of children in Europe will be complemented by another TR with guidelines on how to apply such data. Anthropometric and strength data are not only a crucial basis for health and safety requirements in standards, but also very important for the design of ergonomic and safe products (including for instance facial masks), workplaces and domestic/public environments.

Furthermore, CEN/TC 122's WG 5 'Ergonomics of human-system interaction' will adopt the following ISO publication of ISO/TC 159/SC 4 'Ergonomics of human-system interaction' on :

- General requirements for reducing undesirable biomedical effects during visual interactive tasks using head-mounted displays;
- Impact of light and lighting on users of interactive systems.
- The following standards are also expected to be developed in 2023:
- Requirements for optical characteristics of head-mounted displays related to human-system interaction;
- Guidance on conceptual design, user-system interaction design, user interface design, and navigation design;
- Ergonomic requirements for office work with visual display terminals (VDTs) – Part 820: Ergonomic guidance on interactions in immersive environments, augmented reality, and virtual reality.

CEN/TC 158 'Head protection' will develop new harmonised standards in support of the PPE Regulation (EU) 2016/425 and expects to finalise the revision EN ISO 10256 series 'Protective equipment for use in ice hockey' Parts 1-4, developed under ISO lead and to offer these standards as candidates for OJEU citation.

CEN/TC 158 also expects to finalise the revision of EN 1384 'Helmets for equestrian activities'. The standard is foreseen to be published and offered for citation in the OJEU.

Other continuing standardization activities include finalising the ongoing work within CEN/TC 158 WG 11 'Headforms and test methods' on a new standard on headform and test methods for measuring rotational impact energy. The test methods will be used in product standards, including requirements for oblique impact, such as EN 1078 'Helmets for cyclists' and EN 1080 'Impact protection for young children'. Finally, the committee intends to finalise the EN 397 'Industrial protective helmets'. Other standards to be developed include the revision of EN 12492 'Helmets for mountaineers' and a new standard for 'Helmets for ski mountaineers'.

CEN/TC 79 'Respiratory protective devices' is working on the development of standards listed under the Standardization Request M/571 for harmonisation under the PPE Regulation (EU) 2016/425 as well as test methods for those devices.

In particular, its WG 6 'Supplied breathable gas Respiratory Protective Devices (RPD)' is actively working on EN 13794 'Respiratory protective devices - Self-contained closed-circuit breathing apparatus for escape - Requirements, testing and marking', expected to be completed in 2023.

WG6 will also support the revision of EN 137 'Respiratory protective devices – Self-contained open-circuit compressed air breathing apparatus with full face mask – Requirements, testing,

marking' to meet the requirements of the PPE Regulation (EU) 2016/425. Finally, it will develop the Annex ZA to show the relationship between this European Standard and the GSPR of the PPE Regulation (EU) 2016/425.

Finally, CEN/TC 79's WG 9 'Test Methods and Interpretation of CEN/TC 79 standards' will work on the amendment to EN 13274-7 'Respiratory protective devices - Methods of test - Part 7: Determination of particle filter penetration', which is the test methods for particle filtering half masks known as FFP mask. In this context, CEN/TC 79/WG 4 'Filters and absorption devices' will start the work on the revision of EN 149 'Respiratory protective devices – Filtering half masks to protect against particles – Requirements, testing and marking' in 2023.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Medical devices - CEN/TC 102 'Sterilizers and associated equipment for processing of medical devices' is actively working on the development of harmonised standards under the MDR (EU)2017/745 and IVDR (EU)2017/746, such as EN 13060 'Small steam sterilizers', expected to be finalised in 2023.

CEN/TC 102 and more specifically its WG 6 'Low temperature sterilizers' will work on the finalisation of the first edition of EN 17180 'Sterilizers for medical purposes - Low temperature vapourised hydrogen peroxide sterilizers - Requirements and testing'. It will also revise EN 14180 'Sterilizers for medical purposes - Low temperature steam and formaldehyde sterilizers - Requirements and testing'.

In addition, CEN/TC 102 WG 4 'Packaging', WG 7 'Biological and chemical indicators' and WG 8 'Washer-disinfectors' will carry on with the revision of a series of standards: the EN ISO 11607 series 'Packaging for terminally sterilized medical devices'; EN ISO 11138 'Sterilization of health care products'; EN ISO 11140 series 'Sterilization of health care products'; and EN ISO 15883 series 'Washer-disinfector'. CEN/TC 102 also expects to complete the below standards in 2023:

- EN ISO 11140-6 'Sterilization of health care products - Chemical indicators - Part 6: Type 2 indicators and process challenge devices for use in performance testing of small steam sterilizers';
- EN ISO 15883-1 'Washer-disinfectors – Part 1: General requirements, terms and definitions and tests';
- Amendments to parts 1 and 2 of EN ISO 11607 series on 'Packaging for terminally sterilized medical devices'.

The primary objective of CEN/TC 204 'Sterilization of medical devices' for the next 12 months is to develop harmonised standards for sterilization and aseptic processing of medical devices in support of the MDR (EU) 2017/745 and IVDR (EU) 2017/746. To this aim, it will develop new editions of several existing standards at international level for European adoption to address recent developments in healthcare technology.

CEN/TC 204 will also support the parallel development of the revision of ISO 13408-1 'Aseptic processing of health care products – Part 1: General requirements'. It will also be launching the development of EN amendments to subsequent parts of the series. Furthermore, the committee will embark on the revision of European Standards EN 556 parts 1 and 2 'Sterilization of medical devices - Requirements for medical devices to be designated 'STERILE" to address the standardization request of the European Commission.

Finally, CEN/TC 206 'Biological and clinical evaluation of medical devices' is actively supporting the development of standards part of the EN ISO 10993 'Biological evaluation of medical devices' series listed under Standardization Request M/575 for harmonisation in support of the MDR (EU) 2017/745 and IVDR (EU) 2017/746.

Assistive products and accessibility - CEN/TC 293 'Assistive products and accessibility' will prepare the below amendments in support of the MDR (EU) 2017/745 and its corresponding Standardization Request M/575:

- EN ISO 10535 'Assistive products – Hoists for the transfer of persons – Requirements and test methods';
- EN ISO 21856 'Assistive products – General requirements and test methods'.

Within it WG 5 'Prostheses and orthoses', the TC also expects the revision of the following standards:

- Revision of EN ISO 10328 'Prosthetics – Structural testing of lower-limb prostheses – Requirements and test methods'
- Revision of EN ISO 22675 'Prosthetics – Testing of ankle-foot devices and foot units – Requirements and test methods'
- Revision of EN ISO 22523 'External limb prostheses and external orthoses – Requirements and test methods'

Other Working Groups of the same TC 293 will be engaged in further standardization work:

- 'WG 12 Accessibility' will work on a standard on 'Accessible systems for living independently – Requirements and recommendations'.
- 'WG 13 Tactile lettering' will work on a standard on Tactile lettering – Requirements on the presentation and application of Braille and raised lettering.

An amendment to Mandate (M/575) on medical devices in support of Regulation (EU) 2017/745 and in vitro diagnostic medical devices in support of Regulation (EU) 2017/746 was initiated by the European Commission upon the request of CEN and CENELEC. This amendment has been submitted to the Medical Device Coordination Group working group on standards for consultation and will subsequently be submitted to the opinion of the Committee on Standards under Standardization Regulation (EU) No 1025/2012, for vote by written procedure.

Health informatics - CEN/TC 251 'Health informatics' intends to revise and combine EN 14484:2003 'Health informatics - International transfer of personal health data covered by the EU data protection directive - High level security policy' and EN 14485:2003 'Health informatics - Guidance for handling personal health data in international applications in the context of the EU data protection directive'. They are both standards to ensure the protection of EU data in healthcare, reflecting the experience gained with the GDPR.

It is also important to note that CEN launched a Workshop Agreement to create a standardised way of obtaining the electronic consent of patients for participation in pilots for digital health applications, including the consent to share and reuse the data obtained during these pilots.

In addition, CEN/TC 251 expects that the developments of the below legislative acts will have a big impact on its work:

- The 'European Health Data Space Act', with strong references to:
  - The European Electronic Health Record Exchange Format (EEHRxF)
  - The need for certification of Electronic Health Record Systems (EHR-Ss)
  - Quality labelling, initially applied to apps in the health and wellness sector, to be extended to the domain of apps that are classified as medical devices.
- The 'Artificial Intelligence Act', in which health is indicated as a high impact area, references:
  - The availability of health data for the training of artificial intelligence algorithms through the European Health Data Space
  - The establishment of an AI regulatory sandbox for the development of innovative AI systems in, among others, public health, including disease prevention, control and treatment.

The expectation is that some harmonised work will come into the portfolio of CEN/TC 251 because of these two Acts.

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Healthcare (CEN)
Healthcare (CENELEC)
Occupational health and safety (CEN)
Occupational health and safety (CENELEC)
Personal protective equipment (PPE)

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Household appliances and HVAC

Household appliances and HVAC (Heating, Ventilation and Air Conditioning) is one of the areas where the use and importance of standards in everyday life is more evident. The standardization work in this field is very broad and covers a wide range of activities. More than 20 CEN and CENELEC Technical Committees are responsible for developing European Standards that ensure a high level of performance and safety for a wide variety of everyday products, from kitchen toasters to washing machines and central heating boilers. To do that, they consider the diversity of their users (such as professionals, youngsters, elderly people, or people with disabilities, to name only a few).

26 technical bodies responsible

CEN/CLC/JTC 17	'Gas Appliances with Combined Heat and Power'
CEN/SS H99	'Products for household and leisure use – Undetermined'
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 and/or cooling appliances without integral thermal sources'
CEN/TC 131	'Gas burners using fans'
CEN/TC 171	'Heat cost allocation'
CEN/TC 180	'Decentralized gas heating'
CEN/TC 181	'Appliances and leisure vehicle installations using liquefied petroleum gas and appliances using natural gas for outdoor use'
CEN/TC 195	'Cleaning equipment for air and other gases'
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/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/WS Hycool	'Characterization of a hybrid heat pump module'
CLC/TC 59X	'Performance of household and similar electrical appliances'
CLC/TC 61	'Safety of household and similar electrical appliances'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 778 ENs + 13 other deliverables
Work Items currently in the Work Programme: 203 ENs + 2 other deliverables

Standardization requests from EC/EFTA

M/BC/CEN/89/6 – Gas appliances
M/XXX (Anticipated) – Gas appliances Regulation
M/500 – Fans
M/534 – Water heaters
M/535 – Space heaters
M/537 – Ventilation units
M/560 – Ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coils
M/566 – Ecodesign and energy labelling for household dishwashers, household washing machines and household washer-dryers

M/586 – Ecodesign and energy labelling for refrigerating appliances
M/582 - Ecodesign and energy labelling requirements for refrigerating appliances with a direct sales function
M/XXX (Anticipated) - Ecodesign requirements for air-to-air air conditioners, air-to-air heat pumps and comfort fans

SAFETY OF ELECTRICAL HOUSEHOLD APPLIANCES

Standardization work on the safety of household appliances is under the responsibility of CLC/TC 61 'Safety of household and similar electrical appliances'. This Technical Committee develops, in close cooperation with its international counterpart IEC/TC 61, standards containing safety requirements for more than 100 electrical appliances intended primarily for household use, but also for commercial use, such as those used in professional kitchens. European Standards on the safety of household and similar electrical appliances (part of the EN 60335 series) are continuously adapted to align with the latest technological changes. Most of these standards are candidates for harmonisation in support of European legislation. In 2023, CLC/TC 61 will continue with the European adoption of the latest IEC standards developed by IEC/TC 61. Additionally, CLC/TC 61 will continue to focus on the alignment of their standards to European legislation (more precisely to the Low Voltage Directive – 2014/35/EU and to the Machinery Directive 2006/42/EC).

ECODESIGN

CLC/TC 59X 'Performance of household and similar electrical appliances' prepares European Standards on methods of measurement to help determine the performance of electrical appliances for household and commercial use that are of interest for the user. Most of the products covered by CLC/TC 59X fall under the scope of several Ecodesign implementing regulations and energy labelling regulations adopted by the European Commission.

In this context, in 2023 CLC/TC 59X expects to publish amendments to EN IEC 60546:2016 and EN IEC 62512:2020, which specify, respectively, methods for measuring the performance of clothes washing machines and washer dryers. The objective is to align both standards to EU regulations amendments 2021/34/EU and 2021/340/EU, setting energy labelling and Ecodesign requirements for washing machines. This provides European consumers with valuable information to enable them to make an informed choice and eventually increase the market for more energy efficient products.

In addition, the committee is involved in the green transition, and will pursue the development of EN 50731 'Durability – Measurement method for the assessment of the reliability of washing machines for household use'. This standard is a building block to assess the durability of washing machines. It will push for the durable design of machines, the improvement of their environmental impact, and the use time for consumers who will then be able help to make informed purchase decisions.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Heating, cooling, ventilation, and air conditioning (HVAC) - In 2023, CEN/TC 44 'Commercial and Professional Refrigerating Appliances and Systems, Performance and Energy Consumption' expects, in parallel with ISO/TC 86/SC 7 'Testing and rating of commercial refrigerated display cabinets', to finalise the revision of EN ISO 23953-1 and 2 'Refrigerated display cabinets'. EN ISO 23953-1 establishes a vocabulary of terms and definitions relative to refrigerated display cabinets used for the sale and display of foodstuffs, while EN ISO 23953-2 specifies requirements for the construction, characteristics and performance of refrigerated display cabinets used in the sale and display of foodstuffs.

These standards are in support of Ecodesign and energy labelling Regulations (i.e., 2019/2024/EU and 2019/2018/EU), which lay down rules for marketing and putting into service refrigerating appliances with a direct sales function. The objective is to ensure that their environmental impact, in particular energy consumption, is reduced. EN ISO 23953-1 and 2 will include detailed technical specifications and calculations in support of Ecodesign and energy labelling requirements.

CEN/TC 113 'Heat pumps and air conditioning units' will start the revision of EN 12900 'Refrigerant compressors – Rating conditions, tolerances and presentation of performance data'. This standard specifies rating conditions, tolerances, and the method of presenting manufacturer's data for positive displacement refrigerant compressors.

Safety of household gas appliances - CEN/TC 49 'Gas cooking appliances' develops and maintains European standards relating to the safety of household gas cooking appliances, keeping pace with modern technology. These standards guarantee a safety level and performance characteristics of a product for its safe and environmentally friendly use by a consumer. CEN/TC 49 standards fulfil the needs of consumers, manufacturers as well as certification bodies.

In 2023, the group will finalise the EN 30 series, specifying construction and performance characteristics, as well as the requirements and test methods, for the safety and marking of freestanding and built-in domestic cooking appliances burning combustible gas.

CEN/TC 62 'Independent gas fired space heaters' will publish EN 509 'Decorative fuel-effect gas appliances' which specifies the requirements and test methods for the construction, safety, and marking of decorative fuel effect gas appliances (e.g. decorative fireplaces) not exceeding a nominal heat input of 20 kW.

CEN/TC 181 'Appliances and leisure vehicle installations using liquefied petroleum gas and appliances using natural gas for outdoor use' is expected to finalise, in 2023, EN 484 'Specification for dedicated liquefied petroleum gas appliances - Independent stoves, including those incorporating a grill for outdoor use'. This standard specifies design and performance characteristics, safety specifications and rational use of energy for such devices.

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Household appliances and HVAC (CENELEC)
Ecodesign and Energy Labelling

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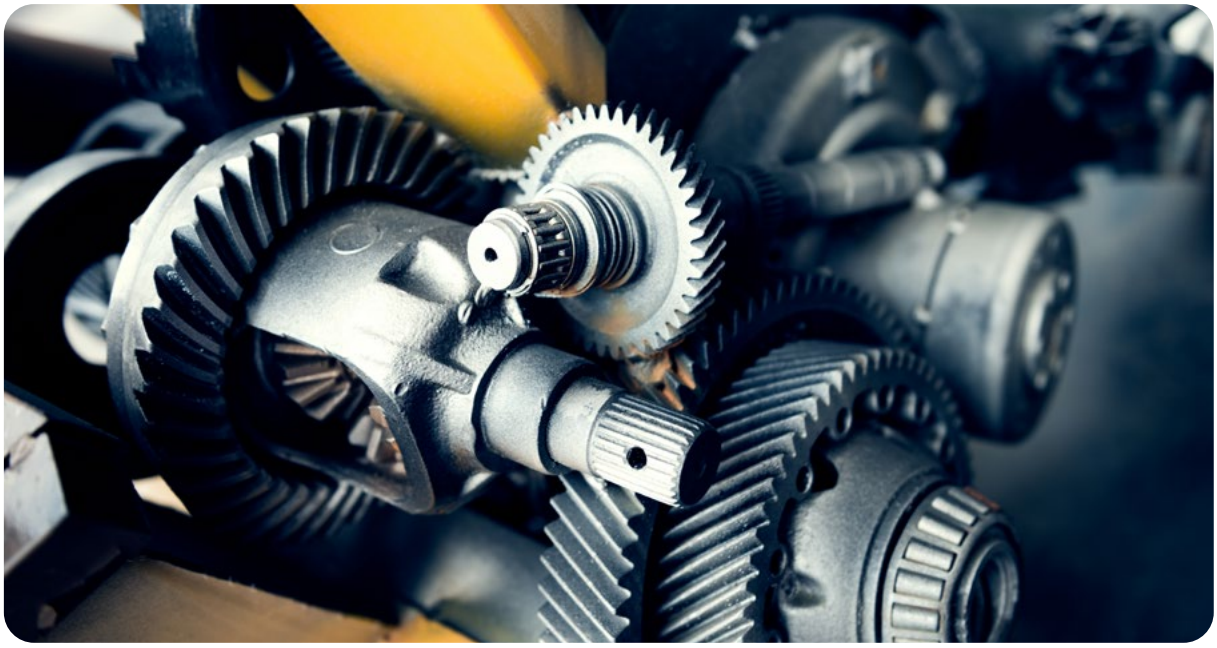
Mechanical and machinery



About fifty CEN and CENELEC technical bodies are involved in standardization work for the machinery sector. They deal with different types of machinery for use in agriculture, industrial manufacturing, mining, construction and by consumers. The sector also includes eleven technical bodies dealing with laboratory, optical and precision equipment (excluding glasses), two technical bodies developing standards on welding and a further twelve that handle the standardization work on tanks and pressure equipment. These Technical Committees (TCs) are mainly composed of industry representatives, notified bodies, national health and safety institutes and representatives from the market surveillance organizations from interested Member States.

A considerable proportion of the deliverables produced in the sector are harmonised standards that give users 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: this is an important characteristic, since the markets for these products tend to be wholly global.

The mechanical and machinery sector is therefore a good example of bringing together European requirements with an internationally accepted approach.

Standards keep the pace of technological development through the involvement of experts from different backgrounds. The aim of the new CEN-CENELEC-ETSI Coordination Group on Smart Manufacturing (SMa-CG) is to advise on the European standardization activities related to smart manufacturing in cooperation with stakeholder groups outside CEN and CENELEC. Furthermore, a Task Group on Industrial Data was created in SMa-CG to synchronise standardization activities on this topic across the ESOs by identifying common elements across all sectors.

Finally, the CEN and CENELEC Sector Forum on Machinery facilitates the exchange of information and the coordination between different stakeholders, and identifies standardization needs, in particular in relation to harmonised standards under the Machinery Directive.

82 technical bodies responsible

CEN/CLC/JTC 18	'Weighing instruments'
CEN/CLC/WS EFPFInterOp	'European Connected Factory Platform for Agile Manufacturing Interoperability'
CEN/CLC/WS MIRACLE	'Lens-based adaptor system for coupling fibre optic to laser sources'
CEN/CLC/WS Monsoon	'Predictive management of data intensive industrial processes'
CEN/CLC/WS ZDMTerm	'Zero Defects in Digital Manufacturing Terminology'
CEN/SS F05	'Measuring Instruments'
CEN/SS H10	'Sewing machines'
CEN/SS I03	'Limits and fits'
CEN/SS I09	'Small tools'
CEN/TC 10	'Lifts, escalators and moving walks'
CEN/TC 114	'Safety of machinery'
CEN/TC 12	'Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries'
CEN/TC 121	'Welding and allied processes'
CEN/TC 123	'Lasers and photonics'
CEN/TC 142	'Woodworking machines – Safety'
CEN/TC 143	'Machine tools – Safety'
CEN/TC 144	'Tractors and machinery for agriculture and forestry'
CEN/TC 145	'Plastics and rubber machines'
CEN/TC 146	'Packaging machines – Safety'
CEN/TC 147	'Cranes – Safety'
CEN/TC 148	'Continuous handling equipment and systems – Safety'
CEN/TC 149	'Power-operated warehouse equipment'
CEN/TC 150	'Industrial Trucks – Safety'
CEN/TC 151	'Construction equipment and building material machines – Safety'
CEN/TC 152	'Fairground and amusement park machinery and structures – Safety'
CEN/TC 153	'Machinery intended for use with foodstuffs and feed'
CEN/TC 168	'Chains, ropes, webbing, slings and accessories – Safety'
CEN/TC 176	'Thermal energy meters'
CEN/TC 182	'Refrigerating systems, safety and environmental requirements'
CEN/TC 186	'Industrial thermoprocessing – Safety'
CEN/TC 188	'Conveyor belts'
CEN/TC 190	'Foundry technology'
CEN/TC 196	'Mining machinery and equipment – Safety'
CEN/TC 197	'Pumps'
CEN/TC 198	'Printing and paper machinery – Safety'
CEN/TC 202	'Foundry machinery'
CEN/TC 210	'GRP tanks and vessels'
CEN/TC 211	'Acoustics'
CEN/TC 213	'Cartridge operated hand-held tools – Safety'
CEN/TC 214	'Textile machinery and accessories'
CEN/TC 23	'Transportable gas cylinders'
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 267	'Industrial piping and pipelines'
CEN/TC 268	'Cryogenic vessels and specific hydrogen technologies applications'
CEN/TC 269	'Shell and water-tube boilers'
CEN/TC 270	'Internal combustion engines'
CEN/TC 271	'Surface treatment equipment – Safety'
CEN/TC 286	'Liquefied petroleum gas equipment and accessories'
CEN/TC 310	'Advanced automation technologies and their applications'
CEN/TC 313	'Centrifuges'
CEN/TC 318	'Hydrometry'
CEN/TC 322	'Equipments for making and shaping of metals - Safety requirements'
CEN/TC 332	'Laboratory equipment'
CEN/TC 334	'Irrigation techniques'
CEN/TC 344	'Steel static storage systems'
CEN/TC 393	'Equipment for storage tanks and for filling stations'
CEN/TC 397	'Baling presses - Safety requirements'
CEN/TC 399	'Gas Turbines applications – Safety'
CEN/TC 406	'Mechanical products - Ecodesign methodology'
CEN/TC 423	'Means of measuring and/or recording temperature in the cold chain'
CEN/TC 429	'Food hygiene - Commercial warewashing machines - Hygiene requirements and testing'
CEN/TC 433	'Entertainment Technology - Machinery, equipment and installations'
CEN/TC 438	'Additive Manufacturing'
CEN/TC 458	'Industrial rotating mixing systems'
CEN/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/WS 093	'Industrial Symbiosis'
CEN/WS 097	'Articulated industrial robots - Elastostatic compliance calibration'
CLC/BTTF 128-2	'Erection and operation of electrical test equipment'
CLC/TC 116	'Safety and environmental aspects of motor-operated electric tools'
CLC/TC 2	'Rotating machinery'
CLC/TC 26	'Electric welding'
CLC/TC 44X	'Safety of machinery: electrotechnical aspects'
CLC/TC 66X	'Safety of measuring, control, and laboratory equipment'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 2377 ENs + 113 other deliverables
Work Items currently in the Work Programme: 515 ENs + 15 other deliverables

Standardization requests from EC/EFTA

M/071 – Pressure equipment
M/396 – Machinery
M/435 – Inspection of pesticide application equipment in use
M/471 – Machinery for pesticide application
M/541 - Measuring instruments
M/549 – Lifts
Draft SReq 'Lifts'

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CONSTRUCTION EQUIPMENT AND BUILDING MATERIAL MACHINES

CEN/TC 151 'Construction equipment and building material machines – Safety' develops standards and other documents in the field of safety of machines and equipment used on construction sites, for winter service, highway maintenance and for the production and processing of mineral building materials. Most of the deliverables produced by this committee support the Machinery Directive (2006/42/EC).

In 2023, CEN/TC 151 will keep working on the EN ISO 20500 series 'Mobile Road construction machinery'. This will be the first EN ISO standard series on safety of mobile road construction machines and will replace the EN 500 series on road construction machines. This series contains the latest safety updates on important subjects like visibility, guarding, and functional safety.

The revision of EN 13035-1 and EN 13035-2 that deal with 'Machines and plants for the manufacture, treatment, and processing of flat glass - Safety requirements' will be finalised. This is an important step for the glass industry.

AGRICULTURAL MACHINERY

The projects of CEN/TC 144 'Tractors and machinery for agriculture and forestry' cover machine safety and operator protection, considering the protection of the environment and technological innovations. These documents play an important part in reducing the risk of accidents for farmers and foresters and in reducing the use of pesticides. The main target of these standards is not only farmers, foresters and manufacturers, but also public authorities in charge of prevention at work and inspection of machines and research and testing organizations.

In 2023, CEN/TC 144 will continue developing the standards on automation of machines and tractors, as the dedicated market is growing rapidly. In this context, CEN/TC 144, in cooperation with ISO, plans to finalise the EN ISO series 18497 'Agricultural machinery and tractors - Safety of partially automated, semi-autonomous and autonomous machinery' in support of the Machinery Directive (2006/42/EC). The series, which consists of four parts, will establish the general design principles to cover the combination of the different functions of machines and tractors, the location of the operator and the types of interaction of these functions.

CEN/TC 144 will also continue, together with ISO, the revision of the first four parts of the EN ISO 16122 series on 'Agricultural and forestry machinery - Inspection of sprayers in use' in support of the Sustainable Use of Pesticides Directive 2009/128/EC. The series deals with the inspection of all types of crop protection sprayers used in agriculture, horticulture and forestry and contributes to the reduction of the contamination of the environment.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Mechanical engineering: General - CEN/TC 211 'Acoustics' produces standards and other documents in the field of acoustics, including methods of measuring acoustic phenomena, and the generation, transmission and reception of sound. In 2023, this TC will continue the revision of EN ISO 3744, used by manufacturers and test laboratories to determine sound power levels. The goal of the revision is to simplify the standard and to make it more user-friendly. CEN/TC 211 is also developing EN ISO 5114-1 (a new standard), in close cooperation with ISO/TC 43/SC 1, which also supports making EN ISO 3744 more readable and easily applicable.

Laboratory, optical and precision equipment (excl. glasses) - CEN/TC 123 'Lasers and photonics' plans to continue the revision of EN ISO 11553-2 on laser processing machines in 2023, which is currently being developed at the international level by ISO/TC 172/SC 9 and IEC/TC 76. Its content is being updated with the objective of achieving harmonisation under the Machinery Directive to aid manufacturers and users.

CEN/TC 332 'Laboratory equipment' will keep developing EN ISO 13132 and EN ISO 4803, both covering 'Laboratory glassware'.

Measuring instruments and non-automatic weighing instruments - The activities on measuring instruments, laboratory and lasers equipment are partially undertaken to support Directive 2014/32/EU on Measuring Instruments (MID) and the non-automatic weighing instruments (NAWI) Directive 2014/31/EU.

CEN/TC 237 'Gas meters' will continue working on EN 12261 'Gas meters - Turbine gas meters'. The TC will also revise EN 14236 'Ultrasonic domestic gas meters' and EN 12480 'Gas meters - Rotary displacement gas meters'.

Motor-operated electric tools - CLC/TC 116 'Safety and environmental aspects of motor-operated electric tools' will continue developing the EN IEC 62841-4-XX series. It will also start revising existing parts of EN 61029 and EN 60335 to become parts of EN IEC 62841. Finally, this TC is expected to start developing standards for environmental aspects of power tools and garden machinery.

Industrial machinery - The 'industrial machinery' subsector comprises about forty CEN and CENELEC technical bodies, dealing with a wide range of machinery used by the industry (such as paper, textile, food, oil and gas, amusement....). Many of the documents are harmonised standards in support of the Machinery Directive (2006/42/EC).

In 2023, CEN/TC 145 'Plastics and rubber machines' will work on the following projects addressing safety requirements of the Machinery Directive (2006/42/EC):

- the revisions of two very important standards for the tire industry: EN 1417:2014 'Plastics and rubber machines - Two-roll mills - Safety requirements' and EN 16474:2015 'Plastics and rubber machines - Tyre curing machines - Safety requirements';
- two projects developed in cooperation with ISO: a brand new standard EN ISO 23582-1 'Plastics and rubber machines - Clamping systems - Part 1: Safety requirements for magnetic clamping systems' and EN ISO 22506 'Plastics and rubber machines - Safety requirements for extrusion machines for plastics', considering the advanced safety technology.

In 2023, CEN/TC 150 'Industrial Trucks – Safety' will collaborate closely with ISO to develop globally relevant safety standards for industrial trucks which also address specific regional requirements. The aim is to achieve citation as harmonised standards under the Machinery Directive (2006/42/EC). In support of this, CEN/TC 150 will finalise the revision of the package consisting of EN ISO 3691-1 'Industrial trucks - Safety requirements and verification - Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks' and EN 16307-1:2020/

prA1 'Industrial trucks - Safety requirements and verification - Part 1: Supplementary requirements for self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks'. The second editions enable to design truck with improved productivity without detriment to safety.

Moreover, CEN/TC 150 plans to start working on two brand-new standards on the requirements for

- the permanently mounted equipment (PME) on variable-reach tractors and
- the multi-purpose Personnel Elevating Platforms (MPEP).

CEN/TC 232 'Compressors, vacuum pumps and their systems', together with ISO, is expected to start working on EN ISO 18623-1 'Air compressors and compressed air systems – Part 1: Air compressor safety requirements' in support of the Machinery Directive (2006/42/EC) which will revise current EN 1012-2:1996+A1:2009. Manufacturers, suppliers and users of air compressors will benefit from the development of a globally available EN ISO standard providing common safety related requirements for designing and making air compressors.

In 2023, CEN/TC 255 'Hand-held, non-electric power tools – Safety' will continue, together with ISO, the revision of EN ISO 11148-13 'Hand-held non-electric power tools – Safety requirements – Part 13: Fastener driving tools' in support of the of the Machinery Directive (2006/42/EC).

CEN/TC 310 'Advanced automation technologies and their applications' will finalise, together with ISO, the revision of two important standards in support of the Machinery Directive (2006/42/EC): EN ISO 10218-1 'Robotics - Safety requirements - Part 1: Industrial robots' and EN ISO 10218-2 'Robotics - Safety requirements for robot systems in an industrial environment - Part 2: Robot systems, robot applications and robot cells integration'.

In 2023, CEN/TC 433 'Entertainment Technology - Machinery, equipment and installations' will continue working on two new standards:

- EN 17206-2 'Entertainment technology - Machinery for stages and other production areas - Part 2: Safety requirements for stands and truss lifts of stands';
- 'Entertainment technology – Unmanned aircraft systems (UAS) for stages and other production areas – Safety requirements and inspections'.

CEN/TC 433 will also finalise EN 17795-5 'Entertainment Technology – Codes of Practice - Part 5: Lifting and motion Operations in the Event Industry' and start working on the new documents on codes of practice for the entertainment industry towards a common understanding and quality of practice in Europe.

CEN/TC 438 'Additive Manufacturing' in cooperation with ISO and ASTM will continue working on the brand new EN ISO ASTM 52938-1 'Additive manufacturing of metals - Environment, health and safety - Part 1: Safety requirements for PBF-LB machines' in support of the Machinery Directive (2006/42/EC).

Pressure Equipment - The potential of hydrogen as a future energy source is closely linked with pressure equipment production and with the development of alternative fuel storage. Several CEN technical committees work in the framework of the Pressure Equipment Directive (2014/68/EU) on activities linked to subsystems (Piping, compressors, regulating devices, metrological devices). Now, these TCs are currently adapting their scope of application to the deployment of hydrogen technology. Work on the revision of several standards is planned for 2023, which will facilitate the use of hydrogen and its derivatives.

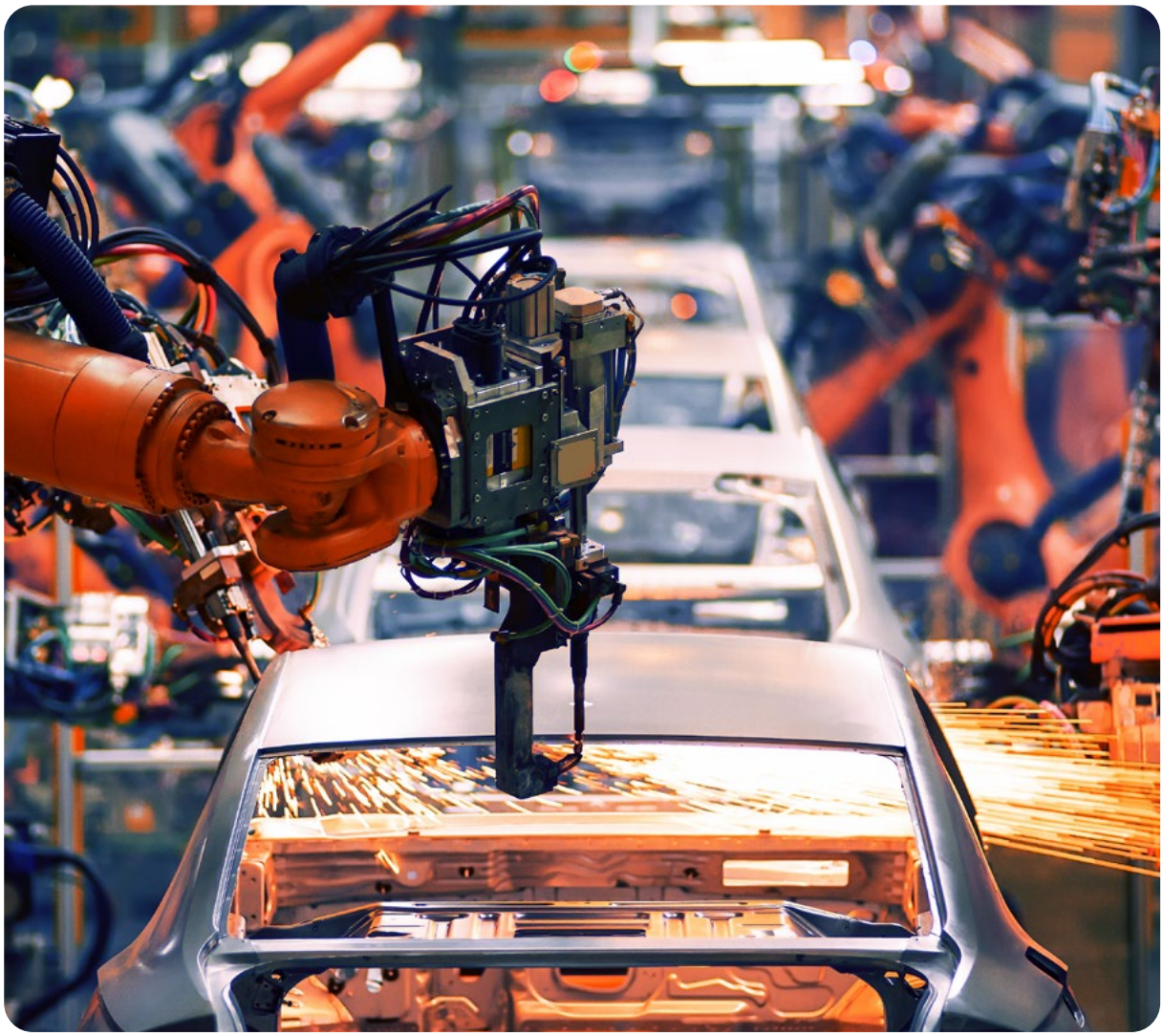
The Pressure Equipment Directive contains essential safety requirements, that whatever the choice of conformity assessment module, need 'an adequate analysis and assessment of the risks.' CEN/TC 54 'Unfired pressure vessels', based on an input from the CEN PE/AN

(Pressure Equipment Advisory Nucleus), will start drafting a new standard in 2023, 'Safety of pressure equipment and assemblies – General principles for design – Risk assessment and risk reduction' inspired by EN ISO 12100 and adapted to the PED 2014/68/EU.

Another 2023 CEN deliverable that will mark a milestone is the publication of EN 16668 'Industrial valves - Requirements and testing for metallic valves as pressure accessories' which lists PED requirements applicable to valves. It will be cited in all product standards of CEN/TC 69 'Industrial valves'.

As for the welding aspect, the publication in 2023 of EN 14717 – 'Welding and allied processes - Environmental checklist' will provide checklists for the assessment of the environmental aspects of welding fabrication of metallic materials, including site and repair work. Informative annexes indicate recommended actions for avoiding and reducing the possible environmental impacts outside the workshop.

MORE INFORMATION
Mechanical and machines (CEN)
Mechanical and machines (CENELEC)



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Mining and metals

The mining and metal sector plays a key role in supporting the EU economy and is instrumental to many other sectors, including construction, automotive and electronics. The ever-growing demand of minerals requires a high effort in standardization. In particular, standards in the field cover the definition, classification, testing, analysis and technical delivery requirements of metal industry products.

Given the substantial interest around this sector, many stakeholders are involved in standardization activities, including National Standardization Bodies (NSBs), manufacturers, users of metallic products and laboratories.

A remarkable number of standards produced for the mining and metal sector support several pieces of legislation. Among them, the Pressure Equipment Directive (PED), the Simple Pressure Vessels Directive (SPVD) and the Construction Products Regulation (CPR). Moreover, European standardization in this field features a close collaboration with the international level: around 30% of iron- and steel-related standards are adopted from, or developed in collaboration with, ISO.

24 technical bodies responsible

CEN/SS M11	'Powder metallurgy'
CEN/SS M14	'Nickel'
CEN/TC 132	'Aluminium and aluminium alloys'
CEN/TC 133	'Copper and copper alloys'
CEN/TC 184	'Advanced technical ceramics'
CEN/TC 219	'Cathodic protection'
CEN/TC 262	'Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys'
CEN/TC 342	'Metal hoses, hose assemblies, bellows and expansion joints'
CEN/TC 459	'ECISS - European Committee for Iron and Steel Standardization'
CEN/TC 459/SC 1	'Test methods for steel (other than chemical analysis)'
CEN/TC 459/SC 10	'Steel tubes, and iron and steel fittings'
CEN/TC 459/SC 11	'Steel castings and forgings'
CEN/TC 459/SC 12	'General issues'
CEN/TC 459/SC 2	'Methods of chemical analysis for iron and steel'
CEN/TC 459/SC 5	'Steels for heat treatment, alloy steels, free-cutting steels and stainless steels'
CEN/TC 459/SC 6	'Wire rod and wires'
CEN/TC 459/SC 7	'Steels for pressure purposes'
CEN/TC 459/SC 8	'Steel sheet and strip for electrical applications'
CEN/TC 459/SC 9	'Coated and uncoated flat products to be used for cold forming'
CEN/WS FORMPLANET	'Innovative testing in support of the sheet metal forming industry'
CEN/WS MODA	'Materials modelling terminology, classification and metadata'
CEN/WS NATEDA	'Nanoindentation Test Data'
CLC/SR 68	'Magnetic alloys and steels'
CLC/WS SGRM	'CENELEC workshop on Specifications for Graphene Related Material'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 985 ENs + 38 other deliverables
Work Items currently in the Work Programme: 108 ENs + 3 other deliverables

IRON AND STEEL

CEN/TC 459 'ECISS - European Committee for Iron and Steel Standardization' hosts 12 Subcommittees in charge of standardization on a wide range of iron and steel products – such as wires, rods, tubes, sheets, castings and forgings – used for different applications, ranging from electrical and machinery, to construction.

CEN/TC 459/SC 1 'Test methods for steel (other than chemical analysis)' develops general methods for mechanical testing, physico-chemical and non-destructive testing, including, if necessary, the verification and calibration of testing equipment used to determine the properties of the steel. CEN/TC 459/SC 1 will finalise the adoption of several EN ISO standards, such as EN ISO 4545-1 'Metallic materials - Knoop hardness test - Part 1: Test method (ISO/DIS 4545-1:2022)' and EN ISO '6507-1 Metallic materials - Vickers hardness test - Part 1: Test method (ISO/DIS 6507-1:2022)'.

CEN/TC 459/SC 2 ' Methods of chemical analysis for iron and steel' standardizes methods and equipment for the determination of chemical composition of iron and steel and related materials. CEN/TC 459/SC 2 will continue working on two Technical Reports, CEN/TR 1037 'Guidelines for the preparation of standard routine methods with wavelength-dispersive X-ray fluorescence spectrometry' and the revision of CEN/TR 10261 'Iron and steel - European standards for the determination of chemical composition'.

CEN/TC 459/SC 3 'Structural steels other than reinforcements' will continue developing standards for hot-rolled steel sheet piles, cold formed steel sheet piles, and continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels. The SC will also finalise the contribution to the CPR Technical Acquis subgroup 2 'Structural metallic products and ancillaries', in view of a possible future Standardization Request.

CEN/TC 459/SC 4 'Concrete reinforcing and prestressing steels' will provide input to the CPR Technical Acquis subgroup 3 'Reinforcing and prestressing steel for concrete', in view of a possible future Standardization Request.

CEN/TC 459/SC 5 'Steels for heat treatment, alloy steels, free-cutting steels and stainless steels' will continue working on the revision of the EN 10088 series on stainless steels and on EN 10278 'Dimensions and tolerances of bright stainless and other cold drawn steel products'. The SC will also finalise the adoption of EN ISO 683-17 'Heat-treated steels, alloy steels and free-cutting steels - Part 17: Ball and roller bearing steels (ISO/DIS 683-17:2022)'.

CEN/TC 459/SC 6 'Wire rod and wires' will keep working on three standards:

- EN 10244-2 'Steel wire and wire products - Non-ferrous metallic coatings on steel wire - Part 2: Zinc or zinc alloy coatings';
- EN 10264-3 'Steel wire and wire products - Steel wire for ropes - Part 3: Round and shaped non alloyed steel wire for high duty applications';
- EN 10270-1 'Steel wire for mechanical springs - Part 1: Patented cold drawn unalloyed spring steel wire'.

CEN/TC 459/SC 9 'Coated and uncoated flat products to be used for cold forming' will progress on its work on EN 10209 'Cold rolled low carbon steel flat products for vitreous enamelling - Technical delivery conditions' and EN 10359 'Laser welded tailored blanks - Technical delivery conditions'.

CEN/TC 459/SC 10 'Steel tubes, and iron and steel fittings' will develop a number of standards. Among them, EN 10344 'Malleable cast iron fittings with compression ends for steel pipes' and EN 10242 'Threaded pipe fitting in malleable cast iron'. It will also complete the adoption of various EN ISO standards.

CEN/TC 459/SC 11 'Steel castings and forgings' will revise EN ISO 11970 'Specification and qualification of welding procedures for production welding of steel castings', and EN ISO 13520 'Determination of ferrite content in austenitic stainless-steel castings'.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Alloys - CEN/TC 132 ' Aluminium and aluminium alloys' will publish EN 14242 'Aluminium and aluminium alloys - Chemical analysis - Inductively coupled plasma optical emission spectral analysis' and EN 1396 'Aluminium and aluminium alloys - Coil coated sheet and strip for general applications – Specifications'. The TC will also issue two amendments, one on EN 573-3:2019+A1 'Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products' and another on EN 12392:2016+A1 'Aluminium and aluminium alloys - Wrought products and cast products - Special requirements for products intended for the production of pressure equipment', harmonised under the PED.

Metallic coatings - CEN/TC 262 'Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys' will continue working together with ISO on the adoption of EN ISO standards, mainly dealing with determination and testing methods of physicochemical properties.

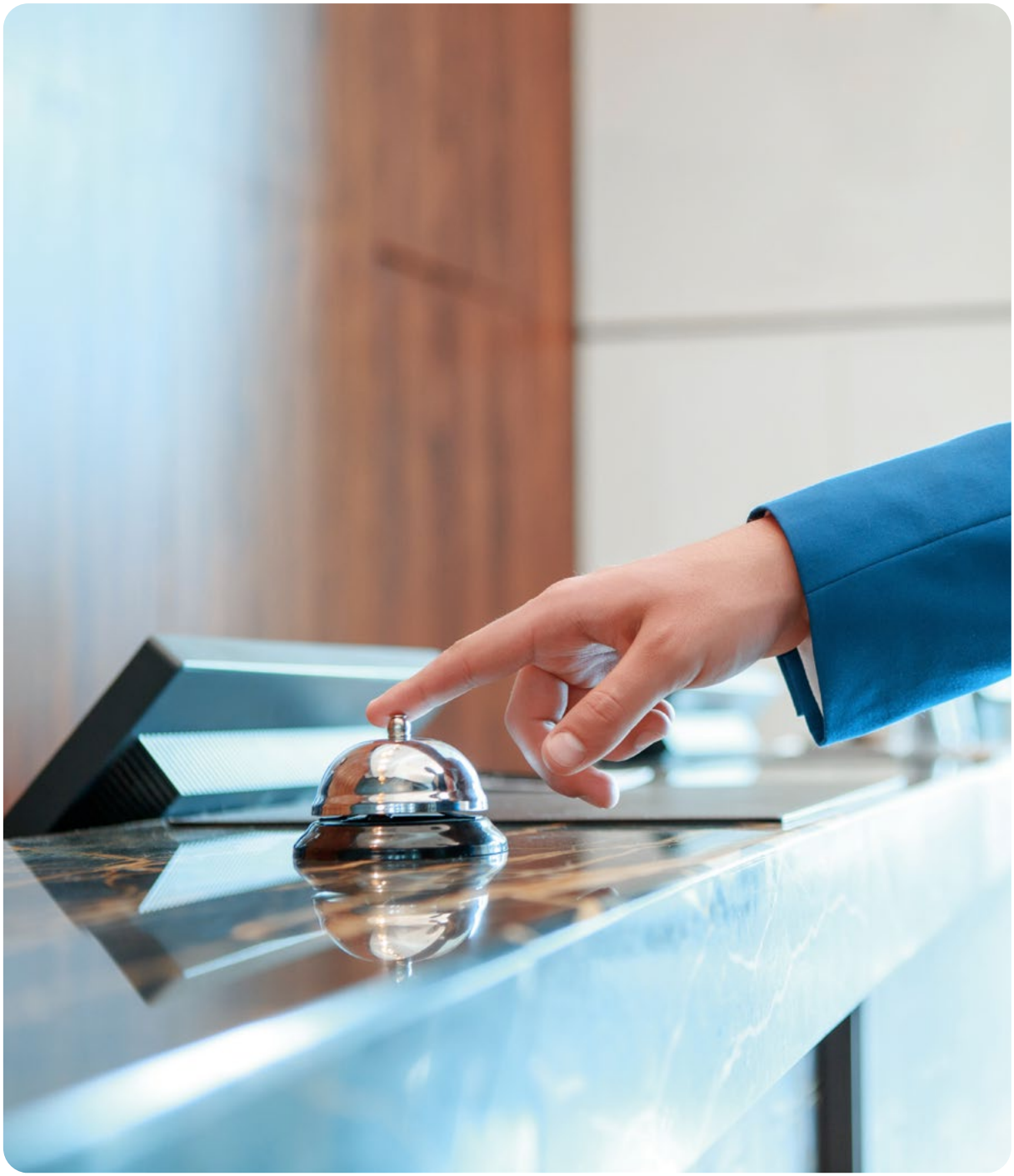
Advanced technical ceramics - CEN/TC 184 'Advanced technical ceramics' oversees standardization in relation to classification, terminology, sampling and test methods for advanced technical ceramics. The products in the scope of the TC are ceramic powder, monolithic ceramics, ceramic composites (including fibres) and ceramic coatings.

In 2023, CEN/TC 184 will adopt various EN ISO standards, such as EN ISO 20504 'Fine ceramics (advanced ceramics, advanced technical ceramics) - Mechanical properties of ceramic composites at room temperature - Determination of compressive properties (ISO/FDIS 20504:2022)'.

Metal hoses, hose assemblies, bellows and expansion joints - CEN/TC 342 'Metal hoses, hose assemblies, bellows and expansion joints' will keep working on the revision of EN 14585 'Corrugated metal hose assemblies for pressure applications', harmonised under the Pressure Equipment Directive. Though this revision, EN 14585-1 , CEN/TR 14585-2, and CEN/TR 14585-3 will be merged to reflect the state of the art on requirements for design/calculation, manufacture and installation of corrugated metal hose assemblies for pressure applications. CEN/TC 342 will also carry out the revision of EN 15266 'Stainless steel pliable corrugated tubing kits for gas installation pipework with an operating pressure up to 0,2 MPa (2 bar)'.

FURTHER INFORMATION
Mining and metals

Services



Standardization is increasingly being used to support the development of the Single Market for services. European standards can contribute to fostering cross-border trade, enhancing safety and performance, and ensuring the protection of consumers and the environment. Standards can set benchmarks against which businesses can measure the quality and performance of their own services, or of the services they are purchasing. In this way, they are key to improving transparency, competitiveness and increasing efficiency.

30 technical bodies responsible

CEN/CLC/JTC 1	'Criteria for conformity assessment bodies'
CEN/SS A07	'Translation and Interpretation services'
CEN/SS A99	'Services – Undetermined'
CEN/SS F17	'Administrative documents'
CEN/SS F20	'Quality assurance'
CEN/SS S29	'Social responsibility'
CEN/TC 138	'Non-destructive testing'
CEN/TC 279	'Value management - Value analysis, function analysis'
CEN/TC 290	'Dimensional and geometrical product specification and verification'
CEN/TC 319	'Maintenance'
CEN/TC 329	'Tourism services'
CEN/TC 331	'Postal services'
CEN/TC 348	'Facility Management'
CEN/TC 381	'Management consultancy services'
CEN/TC 389	'Innovation Management'
CEN/TC 445	'Digital information Interchange in the Insurance Industry'
CEN/TC 447	'Horizontal standards for the provision of services'
CEN/TC 452	'Assistance Dogs'
CEN/TC 461	'Public Procurement'
CEN/WS 095	'CEN Workshop on European Quality framework for Students Internships'
CEN/WS 105	'Guidelines to develop long-term strategies (roadmaps) to innovate responsibly'
CEN/WS 111	'Guidelines for Micro-SMEs on GDPR Compliance'
CEN/WS 114	'A Methodology for Measurement of Worker Satisfaction'
CEN/WS COVR	'Safety in close human-robot interaction: procedures for validation tests'
CEN/WS EUROSAFETOUR	'Response to COVID-19 - Health and safety protocols for tourism establishments and services'
CEN/WS FSR	'Future of Social Responsibility'
CEN/WS JTI	'Journalism Trust Indicators'
CEN/WS OYS	'OYSTER on Materials characterisation - Terminology, classification and metadata'
CEN/WS SICT	'The Standardisation of the Impression Creep Test'
CEN/WS Unicorn	'CEN Workshop on Analytics Insights and Scaling Policies for Microservices (UNICORN)'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 323 ENs + 82 other deliverables
Work Items currently in the Work Programme: 53 ENs + 5 other deliverables

Standardization requests from EC/EFTA

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

POSTAL SERVICES

Standardization of postal services and the improvement of their quality is a strategic priority for the European Union: Directive 97/67/EC sets the rules for the development of an internal market of postal services and the improvement of quality of service across borders. The development of appropriate standards is therefore fundamental for the promotion of interoperability between national networks and for the existence of an efficient universal service.

In 2023, CEN/TC 331 'Postal services' will start the development of standards in support of a Standardization Request which calls for identifying and reviewing standards related to the quality of postal services (such as standards related to postal addresses, with the objective to align them with legal and regulatory developments). The Standardization Request also focuses on the digitalisation of postal services (including information on postal items, digital identification of postal operators, etc). CEN/TC 331 will also consider environmental aspects of postal delivery.

MAINTENANCE OF BUILDINGS

CEN/TC 319 'Maintenance' will finalise EN 17840 'Performance and condition assessment for buildings and civil engineering works - Framework for assessment within physical asset management'. This document on performance and condition assessment intends to be an umbrella standard for physical assets and refers to other standards for detailed methods. The objective is to enhance the quality of the assessment and provide the asset owner/manager with information to support the decision-making process. The standard helps asset and facility managers select the appropriate technique and determine the quality of the work that has been done.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Facility Management - Facility Management has a significant and direct environmental, social, and economic impact through its management of the built environment and the services needed to sustain it for future generations. In 2023, CEN/TC 348 'Facility Management' will publish three important documents in parallel with its ISO counterpart ISO/TC 267 'Facility management':

- EN ISO 41015 'Facility management - Influencing organizational behaviours for improved facility outcomes' will outline how the behaviour of management and facility users can significantly influence an organization's operational performance for better outcomes/outputs. This standard aims to identify the different ways facility improvements can positively impact the contribution that the facility makes to the demand organization by influencing behaviours.
- CEN ISO/TR 41016 'Technology in facility management - Scope, key concepts and benefits' will help facility management professionals better understand the technology landscape and the key concepts involved therein, to better serve customers.

- EN ISO 41017 'Facility management - Guidance on emergency management of epidemic prevention in the workplace (working under pandemic)': the purpose of this guide is to ensure the health and safety of people through facility management in response to outbreaks in all types of workplaces.

CEN/TC 348 also contributes actively to the sustainable transition of the built environment by developing the new technical report CEN ISO/TR 41019 on the role of facility management in sustainability and resilience.

Tourism services - Considering the growing market share of rebreathers for divers and the risk of serious accident in case of inappropriate use of these devices, CEN/TC 329 'Tourism services', together with its international counterpart ISO/TC 228 'Tourism and related services', started the development of EN ISO 24807 'Recreational diving services - Requirements for rebreather diver training - Decompression diving to 100 m' and EN ISO 24806. These standards, to be published in 2023, will both specify the requirements under which trainings are provided. This information is complementary to the general requirements for recreational diving service provision provided in another more general standard (EN ISO 24803) published some years ago.

Societal and Citizen Security - In 2023, CEN/TC 391 'Societal and Citizen Security' will publish EN ISO 22361 'Security and resilience - Crisis management – Guidelines' in parallel with ISO/TC 292 'Security and resilience'. The standard will provide guidelines for crisis management to help organizations plan, establish, maintain, review, and improve their strategic crisis management capabilities. The objective is to ensure that when a crisis comes, which at some point is very likely to happen, the organization has mechanisms in place to overcome it. The document will provide guidance that can increase the resiliency of the organization, facilitate decision-making, highlight the importance of crisis communication, and ensure preparedness through training and learning.

Transport - Logistics and services - In 2023, CEN/TC 320 'Transport - Logistics and services' will finalise prEN ISO 14083 'Greenhouse gases - Quantification and reporting of greenhouse gas emissions arising from transport chain operations'. The document will establish a common methodology for the quantification of energy consumption and greenhouse gas (GHG) emissions related to any transport operations. The standard will specify general principles, definitions, system boundaries, calculation methods, apportionment rules (allocation) and data recommendations. The objective is to promote standardised, consistent, credible, and verifiable reporting regarding energy consumption and GHG emissions related to any transport.

Insurance Industry - Electronic invoicing is an important requirement for the digitalisation of all commercial domains and in the consumer sector. CEN/TC 445 'Digital information Interchange in the Insurance Industry' is finalising a Technical Specification (TS 17901) that will deal with 'Digital information interchange in the insurance industry - Electronic Premium Invoice - Mapping to Electronic Invoice in EN 16931-1:2017'. This document will define a standardised method to map the specific requirements of an insurance premium invoice to the generic electronic invoice described in EN 16931-1.

FURTHER INFORMATION
Services

Transport and vehicles

In an age of constant change, developing and maintaining a safe, efficient, resilient, and sustainable transport system in Europe is vital for the citizens, the economy, and the environment. Thanks to the strong expertise of the European industry, SMEs and sectorial federations, standardization of transport systems in Europe is active across the board: from road to space, and from rails to water. Work on the field encompasses horizontal topics of various nature, such as interoperability, intermodality, the transport of dangerous goods and Intelligent Transport Systems (ITS).

Many of the standards developed and adopted by CEN and CENELEC in this area support Standardization Requests issued by the European Commission. These Harmonised Standards (hENs) contribute to the implementation of relevant European legislation. For example, European standards developed by CEN and CENELEC provide crucial support to the EU Directives relating to the interoperability of Europe's rail system (2016/797/EU), recreational crafts and personal watercrafts (2013/53/EU), the deployment of alternative fuels infrastructure (2014/94/EU and future EU Regulation repealing Directive 2014/94/EU) and cableway installations designed to carry passengers (2016/424/EU).

41 technical bodies responsible

ASD-STAN	'Aerospace'
CEN/CLC/JTC 20	'Hyperloop systems'
CEN/CLC/JTC 5	'Space'
CEN/SS T03	'Road Vehicles'
CEN/TC 119	'Intermodal Loading Units and Cargo Securing (ILUCS)'
CEN/TC 15	'Inland navigation vessels'
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	'Light motorized vehicles for the transportation of persons and goods and related facilities and not subject to type-approval for on-road use'
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/TC 464	'Small Craft'
CEN/WS 069	'Car-Adaptations for Drivers and Passengers of Motor Vehicles'
CEN/WS 090	'Real drive test method for collecting emission'
CEN/WS 098	'Bionic Aircraft - ALM technology and bionic design'
CEN/WS 103	'Real drive test method for collecting vehicle in-cabin pollutant data'
CEN/WS 106	'Specification for bunkering of methanol'
CEN/WS 113	'Framework linking dismantled parts with new design components for the automotive industry in a circular economy model'
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/SR 107	'Process management for avionics'
CLC/SR 125	‚Personal e-Transporters (PeTs)'
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/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	'Standardization of electrical and electronic systems, equipment and associated software for use in all railway applications, whether on vehicles or fixed installations, including urban transport. This includes in particular communication, information, supervision and control Systems'

Standards published by CEN and CENELEC in the sector

CEN and CENELEC portfolio of deliverables: 3922 ENs + 284 other deliverables
Work Items currently in the Work Programme: 623 ENs + 41 other deliverables

Standardization requests from EC/EFTA

M/300 – Cableway installations
M/421 – On-board diagnosis and information management
M/483 – Interoperability of the rail system
M/486 – Urban Rail
M/496 – Space Industry
M/524 – Air Traffic Management
M/533 – Alternative Fuels Infrastructure
M/542 – Recreational craft II
M/557 – Marine equipment
M/567 – UAS (Drones)
M/569 – Caps & lids II
M/579 – Batteries
M/581 – Alternative Fuels Infrastructure II
M/XXX - Interoperability of the rail system II
M/XXX – Cableways Installations II

RAILWAYS

In the railway sector, CEN and CENELEC actively participate in the Sector Forum Rail, which brings together representatives from the railway industry (supply industry and networks), relevant European and international organizations (such as UIC, UNIFE, UITP), Technical Committee chairs and project leaders. Most European Standards in the rail sector are developed by CEN/ TC 256 'Railway applications' and by CLC/ TC 9X 'Electrical and electronic applications for railways'. These TCs collaborate with the European Railway Agency (ERA) with the aim to ensure that European Standards are compatible with the latest Technical Specifications for Interoperability (TSI). In this context, a new Standardization Request connected to the new (EU) 797/2016 will be finalised and implemented in 2022. It aims mainly to update and maintain the current collection of harmonised standards.

In 2023, CEN/TC 256 will work on the revision of the EN 15273 series on gauges. It will also revise other important standards, such as EN 12299 on the measurement and evaluation on ride comfort for passengers, EN ISO 3095 on the measurement of noise emitted by rail bound vehicles, EN 12080 on rolling bearings for axle boxes, and EN 13261 on product requirements of axles for wheelsets and bogies.

On the electric and electronic aspects of railways applications, CLC/TC 9X 'Electrical and electronic applications for railways' will start the first working draft of the EN 50728 revision. This standard is crucial for the railways sector as it defines requirements for testing rolling stock for electromagnetic compatibility with track circuits. More precisely, for the purpose of ensuring compatibility between rolling stock and track circuits systems, this European Standard defines the measurement and evaluation methods of the current emissions of rolling stock to demonstrate compatibility. The established limits for compatibility are defined as current levels at specified frequencies that can disturb the track circuit.

A wide array of manufacturers, operators and infrastructure managers are involved in the revision of this standard, which will strongly benefit the railways community. It is also important to note that this standard supports important requirements of the Directive (EU) 2016/797 on the interoperability of the rail system within the European Union, more precisely the Technical Specification on Interoperability on control command and signalling.

Another revision that will be undertaken by CLC/TC 9X regards the important EN 50463 series on energy measurement on board train. This series is crucial, as it covers major topics on energy measurement such as energy measuring, data handling, and conformity assessment. Finally, CLC/TC 9X will also initiate work on the EN IEC 62590 series on electronic power converters for fixed installations.

To maintain this sector's competitiveness, it is important to incorporate the relevant elements of research into existing or new standards. To this aim, CEN and CENELEC work in close collaboration with the Europe's Rail Joint Undertaking, based on a Memorandum of Understanding that was signed by the three organizations in 2021.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Aircraft and spacecraft, and related equipment - CEN continues to develop and maintain a broad range of products standards for the aeronautic industry in collaboration with ASD-STAN. However, to cover harmonised standards on the field, CEN is creating a new CEN/TC XXX 'Aviation and aeronautics'.

CEN and CENELEC coordinate the development of standards for space products and applications within CEN-CENELEC JTC5 'Space'. This committee is managed by the European Coordination for Space Standardization (ECSS), in line with the new EU Space Programme and as required in Standardization Request M/496 (under renewal). These standards will support the proposed EU Space Programme. New topics will be initiated in 2023 on the subject of 'Space Traffic Management'.

On the specific subject of Cabin Air Quality, CEN will pursue its cooperation with all stakeholders in the frame of CEN/TC 436 'Cabin Air Quality on civil aircraft - Chemical Agents', including EASA.

Motor vehicles - CEN/TC 301 'Road vehicles' develops standards in response to various EU Standardization Requests, including M/421 and M/581. In 2023, CEN/TC 301 will start revising EN ISO 16380 on blended fuels refuelling connectors and EN ISO 16662-2 on specific test procedures for supplementary grip devices for tyres of passenger cars and light duty vehicles.

Hyperloop technology - Recently created CEN and CENELEC JTC 20 'Hyperloop systems' will continue with the development of two standards on reference architecture and on transport services, and of a technical report on a standards inventory and roadmap. As the demand for standardization is important for this brand-new transport sector, JTC 20 is also planning to work on vocabulary definitions and general requirements.

Intelligent Transport Systems (ITS) - Intelligent Transport Systems (ITS) refers to efforts to collect, store and provide real-time traffic information to maximise efficiency, provide convenient and safe transport, and reduce energy by applying advanced electronics, information and telecommunication technologies to roads, automobiles, and goods.

Through its CEN/TC 278 'Intelligent Transport Systems', CEN cooperates closely with CENELEC, ETSI and ISO to ensure a coherent approach to standardization. It develops European Standards and Technical Specifications in response to various Standardization Requests and the EU Rolling Plan for ICT.

For instance, in 2023, the contribution of CEN/TC 278 in the Urban ITS area will be highlighted by the publication of CEN/TR 17868 'Intelligent transport systems - EU-ICIP - ITS standards deliverables'. This technical report aims to provide a Guide to Intelligent Transport System standards while simultaneously enabling the interoperability and regulated requirements for ITS in Europe, informing potential users of various options' compatibilities and incompatibility issues. A dedicated website also reflects this information.

On Electronic Fee Collections (EFC) standards, CEN/TC 278 will continue with the revision of its portfolio and expects to extend it to include 'Automatic Number Plate Recognition' technologies, where the interoperability between EFC systems in Europe is one of the essential objectives for standardization in the domain. This work will be done in response to a Standardization Request currently under discussion.

Regarding work on public transport, future publications of EN 12896-10 'Public transport - Reference data model - Part 10: Alternative Modes' and EN 15531-2 'Public transport - Service interface for real-time information relating to public transport operations - Part 2: Communications infrastructure' are expected.

Furthermore, CEN/TC 278's WG 3 is working on developing other deliverables linked to public transport, such as Service Interface for

Real Time Information (SIRI) and Network and timetable exchange (NeTEx).

Two technical specifications for SIRI ('Service Interface for Real Time Information (SIRI) - Passenger Real-Time Information' and 'Service Interface for Real-time Information (SIRI) - Part 6 Control Action') and one for NetEx ('Public transport - Network and timetable exchange (NeTEx) - Part 6 European Accessibility Profile') are all expected to be published in 2023.

Finally, in 2023 CEN/TC 278 is expected to launch the development of a new deliverable, 'NeTEx – part 7: European Fares Profile'.

Marine and Inland Navigation - CEN/TC 464 'Small Craft', in collaboration with ISO TC 188, is committed to developing a range of harmonised standards that give users presumption of conformity with the recreational craft and personal watercraft in support of Directive 2013/53/EU. Several European standards will be published in 2023: among them, EN ISO 21487 'Small craft - Permanently installed petrol and diesel fuel tanks', EN ISO 9094 'Small craft - Fire protection', and EN ISO 11591:2020 'Small craft - Field of vision from the steering position'. At the same time, the TC is preparing to work on buoyancy and escape means of multihulls.

CEN/TC 15 'Inland navigation vessels' will publish three standards in 2023: EN 1502 'Boarding stairs', EN 13281 'Safety requirements for walkways and working places' and EN 17361 'Outboard ladders'. These European standards will be referred to in Directive 2016/1629/EU on technical requirements for inland waterway vessels.

Cable-supported transport systems with cabins - CEN/TC 242 'Safety requirements for passenger transportation by rope' will continue with the revision of prEN 15700 'Safety for conveyor belts for winter sport or leisure use', a standard that is important for the safety of children using those devices. Other revisions of the standards on cableways installations will be initiated as soon as the related Sreq is approved.

Road equipment - In the frame of the future deployment of automated vehicles, CEN/TC 226 'Road Equipment' is investigating on the needs and possibilities to improve road signalling. The TC is in the process of finalising a series of TRs on the topic.

Transport of dangerous goods - CEN and CENELEC support the implementation of EU Directives on the inland transportation of dangerous goods (2008/68/EC) and on Transportable Pressure Equipment (2010/35/EU) by developing and adopting the relevant standards for referencing in RID/ADR, the major set of international treaties on the transport of dangerous good.

In this framework, CEN/TC 23 'Transportable gas cylinders' will start working on a revision of EN ISO 10286 on the vocabulary of gas cylinders and on an important amendment to EN ISO 11114-1:2020 on the metallic materials for compatibility of cylinder and valve materials with gas contents.

CEN/TC 296 'Tanks for the transport of dangerous goods' will start key work on an amendment to EN 12972:2018 on testing, inspection and marking of metallic tanks.

Furthermore, another TC, CEN/TC 268 'Cryogenic vessels and specific hydrogen technologies applications', will start the revision of EN ISO 24490 on pumps for cryogenic service and of EN ISO 21013-3 on the sizing and capacity determination for pressure-relief accessories for cryogenic service.

FURTHER INFORMATION
Transport (CEN)
Transport (CENELEC)

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Accessibility

The adoption of the 'European Accessibility Act' (Directive EU 2019/882) is a big step forward to promote the inclusion of the 80 million persons with disabilities in Europe. The Directive includes common accessibility requirements for a wide range of products and services and ensures that designers and producers of accessible products and providers of accessible services face fewer barriers to operating in the internal market.

European standardization has a role to play in ensuring the proper functioning of the EU internal market for accessible products and services, by developing consensus-based requirements and specifications.

European Standards are powerful tools to promote products and services that people with functional limitations, including persons with disabilities, can use on an equal basis with others. Persons with disabilities and ageing people, among others, benefit directly from a product, good or service that is easy to access, understand and use. Accessibility is also recognised as a human right by the UN Convention on the Rights of Persons with Disabilities and is at the core of the EU Disability Strategy.

CEN/BT/WG 213, the Strategic Advisory Group on Accessibility (SAGA), advises the CEN Technical Board on political and strategic matters related to accessibility. It is working to further promote the topic through the whole process of developing European Standards from the early stages.

7 technical bodies responsible

CEN/TC 10	'Lifts, escalators and moving walks'
CEN/TC 122	'Ergonomics'
CEN/TC 293	'Assistive products and accessibility'
CEN/TC 320	'Transport - Logistics and services'
CEN-CENELEC and ETSI JWG	'eAccessibility'
CEN-CENELEC JTC 11	'Accessibility in the Built Environment'
CEN-CENELEC JTC 12	'Design for All'

Standardization requests from EC/EFTA

M/587 - Accessibility requirements of products and services

ACCESSIBILITY REQUIREMENTS

In 2023, CEN, CENELEC, and ETSI will start to work in response to the Standardization Request on Accessibility addressed to them by the European Commission (i.e. M/587). This Standardization Request invites the ESOs to develop standardization deliverables that shall maximise the level of accessibility and ensure interoperability including with assistive devices in such a way as to maximise their foreseeable use by persons with disabilities.

This work will see the involvement of three existing technical bodies, namely the CEN-CENELEC and ETSI Joint Working Group on eAccessibility, the CEN and CENELEC Joint Technical Committee 11 'Accessibility in the Built Environment' and the CEN and CENELEC Joint Technical Committee 12 'Design for All'.

OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Ergonomics - CEN/TC 122 'Ergonomics' will finalise the adoption of ISO/TR 22411-2 'Guidance for use in the application of ISO/IEC Guide 71:2014 – Part 2: Ergonomics design considerations for accessibility' developed by ISO/TC 159 'Ergonomics'. The document provides ergonomics data for standard developers to be used in applying ISO/IEC Guide 71:2014 to address accessibility in standards. These data can also be used by ergonomists and designers to support the development of more accessible products, systems, services, environments, and facilities.

Accessibility in the built environment - CEN/CLC/JTC 11 'Accessibility in the built environment' will start the revision of EN 17210 'Accessibility and usability of the built environment - Functional requirements'. For more information on this topic, please refer to the relative section in the 'Construction' chapter.

MORE INFORMATION
Accessibility

Sustainability

CEN and CENELEC develop a large number of European standards supporting the protection of the environment, thus helping reach the objectives of the EU Green Deal and the Sustainable Development Goals of the UN 2030 Agenda. Standards help tackle climate change, ensure the conservation of our natural environment and implement the sustainable use of resources and energy. They are key tools that complement national and European policies aiming to lead the transition towards a green economy and reach the climate target of net zero by 2050.

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

Thanks to CEN and CENELEC's constant efforts towards greening European Standards, they can serve as a useful tool for companies and organizations to protect the environment. By using these standards, businesses and organizations not only meet legal requirements, but they can also benefit financially by reducing their use of resources such as energy and water, producing less waste, preventing accidents, improving resilience and avoiding clean-up costs and fines. In addition, by demonstrating their commitment to the environment, they can be perceived more positively by their current and potential customers, thus accessing more easily new business opportunities.

The CEN and CENELEC Strategic Advisory Body on the Environment (SABE) follows the latest economic and policy developments, and provides advice to the CEN and CENELEC Technical Boards and standard drafters on how to address them in standards in all relevant sectors. SABE maintains close cooperation with the European Commission and regularly discusses with policymakers how standards can support the implementation of environmental and climate-related policies. In 2023, SABE will focus on supporting standardization activities in the following priority fields of the Green Deal: biodiversity, toxic free environment, climate change, cleantech, raw materials and circular economy.

17 technical bodies responsible

CEN/TC 164	Water supply
CEN/TC 165	Waste water engineering
CEN/TC 183	Waste management
CEN/TC 223	Soil improvers and growing media
CEN/TC 230	Water analysis
CEN/TC 260	Fertilizers and liming materials
CEN/TC 264	Air quality
CEN/TC 308	Characterization and management of sludge
CEN/TC 335	Solid biofuels
CEN/TC 343	Solid recovered fuels
CEN/TC 351	Construction Products - Assessment of release of dangerous substances
CEN/TC 366	Materials obtained from End-of-Life Tyres (ELT)
CEN/TC 406	Mechanical Products - Ecodesign Methodology
CEN/TC 411	Bio-based products
CEN/TC 444	Environmental characterization of solid matrices
CEN/TC 454	Algae and algae products
CLC/TC 111X	Environment

Standardization requests from EC/EFTA

M/518 - WEEE
M/561 – Ozone precursors
M/588 – Industrial emissions

STANDARDS FOR THE SDGS

Last year, CEN and CENELEC started mapping the standards that make the most significant contribution to the UN Sustainable Development Goals (SDGs) in the European context (building on the work at the international level already done by ISO and IEC).

In 2023, CEN and CENELEC will continue to raise awareness among the European standardization community on SDGs and on the value of European Standards in support of the EU strategy towards achieving the twin green and digital transitions.

On the long term, this interactive mapping aims to reinforce, but also to move beyond, the more obvious links between the SDG and standards to explore new opportunities and strengthen synergies between stakeholders.

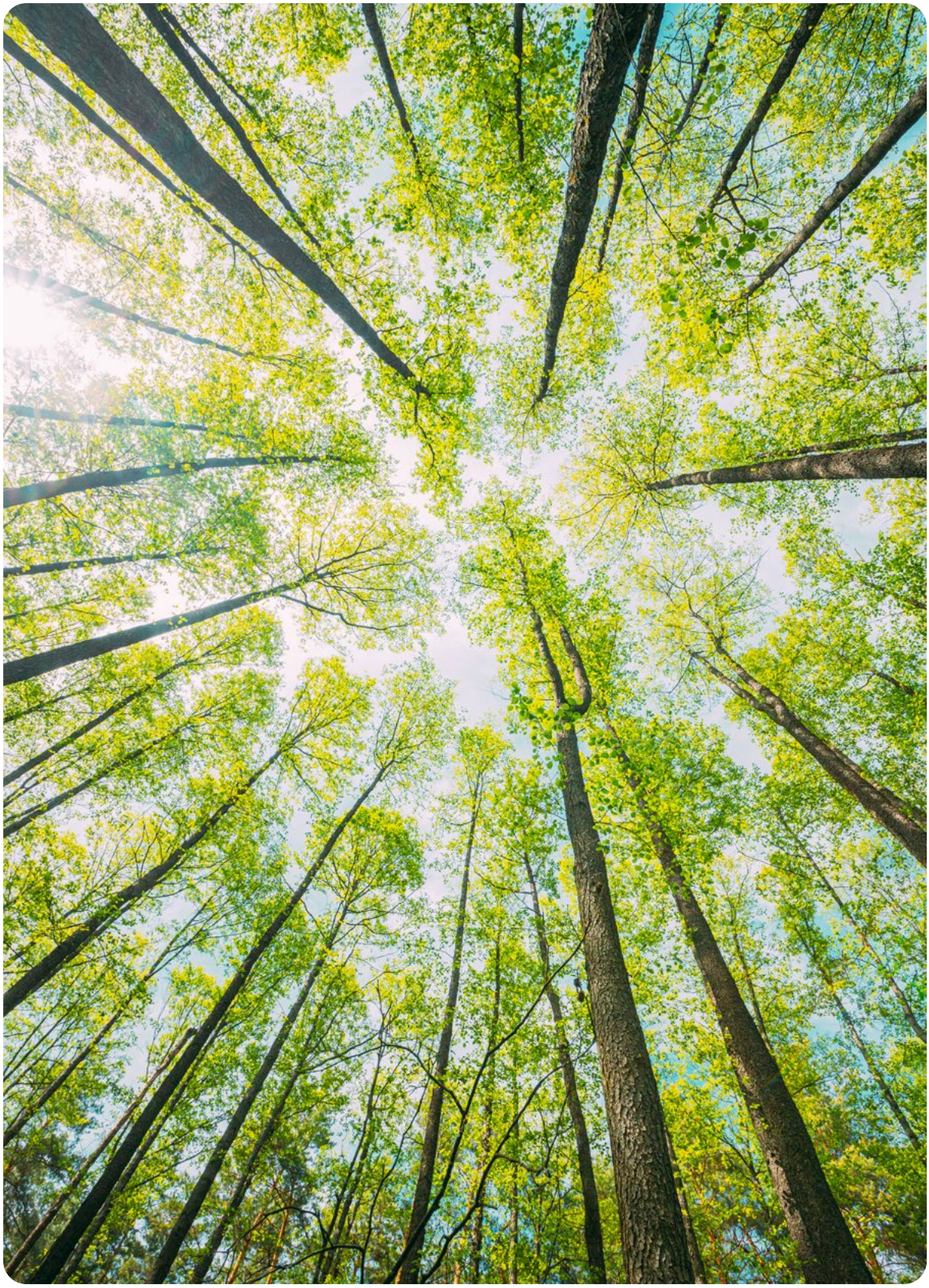
ADAPTATION TO CLIMATE CHANGE

CEN and CENELEC support the European effort to mitigate climate change and prepare for its unavoidable consequences. Since the publication of the first EU adaptation strategy in 2013, CEN and CENELEC have been working closely with the European Commission on climate-proofing key infrastructures by revising the relevant priority standards. The first set of standards that include adaptation solutions from various sectors is now being finalised.

The work should be considered as a pilot phase towards a more ambitious roll-out of adaptation mainstreaming in standards. According to the priorities set by EU Strategy on Adaptation to Climate Change (COM(2021)82), "the Commission will increase cooperation with standardization organizations to climate-proof standards and to develop new ones for climate adaptation solutions". Requests to standardization organizations to increase the climate resilience of infrastructure and standardise adaptation tools and methods are foreseen in 2023.

In 2023, the work on new guidance on mainstreaming climate resilience into standards and drafting new standards considering new scientific evidence on climate change and emerging methods will start.

CEN/TC 467 'Climate Change' will start working on 'Greenhouse gases: requirements and guidelines for the quantification of GHG emission reduction and removal enhancements from land agronomic management practices'. This new deliverable will describe the requirements, methods and tools eligible to quantify carbon footprint from land agronomic practices.



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OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Circular economy - CEN and CENELEC continue to put a big emphasis on the achievement of a Green and Circular Economy, which is one of the main pillars of the European Green Deal. Since 2020, a dedicated group of the CEN and CENELEC Strategic Advisory Body for the Environment has overseen the coordination of all circular economy initiatives. Its priority remains to help technical committees better understand circularity and connect technical work with policy objectives.

Waste Management - The deliverables of CEN/TC 183 'Waste management' specify technical requirements to, on the one hand, minimise significant hazards and hazardous situations which may occur during collection and transportation of waste, and, on the other, increase the efficiency of waste disposal processes. In 2023, the TC will publish EN 1501-4 'Refuse collection vehicles - General requirements and safety requirements - Part 4: Noise test code for refuse collection vehicles', which will provide a procedure for the measurement and calculation of sound power emitted by Refuse Collection Vehicles. This will enable manufacturers and importers to mark and certify rear loaded, side-loaded and front-loaded Refuse Collection Vehicles in compliance with EU Directive 2000/14/EC (Noise Emission in the Environment by Equipment for Use Outdoor).

The committee will also finalise EN 17367 'Waste Management - Data communication between communication management system and the back-office system for stationary waste collection containers - Functional specification and the semantic data model'. This new standard aims to realise the interoperability between communication management systems of waste collection containers and related back-office systems of waste processing companies.

Environmental characterization of solid matrices - CEN/TC 444 'Environmental characterization of solid matrices' develops horizontal multi-matrix standards. It covers the standardization of test methods for the environmental characterization of soil, solid and liquid waste, biowaste and sludge. In 2023, CEN/TC 444 will adopt EN ISO 15799 'Soil quality - Guidance on the ecotoxicological characterization of soils and soil materials' at the European level. The document provides guidance on the selection of experimental methods for the assessment of the ecotoxic potential of soils and soil materials (such as excavated and remediated soils, refills, embankments) with respect to their intended use and possible adverse effects on aquatic and soil dwelling organisms.

CEN/TC 444 will also publish a CEN Technical Specification 'Characterization of waste - Determination of the content of elements and substances in waste', which will specify the minimum laboratory methods and performance requirements for analysis of laboratory samples of liquid and solid waste to determine the inorganic elements and organic substances content of waste.

Air quality - CEN/TC 264 'Air quality' closely follows the latest technical research and policy developments related to the identification of air pollutants. It develops and revises standards that allow the measurement and the comparison of measurement results for known pollutants across the EU, in line with the current European legislation. The standardization work under the ozone precursor mandate M/561 will continue in 2023 and the committee will pursue the development of standards describing technical solutions for measuring volatile organic compounds listed in Directive 2008/50/EU on ambient air quality and cleaner air for Europe (such as ethane, ethylene, etc.).

The objective of measuring ozone precursors substances is to check the efficiency of emission reduction strategies and the consistency of emission inventories. The development of a common measurement method to be defined in the requested standards will allow the assessment of ozone precursors based on common criteria to ensure accuracy and precision of measurements and allow data compatibility.

In 2023, CEN/TC 264 will also initiate work in support of M/588 'Emissions into the air of polychlorinated dibenzo-dioxins and furans (PCDDs/PCDFs) and dioxin-like polychlorinated biphenyls (PCBs), total gaseous mercury and formaldehyde in support of Directive 2010/75/EU'. Said Directive 2010/75/EU lays down rules on integrated prevention and control of pollution arising from industrial activities. It is to be noted that the development of European standards for monitoring emissions will contribute to the achievement of objectives of the European Green Deal to better monitor, report, prevent and remedy air pollution.

Environment - In 2023, CLC/TC 111X 'Environment', together with IEC's Technical Committee 111 'Environmental standardization for electrical and electronic products and systems', will develop EN IEC 82474-1 'Material declaration – Part 1: General requirements'. This document will benefit all industries by establishing requirements for reporting on material and substance product, material efficiency and product circularity data, standardizing protocols, and facilitating the transfer and processing of data. Material declarations are used by many industries to track and declare specific product information used for compliance, the preparation of product (digital) passports and/or environmentally conscious design (ECD) considerations.

The committee will also continue working on EN IEC 63395 'Sustainable management of waste electrical and electronic equipment (e-waste)' together with IEC/TC 111. This standard aims to facilitate the systematic and sustainable management of waste electrical and electronic equipment, thereby preventing the inappropriate disposal of e-waste. The document will provide a framework for assuring consumers and other stakeholders on the safety of equipment and the quality of re-use and recycling operations, thus facilitating resource circularity for electrical and electronic equipment.

In addition, the committee will continue the development of several standards of the series EN IEC 62321 'Determination of certain substances in electrotechnical products'.

CLC/TC 111X will also work on the delivery of a European Commission Ancillary Action on 'Material efficient recycling and preparation for re-use of Critical Raw Materials (CRMs) from different waste streams'. The work started in 2021 and will continue in 2023. The outcome will be a report comprising the mapping of already existing national, European and international standards in the area of waste treatment and production of secondary critical raw materials.

MORE INFORMATION
Environment and sustainability

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Smart technologies

Technologies are becoming 'smarter' every day and capable of adapting their behaviour to fit the environment through wireless access, sensors, and data. The Internet of Things (IoT) is one of the enablers of the fourth industrial revolution, known as Industry 4.0, as it fosters automation and data exchange in manufacturing technologies.

Standardization needs to adapt quickly to cope with developments such as the rapid changes in the markets, their increased levels of complexity, the changing business environment, and a more dynamic and inclusive society. Lines between traditional standardization sectors are blurred, thus requiring effective action to break down the traditional approach based on vertical silos. Furthermore, the concepts of smartness and digitalisation should not only be addressed in terms of technological performance, but also considered in the process of long-term sustainable development. Standards provide a basis for integrating technologies into complex systems, preventing vendor lock-ins, and facilitating interoperability and data exchange.

For these reasons, standards play a crucial role in the consolidation of the European Single Market and contribute to the competitiveness of European industry. CEN and CENELEC are engaged in several activities on topics such as smart grids, smart cities, cybersecurity, Artificial Intelligence, blockchain, distributed ledger technologies and quantum technologies. The two organizations work together to develop standards supporting the development of an open competitive market and actively cooperate with ISO and IEC to reach agreements on common standards that can be applied worldwide. For more information on these topics, please refer to the chapter on *'Digital Society'*.

55 technical bodies responsible

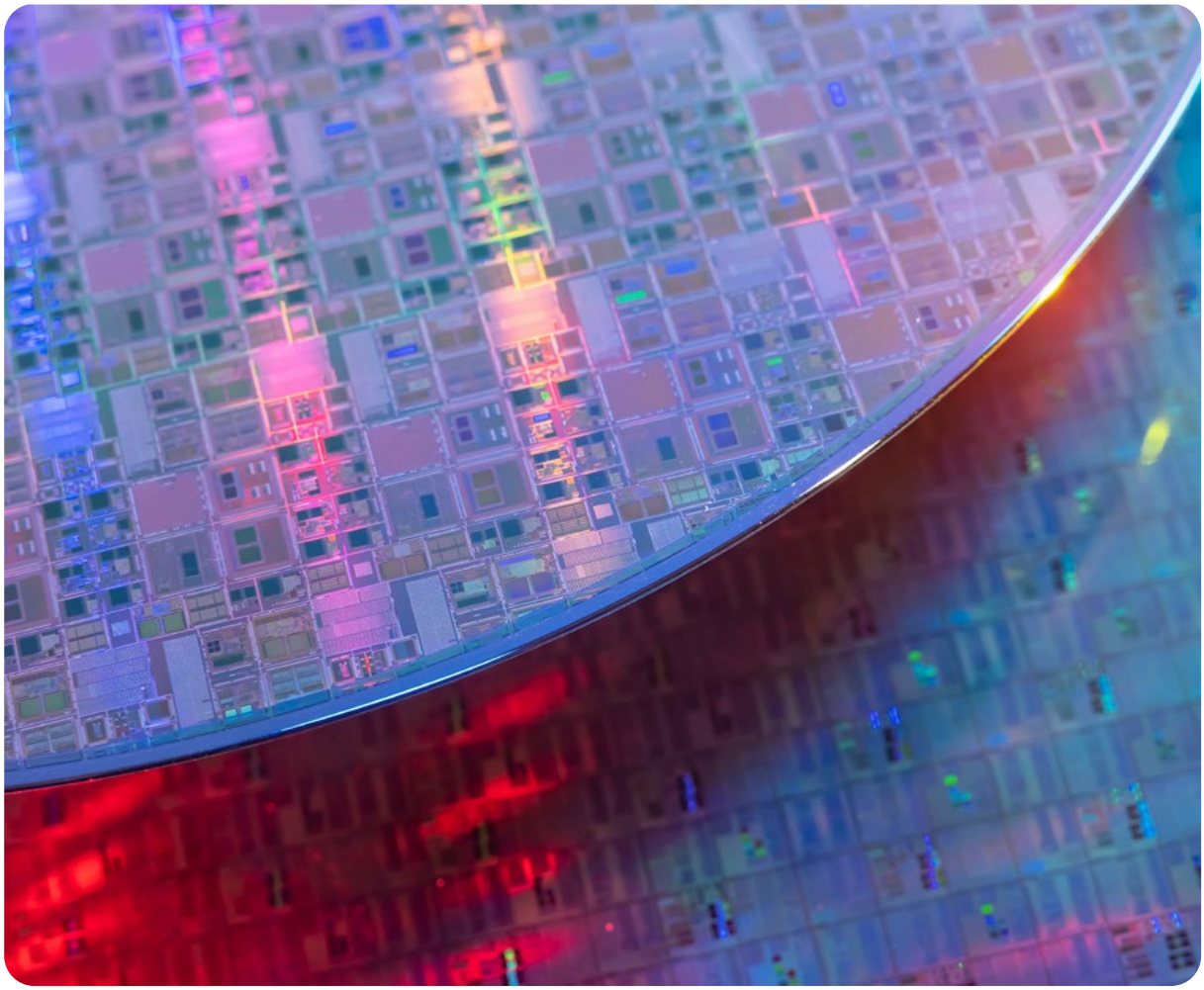
CEN/TC 92	Water meters
CEN/TC 171	Heat cost allocation
CEN/TC 176	Heat meters
CEN/TC 224	Personal identification and related personal devices with secure element, systems, operations and privacy in a multi-sectorial environment
CEN/TC 225	AIDC technologies
CEN/TC 234	Gas infrastructure
CEN/TC 237	Gas meters
CEN/TC 247	Building Automation, Controls and Building Management
CEN/TC 251	Health informatics
CEN/TC 278	Intelligent transport systems
CEN/TC 287	Geographic Information
CEN/TC 294	Communication systems for meters
CEN/TC 318	Hydrometry
CEN/TC 353	Information and Communication Technologies for Learning, Education and Training
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 465	'Sustainable and Smart Cities and Communities'
CEN/WS 084	Self-Sovereign Identifier for Personal Data Ownership and Usage Control (CEN WS ISÆN)
CEN/WS FATEDA	Standards-Compliant Formats for Fatigue Test Data
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 SCS	Description and Assessment of Good Practices for Smart City Solutions
CEN/WS XFS	eXtensions for Financial Services
CLC/WS 04	Interoperability framework requirements specification for services to the home (IFRS)
CLC/TC 8X	System aspects of electrical energy supply
CLC/TC 13	Electrical energy measurement and control
CLC/TC 46X	Communication cables
CLC/TC 57	Power systems management and associated information exchange
CLC/TC 59X	Performance of household and similar electrical appliances
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
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 205	Home and Building Electronic Systems (HBES)
CLC/TC 209	Cable networks for television signals, sound signals and interactive services
CLC/TC 210	Electromagnetic Compatibility (EMC)
CLC/TC 215	Electrotechnical aspects of telecommunication equipment
CLC-ETSI/JWG	Digital Dividend
CEN-CLC-ETSI JWG	eAccessibility
CEN-CLC-ETSI SF	Smart and sustainable cities and communities
CEN-CLC-ETSI	Coordination Group on Smart Energy Grids
CEN-CLC-ETSI	Coordination Group on Smart Meters
CEN-CLC/JTC 13	Cybersecurity and Data Protection
CEN-CLC/JTC 19	Blockchain and Distributed Ledger Technologies
CEN-CLC/JTC 21	Artificial Intelligence
CEN-CENELEC Focus Group on Quantum Technologies	
CEN-CENELEC Focus Group Artificial Intelligence	
CEN-CLC/WS INACHUS	Urban search and rescue (USaR) robotic platform technical and procedural interoperability
CEN-CLC/WS SEP2	Industry Best Practices and an Industry Code of Conduct for Licensing of Standard Essential Patents in the field of 5G and Internet of Things
CEN-CLC/WS SEP-IoT	Workshop on Best Practices and a Code of Conduct for Licensing Industry Standard Essential Patents in 5G and the Internet of Things (IoT), including the Industrial Internet and connectorised components

CHIPS AND SEMICONDUCTORS

Due to the global shortage of chips experienced in the last two years, it has become an urgent priority for Europe to secure and reinforce its chips manufacturing value chain. In this regard, the European Commission has put forward the European Chips Act, aiming at bolstering Europe's competitiveness and resilience and achieving both the digital and green transitions. This commitment is reflected by the *EU's Annual Union Work Programme 2022*, which sets semiconductors as a priority for European standardization. The objective is to make available standards in support of the certification of chips to ensure they are secure, authentic, and reliable.

In 2023, CEN and CENELEC will continue to engage with European stakeholders to perform pre-standardization research activities to address gaps and opportunities for the development of future deliverables that will address the European needs. It will be the basis for the development of a European standardization roadmap that will be made available in 2023, with the organization of dedicated workshops.



OTHER STANDARDS AND ACTIVITIES TO BE DEVELOPED IN 2023

Smart buildings - In 2023, CLC/TC 205 'Home and Building Electronic System (HBES)' will develop a technical specification on IT security and data protection as a user guide for installers, system integrators and administrators.

Furthermore, CLC/TC 205 will develop prEN 50090-4-4 'Home and Building Electronic Systems (HBES)- Part -4-4 HBES IoT Point API', a new homegrown standard which provides a mapping of HBES application layer data.

Finally, TC 205 is also collaborating with CEN/TC 247 WG4 'Open System Data Transmission' on a document on 'Smart buildings'.

CLC/TC 59X 'Performance of household and similar electrical appliances' will continue the development of the EN 50631-1 series 'Household appliances network and grid connectivity'. This document specifies how sets of products from multiple manufacturers can exchange information with Home and Building/Customer Energy Management Systems, located in a home network or in the cloud. This document focuses on the interoperability of household appliances and describes the necessary control and monitoring. It defines a set of functions of household and similar electrical appliances. The standards series will provide interoperability among various appliances in the home.

Smart Grids - In 2023, the CEN-CENELEC-ETSI Coordination Group on Smart Grids will continue advising on European standardization requirements and on ways to address them with regards to smart electrical grids and multicommodity smart metering standardization, including interactions between commodity systems (such as electricity, gas, heat, water). This includes interactions with end-users, including consumers and prosumers.

The Coordination Group will also promote the deployment of open and interoperable data architectures, the industry's wider implementation of standards for smart grids and meters, and will liaise with the international standardization organizations, ISO and – especially - IEC. This collaboration aims to achieve consistency between European and international standards, to avoid the duplication of work and ensure that a consolidated view is considered at international level.

Smart cities - The CEN-CENELEC-ETSI Sector Forum on 'Smart and Sustainable Cities and Communities' is the coordinating body for all European standardization activities in this field. The Forum's objective is to help address cities' standardization needs and help them become smarter and more sustainable by using standards. In 2023, it will coordinate activities and continue to provide advice to technical committees on the matter.

MORE INFORMATION
Smart grids and meters
ITS and mobility services

Strategy 2030: overview and implementation

CEN and CENELEC have put in place a Strategy for 2021-2030, aimed at addressing the long-term and disruptive challenges facing European standardization in the coming years. The CEN and CENELEC Strategy 2030 frames the agenda of the two organisations within the context of the twin digital and green transitions: the aim is to ensure that our standardization system and activities support and serve as decisive catalysts in the transformation towards a sustainable and globally competitive European economy.

Five strategic goals have been identified for CEN and CENELEC to focus on:

1. EU and EFTA recognise and use the strategic value of the European standardization system
2. Customers and stakeholders of CEN and CENELEC benefit from state-of-the-art digital solutions
3. The use and awareness of CEN and CENELEC deliverables increases
4. The CEN and CENELEC system as the preferred choice for standardization in Europe
5. The leadership and ambition of CEN and CENELEC at international level is strengthened

A rolling **Implementation Plan** has been put in place to support the delivery of the goals and priorities identified in Strategy 2030. CEN and CENELEC have also introduced a **Measurement Framework** with Key Performance Indicators to monitor progress. In addition, a **Monitoring and Accountability Framework** has been designed to establish a fit-for-purpose delivery architecture, enabling an agile and responsive implementation of Strategy 2030. Key characteristics of this architecture include a project-based approach and the set-up of a **Project Management Office** (PMO) within the CEN and CENELEC Management Centre foreseen for 2023.

After a first batch of projects was implemented in 2022, and building on initial results, a series of project proposals have been approved for implementation in 2023:

- **P1. Timely Citation of Harmonised Standards.** Continuing from the previous year and based on the initiatives agreed upon within a joint ESO-EC task force, this project aims at addressing inefficiencies and challenges across the entire value chain of standardization processes in support of EU policies and legislation. The ultimate objective is to deliver a smooth referencing system for Harmonised Standards.
- **P2. Enabling Digital Transformation Strategy Project Data and strategic fit.** Also this project is a continuation from previous years, and it aims at meeting the evolving needs of stakeholders by leveraging **digital** skills, business models and tools. P2 was conceived from the outset as a multi-year project. In 2023, P2 will primarily focus on continuing the ongoing work on the following digital projects:
  - **Online Collaborative Authoring:** its objective is to provide an online tool for experts to develop standards which improves efficiency, collaboration, transparency and quality throughout the production chain;
  - **Standards of the Future:** it aims to ensure standards users have access to standards which meet their digitalisation needs by enabling CEN and CENELEC members to develop machine-readable standards.

- **P3. Assessing User Needs.** Building on the insights generated through a mapping and health check of existing user needs across the CEN and CENELEC system in 2022, Project 3 in 2023 intends to further analyse how CEN and CENELEC can better meet emerging users' needs. It is important to note that the P3 project proposal for 2023 will only be approved in February 2023, as it builds on insights from a comprehensive assessment report that is currently being developed.
- **P4. Inclusiveness and Diverse Representation Dashboard.** Building on an assessment of stakeholder representation in the CEN and CENELEC Technical Bodies in 2022, in 2023 Project 4 intends to assess the inclusiveness and diversity at the individual level of technical experts participating in standardization activities, effectively complementing ISO and IEC's efforts on the topic at European level. In doing so, P4 aims to develop a gap-analysis to identify outstanding needs and pain points to further enhance the inclusiveness, diversity, and transparency of our system.

Research and innovation

Integrating input from research and innovation into standardization is key to ensure the timely identification of future standardization opportunities.

Within CEN and CENELEC, **BTWG 'STAIR' (STAndards, Innovation and Research)** is the focal point for any matter regarding the integration of standardization with innovation and research. STAIR's objectives are strengthening engagement with research and innovation communities, seizing opportunities for standardization to bridge the gap between research outcomes and the market, and reinforcing channels to identify new standardization areas for CEN and CENELEC.

Examples of activities in support of those strategic goals are:

- Standards+Innovation Awards: the Awards are presented annually to researchers, innovators, and research projects who have contributed to standardization. The 5th edition of the Standards+Innovation Awards will be presented in 2023.
- Putting Science into Standards (PSIS): this annual foresight initiative is organised in collaboration with the European Commission's Joint Research Centre. Seven workshops took place since 2013. The eighth edition of PSIS will take place in 2023.
- Screening Horizon Europe calls for proposals to identify opportunities for CEN and CENELEC and their Members to use standardization to valorise new knowledge developed by research projects.
- Ongoing **horizon scanning** activities to identify innovative topics representing new opportunities for future standardization.
- Regular process inviting CEN and CENELEC Technical Bodies to submit metrology research needs in support of their standardization activities which can lead to a proposed research topic within the European Association of National Measurement Institutes (EURAMET).
- In 2023 CEN and CENELEC foresee to influence the EU R&I Agenda more proactively by feeding pre-normative topics from the CEN and CENELEC system into Horizon Europe Strategic Plan.

Inclusiveness of the European Standardization System

CEN and CENELEC, with their members the national standardization organisations, are fully committed to supporting all interested stakeholders, such as organisations representing consumers, workers and environmental interests, as well as small and medium-sized enterprises (SMEs) in standardization. Stakeholders are encouraged to engage with their national standardization organisations and, through them, take part in the European and international standardization system.

To further reinforce the representativeness of societal stakeholders and of SMEs in the process of developing standards, CEN and CENELEC encourage and facilitate their appropriate representation and effective participation at the different stages of the development of European standards or other deliverables. In particular, European stakeholder organizations – the European Consumer Voice in Standardisation (ANEC), the Environmental Coalition on Standards (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 workers' interests) has signed a partnership agreement with CEN only.

In line with CEN and CENELEC Guide 25 'The concept of partnership with European organizations and other stakeholders', partnerships with stakeholder organisations are developed taking into account their complementary roles and are respectful of the different levels at which such cooperation may take place, be it national or European. However, partnerships developed under Guide 25 are only complementary to the need for the members of the partner organisations to participate in the work of their national standard bodies and national electrotechnical committees, where national opinions are formed, votes are decided, and consensus is built.

Supporting SMEs' participation

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

- An online 'SME Toolbox of Solutions' describes the benefits of standards, how to find the right standards and where to obtain relevant information.
- 42 national SME helpdesks are service centres that provide direct support the SMEs' participation in the standardization system.
- CEN and CENELEC Guide 17 'Guidance document for standard writers taking into account SME needs' gives advice and recommendation to standard writers on how to take into account SMEs needs. The Guide is available in 27 languages and has also been jointly adopted by ISO and IEC and published as ISO/IEC Guide 17.

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

All the above-mentioned tools, and others, will continue to be used in 2023 to reach CEN and CENELEC's objective to facilitate SMEs' participation in standardization at national and European level. This includes the development of other relevant materials dedicated to entrepreneurs, managers and employees who work for SMEs to learn about standardization in a way that corresponds with their own needs, particularly in support of the CEN-CENELEC Action Plan in support of the EU Standardization Strategy.

Including societal stakeholders

Standards can have a broad impact on society, especially on the safety and well-being of citizens, the efficiency of networks, the environment, the safety of workers and working conditions, accessibility and other public policy fields. For this reason, it is crucial that all relevant parties that have an interest

in a particular standard contribute to its development. This is why CEN and CENELEC encourage and facilitate the appropriate representation and effective participation of consumer and environmental organisations and representatives of trade unions in their standardization activities, in particular through the so-called Annex III societal organisations: ANEC, ECOS and ETUC. A dedicated Societal Stakeholders Group (SSG) has been set-up as a CEN and CENELEC Advisory Body that provides a high-level framework for ongoing cooperation and dialogue. Furthermore, like the toolbox for SMEs, dedicated tools for the different societal stakeholders are also available on the CEN and CENELEC website. CEN and CENELEC also launched in 2018 'Standards for all', an eLearning course for societal stakeholders on standardization.

CEN and CENELEC's efforts to further include societal stakeholders in standardization will continue in 2023, particularly in support of the CEN and CENELEC Action Plan in support of the EU Standardization Strategy.

Promoting Gender Responsive Standardization

CEN, CENELEC and their Members recognise the influential role of standards in our society and believe that it is essential to include a gender-lens in the standards development process and the European system.

Understanding and addressing the diversity of our society brings higher-quality standards that ensure safe and secure products and environments for all. For this reason, CEN and CENELEC, together with more than 20 National Standardization Organizations, Members of CEN and CENELEC, signed the UNECE Declaration for Gender Responsive Standards, and pledged to create and implement a Gender Action Plan to support more gender-balanced and inclusive standards development processes, as well as to strengthen the gender responsiveness of standards themselves. The implementation of the second CEN and CENELEC Gender Action Plan was approved, to be kicked-off in January 2023 for a period of 3 years.

The CEN and CENELEC Informal Coordination Group on Gender Diversity and Inclusion, set up under the 1st Gender Action Plan in 2020, will continue its efforts towards further embedding Gender Responsiveness in the CEN and CENELEC System and fostering Gender equality in Standardization, in support to CEN and CENELEC Strategy 2030.

Industry Advisory Forum

The Industry Advisory Forum (IAF) was first established in 2018, offering a flexible mechanism for industry representatives to contribute with their views to CEN and CENELEC's standardization work. The aim of the Forum is to provide a platform for dialogue with high-level industry representatives to advise on strategic standardization topics for European industry. The objective is to ensure that CEN and CENELEC provide an agile and innovative system, able to meet market needs. A second 3-year mandate of the IAF officially kicked-off in 2022, gathering 18 high-level industry representatives from diverse sectors. The group benefits from strategic knowledge and experience that will allow it to support the implementation of the CEN and CENELEC Strategy 2030 by offering recommendations on identified standardization priorities; address the industry challenges, expectations and concerns; and identify common solutions.

European Affairs

2022 was the year of standardization, setting many new priorities that will be undertaken in 2023. With the release of the European Standardization Strategy, stakeholders from throughout the standardization community have seen the value that standards add to the Single Market and received a glimpse of where it will be headed in the future.

By properly observing the New Legislative Framework, all stakeholders work harmoniously in their respective roles and responsibilities, developing a more efficient use of resources and agile workflows that encourage innovation. One of CEN and CENELEC's main goals from Strategy 2030, that will drive their activities in 2023, is to re-establish a more direct and constant relationship with the EU institutions.

With this objective in mind, in 2022 CEN and CENELEC celebrated with the rest of Europe the European Year of Youth. As the European Standardization System continues to evolve, it will rely on young and developing standardization experts to bring it into the future. The same approach will be followed in 2023 for the European Year of Skills: over the course of the year, CEN and CENELEC will use the occasion to highlight the importance of standards in fostering Europe's skills and identify ways to attract new skills to the standardization system.

A few major highlights of joint policy events that will continue into 2023 include:

- **European Standardization Strategy:** Now that the strategy has been published, the European Commission will keep up the momentum and meet the expectations of the 22 recommendations that were determined in the Strategy. While this year saw a review of the New Legislative Framework, Amendment to Regulation 1025/2012, Annual Work Programme for Standards, and several stakeholder events, next year will be met with high expectations.
- **World Standards Day and the UN 2030 Agenda Sustainable Development Goals:** Every year on 14 October, the international standardization community celebrates World Standards Day. The 2022 edition "Our shared vision for a better world" was dedicated to how standards support the Sustainable Development Goals of the United Nations (SDGs). In 2023, CEN and CENELEC will promote their own standardization mapping of 4783 deliverables.
- **Timely Delivery of Standards:** In the spirit of progress, CEN and CENELEC have also worked on optimising the timely delivery of standards by co-organising the task-force "Timely delivery of European standards for a Green and Digital, Single and Global Market" together with ETSI, the European Telecommunications Standards Institute, and the European Commission and EFTA. Also in 2023, this joint Task Force will continue to pursue improvements to the European Standardization System. Representatives included high-level speakers from the European Standardization Organizations, the industry, and experts from the European Commission's Directorate Generals (such as DGs GROW, SANTE, CONNECT, DEFIS and ENER).

In parallel, CEN and CENELEC plan to continue strengthening their relationship with National Members with regards to European Affairs activities. In the last three years, activities dedicated to European Affairs became progressively more operational, involving Members' representatives and developing systematic sharing of resources and information. This cooperation includes the **European Policy Hub** (EPH), which since its development in 2019 has consisted of the EU standardization policy/public affairs staff of CEN and CENELEC's Members. Its aim is to coordinate and create synergies that anticipate or act on current European policy issues.

This group has extended into its hybrid counterpart, **European Policy Hub-Brussels Arm** (EPH-BA, 2020): it consists of a team of volunteer staff from CEN and CENELEC members directly seconded to Brussels to join the European policy engagement activities, with the intention to further enhance the position of standardization in European policy.

In 2023, CEN and CENELEC will also continue to pursue bilateral discussions with influential MEPs and Commission officials in order to embrace the importance of standards for the overall welfare of our economies and our societies. In doing it, the two organizations will build on the significant work done in 2022, which included 11 position papers and responses to consultations: among them, CPR, New Legislative Framework, Partnership with the Gulf, Standard Essential Patents, Outdoor Noise Directive, Sustainable Products Initiative, Civil-defence synergies, New European Innovation Agenda, Common Chargers , Code of Practice on standardization for researchers, and Amendment of Regulation 1025/2012.

Standards play an instrumental role in a successful European Single Market. This is why CEN and CENELEC look forward to the activities of the 30 Year Anniversary of the Single Market in 2023.

International Cooperation

CEN and CENELEC are committed, as a top priority, to promoting the participation in ISO and IEC and the uptake of ISO and IEC standards by all partners.

In 2023, CEN and CENELEC will also work on developing the existing cooperation with their regional and national standardization priority partners in the Gulf (GSO), India (BIS), Japan (JISC), China (SAC), and Africa (ARSO and AFSEC).

Additional activities undertaken in the framework of these partnerships vary, depending on the topics of interest identified with each partner. Foreseen activities will include:

- Supporting the EU-Japan Industrial Policy Dialogue;
- Identifying additional areas of common interest with JISC;
- Implementing the new Cooperation Agreement with SAC (China) signed in September 2022;
- Strategic and information-exchange meetings with SAC through CEN-CENELEC TF China;
- Identifying further technical collaboration activities with GSO;
- Identifying areas of technical collaboration of mutual interest with BIS;
- Exploring possibilities to contribute to the European Commission's African Market Access and Trade Competitiveness Action, specifically with regards to strengthening pan-African Standardization bodies, and continuing to build long-standing partnerships with our African counterparts, including ARSO and AFSEC.

In 2023, CEN and CENELEC will also further strengthen their cooperation with the Companion Standardization Bodies (CSBs) by exploring opportunities to offer additional services. The two organizations will also continue to contribute as a stakeholder to the Working Group 1 of the EU-US Trade and Technology Council.

Finally, CEN and CENELEC expect to continue developing the CEN and CENELEC Global Outreach Report, their flagship publication outlining the main data regarding their international activities.

The presence of European Standardization in China and India

In 2023, CEN and CENELEC, together with ETSI, EFTA and the European Commission, will continue supporting the two visibility projects 'Seconded European Standardization Expert in China' (SESEC) and 'Seconded European Standardization Expert in India' (SESEI). These projects, which build on the success of the European Standardization model in sharing experiences, provide intelligence and facilitate bilateral cooperation on standardization matters, thereby supporting European companies in accessing the Chinese and Indian markets. SESEC and SESEI participate actively and effectively in Task Force China and Task Force India, respectively.

- **China:** in 2023, the fifth phase of the SESEC project will build on the success of previous phases to foster partners and stakeholders' dialogues with their Chinese counterparts. In particular, it will bring regulatory and standardization-related information to European stakeholders and support European businesses' market access in China.
- **India:** in 2023, the fourth phase of the SESEI (SESEI IV) will close in February. A proposal for a fifth phase (SESEI V) is under preparation and will be submitted to the European Innovation Council and SMEs Executive Agency in January. SESEI V will maintain the structure and composition of the previous phase but run for a shorter period of one year. It will continue to develop activities

of common interest for Europe and India, and those identified in an industry survey, which include sectors such as ICT, Electrical equipment including Consumer Electronics, Mobility including Railways, Smart Cities, and Circular Economy. It will also foster the development of a strong partnership with BIS, the Indian National Standardization Body.

Events 2023

The organisation of events is one of the most effective ways in which CEN and CENELEC raise awareness on the European standardization process and create lasting networks among all stakeholders involved in it.

In 2023, building on the expertise and tools developed to face the Covid pandemic, CEN and CENELEC plan to organise a series of online, in-person and hybrid events to meet direct stakeholders' needs varied and evolving needs.

The preliminary list of events proposed for 2023 contains a variety of concepts and focusses on CEN and CENELEC's priorities for the future. Among them, the following are worth highlighting:

- **Stakeholders Engagement Workshops:** pro-active stakeholder engagement activities allow CEN and CENELEC to position themselves on high priority standardization topics and respond to newly emerging or urgent market needs in a timely manner. Such tailored events achieve different objectives at the same time: facilitate direct exchanges on key stakeholders' needs and challenges; identify standardization solutions; establish key priorities for a future roadmap; and continue to ensure the diversity of expertise is captured in the standardization development processes. In 2023, two workshops will be organised under the overarching theme of Standards in support of the Twin Green and Digital Transitions of the European ecosystems.
- **Putting Science into Standards (PSIS):** the eighth edition of the PSIS workshop, jointly organised by CEN and CENELEC and the Joint Research Centre of the European Commission (JRC), will take place in 2023. These workshops aim to facilitate the identification of emerging science and technology areas that could benefit from standardization to enable innovation and promote industrial competitiveness.
- Cybersecurity Standardisation Conference 2023: the three European Standardization Organisations CEN, CENELEC and ETSI, will be joining forces with ENISA, the European Union Agency for Cybersecurity, to organise the seventh edition of the Cybersecurity Standardisation Conference. The event will take place on the 7 February 2023. Its aim is to foster dialogue among policy makers, industry, research and standardisation organisations, in view of an effective implementation of the EU cybersecurity legislation.

A complete overview of the events organised by CEN and CENELEC in 2023 will be available on the dedicated page on their website.

Trainings

In 2023, CEN and CENELEC will host a webinar on Harmonized Healthcare standards, providing an update on the latest developments regarding the preparation of harmonized standards (hENs) for Healthcare.

In addition, CEN and CENELEC will organise the following recurrent trainings:

- **Webinars for Standard Drafters:** they consist of webinars for Technical Body Secretaries and TC Working Group convenors. These webinars aim at creating a common understanding of the drafting rules and the related procedures. At the same time, it is an excellent opportunity for editors at the CEN and CENELEC Management Centre (CCMC) to better understand TCs' expectations and strengthen working relationships with Technical Bodies.

- **IT Tools trainings:** they consist of trainings dedicated to CEN and/or CENELEC IT Tools, depending on the updates of the tools or needs of the customers.
- **Technical Body officers training (December 2023):** this training is especially targeted to newly appointed Technical Body Officers and it helps them become more acquainted with the standards development process and the European standardization system.
- **Technical Body Seminar with PIN Award Ceremony (December 2023):** the Technical Body Seminar provides Technical Body Officers with an overview of the major novelties in CEN and CENELEC rules and procedures over the last two years, including future trends and challenges. It also offers a platform where Technical Body Officers share information and exchange ideas on subjects directly related to standardization. It concludes with a ceremony paying tribute to a selection of officers.

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

ASI - Austrian Standards International
www.austrian-standards.at

OVE - Österreichischer Verband
für Elektrotechnik
www.ove.at

Belgium

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

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

Bulgaria

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

Croatia

HZN - Hrvatski zavod za norme
www.hzn.hr

Cyprus

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

Czech Republic

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

Denmark

DS - Dansk Standard
www.ds.dk

Estonia

EVS - Eesti Standardikeskus
www.evs.ee

Finland

SFS - Suomen Standardisoimisliitto ry
www.sfs.fi

SESKO - Suomen Sähköteknillinen Standardisoimisjärjestö
www.sesko.fi

France

AFNOR-Comité Electrotechnique Français
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

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
https://www.ceinorme.it/

Latvia
LVS - Latvijas standarts
www.lvs.lv

Lithuania
LST - Lietuvos standartizacijos departamentas
https://lsd.lrv.lt/en/

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

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
http://www1.ipq.pt/PT/Pages/Homepage.aspx

Republic of North Macedonia
ISRSM - Институт за стандардизација на Република Северна Македонија
https://isrsm.gov.mk/en/

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

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

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

Slovenia
SIST - Slovenski inštitut za standardizacijo
www.sist.si

Spain
UNE - Asociación Española de Normalización
www.une.org

Sweden
SIS - Swedish Standards Institute
www.sis.se

SEK - Svensk Elstandard
www.elstandard.se

Switzerland
SNV - Schweizerische Normen-Vereinigung
www.snv.ch

Electrosuisse
www.electrosuisse.ch

Türkiye
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 recognised 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.

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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 2022*

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