

EUROPEAN COMMISSION Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs

Single Market Policy, Regulation and Implementation Standards for Growth

Brussels, 11.08.2017

A Notification under Article 12 of Regulation (EU) No 1025/2012¹

Subject matter related to

\boxtimes	Annual Union Work Programme for European standardisation (Art. 12, point a)
	Possible future standardisation requests to the European standardisation organisations
	(Art. 12, point b)
	Formal objections to harmonised standards (Art. 12, point c)
	Identifications of ICT technical specifications (Art. 12, point d)
	Delegated acts to modify Annexes I or III of Regulation (EU) No 1025/2012 (Art. 12,
	point e)

Title of the initiative

Draft annual Union work programme for European standardisation for 2018

Additional information

Legislative reference(s)	Article 8 of Regulation (EU) No 1025/2012 on European standardisation
EN reference(s)	
Status	Draft
Other information	

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¹ OJ L 316, 14.11.2012, p. 12

Draft annual Union work programme for European standardisation for 2018

1. Introduction

The Commission supports the voluntary application of standards and industry's leading role in their development. At the same time, it considers as essential, to secure a high level of acceptance, that the standardisation process should benefit from the technical knowledge of industrial, governmental and scientific representatives and other stakeholders. The regulator can establish requirements in legislation and ask the European Standardisation System (ESS) to develop voluntary European standards (to be published in the *Official Journal*), which can be used for indirect reference and as a basis for a presumption of conformity or safety. An efficient standardisation system must therefore be based on close partnership between the regulator, standardisation bodies and industry².

The Commission set out a strategic vision for European standardisation in its 2011 Communication on *A strategic vision for European standards: moving forward to enhance and accelerate the sustainable growth of the European economy by 2020*³. This was given legal form in Regulation (EU) No 1025/2012 on European standardisation, which has been in force since 1 January 2013.

The Regulation requires the Commission to identify strategic priorities for European standardisation. These priorities, which reflect the Commission's policy objectives, are published in annual Union work programmes for European standardisation (AUWPs). The AUWPs indicate what standards and standardisation deliverables the Commission intends to request from the European standardisation organisations⁴ (ESOs), i.e. how it intends to use standardisation in support of new or existing legislation and policies and what formal standardisation requests (mandates) this may involve.

Standardisation requests are essential for the functioning of the single market, since standards enable the implementation of legislative acts. This generates legal certainty for manufacturers and facilitates the development and commercialisation of products and services.

The standardisation activity prioritised in this 2018 AUWP reflects a number of the current Commission's policy priorities, and supports recently approved major legislation and policy documents. Further important elements include action to enhance the visibility of European standardisation in other countries and international organisations, and action to improve the functioning, performance and delivery of the ESS.

The Commission welcomes the European Parliament resolution of 4 July 2017 on European standards for the 21st century⁵ ("hereinafter EP report on standardisation "), and

² COM(2016) 358.

³ COM(2011) 311.

⁴ CEN — European Committee for Standardisation, Cenelec — European Committee for Electrotechnical Standardisation and ETSI — European Telecommunications Standards Institute

http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P8-TA-2017-0278+0+DOC+XML+V0//EN&language=EN

acknowledges and underlines "the opinion that standards are an important tool for the operation of the Single Market, to enhance European competitiveness, growth and innovation, to support quality, performance and protection of consumers, business, workers, and environment and to develop interoperability of networks and system". In particular, the AUWP addresses and echoes the challenges and considerations surrounding Standards Essential Patents, on ICT standardisation, the international dimension of standardisation and on autonomous vehicles. Furthermore, the report is crucial in support of the inter-institutional reporting and dialogue and has served as an important reference for this AUWP.

The AUWP also reflects the joint initiative on standardisation (JIS), which was proposed by the Commission in 2015 (as part of the single market strategy⁶) and signed in June 2016. The JIS sets out a shared vision that supports the Commission's 10 policy priorities, and specific actions to be delivered by 2019 to improve the European standardisation system mobilising the EU institutions and the European standardisation community. It has been widely recognised as the way forward for European standard-setting in the light of technological development, political priorities and global trends. To date, it has been signed and endorsed by a total of 109 participants, including EU and EFTA Member States and organisations, representing a high level of engagement throughout the ESS.

This work programme:

- is addressed to all Member states, ESOs, national standardisation bodies (NSBs), Annex III organisations (SBS, ANEC, ETUC and ECOS)⁷ representing respectively SMEs, consumers, workers and environmental interests in standardisation, industry and other stakeholders involved in the standardisation process, and calls for their active participation in the priority actions;
- seeks to make the ESS more effective by concentrating available resources on the sectors that enable it to deliver on Commission priorities; and
- calls on ESOs to base their work programmes on implementation of the key strategies, actions and policies highlighted here.

The AUWP has no budgetary impact over and above what is already foreseen in the financial perspectives for 2018.

2. Strategic priorities for European standardisation in support of Union legislation and policies

The European standardisation process is a cornerstone of the internal market. Its role goes beyond developing harmonised standards: it contributes directly to single market integration and supports job creation, the overall growth of the EU economy, competitiveness, innovation and industrial leadership. It is therefore an integral part of the single market strategy and an important component of the Commission's political priorities and several major policy initiatives, such as the digital single market strategy⁸. By supporting the development of European standards in strategic priority areas representing expanding markets, the Commission aims to create a competitive advantage for European firms, in particular SMEs.

⁶ COM(2015) 550.

⁷ Small Business Standards, the European consumer voice in standardisation, the European Trade Union Confederation and the European Environmental Citizens' Organisation for Standardisation

⁸ COM(2015) 192.

This section focuses on action to support relevant initiatives under the Commission's 2017 work programme and the standardisation needs for 2018 that flow from them. The proposals do not represent an exhaustive list of the actions that the Commission intends to take in the policy fields in question. They reflect the needs identified in the course of preparing or implementing the relevant legislative acts and policies, and are in line with the Commission's strategic objectives in delivering a Europe that 'protects, empowers and defends'.

A particularly pertinent area of digital standards development for European industry is related to manufacturing and production. An Industry-developed reference framework (RAMI – Reference Architecture for Manufacturing in Industry) exists and is actively used and developed for IT systems that support the manufacturing environment. Further developments of this framework are urgently needed, to include services and delivery through platforms.

2.1. Action in support of the digital single market strategy

A year after the publication of the Commission's priorities on ICT standardisation⁹, the actions outlined in the 5G communication networks, Internet of Things (IoT), cloud computing, cyber security and (big) data technologies as priority domains as well as the sectorial domains on eHealth, intelligent transport systems and connected & automated vehicles, smart energy, digitising industry, smart homes, cities and farming are progressing, in collaboration with the ESOs, global SDOs and the standardisation community. In the same way, the Commissions has initiated actions to improve the ICT standardisation ecosystem including work with ESOs and stakeholders on possible measures to improve the Standard Essential Patents (SEP) ecosystem, promotion of open source and its interaction with standardisation, and to strengthen the EU presence in international ICT standardisation. The Mid-Term Review on the implementation of the Digital Single Market Strategy presented the overall implementation of the standardisation actions.

Furthermore, availability of the initial global 5G standards by the end of 2019 is among the actions of the 5G Action Plan¹⁰. Interoperability and standards is part of building a European data economy, which aims at fostering the best possible use of the potential of digital data to benefit the economy and society¹¹. The proposal for a Regulation on Privacy and Electronic Communications¹² calls for standardised icons in order to give an easily visible and intelligible overview of the collection of information emitted by terminal equipment, its purpose, the person responsible for it and of any measure the end-user of the terminal equipment can take to minimise the collection. In July 2016, as part of the Communication on Strengthening Europe's Cyber Resilience System and Fostering a Competitive and Innovative Cybersecurity Industry¹³, the action on the blueprint to handle large-scale cyber incidents on the EU level was announced, where the lack of interoperable solutions (technical standards), practices (process standards) and EU-wide mechanisms of certification are identified as gaps affecting the single market in cybersecurity. In autumn a Communication about the SEP is foreseen providing clarifications towards a balanced and sustainable framework.

- ¹¹ COM(2017)9
- ¹² COM(2017)10
- ¹³ COM(2016) 410

⁹ COM(2016) 176.

¹⁰ COM(2016)588

Certain actions are implemented through the related Public Private Partnerships¹⁴, such as the Alliance for Internet of Things Innovation (AIOTI)¹⁵, the 5G Infrastructure Public Private Partnership, the Big Data Value Association (BDVA), Factories of the Future PPP, the European Cyber Security Organisation (ECSO) and through Horizon 2020 research and innovation projects¹⁶.

In addition, the ICT standardisation needs in support to EU policies are outlined in the 2017 version "Rolling Plan for ICT Standardisation"¹⁷, which is established by the European Commission services in collaboration with the Multi Stakeholder Platform (MSP) on ICT standardisation and has been aligned to reflect the priorities identified in the Communication on ICT standardisation priorities.

This work is also useful for the accessibility of products and services in the EU. In addition, effort to mainstream accessibility following a Design for all approach should be step up to mainstream disability issues in relevant standardisation processes.

In addition, possible standardisation requests related to ICT standardisation are identified in the Annex.

2.2. Action in support of the energy union strategy

The speed and scale of digital transformation is impacting many industries, including the energy sector. Exploring the interplay between digitisation and the energy union is a priority. Standardisation is expected to assist the swift transition towards a decarbonised and integrated internal market, and thus represents a priority for the energy union. To this end, standardisation has also been identified as an important enabler for market-adoption of low-carbon technologies in the Accelerating Clean Energy Innovation Communication¹⁸. Specific action should target the interconnection of electricity networks, support diversified gas supply streams and integrate renewable energy into the consumption mix. Standardisation is already assisting energy efficiency and moderation of demand by targeting buildings through a new set of standards on energy performance of buildings; further efforts should focus on improving the measurement of energy consumption of devices and supporting Smart Cities through green public and innovation procurement.

These objectives have led, *inter alia*, to the ongoing development of a standard for the local and regional monitoring of air quality with mobile and portable monitoring devices that meet the data-quality objectives in the Ambient Air Quality Directives (2008/50/EC and 2004/107/EC).

In the context of the EU's ambitious targets for decarbonising transport needs, standardisation should provide vehicle manufacturers with opportunities to shift to cleaner modes of transport, allowing lower fuel consumption and further reducing emissions of CO_2 and other pollutants.

¹⁴ 5G: <u>https://5g-ppp.eu/</u>, ECSO: <u>https://www.ecs-org.eu/cppp</u>, Big Data Value Association: <u>http://www.bdva.eu/</u>

¹⁵ <u>https://www.aioti.eu/</u>

¹⁶ <u>https://ec.europa.eu/programmes/horizon2020/</u>

¹⁷ https://ec.europa.eu/growth/content/2017-rolling-plan-ict-standardisation-released en

¹⁸ COM(2016) 763 final

Further support through standardisation is needed to reduce the energy inefficiency of buildings by providing end-consumers with adequate information on the performance of district heating and cooling systems. This would contribute to global efforts to reduce greenhouse gas emissions and fuel consumption, while also aiming to foster cooperation with regions and countries outside the EU.

In implementation of the EU Green Infrastructure Strategy ¹⁹ there are standardisation needs in relation to physical building blocks for harmonisation between standards; for including or strengthening the concept and principles of green infrastructure in the different standard categories (performance, procedure, methodology) and for interoperability between technical standards applied in different project phases (planning, design, and construction).

2.3. Action in support of the space strategy for Europe

The Commission operates three satellite programmes (global positioning with Galileo, navigation with EGNOS and observation with Copernicus). Given the economic potential of the services and data these programmes will offer to businesses and the public, they are crucial for the EU's competitiveness. The Commission encourages the uptake of space solutions through standardisation measures and roadmaps, and by integrating space into future strategies, e.g. on autonomous and connected cars, railways, aviation and unmanned aerial vehicles.

2.4. Action in support of the circular economy action plan

In its *Report on the implementation of the Circular Economy Action Plan*²⁰, the Commission asked ESOs to develop generic standards on the durability, reusability, recyclability and documentation on material efficiency aspects (including use of Critical Raw Materials) of certain products.

Harmonised standards will help improve the safety and effectiveness of CE-marked fertilisers. Producers will be able to appeal to a wider group of customers, enjoying possible price premiums by virtue of the widely recognised quality guarantee of the CE mark. According to estimates²¹, about 120 000 jobs could be created in recycling bio-wastes into organic-based fertilisers. Research, innovation and investment in the circular economy will be encouraged and will generate value from domestically sourced secondary resources which would otherwise be disposed of as waste.

2.5. Action in support of the European defence action plan

The European defence market suffers from fragmentation and insufficient industrial collaboration. In accordance with the European defence action plan²², the Commission is committed to supporting the development of standards in the field of defence that Member States have identified as necessary for cooperative projects in priority areas.

²² COM(2016) 950.

¹⁹ COM(2013)249

²⁰ COM(2017) 33 final.

²¹ <u>http://europa.eu/rapid/press-release MEMO-16-826 fr.htm</u>

2.6. Action in support of the European agenda on security

Innovative technology tools are needed to protect us from terrorist threats.²³ Further efforts are needed both in the use of detection technology and towards standardising its use. European industry is well placed to understand the authorities' needs and capacity to deploy the solutions it offers. This could be supported by the creation of platforms to link the various solutions, avoid duplication and build on innovative ideas. European standardisation should bridge systems, methods and products by offering standards that support data quality and the interoperability of data systems recording crime statistics and by establishing requirements for detection equipment, in areas other than aviation.

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

Other standardisation needs have been identified in relation to the Commission's priority of a Europe that stands up for its industry.

There is a market need for new harmonised standards for specific types of machinery for 3D printers, robots, **autonomous vehicles**²⁴, wind turbines and automated machines. Such innovative products are being developed quickly in response to demand and are spreading fast on the European market. In order to overcome the current situation of self-certified conformity procedures, it is very important that European standards are available to ensure safety and market access. Further to this, relevant international standardisation activities should be taken into account.

Directive (EU) 2016/1629²⁵ has confirmed the role of the European Committee for Inland Navigation Standards (CESNI) as the body of reference for developing technical standards in the EU inland navigation sector. CESNI, a committee composed of representatives from EU and third countries, is also the reference for technical standards of vessels under the Revised Convention for Rhine Navigation²⁶. Given the different legal frameworks and timeframes for the decision-making procedures, it is important to strengthen the functioning of CESNI in support of a deeper internal market for inland navigation. The standards developed by CESNI are of key importance for the competitiveness of the fleet and for ensuring safety and environmental performance requirements. Therefore, European standard(s) will be developed to cover technical requirements for inland navigation vessels.

Also, to improve safety and remove technical barriers, there will be a focus on establishing new technical specifications for interoperability in rail system infrastructure and rolling-stock subsystems.

Interoperability and standardisation are key to removing technical barriers and extra costs in public procurement procedures. Ideally, bidders, including SMEs, should be able to communicate and participate easily in multiple markets. Therefore, potential areas of interest for standardisation are data/contract registries, the electronic European single procurement

²³ COM(2015) 624 final.

²⁴ <u>See also the EP report on standardisation</u>

²⁵ Directive (EU) 2016/1629 of the European Parliament and of the Council of 14 September 2016 laying down technical requirements for inland waterway vessels, amending Directive 2009/100/EC and repealing Directive 2006/87/EC

²⁶ <u>http://www.ccr-zkr.org/files/conventions/convrev_e.pdf</u>

document (eESPD) and the accreditation of e-procurement platforms, e-catalogues and e-forms.

To improve the free movement of goods in medical devices markets, uniform application of the legal requirements for placing *in vitro* diagnostic devices on the market needs to be ensured so as to improve safety and performance. Attention will be paid to reviewing and/or updating all existing standards and the possible development of new standards. Support under Horizon 2020 for medical technologies and devices, designed to preserve timely access to innovative healthcare solutions and support the competitiveness of European industry, will also provide industry and users with the testing facilities needed to develop and test medical devices in compliance with these new regulations and associated standards.

There is a need to update the current harmonised standards on civil explosives to reflect the latest developments in technology and improve the safety and quality of conformity assessments of such products. Harmonised standards would support the setting of minimum requirements for improving the health and safety protection of workers potentially at risk from an explosive atmosphere.

3. International cooperation²⁷

Maintaining and improving the presence of EU industry in international markets are key to creating jobs and growth in Europe. Standards facilitate companies' market access worldwide and two main objectives are instrumental in this respect:

- strengthening the competitiveness and global reach of European industry by reducing technical barriers to trade (TBTs); and
- enhancing worldwide interoperability by using common technically aligned standards that support trade in goods and services.

These objectives can be achieved, first and foremost, by aiming for the greatest possible coherence between international and European standards, and by facilitating the use of European and/or international standards outside the EU while striking the proper balance between the European, national and international dimensions²⁸. In 2018, the Commission will intensify its policy dialogue with international standardisation actors. It will also continue to raise awareness and promote the advantages of the international and European system of standardisation in multilateral fora (e.g. the World Trade Organisation and the relevant United Nations committees) and contribute to the EU's regulatory/policy dialogues with economically relevant partners and to negotiations on the TBT chapters of free-trade agreements.

Similarly, the Commission will finance visibility projects in economically relevant countries, such as the current 'seconded European standardisation experts' scheme in China and India, and web-based standardisation platforms with China. The overall objective of such action is to present the ESS as an alternative to other regions'/countries' standardisation arrangements, provide standardisation-relevant intelligence, facilitate bilateral cooperation on standardisation matters and support European companies facing standardisation-related obstacles to access to non-EU markets.

²⁷ See also the EP report on standardisation.

²⁸ See also EP report on standardisation.

The Commission will also use the Foreign Policy Instrument to support promotion of the European Standardisation System globally, in particular in the ICT sector. Finally, to strengthen the European presence in ICT international standardisation in 2018 an observatory of international standardisation activities and a financial support mechanism for participation of key experts in international standardisation meetings to promote European interests will be established.

The Commission will continue supporting international cooperation in standardisation in the context of research through Horizon 2020.

4. Public-private partnership

Public-private partnership is the cornerstone of the ESS and has been at the heart of its successful functioning over the years. Its further development requires the commitment and close cooperation of all stakeholders.

4.1. Governance

To ensure the smooth adoption and publication of harmonised European standards, the standardisation community needs appropriate financial, organisational and human resources.

The Commission is currently working with the ESOs to develop an action plan with a number of priority steps to address the stock of unpublished harmonised standards in the short, medium and long term. In particular, this involves prioritising the standards with the greatest market impact, developing clearer processes for the delivery and publication of the standards, and upgrading IT support tools. In 2018, the Commission will establish a new network of consultants tasked with supporting the production of harmonised standards at technical level.

The Commission will propose to the ESOs that, from 2018, a minimum percentage of the financing from EU operating grants be allocated to activities to support the technical committees which prepare the European standards. It will feed lessons from the first year of implementation (2018) into future exercises.

Finally, the Commission will discuss with the ESOs the possibility of strengthening the private-public partnership through its future involvement in their governance structures, such as the CEN, Celenec and ETSI Joint Presidents' Group which reflects on political and economic developments likely to affect standard-making.

4.2. Training

The Commission will organise inter-institutional training to enhance legislators' and co-legislators' understanding of the use of standards in the implementation of legislation and policies. This will be organised in cooperation with ESOs and international standardisation bodies, so as to ensure coverage of a broad range of subjects and improve knowledge of the interaction between European and international standardisation activity.

4.3. Inclusiveness

Since the entry into force of the Regulation, significant efforts have been made to allow SMEs and societal and social stakeholders to participate effectively in standardisation activities. However, as acknowledged in past AUWPs, many challenges remain in ensuring adequate participation by Annex III organisations. When standards relate to legislation protecting public interests, like for example accessibility, participation of societal stakeholders affected

like in this case those representing persons with disabilities is essential. In 2018, the Commission will continue closely to monitor progress in the implementation of the Regulation's provisions on the inclusiveness of the ESS. It will continue to cooperate with the standardisation community in the context of the JIS, under which a number of actions address the issue of inclusiveness.

The Commission invites ESOs, NSBs and Annex III organisations to maintain their efforts to address the challenges to stakeholder participation and to step up their cooperation. It invites the ESOs to maintain and intensify their efforts to facilitate the work of Annex III organisations and of all interested stakeholders, with a specific focus on their internal rules and procedures, and on work at international level, in particular within ISO and IEC.

5. Delivering on the Joint Initiative on Standardisation (JIS) and the next cycle

The action formulated in the standardisation package of June 2016²⁹ and the JIS should be developed further and implemented so as to continue to improve the annual governance cycle and deliver on the commitment to modernising, prioritising and speeding up the timely delivery of standards. Among the key priorities for 2018 will be:

• supporting EU-level assessment of the impact of standards by improving knowledge of the broader economic and societal effects (Action 1; see also section 5.2);

• action to improve the timely delivery and referencing of standards (Action 8); and

• greater inclusiveness and effective stakeholder participation in the standardisation process at different levels (Action 9).

5.1. Inter-institutional reporting and dialogue

Involving the co-legislators in priority-setting for the ESS is an important success factor. For this work programme, the Commission has based its work on the European Parliament's report on standardisation referred to above, as well as on interactions with the co-legislators. In line with the commitment in the standardisation package, the adoption of the next AUWP will be preceded by a single report from the Commission to the European Parliament and the Council on the implementation of EU standardisation policy. On the basis of this document, which is planned for October 2017, the Commission shall engage in an inter-institutional dialogue with the the European Parliament and the Council. The European Parliament's report on standardisation, this AUWP and the consecutive dialogue will serve as further policy input to the preparation of the AUWP 2019.

5.2. Study on the economic and societal impact of standardisation

Standards play a vital (albeit sometimes invisible) part in supporting economic growth by boosting productivity, competitiveness, innovation and societal welfare. The impacts of standards within businesses and their supply chains are less well understood, and the same is true of the public sector: there is sometimes a lack of awareness and information about the impact of applying standards to public policies.

Article 24 report (COM(2016) 212); and

²⁹ Communication on *European standards for the 21st century* (COM(2016) 358);

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

Annual Union work programme for European standardisation for 2017 (COM(2016) 357 and SWD(2016) 185).

Following an invitation from the Council³⁰ and in line with the Joint Initiative on Standardisation, the Commission is preparing a study on the economic and societal impact of standardisation in the EU. It plans to launch this in 2018 on the basis of a feasibility study in 2017. The structure of the feasibility study will be established in consultation with European academics and will take account of input from them in an exchange in May 2017.

³⁰ The Competitiveness Council of 2 March 2015 'invites the Commission to finalise the independent review and analyse the impact of standardisation on the economy, taking into account the interests of all the parties'.

Draft annex - Standards in support of policies and legislation

The Union's standardisation needs for 2018 flow from the Commission's objectives of delivering a Europe that 'protects, empowers and defends' and will be addressed under its policy priorities, in particular:

- 1. a new boost for jobs, growth and investment;
- 2. a connected digital single market;
- 3. a resilient energy union with a forward-looking climate change policy;
- 4. a deeper and fairer internal market with a strengthened industrial base;
- 7. an area of justice and fundamental rights based on mutual trust; and
- 9. a stronger global actor.

The proposals in this work programme do not represent an exhaustive list of actions that the Commission intends to take in the policy fields in question, but reflect the standardisation needs identified in the course of preparing or implementing the relevant legislative acts and policies.

The aims of the proposed actions are as follows:

New boost for jobs, growth and investment:

1. facilitate recognition of organic and waste-based fertilisers in the single market and thus support the role of bio-nutrients in the circular economy.

Connected digital single market:

- **2.** improve the quality of fixed and wireless/mobile services including in industrial networks;
- **3.** establishing standards facilitating the development of 5G technological advances in the 26 GHz band (24.25 27.50 GHz) and higher mm-wave bands;
- **4.** improve railway radio communication systems, the exchange of data for passengers and schedules, and IT security;
- 5. increase interoperability and easy data-sharing between operators across value chains, notably on product lifecycle management and logistics

Resilient energy union with a forward-looking climate change policy:

- 6. establish new sensors and measurement methods to assess ambient air quality;
- **7.** monitor ammonia (HN₃), chlorine and chlorine dioxide emissions to the air and emissions of hydrogen fluoride or total gaseous fluorides from industrial sectors;
- 8. reduce the energy consumption of computers, displays, servers and data-storage devices, commercial refrigeration, electric motors, fans, lighting products, household cold appliances, standard air compressors, machine tools and external power supplies;
- **9.** improving the energy performance of buildings' heating and cooling systems by providing adequate information to the end-consumers on the energy efficiency of and the renewable use in district heating and cooling systems;
- **10.** support an increase of the proportion of ethanol in petrol from 10 % to 20/25 %, thus providing vehicle manufacturers with opportunities to optimise the combustion process, allowing lower fuel consumption and further reducing emissions of CO₂ and other pollutants;
- **11.** facilitate global action to reduce greenhouse gas emissions and fuel consumption; foster cooperation with non-EU regions and countries; and
- **12.** increase the deployment of green infrastructure, particularly in relation to physical building blocks and procedures.

Deeper and fairer internal market with a strengthened industrial base:

- **13.** strengthening the role of CESNI, European Committee for Inland Navigation Standards, for the development of technical standards for inland navigation vessels;
- 14. match European global navigation satellite system products with end-user applications;
- 15. increase the interoperability of Galileo services with the aviation market;
- 16. standardise public procurement bidding systems, platforms, forms and data;
- **17.** harmonise safety standards for 3D printers, robots, autonomous vehicles, wind turbines, automated machines and food machines;
- **18.** strengthen safety and performance requirements for medical devices and for *in vitro* diagnostic medical devices;
- **19.** update hygiene and safety requirements and test methods for construction products in contact with water;
- 20. support work on the essential requirements for unmanned aircraft;
- **21.** update safety standards on civil explosives in line with technology developments;
- **22.** establish new technical specifications for interoperability relating to rail system infrastructure and rolling-stock subsystems;
- **23.** protect humans from cancer and other health effects of polycyclic aromatic hydrocarbons, by determining their migration from plastic and rubber;
- **24.** establish minimum requirements for improving the health and safety protection of workers potentially at risk from an explosive atmosphere; and
- **25.** improve consumer safety.

Area of justice and fundamental rights based on mutual trust:

26. establish requirements for detection equipment, in areas other than aviation, to protect citizens from terrorist attacks.

Stronger global actor:

27. support Member States' efforts to develop joint defence capabilities while fostering a competitive and innovative industrial base.

Draft working document on implementation of the foreseen actions

Ref.	Policy/legislative reference	Objective	Aim /impact of the action	Type of action
1	Proposal for a regulation of the European Parliament and of the Council laying down rules on the marking available on the market of CE marked fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009. COM (2016)157	More and more manufacturers in the EU are developing innovative fertilising products including nutrients or organic matter recycled from bio-waste. But diverging national rules and standards make it difficult for producers of organic fertilisers to sell and use them across the EU single market. The future Regulation will create a level playing field for all fertilising products. At the same time, new common requirements for quality, safety and labelling will allow European farmers to make informed choices, contributing to making food production more cost and resource effective. The harmonised standards will help economic operators and competent authorities to verify the compliance of CE marked fertilising products against the future legal requirements.	In the absence of harmonised standards, the application of the new rules would be impossible. Harmonised standards will help to increase the safety and the efficacy of CE mark fertilising products. Producers will be able to offer their products to a wider group of customers, enjoying possible price premiums from offering a product backed by the widely recognized quality guarantee of the CE marking. According to estimates about 120.000 jobs could be created thanks to recycling of bio-wastes in organic-based fertilisers. By levelling the playing field for all fertilisers. Research, innovation and investment in the circular economy will be encouraged and will generate value from secondary domestically sourced resources which would otherwise be disposed as waste.	CEN will be requested to develop harmonised standards for the control of CE marked fertilising products. A preliminary screening exercise on available test methods has allowed to identify relevant EN or ISO standards and where gaps need to be filled in

1. A New Boost for Jobs, Growth and Investment

Commission européenne/Europese Commissie, 1049 Bruxelles/Brussel, BELGIQUE/BELGIË - Tel. +32 22991111 http://ec.europa.eu/growth/single-market/european-standards/notification-system/index_en.htm

ef.	Policy/legislative reference	Objective	Aim /impact of the action	Type of action
2	Communication: ICT Standardisation Priorities for the Digital Single Market COM(2016)176	Overcome the current lack of an agreed set of measurements and tools to assess quality of broadband/internet and availability of fixed and mobile services across the EU territory. Assess the reliability of measurements of fixed and mobile network performance and QoS provided. Assess availability, reliability, resilience of critical telecom infrastructure	Pan European set of internet Quality of Service measurements and tools to support DSM policy development and the monitoring of progress towards the achievement of EU broadband objectives, support the planning and deployment of EU funded broadband measures (ESIF, EFSI, CEF), aid in the monitoring and implementation of EU regulation on Communication Services including the user rights and consumer protection aspects set within the TSM regulation. Ensure the reliable delivery of fixed, wireless/mobile including 5G innovative services and its pan European applications (eg: in the fields of transport/Connected cars, eHealth, education, smart energy delivery, GIS- related services, etc.). Aid in the assessment of the availability, reliability, resilience of critical telecom infrastructure/services to deliver essential services (eg: energy) Benchmark QoS of broadband across the EU areas at the highest level of resolution possible.	Development of standards building on relevant work from BEREC on QoS on fixed and wireless/mobile services

2. A Connected Digital Single Market

3	Radio Equipment Directive (2014/53/EU) OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishes a regulatory framework for the making available on the market and putting into service in the Union of radio equipment	Establishing standards facilitating the development of 5G technological advances in the 26 GHz band (24.25 – 27.50 GHz) and higher mm-wave bands that are identified as candidate bands to be used for 5G (IMT- 2020) services.	To enable increased sharing such as for example adaptive beamforming, including the flexibility needed to enable access for different 5G applications.	Development of Harmonised Standards
4	DIRECTIVE (EU) 2016/797	Standards for the succession of GSM-R as the radio communication system for railways, in order to mitigate the risk of GSM-R obsolescence, to follow the pace of innovation and to ensure that the radio communication part of ERTMS will be standardised and available in a timely manner; Reengineering of NeTex (passengers) versus Transmodel and; Developing railway standards on IT-Security	maintain Railway interoperability by harmonisation of communication system in support of ERTMS; ensure that physical model of NeTex (multimodal data exchange in passenger transport) will be also available as conception model in Transmodel ; ensure safety of ever more connected railway systems.	Development of Harmonised Standards

5	COM (2011) 144 final: White Paper Roadmap to a Single European Transport Area – "Towards a competitive and resource efficient transport system; COM (2009) 8: Maritime Transport Strategy 2018; COM (2013) 913 and SWD (2013) 913 and SWD (2013) 524: Urban Mobility Package and C(2015)2259 setting- up an expert group on Digital Transport and Logistics	Establish standards enabling efficient information exchange between stakeholders (public and private) along the whole supply chain, and to facilitate the flow, access and use of data	Digitalisation in transport and logistics is an important driver for efficiency, simplification, lowering costs, and a better use of resources. Digitalisation also creates new opportunities for business and has the potential to change the way cargo and traffic flows will be organised and managed in the future. To support this process, DG MOVE established the Digital Transport and Logistics Forum (DTLF), a consultative platform for the cooperation between stakeholders in a cross-modal and cross-sectorial perspective. The issue of standards would be one of the aspects to improve interoperability and facilitate data	Ancillary action for the cooperation as regards the standards of information exchange
	Transport and Logistics		interoperability and facilitate data	
	('the Digital Transport		sharing between the actors operating in	
	and Logistics Forum')		the logistic chains.	

Ref.	Policy/legislative reference	Objective	Aim /impact of the action	Type of action
6	Ambient air quality directives (Directive 2008/50/EC and Directive 2004/107/EC)	Support for the local and regional monitoring of air quality with <u>mobile</u> <u>and portable monitoring devices</u> that meet the data quality objectives in the Ambient Air Quality Directives. Support fot the <u>implementation of the Ambient Air</u> <u>Quality Directives</u> . In order to ensure that the information collected on air pollution is sufficiently representative and comparable across the Community, it is important that standardised measurement techniques and common criteria for the number and location of measuring stations are used for the assessment of ambient air quality. Techniques other than measurements can be used to assess ambient air quality and it is therefore necessary to define criteria for the use and required accuracy of such techniques.	The standards for air quality sensors would support for the local and regional monitoring of air quality with mobile and portable monitoring devices and the statistical processing of data in a user-friendly way. The problem to be solved is that the performance of the current generation of air quality sensors does not meet the data quality objectives in the Ambient Air Quality Directives. The standard is necessary because Member states S have identified problems with the relatively cheap sensors used by the public to measure air quality, because these sensors do not meet the data quality objectives in the Ambient Air Quality Directives . All over Europe, citizen scientists, NGOs, companies and administrations are increasingly monitoring local and regional air quality. They often use mobile monitors, portable devices and biological tools. These ways are claimed to be useful to perform measurements in or near hotspots and to establish air quality benefits near infrastructure projects to compare the situation before and after, especially if no official monitoring station is nearby. Such ways could also raise awareness of e.g. school pupils and provide support among citizens for air quality measures. The developement of a standard for air quality sensors would promote innovation, increase the quality of the portable devices and impact on jobs and competitiveness in the EU market of these sensors.	Development of a standard for the local and regional monitoring of air quality with mobile and portable monitoring devices that meet meet the data quality objectives in the Ambient Air Quality Directives.

73. A Resilient Energy Union with a Forward-Looking Climate Change Policy

			the measurement equipment and of the reported data.	
8	Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products and associated implementing Regulations	Standards meeting the requirements which the below listed energy-related products covered by implementing measures must fulfil in order to be placed on the market and/or put into service: computers, displays, servers and data storage devices, commercial refrigeration, electric motors, fans, lighting products, household cold appliances, standard air compressors, machine tools and external power supplies	The standards will decrease the energy consumption of the products thus reducing the environmental impacts and achieving energy savings which also leads to economic savings for businesses and end-users	Development pf standards
9	EU Renewable Energy Directive 2009/28/EC and the Commission's legislative proposal COM (2016) 767 final of 30 November 2016 on recast of the EU Renewable Energy	Developing energy labels and energy performance certificates for district heating and cooling systems, thereby building on and completing the existing standards for calculation of the energy performance of district heating and cooling	 Provide information to end-consumers, therefore contributing to one of the three key objectives of the clean energy package 	Development of energy performance certificates and energy labels reflecting the measurement and calculation of

				Performance of District Heating and Cooling
10	EU Renewable Energy Directive 2009/28/EC	Develop standards for a 20/25 ethanol blend in petrol.	At present the ethanol blend wall is limited to 10vol% ethanol in petrol. The EU has ambitious targets for defossiling transport and higher blends can contribute DG ENER is already supporting CEN to carry out research on the topic via 3 research contracts. The final results are expected by the end of 2017-early 2018. Based on the final results and in consultation with other EC services as well as the stakeholders and CEN the Commission may decide to send a mandate to CEN.	Development of standards
11	Directive 2003/87/EC	Update of EN 16258:2012 "Methodology for calculation and declaration of energy consumption and GHG emissions of transport services" with the objective to harmonise with other standards and their implementing rules for emission accounting from transport services at the global level	Logistic chains are often of international dimension, creating a need for the alignment and implementation of standards at a global scale. This action will therefore contribute to international harmonisation efforts, facilitating global approaches on GHG emissions and fuel consumption reduction and also fostering cooperation with non-EU regions and countries.	Ancillary action to establish cooperation with the global standardisation bodies (e.g. ISO) for a harmonised standard for emission accounting from transport services
12	Communication on Green Infrastructure COM (2013)249, COM (2013)216 on adaptation to climate change and referring to COM (2014)445 on resource efficiency opportunities	The Communication COM(2013)249 on an EU Strategy for Green Infrastructure identifies standards as possibly contributing to 'growing the market' for green infrastructure solutions. The Commission, taking into account e.g results of the study <u>"Supporting the</u> <u>Implementation of Green</u>	Developing green infrastructure technical standards will contribute substantially to green Infrastructure implementation, and as such to new green Infrastructure markets. While GI is increasingly becoming used more broadly, the available information and uptake of green Infrastructure is fragmented. Standards will be used across different sectors (finances, buildings, water, transport, public health, industry, climate, rural	Development of standards

i	in the building sector	Infrastructure" will ask for the development of technical standards, particularly in relation to physical building blocks and procedures, which could increase the deployment of Green Infrastructure.	abandonment and energy). They will set recognized quality level, build trust and confidence necessary to stimulate demand as well as further innovation in the sector, new skills, competitiveness, jobs and green growth.	
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Ref.	Policy/legislative reference	Objective	Aim /impact of the action	Type of action
13	Directive (EU) 2016/1629 of the European Parliament and of the Council of 14 September 2016 laying down technical requirements for inland waterway vessels, amending Directive 2009/100/EC and repealing Directive 2006/87/EC	Annex II of Directive (EU) 2016/162 introduces into EU law the ES-TRIN standard (see: https://www.cesni.eu/en/documents). It is a mandatory set of EU standards that a vessel has to comply with in order to be authorised to navigate in waterways of European dimensions. The set of standards cover multiple issues, from stability parameters, navigational equipment, safety and environmental parameters of engines, gears and tools, etc., etc. The ES-TRIN standard is established by the European Committee for Inland Navigation Standards (CESNI), on the basis of the work of experts from the Member States and third countries. The aim is to transpose the work performed by CESNI in the European standardisation system through the CEN/TC 15 on Inland navigation vessels and develop European standard(s).	CESNI is a standardisation body of key importance for the European inland navigation industry. The ES-TRIN standard requires constant examination and upgrade to ensure technological progress, competitiveness of the fleet and adequate levels of safety and environmental performance. The particular nature of CESNI as standardisation body under EU law has to be clarified. The current situation results in a lack of legal certainty, which has a potentially negative impact on the achievement of deeper and fairer internal market for the EU inland navigation sector.	Strengthen the role of CESNI as the body in charge of developing European standard for the inland navigation sector.

4. A Deeper and Fairer Internal Market with a Strengthened Industrial Base

14	Priorities of Space Strategy COM (2016) 705 & Commission implementing decision on the adoption of the work programme for 2017 and on the financing of the European satellite navigation programme	Further to a EGNSS downstream standardisation study (finalised in 7/2017) on the state of play, gaps and priorities for future EGNSS standardisation needs, follow- up action is planned in view of establishing a roadmap on EGNSS downstream standardisation and launching standardisation activities in priority areas.	The study investigates EGNSS downstream standardisation needs in ten EGNSS market application areas, incl. LBS, Aviation, RPAS, Maritime, Road, Rail, Multimodal transport, Agriculture, Timing and Synchronisation. Follow-up standardisation action is planned in those areas where added value and impact on jobs, competitiveness is highest.	Roadmap for EGNSS downstream standardisation & implementation of roadmap
15	Priorities of Space Strategy COM (2016) 705 & Commission implementing decision on the adoption of the work programme for 2017 and on the financing of the European satellite navigation programme	Develop technical solution for implementation of multi-constellation/ dual frequency by drafting EUROCAE dual frequency multi-constellation Minimum Operational Performance Specifications	This action will ensure that Galileo is included within and compatible with relevant standards, where not being included would hinder uptake of Galileo services in the aviation market segment.	Preparation of relevant technical standards and promotion of Galileo within EUROCAE.

16	Communication on End- to-End eProcurement (COM(2013)453), Public Procurement Directives (2017/24/EU), Communication on the Digital Single Market Strategy (COM/2015/0192)	Supporting standardization initiatives, to improve the functioning of the single market in Europe	Savings up to 100 BEUR each year, it will make Europe much more competitive and robust. And as Public Procurement has many spill-over effects in Europe it will spread innovation	Interoperability and standardisation is a key strategy to remove technical barriers or extra costs when suppliers bid on a plurality of systems. In order to achieve a true single market, bidders including SMEs ideally should be able to communicate and participate easily in multiple markets. As well it is important to understand the single market and to improve it with better policies. Potential areas of interest for standardisations are therefore data/contract registries, eESPD, accreditation of eProcurement platforms, eCatalogue and eForms
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17	Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast)	Mainly related to new (emerging) technologies and machinery, standards necessary for specific machinery below, as a market need identified via the open public consultation for the evaluation study of the Directive on machinery: 1) Additive manufacturing machinery (3D printing); 2) Collaborative robots; 3)Automated machines and vehicles; 4)Wind turbines; 5)Food machines	New harmonised standards for specific types of machinery mentioned hereafter will fill in the existing gap for such innovative products which are developed at a fast pace and their spread on the European market becomes increasingly wider. In order to overcome the current situation of self- certification conformity procedures and as such, availability of European harmonised standards is highly important both for ensuring safety and market access. Further to this, relevant international standardisation activities should be taken into account.	Develop harmonised standards
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19Construction products Regulation (EU) 305/2011 and Drinking Water Directive 98/83/EC do not set out limits for the transfer of substances that are components of materials to drinking water they are in contact with (only exist for food in contact with Drinking Water Directive 98/83/EC , and and related to Regulation (EC) No 1935/2004 including Regulation 10/2011Includin perfect developed in a rudimentary way by TC164, but further specific standardisation work on hygiene and safety for products and materials in contact with drinking water is urgently needed. A replacement of mandate to CEN M/136rev2 concerning the execution of standardisation work for harmonised standards on construction products in consumption is ongoing.Includin	Amending harmonised product standards on products and materials in contact with mage water in all relevant product nder the CPR; harmonising the mical approach in several MS ing in this field currently working with different methods; Amending harmonised product standards on products and materials in contact with drinking water. The Commission is gathering data and information for replacing M/136
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20	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency, and repealing Regulation (EC) No 216/2008 of the European Parliament and of the Council	To help industry conformity with the new regulation and its implementing rules, it will be necessary to develop of standards in the field of drones, in particular on identification, geofencing and other technical requirements that will be in the new legislation.	Supporting the essential requirements for unmanned aircraft	Development of standards
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Directive 2014/28/EU on the harmonisation of the laws of the Member States relating to the making available on the market and supervision of explosives for civil uses

The Directive on civil explosives has the purpose to create an EU single market for this product category, whenever they meet the essential safety requirements established with the Directive. To facilitate the work of economic operators, notified bodies and market surveillance authorities in ensuring that explosives for civil uses meet these essential safety requirements, several harmonised standards have been developed by CEN following a mandate from the Commission. For explosives complying with these harmonised standards there is a presumption of conformity with the essential safety requirements. The current harmonised standards fo explosives have been adopted between 2002 and 2005; technical progress has made a revision of the standards necessary, in order to include in their scope new products and new technology which have been introduced after their adoption.

The aim of this action is to increase the safety of civil explosives and the quality of conformity assessments for these products, by bringing into line the existing harmonised standards with the current level of technology in this sector, and by closing gaps deriving by the fact that newer, but already widely used products (in particular, electronic detonators) are not covered at all by the existing harmonised standards. The update of the harmonised standards for explosives will have a positive impact for economic operators, notified bodies and market surveillance authorities.

Revision of the current harmonised standards EN 13630, EN 13631, EN 13763, EN 13857 and EN 13938 and development of a new standard for electronic detonators (in case it would not be possible to include it in one of the above-listed harmonised standards)

22	DIRECTIVE (EU) 2016/797	 Close open points of the rail Technical Specifications for Interoperability Issuing new/updated EN Standards allowing simpler and clearer TSIs. Specific topics include: Rolling stock standards for 1520 mm track gauge: extend the scope of existing standards (e.g. dynamic behaviour) Update standards to establish normative limits to track geometry defects for speeds over 300 Km/h. 	Increase harmonisation of RST and INF functional requirements at EU level. Consequently, better safety level and removal of technical barriers.	Development/revision of Harmonised Standards
23	Regulation 1907/2006 (REACH)	Harmonisation of an analytical method to determine the migration of polycyclic aromatic hydrocarbons (PAHs) from plastic and rubber. The restriction in entry 50 of Annex XVII will be reviewed in late 2017 and may include a migration based derogation from the content limit already established.	This standard will support the implementation of the restriction defined in entry 50 of Annex XVII to REACH, relative to PAHs in consumer articles containing plastic and rubber components.	Development of a harmonised standard. The standard would rely on initial method development work currently being undertaken by DG JRC Directorate D, which should conclude in late 2017.

24	Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres	European harmonised standards in the ATEX sector are currently developed under the Mandates M/BC/CEN/92/46 and M/BC/CEN/92/8 issued for the previous Directive 94/9/EC. It is necessary to consolidate and update the mandate for the new Directive 2014/34/EU taking into consideration the Standardisation Regulation (EU) No 1025/2012	As for the other EU harmonisation legislation for products in the internal market, referred to the "New Approach" and the "New Legislative Framework", harmonised standards are a very useful mean to get presumption of conformity with the essential requirements they aim to cover. A new consolidated and updated mandate would improve the legal and technical bases for the work to be developed by the European Standardisation Organisations (CEN and CENELEC)	Development of harmonised standards for the ATEX legislation
25	Directive on General Product Safety 2001/95/EC	To improve safety of consumer products not covered by Union harmonisation legislation.	European standards developed and referenced under GPSD improve safety of consumers, help Member States to enforce the general safety requirement contained in the GPSD and provide legal certainty to businesses, therefore improving the functioning of the internal market.	Development of standards

Ref.	Policy/legislative reference	Objective	Aim /impact of the action	Type of action
26	Communication on a new EU approach to the detection and mitigation of CBRN-E risks (COM(2014) 247); Communication Implementing the European Agenda on Security: EU action plan against illicit trafficking in and use of firearms and explosives (COM(2015) 624); Communication Security Industrial Policy Action Plan for an innovative and competitive Security Industry (COM(012)417))	Investigate if there is a possibility to set minimum standards and/or recommendations for minimum detection capabilities for detection equipment in other areas than aviation (e.g. rail, stadiums, shopping malls).	The action's aim is to address the existing gap in this area in order to ensure a better protection level and increase security.	Study assessing the possibility of setting (minimum) standards in the area of detection equipment in other areas than aviation, in view of the development of such standards.

7. An Area of Justice and Fundamental Rights Based on Mutual Trust

Ref.	Policy/legislative reference	Objective	Aim /impact of the action	Type of action		
27	Communication (2016)950: European Defence Action Plan (EDAP)	The Commission is committed in the EDAP to considering supporting the development of standards in the field of defence that Member States have identified as necessary for co-operative projects in priority areas.	Supporting Member States to develop joint defence capabilities while fostering a competitive and innovative industrial base.	Development of standards		

9. A Stronger Global Actor