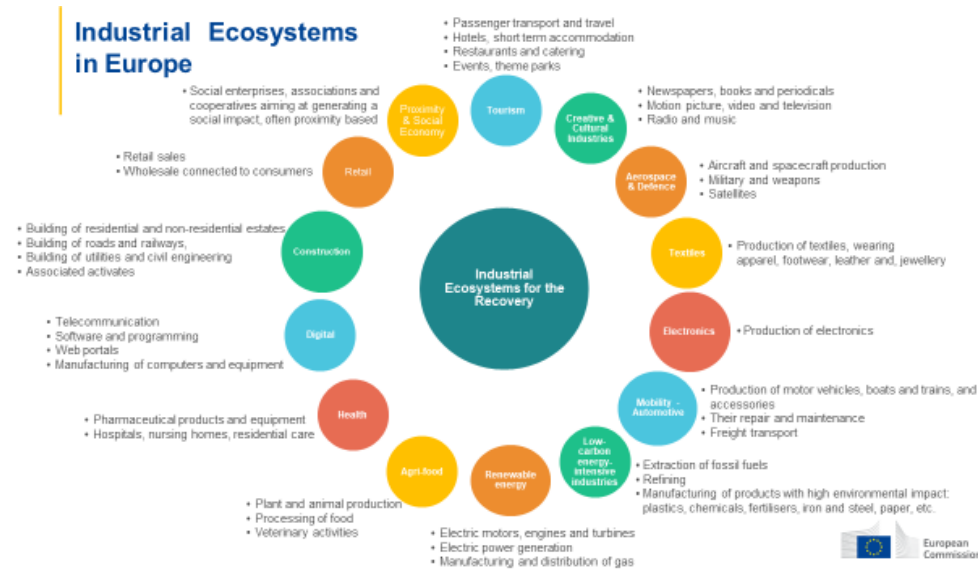


Industrial Ecosystems in Europe

Technical Mapping

The European Commission issued [Europe's moment: Repair and Prepare for the Next Generation \(Recovery plan\)](#) on 27 May 2020. Following this, DG GROW invited CEN and CENELEC to provide input on the added-value of standardization in support of the identified 14 ecosystems, and where current and future work by CEN-CENELEC from 2020 to 2022 would fit in these ecosystems.



Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
DIGITAL			
DIGITAL Telecommunication	COM (2020)65 - Artificial Intelligence - A European approach to excellence and trust COM (2020)66 - A European strategy for data COM (2020)67 - Shaping Europe's digital future		CLC/TC 108X 'Safety of electronic equipment within the fields of Audio/Video, Information Technology and Communication Technology' CEN/TC 294 'Communication systems for meters' <i>CCMC contact: Constant Kohler</i>
DIGITAL Software and programming	COM (2020)66 - A European strategy for data COM (2020)67 - Shaping Europe's digital future		CEN-CLC/JTC 13 'Cybersecurity and Data Protection' CEN-CLC/JTC 19 'Blockchain and Distributed Ledger Technologies' CEN-CENELEC Focus Group 'Blockchain and Distributed Ledger technologies' 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' <i>CCMC contact: Constant Kohler</i>
DIGITAL Web portals	COM (2020)65 - Artificial Intelligence - A European approach to excellence and trust COM (2020)66 - A European strategy for data COM (2020)67 - Shaping Europe's digital future		CEN/TC 365 'Internet Filtering' <i>CCMC contact: Constant Kohler</i>
DIGITAL Manufacturing of computers and equipment	COM (2020)65 - Artificial Intelligence - A European approach to excellence and trust COM (2020)66 - A European strategy for data COM (2020)67 - Shaping Europe's digital future		CEN/TC 310 'Advanced Automation Technologies and their applications' CLC/TC 44X 'Safety of machinery: electrotechnical aspects' <i>CCMC contact: Constant Kohler</i>

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
HEALTH			
HEALTH Pharmaceutical products and equipment	Regulation (EU) No 2017/745 on Medical devices Regulation (EU) No 2017/746 on In vitro diagnostic medical devices COM (2014)215 on Effective, accessible and resilient health systems COM (2014)219 on Mobile Health	In the e-Health sector, CEN/TC 251 will work towards finalising a Technical Specification on 'International Patient Summary - Guideline for European Implementation', which will be then brought to the attention of the European Commission, together with the recently published EN 17269:2019 'Health informatics - The International Patient Summary', as a starting point for possible standardization activity for the prioritized European Electronic Health record Exchange Format, as described in the Commission Recommendation 'On a European Electronic Health Record exchange format'.	CEN-CLC/JTC 3 'Quality management and corresponding general aspects for medical devices' CEN/TC 55 'Dentistry' CEN/TC 102 'Sterilizers and associated equipment for processing of medical devices' CEN/TC 140 'In vitro diagnostic medical devices' 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 243 'Cleanroom technology' CEN/TC 251 'Health informatics' CLC/TC 62 'Electrical equipment in medical practice' CCMC contact: Jennifer Ogbonna
HEALTH Hospitals, nursing homes, residential care	COM (2008)725 on the European Workforce for Health		CEN/TC 449 'Quality of care for older people' CEN/TC 450 'Patient involvement in person-centred care' CCMC contact: Jennifer Ogbonna

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
AGRIFOOD			
AGRIFOOD Plant and animal production	Regulation (EC) No 882/2004 on controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules A new Industrial Strategy for a green and digital Europe EU Industrial Strategy Regulation 2019/1009 on the making available on the market of EU fertilising products European Green Deal		CEN/TC 327 'Animal feeding stuffs - Methods of sampling and analysis' CEN/TC 463 'Microbiology of the food chain' CCMC contact: Claire Dalier
AGRIFOOD Processing of food	Regulation (EC) No 882/2004 on controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules		CEN/TC 275 'Food analysis - Horizontal methods' (WG 13) CEN/TC 327 'Animal feeding stuffs - Methods of sampling and analysis' CEN/TC 460 'Food authenticity' CEN/TC 463 'Microbiology of the food chain' CCMC contact: Claire Dalier
AGRIFOOD Veterinary activities	European Green Deal		CEN/TC 216 'Chemical disinfectants and antiseptics' CCMC contact: Claire Dalier

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
RENEWABLE ENERGY			
RENEWABLE ENERGY Electric motors, engines and turbines	European Green Deal		CEN-CENELEC-ETSI Coordination Group on Smart Energy Grids CEN-CENELEC-ETSI Coordination Group on Smart Meters CEN-CLC/JTC 10 'Energy-related products - Material Efficiency Aspects for Ecodesign' CEN-CLC/JTC 14 'Energy management, energy audits, energy savings' CEN/WS 073 'Eco-efficient Substations' CLC/TC 23H 'Plugs, socket-outlets and couplers for industrial and similar applications, and for electric vehicles' CLC/TC 45AX 'Instrumentation, control & electrical power systems of nuclear facilities' CLC/TC 62 'Electrical equipment in medical practice' CLC/TC 69X 'Electrical systems for electric road vehicles'
RENEWABLE ENERGY Electric power generation	Directive 2018/2001 on the promotion of the use of energy from renewable sources	In the field of Batteries there are two ongoing activities: <ul style="list-style-type: none"> - Draft Standardization Request on Performance and sustainability requirements for rechargeable batteries with internal storage, which CEN/CENELEC received on 2020-03-11 and which they are currently working on, consolidating the comments received during the BTs consultation. - Draft Ancillary Action on Material efficient recycling and preparation for re-use, which also covers waste batteries, which the EC is finalizing in collaboration with CEN/CENELEC. The formal notification is expected this year. 	CEN-CLC/JTC 14 'Energy, management, energy audits, energy saving' CEN-CLC-ETSI Coordination Group on Smart Meters CLC/TC 8X 'System aspects of electrical energy supply' CLC/TC 9X 'Electrical equipment and systems for railways' CLC/TC 13 'Electrical energy measurement and control' CCMC contact: Mercedes Mira Costa

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
RENEWABLE ENERGY Manufacturing and distribution of gas	Directive 2018/2001 on the promotion of the use of energy from renewable sources		CEN/TC 234 'Gas infrastructure' CEN/TC 235 'Gas pressure regulators and associated safety devices for use in gas transmission and distribution' CEN/TC 282 'Installation and equipment for LNG' CEN/TC 19 'Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin' CEN/TC 335 'Solid biofuels' CEN/TC 343 'Solid recovered fuels' CEN/TC 408 'Natural gas and biomethane for use in transport and biomethane for injection in the natural gas grid' CEN/TC 441 'Fuel labelling' CCMC contact: Andrea Nam
LOW-CARBON ENERGY INTENSIVE INDUSTRY			
LOW-CARBON ENERGY INTENSIVE INDUSTRY Extraction of fossil fuels	European Green Deal A new Industrial Strategy for a green and digital Europe EU Industrial Strategy		CEN/TC 12 'Standardization of the materials, equipment and offshore structures used in the drilling/pipelines' CCMC contact: Andrea Nam
LOW-CARBON ENERGY INTENSIVE INDUSTRY Refining	European Green Deal A new Industrial Strategy for a green and digital Europe EU Industrial Strategy		CEN-CENELEC Workshop REEMAIN 'Methodology for Resource and Energy Efficiency Manufacturing' CEN-CLC/JTC 6 'Hydrogen in energy systems' CCMC contact: Mercedes Mira Costa

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
<p>LOW-CARBON ENERGY INTENSIVE INDUSTRY</p> <p>Manufacturing of products with high environmental impact: plastics, chemicals, fertilisers, iron and steel, paper, etc.</p>	<p>European Green Deal</p> <p>Directive 2019/904/EU on Reduction of the impact of certain plastic products on the environment</p>	<p><i>NOTE:</i></p> <p><i>CEN and CENELEC have signed the declaration of the Circular Plastic Alliance, committing to participate to the development and revision of European standards dealing with the recycling of plastics.</i></p> <p><i>CEN expects a Standardization Request relating to the plastics recycling and recycled plastics.</i></p>	<p>CEN/TC 249 'Plastics'</p> <p>CEN/TC 261 'Packaging'</p> <p>CEN/TC 455 'Plant Bio stimulants'</p> <p>CEN/TC 411 'Bio-based products'</p> <p>CEN/TC 454 'Algae and algae products'</p> <p>CCMC contact: Andrea Nam</p>
MOBILITY- AUTOMOTIVE			
<p>MOBILITY- AUTOMOTIVE</p> <p>Production of motor vehicles, boats and trains, and accessories</p>	<p>Regulation (EU) No 1315/2013 relating to the development of the trans-European transport network</p> <p>Regulation (EU) No 1316/2013 establishing the Connecting Europe Facility</p>	<p>Deliverables from CEN-CLC/JTC 20 'Hyperloop systems', who will address technical aspects (interoperability and safety) of hyperloops systems while giving a dedicated focus on the legislative framework.</p>	<p>CEN/TC 436 'Cabin Air Quality on civil aircraft - Chemical Agents'</p> <p>CCMC contact: Thierry Legrand</p> <p>CEN/TC 15 'Inland navigation vessels'</p> <p>CEN/TC 464 'Small craft'</p> <p>CCMC contact: Samuel Gilet</p> <p>CEN-CLC/JTC 20 'Hyperloop systems'</p> <p>CCMC contact: Marc-Antoine Carreira da Cruz</p>
<p>MOBILITY- AUTOMOTIVE</p> <p>Their repair and maintenance</p>	<p>Regulation (EU) No 1315/2013 relating to the development of the trans-European transport network</p> <p>Regulation (EU) No 1316/2013 establishing the Connecting Europe Facility</p>		<p>CEN/TC 242 'Safety requirements for passenger transportation by rope'</p> <p>CEN/TC 274 'Aircraft ground support equipment'</p> <p>CEN/TC 436 'Cabin Air Quality on civil aircraft - Chemical Agents'</p> <p>CEN/TC 256 'Railway applications'</p> <p>CCMC contact: Thierry Legrand</p> <p>CEN/TC 464 'Small craft'</p> <p>CCMC contact: Samuel Gilet</p>

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
MOBILITY- AUTOMOTIVE Freight transport	Regulation (EU) No 1315/2013 relating to the development of the trans-European transport network Regulation (EU) No 1316/2013 establishing the Connecting Europe Facility		CEN/TC 274 'Aircraft ground support equipment' CEN/TC 119 'Swap bodies for combined goods transport' CEN/TC 278 'Intelligent transport systems' CEN/TC 377 'Air Traffic Management' CCMC contact: Thierry Legrand
ELECTRONICS			
ELECTRONICS Production of electronics	Low-Voltage Directive 2014/35/EU PPE Regulation (EU) No 2016/425		CLC/TC 210 'EMC' CLC/TC 108X 'Safety of electronic equipment within the fields of Audio/Video, Information Technology and Communication Technology' All TCs developing standards relating to LV installations CCMC contact: Geert Maes CEN/TC 62 'Independent gas-fired space heaters' CLC/TC 59X 'Performance of household and similar electrical appliances' CLC/TC 61 'Safety of household and similar electrical appliances' CCMC contact: Catherine Vigneron
TEXTILES			
TEXTILES Production of textiles, wearing apparel, footwear, leather and, jewellery	European Green Deal Directive 2019/904/EU on Reduction of the impact of certain plastic products on the environment.	NOTE: <i>CEN supported this topic in the final AUWP 2020. CEN expects a Standardization Request relating to the circular design of fishing gear to encourage preparing for re-use and facilitate recyclability at end of life.</i>	CEN/TC 248 'Textiles and textile products' CCMC contact: Claire Dalier

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
AEREO SPACE AND DEFENCE			
AEREO SPACE AND DEFENCE Aircraft and spacecraft production	A new Industrial Strategy for a green and digital Europe EU Industrial Strategy		CEN/TC 377 'Air Traffic Management' CEN-CLC/TC 5'Space' CCMC contact: Thierry Legrand
AEREO SPACE AND DEFENCE Military and weapons	A new Industrial Strategy for a green and digital Europe EU Industrial Strategy		CLC/BTTF 133-1 'Sound systems for emergency purposes which are not part of fire detection and alarm systems' CEN/TC 325 'Crime prevention through building, facility and area design' CEN Workshop D-Box 'Demining tool-box for humanitarian clearing of large scale areas from anti-personnel landmines and cluster munitions' CEN Workshop TER-CDM 'Terminologies in Crisis and Disaster Management' CEN-CENELEC Workshop on Guidelines on evaluation systems and schemes for physical security products CEN-CENELEC Workshop ZONeSEC 'Interoperability of security systems for the surveillance of widezones' CCMC contact: Thierry Legrand
AEREO SPACE AND DEFENCE Satellites	A new Industrial Strategy for a green and digital Europe EU Industrial Strategy		CEN-CLC/TC 5 'Space' and its WG 1 'Navigation and positioning receivers for road applications', led by BNAE (the French Aerospace Standardization Organization), focusing on the development of the EN 16803 series standards to support Global Navigation Satellite Systems (GNSS) CCMC contact: Thierry Legrand
CREATIVE AND CULTURAL INDUSTRIES			
CREATIVE AND CULTURAL INDUSTRIES Newspapers, books and periodicals		CWA by the CEN/WS - Journalism Trust Initiative (currently available for public review and commenting)	CCMC contact: Christina Thorngreen

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
CREATIVE AND CULTURAL INDUSTRIES Motion picture, video and television			CCMC contact: Christina Thorngreen
CREATIVE AND CULTURAL INDUSTRIES Radio and music			CCMC contact: Christina Thorngreen
TOURISM			
TOURISM Passenger transport and travel	A new Industrial Strategy for a green and digital Europe EU Industrial Strategy		CEN/TC 329 - Tourism services CCMC contact: Christina Thorngreen
TOURISM Hotels, short term accommodation			CEN/TC 329 - Tourism services CCMC contact: Christina Thorngreen
TOURISM Restaurants and catering			CEN/TC 329 - Tourism services CCMC contact: Christina Thorngreen
TOURISM Events, theme parks			CEN/TC 329 - Tourism services CCMC contact: Christina Thorngreen
PROXIMITY AND SOCIAL ECONOMY			
PROXIMITY AND SOCIAL ECONOMY Social enterprises, associations and cooperatives aiming at generating a social impact, often proximity based	Upcoming European legislation on Accessibility Regulation (EC) 1107/2006	<p>NOTE: <i>Standardization of the service chain focuses on processes for technology-enabled care. The standards work underpins European policies on Active and Healthy Ageing (AHA) and it aims at ensuring that alarm users benefit from an improved level of quality of life by enabling them to stay longer in their own homes, remain independent and be able to participate actively in society.</i></p> <p>CEN/TC 391 'Societal and citizen security', which is defining a European Standard setting out requirements and guidance for management with strategic responsibilities (C levels) for the delivery of a crisis management capability.</p>	<p>CEN/WS 091 'City Resilience Development - Maturity Model'</p> <p>CEN/WS 092 'City Resilience Development - Operational Guidance'</p> <p>CEN/TC 391 'Societal and citizen security'</p> <p>CEN/TC 431 'Service Chain for Social Care Alarms'</p> <p>CEN/TC 435 'Tattooing services'</p> <p>CEN/TC 448 'Funeral services'</p> <p>CEN/TC 452 'Assistance Dogs'</p> <p>CCMC contact: Christina Thorngreen</p>
RETAIL			
RETAIL Retail sales			CEN/TC 368 'Product Identification' CCMC contact: Christina Thorngreen

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
RETAIL Wholesale connected to consumers			CEN/TC 263 'Secure storage of cash, valuables and data media' CCMC contact: Christina Thorngreen
CONSTRUCTION			
CONSTRUCTION Building of residential and non-residential estates	Construction Products Regulation		CEN/TC 156 'Ventilation for buildings' CEN/TC 228 'Heating systems and water-based cooling systems in buildings' CEN/TC 346 'Conservation of Cultural Heritage' CEN/TC 422 'Side curtains ventilation systems - Safety' CCMC contact: Nuno Pargana
CONSTRUCTION Building of roads and railways	Construction Products Regulation		CEN/TC 227 'Road materials' CEN/TC 336 'Bituminous binders' CCMC contact: Nuno Pargana

<p>CONSTRUCTION Building of utilities and civil engineering</p>	<p>Construction Products Regulation</p>		<p>CEN/TC 135 'Execution of steel structures and aluminium structures' CEN/WS 'Smart CE marking for the construction industry' CEN/TC 104 'Concrete and related products' CEN/TC 112 'Wood-based panels' CEN/TC 124 'Timber structures' CEN/TC 125 'Masonry' CEN/TC 128 'Roof covering products for discontinuous laying and products for wall cladding' CEN/TC 129 'Glass in building' CEN/TC 134 'Resilient, textile and laminate floor coverings' CEN/TC 154 'Aggregates' CEN/TC 163 'Sanitary appliances' CEN/TC 166 'Chimneys' CEN/TC 167 'Structural bearings' CEN/TC 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'</p>
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Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
<p>CONSTRUCTION Associated activities</p>	<p>Construction Products Regulation</p>		<p>CCMC contact: Nuno Pargana</p> <p>CEN/TC 33 'Doors, windows, shutters, building hardware and curtain walling'</p> <p>CEN/TC 50 'Lighting columns and spigots'</p> <p>CEN/TC 51 'Cement and building limes'</p> <p>CEN/TC 53 'Temporary works equipment'</p> <p>CEN/TC 67 'Ceramic tiles'</p> <p>CEN/TC 88 'Thermal insulating materials and products'</p> <p>CEN/TC 99 'Wallcoverings'</p> <p>CEN/TC 155 'Plastics piping systems and ducting systems'</p> <p>CEN/TC 229 'Precast concrete products'</p> <p>CEN/TC 241 'Gypsum and gypsum based products'</p> <p>CEN/TC 246 'Natural stones'</p> <p>CEN/TC 254 'Flexible sheets for waterproofing'</p> <p>CEN/TC 277 'Suspended ceilings'</p> <p>CEN/TC 288 'Execution of special geotechnical works'</p> <p>CEN/TC 297 'Free-standing industrial chimneys'</p> <p>CEN/TC 303 'Floor screeds and screed materials'</p> <p>CEN/TC 340 'Anti-seismic devices'</p> <p>CEN/TC 349 'Sealants for joints in building construction'</p> <p>CEN/TC 357 'Stretched ceilings'</p> <p>CEN/TC 361 'Polymer modified bituminous thick coatings for waterproofing - Definitions/requirements and test methods'</p> <p>CEN/TC 396 'Earthworks'</p>

Ecosystems identified with subgroups	Other related EU policy/ legislation	Activities in support of the Ecosystems	Technical groups possibly involved
			CEN/TC 407 'Cylindrical helical springs made from round wire and bar - Calculation and design' CEN/TC 459 'ECISS - European Committee for Iron and Steel Standardization' CCMC contact: Nuno Pargana