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*(Information)*INFORMATION FROM EUROPEAN UNION INSTITUTIONS, BODIES, OFFICES
AND AGENCIES

EUROPEAN COMMISSION

COMMISSION NOTICE

The 2022 annual Union work programme for European standardisation

(2022/C 66/01)

Under Article 8 of Regulation (EU) No 1025/2012 on European Standardisation ⁽¹⁾, the Commission must adopt an 'annual Union work programme for European standardisation'.

This Commission Notice identifies the European standards and European standardisation deliverables that the Commission intends to request for 2022, together with specific objectives and policies for these standards and deliverables (see Annex).

This action on EU standardisation is embedded in EU policies. It supports the implementation of policies such as:

- the twin green and digital transitions;
- the single market;
- the digital single market;
- the single market for services;
- the space programme;
- the internal markets for renewable and natural gases and for hydrogen;
- energy efficiency and climate; and
- international trade.

Standards support these policies to ensure that EU products and services are competitive worldwide and reflect state-of-the-art safety, security, health, environmental considerations and the achievement of the Sustainable Development Goals.

The Commission adopts this Notice together with a Communication on the Standardisation strategy.

The Communication identifies standardisation priorities ('urgencies'). In these areas, there is an urgent need for standards and standardisation deliverables to achieve the EU's policy objectives of a green, digital and resilient single market. This annual EU work programme covers those standardisation priorities, which include:

- Review existing standards to identify needs for revisions or development of new standards to meet the objectives of the European Green Deal and Europe's Digital Decade and support the resilience of the EU single market;

⁽¹⁾ Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).

- COVID-19 vaccines and medicines production;
- Critical raw materials for batteries and waste batteries;
- Climate resilience of infrastructure and low-carbon cement;
- Hydrogen technologies and components;
- Transport and storage of hydrogen;
- Standards for the certification of chips in terms of security, authenticity, reliability;
- Smart contracts for data spaces.

In addition to the urgencies set by the Communication on the Standardisation strategy, the Annex to this Notice contains actions for the development and revision of European standards or European standardisation deliverables, which are necessary, and suitable for the support of Union legislation and policies.

Internationally, the Commission will continue its cooperation on standardisation with the United States in Working Group 1 – Technology Standards of the EU-US Trade and Technology Council and collaborate on technical standards within the G7 ‘Group of Seven’. The Commission also supports the work of Multi-Stakeholder Platform on ICT in their identification work for standardisation needs via the Rolling Plan for ICT standardisation ⁽²⁾.

The Commission will also support standardisation as an essential part of the chapter on technical barriers to trade in every free trade agreement it negotiates.

⁽²⁾ <https://joinup.ec.europa.eu/collection/rolling-plan-ict-standardisation/rolling-plan-2021>

Standardisation urgencies set by the Communication on the Standardisation strategy				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
1	Review existing standards to identify needs for revisions or development of new standards to meet the objectives of the European Green Deal and Europe's Digital Decade and support the resilience of the EU single market	European Green Deal, COM/2019/640 final 2030 Digital Compass: the European way for the Digital Decade, COM/2021/118 final Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery, COM(2021) 350 final	Develop a methodology, first screening exercise and sample of existing standards to review them in light of the objectives set on the European Green Deal, Europe's Digital Decade and a resilient single market.	To contribute to the European Commission objectives, for example no net emissions of greenhouse gases by 2050 or enabling 75 % of EU companies to use digital tools, like cloud, artificial intelligence or big data.
2	COVID-19 vaccines and medicines production	Communication from the Commission to the European Parliament, the European Council and the Council A united front to beat COVID-19 COM/2021/35 final	Develop European standards to establish a standard set of data to be included in the form detailing the results of COVID-19 tests. Explore the feasibility of establishing standards for single-use items needed for the production of vaccines and therapeutics in order to enhance the inter-operability of key production components and minimise the risk of production disruptions in case of shortages of these materials.	Increasing vaccine and COVID-19 medicines production, supplies and information.
3	Critical raw materials for batteries and waste batteries	Proposal for a Regulation of the European Parliament and of the Council concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020 COM (2020) 798 final and 2020/0353(COD)	Revise existing European standards and develop new ones for waste electrical and electronic equipment and waste batteries. The revision will concern: material-efficient, high-quality recycling and preparation for re-use of key waste streams (waste electrical and electronic equipment, including photovoltaic panels), waste batteries, end-of-life vehicles and waste windmills. EU-wide quality requirements for secondary raw materials.	The standards will contribute to valorising raw materials in waste products through recycling, like batteries, and reducing the need for new raw materials in critical applications. This is particularly important with regard to strengthening the EU's resilience by mitigating the supply risk for raw materials.

Standardisation urgencies set by the Communication on the Standardisation strategy

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
4	Climate resilience of infrastructure and low-carbon cement	COM(2021)82 Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change -point 2.3.2 and COM(2020) 662 on A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives –	Revise a broader range of standards for assets (including non-infrastructure) that are vulnerable to climate impacts, according to state-of-the-art knowledge – to improve their climate resilience. Develop standards supporting technical solutions for climate adaptation, to facilitate and accelerate their take-up across the EU.	Improving the climate resilience of the existing infrastructure stock and new major infrastructure projects. As cement is an essential component of the construction sector, an assessment will take place regarding its potential to become a low-carbon construction product – in full compliance with the principle of technology neutrality.
5	Hydrogen technologies and components	Proposal for a Regulation of the European Parliament and of the Council on the internal markets for renewable and natural gases and for hydrogen (recast) COM/2021/804 final	Develop European standards on quality, technology and safety – to support the deployment of a single market for hydrogen.	Improving the provision of charging points and their maintenance.
6	Transport and storage of hydrogen	Proposal for a Directive amending Directive (EU) 2018/2001 as regards the promotion of energy from renewable sources COM/2021/557 final Proposal for a Regulation on guidelines for trans-European energy infrastructure and repealing Regulation (EU) No 347/2013 COM/2020/824 final Directive (EU) 2019/692 amending Directive 2009/73/EC concerning common rules for the internal market in natural gas Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action	Revise existing and/or develop new European standards for gas quality and safety – relevant for injection into the gas grid and other end uses, as well as for the quality of hydrogen-based fuels.	Enabling and promoting the scaling up of transport and storage methods for hydrogen, while ensuring the safety and operational efficiency of gas networks and avoiding inadvertent barriers.

Standardisation urgencies set by the Communication on the Standardisation strategy				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
7	Standards for the certification of chips in terms of security, authenticity, reliability	Europe's digital decade: digital targets for 2030 2030 Digital Compass: the European Way for the Digital Decade	Develop standards in support of the certification of chips to ensure that they are secure, authentic and reliable.	Ensure trust and cybersecurity requirements of future smart devices, systems and connectivity platforms that will have to rely on advanced electronics and will largely depend on the features of the underlying technology. The standards will support certification of these chips for trust and security and cover the value chain up to integration in end products.
8	Smart contracts for data spaces	Data Act (including the review of the Directive 96/9/EC on the legal protection of databases) Regulation establishing a framework for the use of data in the EU See published initiatives in: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13045-Data-Act-&-amended-rules-on-the-legal-protection-of-databases_en	Develop standards meeting certain essential requirements for smart contracts, as set out in the upcoming Data Act. A smart contract that meets the standard must be presumed to comply with the essential requirements.	Ensuring that smart contracts used for data sharing are trustworthy and interoperable, so they can be used to support data exchange and pooling. In Europe, data are not concentrated on big tech platforms but remain distributed in many places. Under its Data Strategy, the EU helps companies pool data for e.g. training machine learning algorithms and applications in healthcare, transport and energy.

Actions for the development and revision of European standards or European standardisation deliverables which are necessary and suitable for the support of Union legislation and policies				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
9	Advanced manufacturing services	Directive 2006/123/EC of the European Parliament and of the Council on services in the internal market for relevant sectoral legislation and and COM(2020) 66 A European strategy for data	Develop European standards to support the provision of services and data related to robots, industrial supply chain management and predictive maintenance of network machinery.	Improving the provision of cross-border services in the single market and support transparency of supply chain transactions.
10	Construction services	Directive 2006/123/EC of the European Parliament and of the Council on services in the internal market	Develop European standards to support the provision of cross-border services in the areas of construction e.g. such as architectural and engineering services as well as services related to the energy efficiency of buildings.	Improving the provision of cross-border services in the single market.
11	Postal services	Directive 97/67/EC on common rules for the development of the internal market of Community postal services and the improvement of quality of service; Directive 2002/39/EC with regard to the further opening to competition of Community postal services; Directive 2008/6/EC with regard to the full accomplishment of the internal market of Community postal services and Regulation (EU) 2018/644 on cross-border parcel delivery services	Revise existing and/or develop new European standards or European standardisation deliverables in areas such as quality of service and digitisation.	Improving the quality of service and promoting interoperability between national networks and an efficient universal service within the single market.
12	Accessibility requirements for products and services, including ICT	Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and services and Directive (EU) 2016/2102 on the accessibility of the websites and mobile applications of public sector bodies	Develop standards for the product accessibility requirements set out in Annex I of Directive (EU) 2019/882, such as: <ul style="list-style-type: none"> — requirements on the provision of information; — user interface and functionality design; support services; the packaging of the product; — instructions for installing, maintaining, storing and disposing of the product; — ensuring the accessibility of the products used to provide the service; 	Facilitating the use by people with disabilities of ICT products and services – such as self-service terminals, applications, websites/platforms, online services and online communication with emergency services and other services in the scope of the directive.

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			<p>— facilitating the use of these services by people with disabilities: providing information about the functioning of the service, providing services that are optimal for use by people with disabilities, and defining functional performance criteria for this.</p> <p>Develop harmonised standards for the services within the scope of the Directive and the places where the services are provided.</p>	
13	Space traffic management and market uptake of space data	Regulation (EU) 2021/696 establishing the Union Space Programme and the European Union Agency for the Space Programme	<p>Develop European standards for space traffic management.</p> <p>Develop European standards to support user and market uptake of space data and services provided by the EU Space Programme (Galileo, EGNOS, Copernicus, SSA, GOVSATCOM).</p>	<p>To:</p> <p>(1) reduce current and future operational risks and protect European space infrastructure;</p> <p>(2) increase user and market uptake of space data and services, by facilitating their integration in various sectors.</p> <p>These include autonomous and connected cars, railways, aviation, unmanned aerial vehicles, specialised user equipment.</p>
14	Ambient air quality - Performance of sensor-based systems measuring air pollution	Article 6 and Article 7 and Annex I to Directive 2008/50/EC on ambient air quality	<p>Develop validated test standard(s) to evaluate the performance of sensor-based systems measuring air pollution.</p> <p>This standard will evaluate if sensor-based systems comply with the data quality objectives in Directive 2008/50/EC.</p>	<p>Improving ambient air quality assessments by evaluating the extent to which sensor-based systems comply with the data quality objectives in Directive 2008/50/EC.</p> <p>Standard(s) will also allow for more extensive use of this monitoring method and so improved assessment of air quality.</p>

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Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
15	Ambient air quality – modelling-based assessments	Articles 6 and 7 and Annex I to Directive 2008/50/EC	Develop standards ensuring that modelling-based assessments of air quality are objective, reliable and comparable, and of sufficient quality to generate reliable information about concentrations of air pollutants in ambient air.	Ensuring that the information collected on air pollution is sufficiently representative and comparable across the EU.
16	Ambient air quality - measurement methods for monitoring polycyclic aromatic hydrocarbons in ambient	Article 4(1), (8) and (13) of and Annex V to Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air	Develop standards for the reference methods for measuring concentrations in ambient air of polycyclic aromatic hydrocarbons.	Ensuring that the analysis of polycyclic aromatic hydrocarbons in ambient air is sufficiently precise, reliable and comparable across the EU.
17	Industrial emissions	Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)	Develop European standards to ensure sampling and analysis of relevant polluting substances and measurements of process parameters, as well as quality assurance for automated measuring systems and the reference measurement methods to calibrate those systems.	Reducing – and as far as possible eliminating – pollution arising from industrial activities.
18	Sorted plastics waste and recycled plastics	The action of Annex I to the European Strategy for Plastics in a Circular Economy COM(2018)28 Actions to boost recycled content: –development of quality standards for sorted plastics waste and recycled plastics in cooperation with the European Standardisation Committee	Develop new European standards and European standardisation deliverables and revise existing European standards to address procedural and infrastructure issues for recycling” plastics – to support the quality of the plastics recycling value chain. These standards should set requirements on the recyclability of plastics products, the quality of the sorted plastics waste and the quality of recycled plastics, taking into account their intended application in products after recycling.	Offer recycled plastics which meet the needs of product brands and manufacturers for a reliable, high-volume supply of materials with constant quality specifications.

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19	Materials in contact with drinking water	DIRECTIVE (EU) 2020/2184 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2020 on the quality of water intended for human consumption (recast)	Develop new European standards with regard to analytical methods for determining substances migrating from materials and methods for testing final materials in contact with drinking water.	Protecting the quality of drinking water and public health. Materials in contact with drinking water can impact its quality (e.g. by leaching substances). Analytical and testing methods need to be developed to ensure that final materials in contact with drinking water are safe.
20	Wastewater treatment	Council Directive concerning urban waste water treatment (91/271/EEC) and Regulation (EU) No 305/2011 laying down harmonised conditions for the marketing of construction products as amended by Commission Delegated Regulation (EU) No 568/2014, Commission Delegated Regulation (EU) No 574/2014 and Regulation (EU) 2019/1020	Revise existing standard EN 12566: Small wastewater treatment systems for up to 50 PT in seven parts.	Improving environmental protection and reducing health risks.
21	Natural refrigerants	Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006	Develop a new standard on the requirements and risk analysis process for refrigerating systems operated with flammable refrigerants that are used in road transport of temperature-sensitive goods. Revise EN 378-1, EN 378-2 and EN 378-3 and create a completely new part 5 on safety classification and information about refrigerants.	Ensuring an easier and bigger uptake of natural refrigerants in the RAC sector, which would reduce the environmental impact of such appliances. Indirectly, this can make EU companies in this sector more competitive.

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Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
22	Fertilising products	Regulation (EU) 2019/1009 laying down rules on the making available on the market of EU fertilising products and C (2020)612 Commission implementing Decision on a standardisation request to the European Committee for Standardisation as regards the EU fertilising products in support of Regulation (EU) 2019/1009	Develop new European standards, update existing standardisation deliverables and adapt the Commission work programme implementing Decision C(2020)612 for delivering timely and state-of-the-art standards.	Making fertilisers available on the single market and setting uniform conditions for making fertilisers made from such recycled or organic materials available on the entire single market.
23	Food safety-animal nutrition	Regulation (EU) 2017/625 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products	Develop new European standards with regard to analytical methods in the field of animal nutrition as regards: <ul style="list-style-type: none"> — banned additives — contaminants (metals, plant toxins, mycotoxins) — authorised additives — radioactivity — packaging materials 	Establishing standardised methods of analysis is of utmost importance to guarantee (i) uniform application and control of European legislation in all EU Member States and (ii) a high degree of feed and food safety.
24	Food safety contaminants in food	Regulation (EU) 2017/625 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products	Develop new European standards regarding analytical methods in the field of food safety legislation as regards processing contaminants (such as acrylamide, perchlorate, furans, 3-monochloropropane diol, and glycidyl esters) in food.	Establishing standardised methods of analysis is of utmost importance to guarantee (i) uniform application and control of European legislation in all EU Member States and (ii) a high degree of food safety.
25	Food safety-metals in food	Regulation (EU) 2017/625 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products	Develop new European standards regarding analytical methods in the field of food safety legislation as regards metals (such as nickel, chromium VI) in food	Establishing standardised methods of analysis is of utmost importance to guarantee (i) uniform application and control of European legislation in all EU Member States and (ii) a high degree of food safety.

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Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
26	Food safety-mycotoxins and plant toxins in food	Regulation (EU) 2017/625 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products	Develop new European standards regarding analytical methods in the field of food safety legislation as regards mycotoxins and plant toxins in food	Establishing standardised methods of analysis is of utmost importance to guarantee (i) uniform application and control of European legislation in all EU Member States and (ii) a high degree of food safety.
27	Protection of ships carrying liquefied gases in bulk and ships using gas as a propellant	Directive 2014/90/EU on marine equipment	Develop a new European standard for testing fixed dry chemical powder and related fire-extinguishing systems, to protect ships carrying liquefied gases in bulk and ships using gas as a propellant.	Improving maritime safety. The International Maritime Organisation is revising its guidelines for approving fixed dry chemical powder fire-extinguishing systems for protecting ships carrying liquefied gases in bulk. But so far, there is no validated test standard for a jet and/or cable tray fire test. Developing such a standard, in close coordination with ISO, should improve maritime safety not only for gas tankers but also for gas-propelled passenger ships.
28	Climate-related data	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change COM/2021/82 final and COM(2020) 66 A European strategy for data	Develop standards ensuring data from both the private and public sector are recorded, collected and shared in a comprehensive and uniform way.	Improving the accuracy of climate risk assessment by providing data that quantify disaster losses.

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Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
29	Dynamic life-cycle assessment for estimating carbon removals in construction products	COM (2021) 572 EU Forest Strategy Section 2.1. and COM (2021) 800 Sustainable carbon cycles. Section 3.1.	Develop a standardized framework of dynamic life-cycle assessment to account more accurately for carbon removals associated with carbon storage in construction products.	The main objective is to reflect the progress made in dynamic life-cycle assessment better to acknowledge carbon storage in standards for construction products, mainly when using time-dependent characterization factors applied to a dynamic life cycle inventory.
30	Ecodesign and energy labelling of computers	Commission Regulation (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers	Revise existing and develop new standards for computers and servers, through reliable, accurate and reproducible measurement methods which take into account the recognised state of the art.	Reducing the energy consumption of computers and computer servers.
31	Ecodesign and energy labelling of cooking appliances	Commission Regulation (EU) No 66/2014 of 14 January 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for domestic ovens, hobs and range hoods	Revise existing and develop new standards for cooking appliances.	Reducing the energy consumption of cooking appliances.
32	Ecodesign and energy labelling of electronic displays	Commission Regulation (EU) 2019/2021 of 1 October 2019 laying down ecodesign requirements for electronic displays pursuant to Directive 2009/125/EC and Commission Delegated Regulation (EU) 2019/2013 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of electronic displays	Revise existing and develop new standards for electronic displays covering high dynamic range (HDR) encoding function and resolution levels above 4k (or HD), setting a specific testing method for behaviours of ABC, and adapting verification methods for plastics additives content.	Reducing the energy consumption of electronic displays (televisions, monitors), covering HDR and resolutions levels above 4k (or HD), by setting a specific testing method for ABC and adapting verification methods for plastics additives content.

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Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
33	Ecodesign and energy labelling of light sources	Commission Regulation (EU) 2019/2020 of 1 October 2019 laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC and Commission Delegated Regulation (EU) 2019/2015 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of light sources	Revise existing and develop new standards covering procedures and methods for measuring the required parameters for: <ul style="list-style-type: none"> — fluorescent and high-intensity discharge lamps — ballasts able to operate such lamps — luminaires able to operate such lamps — luminaires for office lighting luminaires for street lighting.	Reducing the energy consumption of light sources, yielding an estimated 41,9 TWh of annual final energy savings in 2030.
34	Ecodesign and energy labelling of local space heaters	Commission Regulation (EU) 2015/1188 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for local space heaters and, Commission Delegated Regulation (EU) 2015/1186 of 24 April 2015 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of local space heaters	Revise existing and develop new standards for local space heaters.	Reducing energy consumption and further limiting the environmental impact of local space heaters.
35	Ecodesign and energy labelling of refrigerating appliances	Commission Regulation (EU) 2019/2019 of 1 October 2019 laying down ecodesign requirements for refrigerating appliances pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 643/2009	— Revise existing and develop new standards for refrigerating appliances, to support measurement of the relevant product parameters through reliable, accurate and reproducible measurement methods, which consider the recognised state-of-the-art measurement methods.	Reducing the energy consumption of refrigerating appliances, yielding an estimated 10 TWh of annual final energy savings in 2030.

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36	Ecodesign and energy labelling of refrigerating appliances with direct sale function	Commission Regulation (EU) 2019/2024 laying down ecodesign requirements for refrigerating appliances with a direct sales function pursuant to Directive 2009/125/EC and Commission Delegated Regulation (EU) 2019/2018 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of refrigerating appliances with a direct sales function	Revise existing and develop new standards for refrigerating appliances with a direct sales function, covering methods and calculations for measuring the required parameters.	Reducing the energy consumption of refrigerating appliances with a direct sales function, yielding an estimated 48 TWh of annual final energy savings in 2030.
37	Ecodesign and energy labelling of vacuum cleaners	Commission Regulation (EU) No 666/2013 of 8 July 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for vacuum cleaners	Revise existing and develop new standards for vacuum cleaners to support measurement of the relevant product parameters, through reliable, accurate and reproducible measurement methods which consider the recognised state-of-the-art measurement methods.	Reducing the energy consumption of vacuum cleaners during their usage phase.
38	Ecodesign and energy labelling of space heaters	Commission Regulation (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters and Commission Delegated Regulation (EU) No 811/2013 with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device.	Revise existing and develop new standards for space heaters and combination heaters to support measurement of the relevant product parameters. Through reliable, accurate and reproducible measurement methods, which take into account the recognised state-of-the-art measurement methods.	Standardising energy consumption, sound power level and nitrogen oxide emission requirements for space heaters and combination heaters throughout the EU. This should help make the single market operate better and improve the environmental performance of these products

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Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
39	Ecodesign and energy labelling of water heaters	Commission Regulation (EU) No 814/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks as amended by Commission Regulation (EU) 2016/2282 of 30 November 2016 and Commission Delegated Regulation (EU) No 812/2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device.	Revise existing and develop new standards for water heaters and hot water storage tanks, to support measurement of the relevant product parameters through reliable, accurate and reproducible measurement methods which consider the recognised state-of-the-art measurement methods.	Standardising energy consumption, sound power level and nitrogen oxide emission requirements for water heaters, and requirements for standing losses by hot water storage tanks throughout the EU. This should help make the single market operate better and improve the environmental performance of these products.
40	Ecodesign and energy labelling of smartphones and tablets	Commission Regulation PLAN/2020/9213 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for smartphones and tablets and Commission Delegated Regulation PLAN/2020/9217 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of smartphones and tablets	Develop new standards for smartphones and tablets, to support the measurement and calculation of the relevant product parameters – through reliable, accurate and reproducible measurement methods which consider the recognised state-of-the-art measurement methods.	Reducing the environmental impacts associated with smartphones and tablets
41	Ecodesign and energy labelling of photovoltaic products (modules, inverters and systems)	Commission Regulation PLAN/2020/7002 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for photovoltaic products (modules, inverters and systems) and Commission Delegated Regulation PLAN/2020/7007 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of photovoltaic products (modules, inverters and systems)	Develop new standards for photovoltaic products (modules, inverters and systems), to support the measurement and calculation of the relevant product parameters – through reliable, accurate and reproducible measurement methods which take into account the recognised state-of-the-art measurement methods.	Reducing the environmental impacts associated with photovoltaic products (modules, inverters and systems)

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42	Ecodesign of air-to-air air conditioners and heat pumps	Commission Regulation (EU) No 206/2012 of 6 March 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for air conditioners and comfort fans as amended by Commission Regulation (EU) 2016/2282 of 30 November 2016	Revise existing and develop new standards for air-to-air air conditioners and heat pumps, through reliable, accurate and reproducible measurement methods, which consider the recognised state of the art.	Reducing the energy consumption of air-to-air air conditioners and heat pumps in their usage phase, as well as their sound power level.
43	Ecodesign of electric motors	Commission Regulation (EU) 2019/1781 of 1 October 2019 laying down ecodesign requirements for electric motors and variable speed drives pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Regulation (EC) No 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated into products and repealing Commission Regulation (EC) No 640/2009	Revise the existing standards along with the following elements: (1) setting resource efficiency requirements, including identification and reuse of rare earth in permanent magnet motors; (2) the level of verification tolerances; (3) method and energy classes for motors with a rated voltage above 1 000 V; (4) combinations of motors and variable speed drives sold together, as well as integrated variable speed drives (compact drives); (5) adding other types of motors to the scope, including permanent magnet motors.	Providing repeatable, reproducible, cost-effective and practice-relevant test methods for measuring the energy consumption of electric motors. With a view to reducing their energy loss rate, thus contributing to the functioning of the single market and to energy savings.
44	Ecodesign of electrical and electronic household and office equipment	Draft proposal for a COMMISSION REGULATION (EU) .../... laying down ecodesign requirements for off mode, standby, and networked standby energy consumption of electrical and electronic household and office equipment pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 1275/2008 - PLAN/2016/444	Revise existing and develop new standards for electrical and electronic household and office equipment.	Reducing standby off mode and networked standby energy consumption of electrical and electronic household and office equipment.

Actions for the development and revision of European standards or European standardisation deliverables which are necessary and suitable for the support of Union legislation and policies				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
45	Ecodesign of external power supplies	Commission Regulation (EU) 2019/1782 of 1 October 2019 laying down ecodesign requirements for external power supplies pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 278/2009	<p>Revise existing and develop new standards for external power supplies to support measurement of the relevant product parameters.</p> <p>Through reliable, accurate and reproducible measurement methods which take into account the recognised state-of-the-art measurement methods.</p>	The main objective is to standardise the energy consumption of external power supplies, thus contributing to the functioning of the single market and to energy savings.
46	Ecodesign of industrial fans	Commission Regulation (EU) No 327/2011 of 30 March 2011 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW as amended by Commission Regulation (EU) No 666/2013 of 8 July 2013 and by Commission Regulation (EU) No 2016/2282 of 30 November 2016	<p>Revise the existing standards and develop new standards to enable an extended products approach, notably by defining a sufficient number of operating points and an interpolation/calculation method and/or a characteristic curve.</p> <p>Complement direct measurement methods with appropriate calculation/interpolation methods and quantify their validity.</p> <p>Methods for circulating fans and large comfort fans and for large fans e.g. through extrapolation from scaled models.</p>	<p>Providing repeatable, reproducible, cost-effective and practice-relevant test methods for measuring the energy consumption of industrial fans.</p> <p>With a view to reducing their energy loss rate, thus contributing to the functioning of the single market and to energy savings.</p>
47	Ecodesign of variable-speed drives	Commission Regulation (EU) 2019/1781 of 1 October 2019 laying down ecodesign requirements for electric motors and variable speed drives pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Regulation (EC) No 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products and repealing Commission Regulation (EC) No 640/2009	<p>Revise the existing standards along with the following elements:</p> <p>(1) Address system losses directly associated with variable-speed drives, in particular losses induced upstream in the grid when the input current is not sinusoidal, and harmonic losses induced downstream in the motor;</p>	<p>Providing repeatable, reproducible, cost-effectively and practice relevant test methods for measuring energy consumption/losses of variable speed drives.</p> <p>With a view to reducing energy loss rates, thus contributing to the functioning of the single market and to energy savings.</p>

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			<ul style="list-style-type: none"> (2) the level of verification tolerances; (3) if applicable adding energy classes to encourage more efficient drives; (4) setting requirements for combinations of motors and variable-speed drives sold together, as well as integrated variable-speed drives (compact drives); (5) adding other types of variable-speed drives in scope. 	
48	Interoperability of the rail system	Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union (recast) and COM(2020) 66 A European strategy for data.	<p>Update existing and develop new European standards related to (in particular, but not only):</p> <ul style="list-style-type: none"> — in-freight transport on general aspects of the logistics value chain; — train-to-ground communication systems; — digitalisation and automation, multimodality and mobility as a service; — cybersecurity; — the European rail traffic management system and (5G-based) automatic train operation; — digital automatic couplers for freight wagons and innovative solutions for intermodal and combined transport; — virtual certification; — condition-based maintenance; — the use of new materials and alternative fuels. 	Supporting the technical specifications for interoperability and rail system architecture, including digitalisation (for efficient train operations and user benefits), automation, and cybersecurity.

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			Considering connection of the data with European mobility data by pooling and sharing of data from existing and future transport and mobility databases.	
49	Medical devices and in vitro diagnostic medical devices	Regulation (EU) 2017/745 on Medical Devices (MDR) Regulation (EU) 2017/746 on In Vitro Diagnostic Medical Devices (IVDR)	Revise existing and develop new European standards for design and manufacturing of: <ul style="list-style-type: none"> — medical devices covered by Regulation (EU) 2017/745 (MDR) — in vitro diagnostic medical devices covered by Regulation (EU) 2017/746 (IVDR) The standards will apply to design and manufacturing, risk management and the obligations on economic operators and sponsors – including those relating to: <ul style="list-style-type: none"> — quality management systems — risk management — clinical investigations and performance studies — clinical evaluation — clinical evidence. 	Ensuring the smooth functioning of the single market as regards medical devices, by setting high standards of quality and safety for medical devices and in vitro diagnostic medical devices. These should meet common safety concerns as regards such products, thus ensuring a high level of health protection and safety for patients, users and other people.
50	Safe operations by unmanned aircraft systems	Commission Delegated Regulation (EU) 2020/1058 of 27 April 2020 amending Delegated Regulation (EU) 2019/945 as regards the introduction of two new unmanned aircraft systems classes	Develop new European standards to cover the requirements that address the risks posed by the operation of unmanned aircraft systems.	Ensuring that unmanned aircraft systems operate safely and with low risk, so they do not need to be subject to standard aeronautical compliance procedures.

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			These concern the specific features and functionalities necessary to mitigate risks pertaining to the safety of the flight, privacy, and protection of personal data, security or the environment.	
51	Safety of toys	Directive 2009/48/EC on the safety of toys	Develop new or revise existing European standards to support state-of-the-art technology on the safety of toys and on chemicals in toys.	Addressing technological developments in the toy market which have raised issues with respect to safety and created increased consumer concerns.
52	Safety requirements for certain children's products	Directive 2001/95/EC on General Product Safety (GPSD)	Develop new and revise existing European standards to ensure the safety of certain children's products (excluding toys), reflecting state-of-the-art developments	Providing a high level of consumer protection by strengthening the safety of children products, considering the latest scientific and technological developments and the requirements of the legislation.
53	Protective systems in potentially explosive atmospheres	Directive 2014/34/EU on equipment and protective systems intended for use in potentially explosive atmospheres (ATEX)	Develop new and revise existing European standards to ensure the health and safety of equipment and protective systems intended for use in potentially explosive atmospheres. The requirements are set out in Annex II of the Directive 2014/34/EU.	Ensuring that machinery and other equipment with its own potential source of ignition which is intended to be installed in explosive areas are sufficiently protected against the risk of causing an explosion. Or, failing that, that any explosion is sufficiently mitigated.
54	Pyrotechnic articles	Directive 2013/29/EU of the European Parliament and of the Council of 12 June 2013 on the harmonisation of the laws of the Member States relating to the making on the market of pyrotechnic articles (recast)	Standardisation work to increase the safety of pyrotechnic articles: update the current standards on pyrotechnic articles to reflect the requirements in the current Directive 2013/29/EU and the latest developments in technology.	Increasing the safety of pyrotechnic articles and the quality of conformity assessments of these articles – by aligning the existing standards in this field with current legislative and safety requirements, as well as with the latest technological developments.

Actions for the development and revision of European standards or European standardisation deliverables which are necessary and suitable for the support of Union legislation and policies				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
55	Cableway installations	Regulation (EU) 2016/424 on cableway installations	Develop or revise standards to provide detailed technical specifications for (i) designing and constructing cableway installations, their infrastructure, subsystems and safety components and (ii) operating cableway installations.	Improving the safety of cableways installations.
56	Construction products	Regulation (EU) No 305/2011 on construction products and COM(2020) 662 on A Renovation Wave for Europe - greening our buildings, creating jobs, improving lives	Develop new European standards for assessment methods and criteria for construction products in particular for those supporting the renovation of the buildings– to be used as standardised technical specifications under Regulation (EU) No 305/2011.	Ensuring the single market for construction products operates smoothly and the greening of our buildings.
57	Lifts and safety components in lifts	Directive 2014/33/EU on the harmonisation of the laws of the Member States relating to lifts and safety components for lifts , Commission Implementing Decision (EU) 2021/76 and Commission Implementing Decision (EU) 2021/1220	Develop new European standards, update existing standardisation deliverables and adapt the Commission work programme implementing Decision (EU) 2021/76 and Decision (EU) 2021/1220 for delivering timely and state-of-the-art standards.	Ensuring a high level of health protection and safety and, where appropriate, safety for property, and guaranteeing fair competition on the EU market.
58	Onboard weighing equipment	Commission Implementing Regulation (EU) 2019/1213 of 12 July 2019 laying down detailed provisions ensuring uniform conditions for the implementation of interoperability and compatibility of onboard weighing equipment	Develop a standard for the transmission of information on onboard weighing equipment between truck and trailer, through a Cooperative Intelligent Transport Systems link. The new standard must develop the application layer of the communication between the different vehicles in the truck combination, based on a wireless link set-up between the Cooperative Intelligent Transport Systems stations in the motor vehicle and those in the trailers or semi-trailers, in accordance with standards EN 302 663, EN 302 636-4-1 and EN 302 636-5.	Supporting a standardised method for checking vehicles or vehicle combinations that may be overloaded, to prevent excessive road damage and ensure manoeuvrability.

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59	Pressure equipment	Directive 2014/68/EU of 15 May 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of pressure equipment	Revise existing standards and develop new standards for pressure equipment or assemblies	Improving safety and facilitating market access for small and medium-sized firms. This will make EU companies more competitive in the global marketplace.
60	Gas appliances	Regulation (EU) 2016/426 on appliances burning gaseous fuels	Develop new or revise existing European standards, to support state-of-the-art technology in the field of appliances burning gaseous fuels. The work will respond to: — the changes introduced in the essential requirements; — developments regarding gaseous fuels from renewable sources; — an anticipated increase in the use of hydrogen; — new technologies available (e.g. fuel cell appliances).	Ensuring health and safety as well as rational use of energy (energy efficiency) for appliances burning gaseous fuels.
61	Simple pressure vessels	DIRECTIVE 2014/29/EU on the harmonisation of the laws of the Member States relating to the making available on the market of simple pressure vessels	Revise existing standards in the EN 286 series and develop new standards.	Improving safety and facilitating market access for small and medium-sized firms. This will make EU companies more competitive in the global marketplace.
62	Weighing and measuring instruments	Directive 2014/31/EU Non-Automatic Weighing Instruments Directive 2014/32/EU Measuring Instruments	Develop new or revise existing European standards to support state-of-the-art technology in the field of weighing and measuring instruments.	(i) Protecting the public against incorrect results from weighing operations by means of non-automatic weighing instruments when used for certain categories of applications; (ii) Supporting correct and traceable measuring instruments that can be used for a variety of measurement tasks which directly and indirectly affect people's daily lives in many ways.

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				<p>These tasks are made for reasons of public interest, public health, safety and order, environmental protection, consumer protection, levying taxes and duties and fair trading.</p> <p>They may require the use of legally controlled measuring instruments.</p>
63	Safe and trustworthy artificial intelligence systems	<p>Proposal for a Regulation of the European Parliament and the Council laying down harmonised rules on Artificial Intelligence (AI Act) and amending certain Union legislative acts</p> <p>https://op.europa.eu/en/publication-detail/-/publication/e4c43528-ccfc-11ea-adf7-01aa75ed71a1/language-en</p>	Laying down rules for the placing on the market, putting into service and use of artificial intelligence systems in the EU, addressing requirements related to their safety and trustworthiness, including risk management, data quality, transparency, human oversight, accuracy, robustness and cybersecurity.	Ensuring that artificial intelligence systems can be safe and trustworthy, are monitored appropriately throughout their lifecycle, respect fundamental values and human rights recognised in EU and strengthen European competitiveness.
64	Public procurement	Directive 2014/24/EU on public procurement, article 22. and COM(2020) 66 A European strategy for data.	Develop standardisation deliverables for the electronic procurement end-to-end life cycle, to ensure cross-border interoperability and support common European data spaces for public administrations.	<p>The standards aim to facilitate interoperability between public procurement buyers and suppliers, especially at a cross-border level.</p> <p>Achieving interoperability is essential to create the single market in Europe.</p>
65	Cybersecurity of radio equipment	Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment	Develop new standards in support of certain cybersecurity requirements for specific radio equipment.	Improving the cybersecurity of certain radio equipment.

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66	eInvoicing	Directive 2014/55/EU on eInvoicing, article 3, and Commission Implementing Decision (EU) 2017/1870 of 16 October 2017.	Update or revise the European standard on electronic invoicing, to take into account technological developments and ensure full and ongoing interoperability in electronic invoicing in public procurement.	Promoting the uptake of electronic invoicing in public procurement and complementing efforts to promote the uptake of electronic procurement.
67	Digital passports for products and services	Sustainable Products Policy Legislative Initiative	Development of European standards addressing requirements related to trustworthiness, security, transparency of digital passports for products and services.	The objective is to provide the basis for ensuring high environmental performance of all products and, to the extent possible and relevant, services on the EU market by improved information flows through digital passports.
68	Quick Response code for instant payments at Point of Interaction	COM(2020) 592 on a Retail Payments Strategy for the EU	Develop a Quick Response code standard allowing initiation and acceptance of instant payments (both within one Member State and cross-border), using an electronic device (e.g. a mobile phone), in a variety of situations, such as in physical shops, in e-commerce, between individuals, between businesses, from businesses to consumers, invoices, etc.	Supporting the cross-border interoperability of instant payment solutions and the emergence of pan-European instant payment solutions, as well as their uptake.
69	Standards in support of blockchain services infrastructure	Europe's digital decade: digital targets for 2030 2030 Digital Compass: the European Way for the Digital Decade	Develop standards that will support the overall roll-out of the blockchain services infrastructure and distributed ledger technologies across the EU.	To support the European Blockchain Services Infrastructure that is green, secure, interoperable in full compliance with EU values and the EU legal framework, making cross-border and national/local public service provision more efficient and reliable and promoting new business models.