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COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL AND THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE

A strategic vision for European standards: Moving forward to enhance and accelerate the sustainable growth of the European economy by 2020

(Text with EEA relevance)

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1. A STRATEGIC VISION FOR STANDARDS IN EUROPE

1.1. European standards

Standards are voluntary documents that define technical or quality requirements with which current or future products, production processes, services or methods may comply. Standards result from voluntary cooperation between industry, public authorities and other interested parties collaborating within a system founded on openness, transparency and consensus.

Standards are trade-enhancing because of their cost-decreasing effect and the reduction of information asymmetries between the supply and the demand sides, especially in the case of cross-border transactions. Several econometric studies have established a **clear connection at a macroeconomic level between standardisation in the economy, productivity growth, trade and overall economic growth.** The economic benefit of standardisation can vary significantly between different EU countries. Studies show that the impact of standards on annual GDP growth could rage from 0.3 to 1 percentage point. For Germany this impact is estimated at 1% of the gross national product, for France at 0.8% and for United Kingdom only at 0.3%.

One of the unique aspects of the voluntary cooperation between industry, public authorities and other interested parties in the EU is the growing number of **European standards** which are adopted by the European standardisation bodies (ESOs)¹ and which apply throughout the EU. The ESOs are independent organisations governed by private law. For industry, European standards summarise best practice in a specific area, because they encapsulate the collective expertise of the participating actors. **The large majority of European standards remain industry-initiated**, indicating that these instruments mainly respond to the needs of enterprises and are mainly privately driven.

European standardisation was extremely successful and one of the driving factors of the creation of the internal market for goods. European standards replace national and often conflicting standards which, as such, may create technical impediments to

The ESOs are: CEN (The European Committee for Standardisation), CENELEC (The European Committee for Electrotechnical Standardisation) and ETSI (The European Telecommunications Standards Institute).

a national market. Many European standards are developed by the ESOs at the request of the Commission. A large proportion of these standards adopted by the ESOs at the request of the Commission are so-called "harmonised standards" which ensure that products meet the essential requirements set out in EU harmonisation legislation. Compliance with a European harmonised standard guarantees compliance with the applicable requirements, including safety requirements, set out in the relevant EU harmonisation legislation. However, use of harmonised standards is still voluntary and a manufacturer may use any other technical solution which demonstrates that his product meets the essential requirements. The percentage of European standards that are harmonised standards has increased in the last two decades from 3.55% to 20% in 2009.

European standards and standardisation are very effective policy tools for the EU. Although standards and standardisation have much wider benefits for the European economy, they are used as policy instruments to ensure, inter alia, the interoperability of networks and systems, a proper functioning of the Single market, a high level of consumer and environmental protection, and more innovation and social inclusion.

Consumer safety is very important element in many European standards. The safety of the consumer is usually a primary concern for drafting and adopting a European standard. Conversely, when a safety issue is discovered when the product is already put on the market (for example as a result of a market surveillance inspection), this problem should be taken into account during the preparation of a new standard or the revision of an existing standard. As a consequence, there is a close link between standardisation, product safety and market surveillance, which will be strengthened in the future revision of the legislative framework on market surveillance.

European and other standards are indispensable in the digital society to ensure the interoperability of networks and systems, especially in the field of ICT. In a digitally driven society, ICT solutions are used in any economic sector as well as in our daily lives. ICT solutions, applications and services have to be able to communicate with each other; they should be interoperable. Interoperability requires standards.

1.2. ...in a fast changing global landscape

But the world has changed. Standards used to be confined to product standards but are evolving more and more to process and production standards covering a broad range of subjects. In the future, **European standardisation will play a crucial role in a wide variety of areas, wider than today**, ranging from supporting European competitiveness, protecting the consumer, improving accessibility of disabled and elderly people to tackling climate change and the resource efficiency challenge. To respond rapidly to evolving needs in all areas, a comprehensive, inclusive, efficient and technically up-to-date European standardisation system will be required. This system will build on the strengths of the existing system, but will also need to be flexible and responsive in addressing future challenges as they arise.

It is especially vital that in areas where Europe is the driving innovation force in developing new types of tradable goods, services and technologies – for example in

areas such as electric vehicles, security, energy efficiency and smart grids – that the creation of the European standard be carried out rapidly with the aim of asserting it as an international standard. This would maximise first mover advantage and increase the competitiveness of European industry. In such cases, though the role of ESOs is vital, any delays in delivering the standard will lead to prompt legislative action by the Commission.

The European Council of 4 February 2011 confirmed that standardisation is a crucial framework condition to boost private investment in innovative goods and services and that standardisation processes should be accelerated, simplified and modernised. It is essential for the European economy that European standardisation further adapts to the fast changing global landscape and economic environment. The rapid shortening of innovation cycles, the convergence of technologies, fierce global competition and emergence of new global players could raise concerns about the sustainability of European standardisation system in adapting to these challenges. In the new global era, the policy role of standardisation process cannot be limited to supporting European legislation. Today, standardisation is increasingly happening at global level in many areas, often, like in the field of ICT, through dynamic and fast-paced for aand consortia. In this context, the strategic use of standards on the one hand and European standardisation on the other, are strategic assets for securing EU competitiveness and a key tool for knowledge dissemination, interoperability, validation of novel ideas and promotion of innovation. Yet, European standards can complement but not substitute European legislation, or prevent the European legislator from addressing major issues in the EU.

European standardisation will expand to new areas and will cover new subjects. In a fast changing and globalising economic context, standards will more than ever become an invaluable tool for international trade. However, **the success of the implementation of the European standards will depend on the legitimacy and the efficiency of their adoption processes**. The inclusivity and the speed of the process must be urgently improved if we want European standards to play a global role.

Strategy for smart, sustainable and inclusive growth, as set out in several flagship initiatives. Innovation Union² underlines that a dynamic and responsive European standardisation system is needed to support innovation. The Industrial Policy³ flagship stresses the need for European standardisation to be highly responsive in a rapidly changing world, for it to support European competitiveness in the global market and for it to meet the needs of both industry and public authorities. The Digital Agenda for Europe⁴ highlights the importance of ICT standards in delivering interoperability between devices, applications, data repositories, services and networks. And the Flagship for a Resource Efficient Europe⁵ emphasizes the important role of standards in encouraging eco-innovation. Standardisation also plays

² COM(2010) 546.

³ COM(2010) 614.

⁴ COM(2010) 245.

⁵ COM(2011)21.

a role in policy measures such as the "Single Market Act"⁶, the Communication on Trade, Growth and World Affairs⁷ and the Disability Strategy 2010-2020⁸. European standardisation also features in the review of the "Small Business Act" for Europe⁹. The Communication on "a new response to a changing Neighbourhood¹⁰" also refers to the need for partner countries to implement commitments on taking over EU standards in the framework of the negotiations with respect to Deep and Comprehensive Free Trade Agreements (DCFTA).

A European standardisation system supporting the Europe 2020 Strategy for smart, sustainable and inclusive growth will need to meet the following **strategic objectives**:

- (1) Standards need to be quickly available especially but not only to assure the interoperability between services and applications in the field of information and communications technologies so that Europe can reap the full benefits of ICT. The most relevant ICT standards developed by the ESOs or by global ICT Fora and Consortia, provided that these standards comply with a set of quality criteria, should play a more prominent role in fulfilling public policy objectives and societal needs. It should become possible to use these standards in public procurement, or to facilitate policy making and legislation.
- (2) Standardisation within the EU will continue to make a significant contribution to the European economy. European standards are **powerful strategic tools for businesses to increase their competitiveness.** Since European standards are used above all by businesses as a tool to facilitate the market penetration of innovative goods and reducing production costs, **standards must keep pace with ever faster product development cycles**.
- (3) European standards developed by the European standardisation bodies will need to respond to an increasing demand, as a tool to support many European policies and legislation. European standardisation has and will have a significant impact in underpinning the single market of goods and services and preventing the creation of trade barriers within the EU. The use of standards as a policy tool is made possible by a longstanding tradition of strong partnership between voluntary experts from industry, EU public authorities, the ESOs the National Standardisation Bodies (NSBs) and other standard developing organisations. The ESOs are responsible for managing the development and the adoption of European standards in consultation with their members¹¹.

⁶ COM(2011) 206.

⁷ COM(2010) 612.

⁸ COM(2010) 636.

⁹ COM(2011) 78.

¹⁰ COM(2011) 303.

CEN and CENELEC's membership consists of the NSBs, whereas ETSI uses a 'mixed' model, in which members from industry participate directly in standards development, with the National Committees involved in the final stages of agreeing a European standard.

- (4) European standards will affect more and more groups in European society, including businesses of all sorts and many individual citizens. A standard is the result of a consensus reached by those participating in its development. A sufficiently wide range of participants is essential for a standard to be accepted both by businesses and consumers. The European standardisation system must therefore become as inclusive as possible, with all partners committed to a system rooted in the core values of openness, transparency and scientific solidity. The continuous improvement of standardisation structures and governance will also require effective and closer collaboration between all partners, above all between the European standardisation bodies and between national standardisation bodies on the one hand, and the public authorities and legislators on the other.
- (5) Standards have an important role to play in **supporting the competitiveness of European businesses in the global market**, allowing them to access foreign markets and establish business partnerships around the globe.

This strategy sets out a package of measures, both legislative and non-legislative. The legislative measures are contained in the accompanying proposal for a Regulation on standardisation, which updates and combines existing European legislation and is accompanied by an Impact Assessment¹². Non-legislative measures include actions to be taken by the Commission and a series of recommendations addressed to other actors in the European standardisation system.

These measures all draw on the results of a wide-ranging review of the European standardisation system, carried out from 2008-2010, including the EXPRESS Report¹³, two public consultations, the White Paper on Modernising ICT standardisation in the EU¹⁴ and a range of in-depth studies. It is also informed by the European Parliament's October 2010 report on the future of European standardisation¹⁵, which emphasises building on the strengths and core values of the existing system, improving its deficiencies and striking the right balance between the European, national and international dimensions.

The importance of European standardisation for the European economy and the competitiveness of European enterprises implies that it will be necessary, in a longer term perspective, to assess on a more regular basis if the European standardisation system is sufficiently capable to adapt to the quickly evolving environment and to contribute to Europe's strategic internal and external objectives, in particular in the field of industrial policy, innovation and technological development. The first assessment will be launched in 2013 at the latest.

The impact assessment also evaluates the relevance of the standardisation activities receiving EU financing in the light of the requirements of EU policies and legislation, as set out in Article 6(2) of Decision No 1673/2006/EC of the European Parliament and of the Council of 24 October 2006 on the financing of European standardisation.

Expert Panel for the Review of the European Standardisation System (EXPRESS), "Standardisation for a competitive and innovative Europe: a vision for 2020", Report for the European Commission, 2010. http://ec.europa.eu/enterprise/policies/european-

standards/files/express/exp_384_express_report_final_distrib_en.pdf

¹⁴ COM(2009)324 of 3.7.2009.

¹⁵ A7-0276/2010

2. EUROPEAN STANDARDISATION IN SUPPORT OF INDUSTRIAL POLICY AND INNOVATION

In an era of increasing global competition, an ageing European population and fiscal restraint, European competitiveness depends on our ability to foster innovation in products, services and processes. For this reason innovation has been placed at the heart of the Europe 2020 strategy and the Commission flagship initiatives on "Industrial Policy" and "Innovation Union" 17.

The benefits of standards for the European industry are tremendous. Standards lead to cost reduction or cost savings derived mainly from economies of scale, the possibility to anticipate technical requirements, the reduction of transaction costs and the possibility to access standardised components. According to the World Bank¹⁸, one of the most important economic benefits of standards is that they increase productive and innovative efficiency. They allow suppliers to achieve lower per-unit costs by producing large homogeneous batches. In addition, producers gain skills and experience by focusing on fewer product variations. Another benefit is improved market access as a result of increased competitiveness due to increased efficiency, reduced trading costs, simplified contractual agreements (because the characteristics and functionalities of the product are clear as a result of the standards) and increased quality. Standards also lead to better relations with suppliers and clients derived from increased safety for consumers, increased trust, reduced liability risk and wider choice of suppliers for the same reasons mentioned above. Minimum safety standards are the most straightforward example of standards used to solve imperfect information problems. European standards have an immense value for the competitiveness of the enterprises working in the fields of transport, machinery, electro-technical products and other manufacturing industries, as well as in the field of telecommunications.

Well designed and timely European standards can support **innovation** in a number of ways. Existing standards can codify and spread the state of the art in various technologies. They can also facilitate the introduction of innovative products by providing interoperability between new and existing products, services and processes, for example in the field of eco-design, smart grids, energy efficiency of buildings, nanotechnologies, security and eMobility. In some instances, innovations can more easily gain market acceptance if they comply with existing standards for safety, quality and performance. Interoperability standards can underpin a technological platform on which other innovation can take place, especially for services (for example, using LTE mobile services as a platform for mobile commerce solutions or public cloud computing platforms for eGovernment applications).

Finally, standards can help to bridge the gap between research and marketable products or services. A standard can codify the results of publicly funded research, thus making them available as a basis for further innovation. This can be a highly effective mechanism for knowledge and technology transfer. Unfortunately, the full

¹⁶ COM(2010) 614.

¹⁷ COM(2010) 546.

Quality Systems and Standards for a Competitive Edge (drafted by J. Luis Guasch, Jean-Louis Racine, Isabel Sánchez and Makhtar Diop), The International Bank for Reconstruction and Development/The World Bank, 2007.

potential of standardisation in support of innovation is not realised. There is still a need for further understanding on how the different channels through which standards can spur innovation interact.

Scientific activities make a key contribution to the standardisation process. The methodologies, processes and materials that lead to standards are defined, partly or wholly, by available scientific knowledge. Indeed **pre-normative research** is a pre-requisite in many promising industrial applications as a means of establishing a level playing field for industrial cooperation and a predictable regulatory environment for future market development.

A systematic approach to research, innovation and standardisation should be adopted at European and national level to improve the exploitation of research results, help best ideas to reach the market and achieve wide market uptake.

When standards with a scientific component are to be incorporated into European Union policy, procedures will be defined to assure that they are impartial, sound, based on balanced scientific evidence and take into account impacts throughout the lifecycle of products and services. In addition to results relevant to standardisation from EU funded research projects and other sources, the Joint Research Centre of the European Commission will provide scientific input in its area of expertise to ensure that standards take into account economic productivity and social needs such as environmental sustainability, safety and security concerns. Awareness of the potential synergies between research, innovation and standardisation also needs to be raised through better education and training about standards. In addition, standards may include proprietary technologies, especially in innovative domains. Therefore, the IPR policies of the ESOs should contain a fair balance between the interests of technology owners and those of technology users, to avoid restrictive effects on competition.

European standards are an important step for bringing research results to the market and for the validation of technologies. Standards can play this key role only if they keep pace with the development of technologies and ever **faster product development cycles**. In the past, lead time before starting standardisation work, combined with the 3 to 5 years previously required to develop a European standard, have meant that standards have lagged too far behind rapidly evolving technologies, making them sometimes obsolete when eventually adopted. This becomes increasingly problematic if standards are to be used strategically as a means of stimulating innovation and promoting interoperability of innovative products. Consequently, certain sectors have been reluctant to engage in standardisation or are unable to benefit from the positive effects of standards, such as interoperability.

To improve this situation, two factors are of key importance: firstly efficient anticipation and planning of standardisation, and secondly the speed of standards development itself. Anticipation and foresight studies can help to anticipate the need for standards development, by linking emerging technologies, their research needs for future products and processes to the definition of policy. Numerous improvements can be made in these areas without undermining the core values of the standardisation system, such as inclusiveness, consensus and the voluntary nature of standards.

To improve planning of its standardisation-related activities the European Commission will adopt an annual **Work Programme for standardisation**, as set out in the accompanying proposed Regulation. This Work Programme will identify strategic priorities for European standardisation, for mandates¹⁹ and for other actions required. Innovative areas will be prioritised using the mechanisms set out in the flagship Innovation Union, such as the use of Innovation Partnerships and the monitoring of innovation development areas by the European Commission. The proposed Regulation will also streamline the procedure for objections to a harmonised standard adopted for the application for EU legislation. Commission funding of European standardisation will be targeted according to the priorities identified in the annual Work Programme.

Most stakeholders take the view that **European standardisation processes should be accelerated, simplified and modernised**. Therefore, **EU financial support** to the ESOs will be used to drive continuous improvement in the ESOs' performance. The Commission will put deadlines in its requests for standards and funding will be conditional on the ESOs fulfilling criteria related, inter alia to the speed of standards development, the adequate representation of stakeholders and the quality, relevance and timeliness of standards produced. The Commission objective is to reduce the average time to develop European standards or European standardisation deliverables requested by the Commission by 50% by 2020²⁰.

Financial support will above all be dependent on the ESOs improving the **efficiency** of the European Standardisation System and on the central secretariats meeting defined objectives. Already, they have taken some steps, such as the creation of a joint CEN-CENELEC Management Centre under a common Director General. However, the ESOs must now modernise their internal processes, e.g. by exploring and adopting best practices from other standards-developing organisations and by improving joint working with one another and with other organisations. The ESOs should also raise awareness about existing conflict resolution mechanisms and ensure that these mechanisms deliver a consensus within the appropriate time frame.

Funding to support mandated standardisation activities will remain a major driver for the development of **standards whose primary function is to support EU public policy and legislation**. The Commission will also continue to support the translation of harmonised standards into official EU languages.

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Mandates are requests to the ESOs to carry out work related to the planning or development of standards.

A reduction of the average development time from 36 months to 18 months by 2020.

Actions

- (1) As per the accompanying proposed Regulation, the Commission will establish an **annual Work Programme**, which will identify priorities for European standardisation and the mandates required with corresponding deadlines. The Commission will establish the Work Programme after broad consultation of relevant stakeholders.
- (2) The Commission will demand that **European standards for innovative products and services** will be quickly elaborated and adopted, for example in the field of ecodesign, smart grids, energy efficiency of buildings, nanotechnologies, security and eMobility.
- (3) The Commission will make funding of the ESOs conditional on their fulfilment of **performance criteria** and their meeting defined **objectives** which, inter alia, will specify that the ESOs will need to optimise the speed of standards development and to modernise their working practices. The ESOs should reduce the average time to develop European standards or European standardisation deliverables requested by the Commission by 50% by 2020. In addition, the Regulation will streamline and shorten the procedure for objections to a harmonised standard.
- (4) When standards that have a scientific component are to be incorporated into European Union policy, the Commission will take all necessary steps to assure that **impartial**, **sound and balanced scientific evidence** is at the basis of the European standardisation process. In addition to results relevant to standardisation from EU funded research projects and other sources, the Joint Research Centre of the European Commission will provide the scientific input, in its areas of expertise, to ensure that standards take into account economic competitiveness, social needs, safety/security concerns and the environmental impact throughout the life cycle.
- (5) ESOs, Member States and other standardisation bodies are expected to improve **awareness and education** about standardisation and potential links with research projects. Public knowledge about standardisation should be increased by means of training, awareness-raising activities and targeted workshops.

3. Using standards to address key societal challenges

In areas of high political and economic importance, standards can be used strategically to accelerate the development of innovative solutions, including through the deployment of ICT. In the twenty-first century Europe faces a number of strategic challenges, in particular in areas where standards have particularly strong potential to support EU policy, such as consumer protection, accessibility, climate change, resource efficiency, security and civil protection, protection of personal data and individuals' privacy²¹ and the use of ICT for interoperability in the Digital Single Market.

Standards play an important role in supporting **consumer protection**, in particular through the provision of safety parameters in standards that give presumption of

²¹ COM(2010) 609 "A comprehensive approach on personal data protection in the European Union".

conformity to the General Product Safety Directive²² (GPSD). The Commission is therefore developing a proposal in which it envisages to enable the faster adoption of mandates for European Standards and strengthen their role in the Directive.

Standardisation is already a key instrument for improving accessibility of disabled and elderly people. Around one tenth of all European citizens have some form of disability and as the population of Europe ages, this figure will increase. Standards, which take into account accessibility considerations, following the "design for all" principle²³, have great potential to remove barriers and empower disabled people to participate in all aspects of society. "Design for all" contributes to the improvement of equal access by all people to; inter alia, employment, the built environment, transportation, medical facilities, information and communication, education, leisure and culture. Standards developed in accordance with this principle can also support innovation and the creation of a true European single market in accessible products and services for disabled and elderly people. European standardisation processes applied to social services could well be a way to disseminate social innovation throughout a large number of entities and would give providers a visible incentive to making progress in the right direction. Accessibility requirements therefore need to be considered in all relevant standardisation activities, amongst others through greater involvement of organisations representing disabled people, accessibility experts and other relevant professionals. The UN Convention on the Rights of Persons with Disabilities entered into force for the EU on 22 January 2011 and was ratified by 17 Member States while the other Member States are still in the process of doing so. The Convention requests State parties to promote universal design in the development of standards and to develop, promulgate and monitor implementation of minimum standards for accessibility of facilities and services open or provided to the public. The European standardisation work can contribute to the implementation of the Convention in Europe.

European standardisation can support legislation and policies on **climate change**, **green growth and can promote the transition to a low carbon and resource efficient economy**. Standards encourage resource efficiency by integrating requirements related to end-of-waste criteria, durability and recyclability. Measurement standards will be particularly important in assessing emissions and environmental impacts, which will enable improvements in the environmental performance of products and production processes. In this, it is encouraged to use life cycle analysis tools developed at EU level²⁴ It will also be crucial for the development of new markets for more environmentally friendly products and services, and in facilitating market access for new players. In future it will be necessary to consider environmental factors when developing standards in other areas, the process known as "mainstreaming of environmental requirements"²⁵. The Commission recognises the progress made by the ESOs in helping standards

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Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety.

Mandate M 473 "Design for All".

International Life Cycle Database Handbook (http://lct.jrc.ec.europa.eu/); ongoing work on product and corporate environmental footprint (http://ec.europa.eu/environment/eussd/corporate_footprint.htm)

http://ec.europa.eu/environment/eussd/product_footprint.htm)

See the ECO-Design mandates already issued for a range of product groups, e.g. M/439, M/450, M/451, M/469, M/470.

developers to identify and understand basic environmental impacts and determining whether it is possible to address these when developing a standard. Nevertheless, efforts to deal effectively with environmental issues in the NSBs remain fragmented. The mainstreaming of environmental requirements should therefore remain a high priority for the ESOs and NSBs. The NSBs in particular need to improve their involvement of environmental Non-Governmental Organisations (NGOs) in the standards development process.

Accelerating standardisation is key in creating a European-wide market for security products and is already a priority for the Commission²⁶ In the security domain, speed is paramount to counter new and emerging threats, full use should therefore be made of fast track procedures for standardisation. Furthermore, standards for certain security applications, such as scanners at airports or banknote printing presses, should only be made available to entities which have the required security clearances.

Actions

- (6) The Commission will revise the **General Product Safety Directive**, in which it envisages in particular to strengthen the role of European standards and shorten the procedure for their adoption.
- (7) The Commission will extend the **strategic use of standardisation** in support of **environmental and accessibility legislation** and policies and in the field of **civil security and protection**.
- (8) Member States should ensure the effective involvement of stakeholders, environmental NGOs and representatives of disabled and elderly people in standardisation at national level.
- (9) The ESOs and NSBs should ensure that standards take full account of consumer, environmental and accessibility factors and adequately involve their representative stakeholders.

4. AN INCLUSIVE STANDARDS DEVELOPMENT PROCESS

The strength of a voluntary standard depends on the strength of the consensus which was reached when developing it. A strong consensus is vital for a standard to be accepted and used by industry. Acceptance of the standard by other stakeholders is important in those areas where standards are used in support of public policy and legislation. However, at present not all relevant stakeholders are adequately represented in the standardisation process. While **SMEs** form the backbone of the European economy, it remains larger companies that are better represented in the various technical bodies of European standardisation. This is because SMEs have few employees and can seldom afford the division of labour for one employee to spend a relevant amount of time participating in standards development. The costs in

²⁶ COM(2009) 691.

terms of the time required, travel expenses and membership fees are proportionally too high.

Furthermore, **standardisation is moving into new areas**. Traditionally, standards were produced for technical coordination. Nowadays, standards are also developed for the wider use within organizations, for example to provide them with guidance on management systems, services or environmental and social issues. In addition, although standards are developed by private actors, the more traditional standards often have a significant impact on wider society, affecting the safety and well-being of citizens, the efficiency of networks, the environment and other public policy fields.

Therefore, **SMES** and societal stakeholders who represent these wider groups (e.g. consumers, trade unions, environmental NGOs, organisations for and of persons with disabilities) must be closely involved in the standardisation process. One of the possibilities for the ESOs to achieve this goal is to seek inspiration in the model used for developing the ISO guidance standard²⁷ on social responsibility, the so-called "alternative production line". This model is particularly relevant for work items that are very sensitive or of particular public interest.

Currently the ETSI membership model is already open to direct participation by SMEs. In the case of CEN and CENELEC, the participation of SMEs and societal stakeholders in the development of European Standards is channelled through the NSB. This is a consequence of the "national delegation principle", whereby the interests of all national stakeholders are represented within CEN and CENELEC through their NSB. The advantage of this principle is that much of the work is done at national level so that the costs of participation, especially travel, can be lower and national specificities, such as language, can be taken into account. As this principle will continue to underpin the standardisation system within CEN and CENELEC, the NSBs must be able to provide a robust platform for consensus building. While some NSBs have made good progress in this area, others need to be more proactive in involving stakeholders who have not traditionally participated in the standardisation process. In some cases the price of standards remains a barrier to access for SMEs and societal stakeholders. Best practice, such as special rates or bundles at a reduced price, can remove these barriers while maintaining or even improving the financial viability of the system.

In all their activities, CEN, CENELEC and ETSI follow the **core principles for standardisation**²⁸, **set out by the World Trade Organisation** in the context of the Technical Barriers to Trade Agreement²⁹. Taking the WTO criteria as a basis, the ESOs and NSBs should voluntarily develop a **scheme**, with measurable parameters, to demonstrate that the NSBs comply with these criteria and to ensure continuous improvement in the European standardisation system.

²⁷ ISO 26000.

The core principles are: transparency, openness, impartiality and consensus, effectiveness and relevance, and coherence.

World Trade Organisation Technical Barriers to Trade: Annex 3c Code of Good Practice for the Preparation, Adoption and Application of Standards: http://www.wto.org/english/docs_e/legal_e/17-tbt_e.htm. .

Such a scheme should form the basis of a future **peer-review** of the NSBs which should include other elements such as cost structure, transparency and efficiency. Increased co-operation between NSBs, including the exchange of good practice and twinning projects, will also help to increase the performance of NSBs.

Significant scope also exists to increase SMEs' and societal stakeholders' participation in European standardisation committees, although issues related to time and cost form significant barriers to access. While the ESOs have started work to improve SMEs' participation in and benefit from standardisation, further action is needed. The Commission will therefore continue to support financially the **participation of SMEs and societal stakeholders in European standardisation** committees³⁰. It will also continue to support European organisations representing SMEs and societal stakeholders, by financing the activities of their secretariats. Moreover, CEN and CENELEC should fully implement the recommendations of the report "SME access to European standardization"³¹. They should also adapt their internal rules in order to strengthen the position of European associations of SMEs and societal stakeholders.

Actions

- (10) The Commission will request that the ESOs evaluate the introduction of **alternative** and more inclusive working processes (the "alternative production line"), in particular for work items that are very sensitive or of particular public interest.
- (11) The Commission will request the ESOs and NSBs to implement a voluntary scheme to demonstrate that NSBs comply with membership criteria based on WTO TBT principles and that the ESOs regularly monitor such compliance. The Commission further requests that the ESOs report annually the results of these monitoring exercises to the Commission.
- (12) The Commission will also request the ESOs and NSBs to develop a **peer review** system to actively monitor, inter alia, wide participation in the standardisation process.
- (13) The participation of **national SME representative organisations and national societal stakeholders** should be supported by Member States, including by means of financial support if appropriate.
- (14) National standardisation bodies are encouraged to **provide standards at special rates or bundle them at a reduced price** for SME and societal stakeholders.
- (15) The position of **European Associations representing SMEs and societal stakeholders** should be strengthened, inter alia through continuing financial support by the Commission.

For example through the Small and Medium Enterprises Standardisation Toolkit (SMEST 1 & 2).

de Vries, Blind, Mangelsdorf, Verheul, van der Zwann, "SME access to European standardization", Rotterdam, 2009.

5. STANDARDISATION AND THE EUROPEAN SINGLE MARKET FOR SERVICES

A thriving and fully functioning European single market is key to delivering the Europe 2020 strategy, as outlined in the flagship initiative Towards a Single Market Act³². The foundations of the single market are the four freedoms of movement: of persons, goods, services and capital. In one of these areas, goods, the European standardisation system has already made an important contribution, principally by means of the "New Approach" to legislation, designed to prevent the creation of technical barriers to trade.

Although European standards are already widely used for transport and logistics, postal services and electronic communications networks and services, the voluntary European standards have played a less prominent role in supporting the completion of the single market for services and contributing to the competitiveness of this key sector of the European economy. Services are today one of the main drivers of the EU economy, accounting for over two-thirds of EU GDP and being the source of all net job creation in the recent year. However, the single market for services is not fulfilling its full potential as long as numerous legal and administrative obstacles to services continue to exist within the single market. Standards have in this context great potential to contribute to a more European and thriving services sector and therefore a more innovating and competitive economy, by improving the interoperability and quality of service.

Progress in the development of European standards for services has, however, been slow and recent years have seen the rapid growth in service standards at the national rather than the European level, (453 new national standards in 2005-2009, as opposed to only 24 European). This proliferation of national standards risks creates barriers to intra-EU trade in services by requiring businesses to adapt to an ever greater number of differing national standards within the single market.

This is why the Commission communication on the 'Single market Act: Twelve levers to boost growth and confidence' includes among its twelve key priority actions to be adopted by the EU institutions before the end of 2012 the extension of the European standardisation system to services. The proposed Regulation on European standardisation therefore includes voluntary service standards within its scope in order to reduce the likelihood of conflicting and multiple national standards, while also enabling the Commission, after due consideration, to issue mandates requesting the development of European service standards. Responses to the public consultation on reform to the standardisation system indicated broad support for this proposal. However, the proposed regulation will not extend the notification of obligatory draft product rules to services as it is not its subject-matter. This system, whereby draft technical regulations on products and information society services must be notified to the Commission and the other Member States, will remain unaltered by the proposal. The extension of this system to the field of services might be later considered in the context of the review of Directive 98/34/EC.

European standards on services must take into account the public interest and be based on consensus and market driven whereby the needs of the economic

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operators and stakeholders directly or indirectly affected by the standard prevail. Therefore, the Commission intends to consult service industry stakeholders so as to ensure that any future standard actually meets this market relevance test. The **High Level group on Business Services** proposed in the Commission Communication "Towards a Single Market Act" should also be used as a forum to discuss these and other issues related to the standardisation of services. It should be noted that the vast majority of undertakings in the service sector are small enterprises. Therefore, the participation of SMEs and societal stakeholders is crucial for the standardisation process.

Actions

- (16) **Standards for services** will be included in the scope of the accompanying new Regulation on Standardisation.
- (17) The Commission will, where there is a demand from the market and following a consultation of stakeholders, request the **development of voluntary standards for the service sector which are market driven, consensus-based and take into account the public interest.**
- (18) The Commission will set up a **High Level Group on Business Services** which will also examine standards issues in industries.

6. STANDARDISATION, INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AND INTEROPERABILITY

ICT is responsible for 5% of European GDP with an annual market value of €660 billion. However that economic impact is dwarfed by the impact of the enabling role ICT plays in the productivity growth of all other business sectors. Moreover, ICT directly touches upon the lives of individual citizens with over 250 million daily Internet users in the EU and nearly all European citizen owning mobile phones. This has already profoundly changed business and society in many ways and these changes will accelerate further: attractive content and services available in an efficient internet environment stimulate the demand for higher speed and capacity, which in turn will create new business and trigger even more innovative services.

Standards need to be available to assure the interoperability between devices, applications, data repositories, services and networks so that Europe can reap the full benefits of ICT. The use of standards also needs to be promoted, including by public procurement and relevant EU policies and legislation.

At the same time as the ICT landscape has changed dramatically, so has the landscape in ICT standardisation. Alongside the traditional standard setting organisations, specialised and mostly global ICT Fora and Consortia have become more active and several have emerged as leading ICT standards development organisations. These leading organisations also usually implement rules, processes and procedures that are broadly in line with those laid down by the WTO for

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international standards organisations. Although ESOs already made considerable efforts to cooperate more closely with fora and consortia, the standards elaborated by the latter are not integrated in European standards.

It is necessary to reach at least an adequate level of interoperability and to ensure that public procurers can acquire interoperable ICT services and applications. This should be achieved by taking account of today's technologies where, in areas such as Internet and World Wide Web, the standardisation landscape is occupied by fora and consortia rather than the ESOs. In that perspective, the Commission set out for public consultation detailed proposals for modernising European ICT standardisation in the form of a White Paper. Given the positive reactions to the White Paper, the Commission will now further implement those proposals.

As foreseen in the 'Digital Agenda for Europe'³⁵, the Regulation will establish a system whereby the most relevant **ICT standards developed by leading Global ICT Fora and Consortia can be used in public procurement to help avoid lockin and encourage competition** in the supply of interoperable ICT services, applications and products. In certain cases, when defined in the context of ICT policies and strategic initiatives, architectures and interoperability frameworks, the implementation of globally adopted standardised interfaces may be required in public procurement procedures, provided the principles of openness, fairness, objectivity and non-discrimination and the public procurement directives are applied.

The selected ICT standards will **complement European standards** and must comply with **quality criteria**. Those criteria, which address both the standards developing processes and the standards themselves, cover matters such as openness, transparency and neutrality as well as imposing same minimum requirements as applied by the ESOs for the treatment of intellectual property (IP) rights.

The Commission will increasingly use selected ICT standards developed by other standards development organisations than ESOs for European policies, provided that these standards comply with these quality criteria, in particular when the interoperability between devices, applications, data repositories, services and networks must be further enhanced. For example, in the evolving area of cloud computing standardisation efforts and standards are numerous and dispersed. Efforts are needed to ensure these standards are useful for supporting European concerns of assuring user choice through interoperability and data portability.

If Europe wants to have the ICT standards that it needs in a timely manner, a **permanent dialogue** between public authorities and stakeholders and a dialogue between standards development organisations, including fora and consortia, are a must. The Commission will also continue to explore with stakeholders ways of further increasing the transparency and predictability of the treatment of IP in ICT standardisation. In parallel, the Commission will help and encourage the ESOs to further strengthen their cooperation with fora and consortia, in particular for bringing fora/consortia specifications into the European standardisation system, for example through fast-track procedures.

COM(2010) 245.

Modernising ICT Standardisation in the EU – The Way Forward - COM(2009) 324, 3.7.2009.

Actions

- (19) The accompanying proposed Regulation will allow referencing in public procurement documents of **selected ICT standards** that are widely accepted by the market and comply with a set of quality criteria based on the WTO principles for international standardisation processes, in domains where the ESOs are not active, where ESO standards have not gained market uptake or where these standards have become obsolete.
- (20) In **EU policies**, the Commission will increasingly use **selected ICT standards** that comply with the same set of quality criteria, in particular when the interoperability between devices, applications, data repositories, services and networks must be further enhanced.
- (21) In 2011, the Commission will create and chair a dedicated **multi-stakeholder platform** to advise the Commission on matters relating to the implementation of standardisation policy in the ICT field, including the work programme for ICT standardisation, priority-setting in support of legislation and policies and identification of specifications developed by Global ICT Fora and Consortia.
- (22) Member States should increase the use of standards, including the selected ICT standards, in public procurement of ICT in order to promote interoperability and innovation and to avoid lock-in.
- (23) The ESOs are expected to continuously improve processes for **bringing ICT** standards developed by other standards development organisations into the European standardisation system, for example through fast-track procedures.

7. STANDARDS TO INCREASE EU COMPETITIVENESS IN THE GLOBAL MARKET

Europe already plays a leading role in international standardisation through the European NSBs, which are all members of ISO and IEC. Standards have an important role to play in **supporting the competitiveness of European businesses in the global market**, allowing them to access foreign markets and establish business partnerships around the globe³⁶.

The European standardisation system therefore recognises the primacy of international standards, by means of the Vienna and Dresden agreements, which set out the framework for cooperation between the ESOs and international standardisation bodies. International standards, in particular, contribute to the removal of trade barriers resulting from differences in technical regulations of various countries, and are a powerful tool for promoting regulatory convergence. European standards should therefore, wherever possible, be based upon the internationally accepted standards of ISO, IEC and ITU. Further opportunities to increase convergence with international standards should therefore be explored. European standards are necessary where international standards are not available or where they do not adequately serve legitimate regulatory and policy objectives.

Europe 2020 flagship initiative for Trade, Growth and World Affairs - COM(2010) 612.

Where European standards deviate from existing international standards, an outline of the reasons for the deviation should be provided.

Whilst the EU and EFTA are committed to implementing all international standards, which are compatible with the values of European standardisation, by withdrawing conflicting European ones, there is no equally comprehensive commitment to using international standards from any other country or regional organisation. The EU shall therefore continue to **promote the use of international standards**, remain proactive in avoiding protectionist measures and expect a similar attitude from its partners.

Europe is often an innovator in developing new types of tradable goods, services and technologies, for example in areas such as electric vehicles, security, energy efficiency and smart grids. By driving the development of European or international standards in these areas Europe can maximise first mover advantage and increase the competitiveness of European industry. **Standardisation bodies based in the EU should therefore continue to put forward proposals for international standards** in those areas where Europe is a global leader to maximise European competitive advantage. International standardisation will also be important in tackling societal challenges, such as climate change, accessibility and the living conditions of an ageing population. Effective action will require increased co-operation between the ESOs and their international counterparts during the preparatory phase of standards development.

European standardisation can inspire neighbouring countries and other regions around the globe. The European standardisation system should be promoted through further and better coordinated visibility and technical assistance initiatives, for example to increase participation of developing and least developed countries in international standard-setting work, or by the establishment of standardisation and internal market regulation experts in third markets.

Since the EU's trade policy pays particular attention to the US, China, Russia, Japan, India and Brazil, it is important for our economic relations with these countries to reinforce the cooperation with them on standardisation. In this context, the Commission particularly welcomes the results of the Transatlantic Economic Council (TEC) and the High Level Regulatory Cooperation Forum (HLRCF) for the improvement of upstream cooperation in standardisation between the EU and the USA in the field of energy efficiency, electric vehicles, accessibility and smart grids. Co-operation between the Commission and China has also shown promising results and similar initiatives should be undertaken with other partners, such as India.

In the framework of the **European Neighbourhood Policy**, the EU regulatory model is promoted and partners are encouraged to use the possibility to capitalise on the attractiveness of a shared regulatory environment. Several partners have already adopted a broad-ranged approach to convergence with EU standards and are working to implement commitments on taking over those European standards with a view to negotiating Deep and Comprehensive Free Trade Agreements (DCFTA) with the EU.

The wider use of voluntary international standards in regulation is also a powerful tool to bring about regulatory convergence between different countries and trading blocks to ensure the proper functioning of global markets, including

financial markets. During trade negotiations and regulatory dialogues the European Commission and Member States should therefore continue to promote regulatory convergence and make use of existing sectoral initiatives, which include a standardisation component. The EU should also work with its international partners to promote the use of voluntary international standards in regulation and to improve the openness, transparency and quality/effectiveness of our respective processes.

The ESOs already collaborate and coordinate their activities with their international counterparts. They should jointly conclude further agreements with the recognised standards bodies in third countries and regions.

Actions

- (24) The Commission will continue to promote the enhanced convergence to international standards, the use of voluntary standards in regulation and the use of existing sectoral regulatory convergence initiatives in the context of regulatory dialogues and trade negotiations. The Commission will support and strengthen current regulatory dialogues, in particular those which explicitly include standardisation, and investigate the possibility of establishing further dialogues with new partners.
- (25) The Commission will provide **technical assistance** to countries and regions, with a view to encouraging their participation in international standard setting work.
- (26) By supporting **European standardisation experts** in the countries with a strategic trade dimension for the EU, the Commission will strengthen cooperation with their standardisation bodies.
- (27) The Commission expects that ESOs and NSBs put forward more **proposals for international standards in those areas where Europe is a global leader.** The Commission further requests that the ESOs actively monitor European performance in international standardisation and that they report annually on this to the Commission.
- (28) **ESOs are expected to act jointly in international matters** and to further strengthen their existing co-operation with their international counterparts. Such improved cooperation should include innovative areas of standards development, and further promotion of mechanisms for the joint preparation of standards.

8. MONITORING PROGRESS AND DEVELOPING A STRATEGY BEYOND 2020

The Commission will begin implementation of its actions immediately while some actions may require the entry into force of the accompanying regulation, ideally on 1 January 2013.

By 2013 at the latest, an **independent review** will be launched to measure and assess if the strategic objectives of this communication are being achieved. Its main objective will be to assess if, in a longer term perspective, the European standardisation system is able to adapt to the quickly evolving environment and to contribute to Europe's strategic internal and external objectives, in particular in the field of industrial policy, innovation and technological development. It will also examine if the European standardisation system is adequate from the point of view of the market's needs, of inclusivity and of representativity. In this context, it will also

examine if voting rights should be granted for selected European organisations representing SME and societal stakeholders in the ESOs. Moreover, it should also assess how the European standardisation system can support European standards beyond the single market in the globalised economy. The Commission will also ensure full alignment with the post-2013 Multiannual Financial Framework and the provisions of the Financial Regulation. The independent review will also form a useful foundation to establish strategic priorities for standardisation beyond 2020. These priorities will provide a sound basis for European standardisation policy, ensuring that standardisation will continue to play an important part in supporting Europe's future.

Action

(29) An **independent review** will be launched in 2013 at the latest to assess progress against strategic objectives and evaluate the performance of the current governance in the European standardisation system. It will consider measures to make standard setting faster, more inclusive and more efficient while maintaining the EU's strategic position vis-à-vis our main trade partners. The Commission will also secure the alignment with the post-2013 Multiannual Financial Framework and the provisions of the Financial Regulation.