REPORT OF THE EXPERT PANEL FOR THE REVIEW OF THE EUROPEAN STANDARDIZATION SYSTEM

Standardization for a competitive and innovative Europe: a vision for 2020

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EXECUTIVE SUMMARY

Background

The European Standardization System (ESS) has been a central element in the delivery of the single European market, in particular, through the use of Directives in key areas under the 'New Approach' policy, integrated into the New Legislative Framework.

As well as supporting the regulatory framework, studies at the macroeconomic and microeconomic levels in various European countries and around the world have demonstrated the clear benefits of standards and standardization to the wider economy.

Furthermore the influence of Europe in international standardization, including strong connectivity with international standardization organizations, achieved through the Dresden and Vienna Agreements, as well as statements of mutual recognition between European and international organizations, has enhanced the competitive position of Europe.

International standardization is a key supporter of open markets, free trade and interoperability on a global level. Whilst fully supporting the primacy of international standardization, European standards are required to meet specific European needs, such as those around the internal European market and public policy or regulatory needs without becoming a barrier to trade.

Europe also has the potential to develop its position as a beacon of best practice for the rest of the world, through the development of market-leading standards and through the use of standards to support public policy objectives. The implementation of European Standards (ENs) as identical national standards in the countries of the EU and EFTA has been fundamental in reducing costs to business, improving competitiveness, enhancing consumer choice and achieving the roll-out of public policies. Moreover, this principle has been successful in ensuring the pan-European implementation of International Standards which the European Standards may adopt.

Looking towards the year 2020 and beyond, a number of key strategic challenges have been identified, such as increasing globalization and the position of Europe within a globalized world; the increasing convergence of technologies; a more sophisticated view of key stakeholders encompassing the broader interests of society as a whole; and urgent issues facing the planet, including climate change, energy management and questions around sustainable development. To develop and enhance best practice in all of these areas, there will be continued pressures on the ESS to work more efficiently and to deliver smarter quality standards solutions to market in a timely manner.

The needs and roles of standards-developers from all stakeholders at national and European levels, national and European public authorities, businesses of all sizes (particularly SMEs) and their representative organizations, plus other key stakeholder groups all had to be considered in the light of delivering a coherent European standards environment fit to meet the needs of the society of 2020 and beyond. The Expert Panel for the Review of the European Standardization System (EXPRESS) comprised 30 individual experts from European, national and international standards

organizations, industry, SMEs, NGOs, trade unions, academia, fora and consortia and public authorities from EU Member States and EFTA countries.

The EXPRESS panel was appointed to examine how the existing strengths of the ESS could be built upon and enhanced to meet such challenges, and furthermore to look at issues surrounding coordination between the various standardizing bodies in the marketplace: both the formally recognized bodies — the European Standardization Organizations (ESOs), i.e. CEN, CENELEC and ETSI in the ESS—and others, such as fora and consortia. There was also a need to rearticulate the benefits of, and need for, standardization in a changing world, and to address how standardization can and should meet the needs of policymakers and public authorities.

This report is the conclusion of twelve months of study. It represents a consensusbased and strongly supported conclusion that, by building on current arrangements, the ESS can meet the considerable challenges that lie ahead to 2020 and beyond.

Vision

By 2020, the ESS will deliver a standardization system for Europe capable of meeting the needs of business, society and public authorities and of responding to the rapidly changing needs of the world, including the development and convergence of technologies, the improvement of product safety and welfare for citizens, and the challenges of climate change and energy management. The substantial quantified financial benefits of standardization will have been maintained and enhanced.

Through its close connections to Member States and to the wider international standardization system, the ESS will be an effective centre of influence ensuring market relevance, avoidance of duplication and a proven added value of standardization. The ESS will be characterized by close cooperation between the ESOs, fora and consortia and their stakeholders. Key stakeholders, SMEs, larger businesses, societal representatives and policymakers will all be engaged in an effective, efficient and coordinated system for standardization, fit to support both the societal and economic needs of Europe and able to ensure innovation, growth and competitiveness for Europe in the world.

Recommendations

The EXPRESS panel makes a number of key proposals to ensure the continuing fitness-for-purpose and relevance of European standardization and to meet the challenges ahead to 2020.

Cooperation between European Standardization Organizations

Enhancing strategic and operational cooperation between the ESOs will bring a number of benefits. A new oversight arrangement is envisaged that will review with all stakeholders the standards programme and its market relevance, and will ensure that key topics of public interest and innovation development are identified.

Building on present strengths

The ESS clearly has many strengths, and these strengths should be preserved and enhanced, by ensuring that the legislative framework supporting standardization has the capacity to accommodate other sectors as they become a priority. All three ESOs

should continue to enhance their collaboration and increase the integration of their systems and processes in order to be able to meet the challenges deriving from increasing convergence of technologies and the need for the global outreach of the ESS Based on these strengths an improved dialogue with all stakeholders and with fora and consortia shall increase the vitality of the ESS.

Engagement with policymakers

Better coordination of and between Directorates General with the ESOs, including at early stages in policy development, is needed for standardization to deliver the greatest benefits for the economy, society and public policy.

Promotion of the benefits of standards

Beyond the application of standards in a public policy context, the benefits of standards should be promoted to the wider community and through the education system, the place of standards in the economy and their role in meeting the needs of public authorities and society.

Development of the services sector

The services sector will continue to develop as a key element of the economy to 2020 and a key driver for innovation. The internal European market and trade across internal borders will continue to grow in relation to services. The availability and use of standards is a major component for a flourishing services sector, although care is required in presenting new work item proposals for specific management systems standards for the services sector to ensure they are needed and likely to be effective. In some areas of the services sector, standards can also be a key unifying force in supporting best practice and public policy, and recommendations are made for ensuring that the ESS and the legislative framework around standardization (e.g. in the revision of the legal framework for European Standardization, Directive 98/34 EC) is fit to meet these needs.

Meeting the needs of society

A coherent policy and plan of action is recommended to ensure that standards can address the challenges of climate change, energy, sustainable development and changing consumer needs and expectations. In order to ensure the participation of societal stakeholders in the development of the related policy framework and the underpinning European standardization process, it is recognized there needs to be continued EU support for certain stakeholder groups at the European level in the years to 2020. This is on the understanding that this European-level participation complements – and does not compete with – the principle of national delegation.

Engaging SMEs; engaging all stakeholders

The pathway for stakeholders to interact with standardization organizations needs to be simplified to promote a coherent work programme where there is ease of access for all interested stakeholders, such as SMEs, to standardization work and standards information. The ESOs' plans to implement a step-change improvement in accessibility to and participation in standards development should be promoted. Depending on the domain, one key issue in terms of easy access to standards for SMEs can be the availability of documents in national languages, such as in the case of standards related to legislation. Measures such as the use of new web technology and the provision of free access to relevant abstracts will reduce the costs to business and, by raising awareness, create greater use and thereby business and consumer benefits.

Extension and promotion of New Legislative Framework

The strengths of the New Legislative Framework, where there is a close interaction between standards and regulation (i.e. harmonized standards), need to be utilized in new areas and promoted outside Europe. For future areas of public policy, better coordination between Directorates General at the European Commission will be needed to ensure a consistent approach towards, and use of, standardization to deliver policy goals. Coupled with this, the legal, financial and administrative structures supporting standardization need to be optimized to ensure support for standardization within a coherent overall structure.

Interactions with fora and consortia

A key challenge for the ESOs is how they interact with fora and consortia: in many areas there is pressure for fora and consortia specifications to be "recognized" in some way, and to facilitate the uptake of such specifications in a public policy or public procurement context. It is proposed that — *inter alia* via the new oversight arrangement mentioned above — the ESS will ensure that it has the improved mechanisms to interact with fora and consortia and ensure that the best standards are adopted appropriately.

Building relationships with researchers and innovators

In addition, the interaction with the European research programmes is fundamental. Studies show how standards add significant financial benefit to Europe by enabling the application of new technology, and research must engage this enabling activity as early as possible. There should be adequate incentives to ensure that researchers can be involved in standardization.

1. INTRODUCTION

1.1 Rationale and objectives of EXPRESS

Standardization within Europe is the result of a voluntary cooperation amongst industry, users, consumers, public authorities and other interested parties, managed by independent organisations with the support and involvement of standardization stakeholders. The specifically developed and accepted cooperative processes are predominantly used in order to create the standards that are needed by the market players as a common basis for their respective markets. Market relevance is generally accepted as a main principle for the resulting standards, not only where they are used in the markets, but also where they contribute to policies.

In the political context, European standardization has successfully contributed to the implementation of European policies and legislation over the past two decades. The role of European standardization in support of EU legislation has been confirmed in the legislative package providing a common framework for marketing products¹ and the New Legislative Framework², incorporating the "New Approach". Furthermore, the Commission has reiterated in its Communication on standardization and innovation (11 March 2008)³ as well as in a number of other policy initiatives⁴, the substantial contribution that standardization is expected to make to European competitiveness, innovation and other policies or policy objectives such as sustainability and product safety.

The Competitiveness Council endorsed and enlarged the Commission's proposals in its Conclusions of 25 September 2008⁵ and provided additional recommendations to all stakeholders.

The legal framework for European standardization has been laid down in Directive 98/34/EC (and previously Directive 83/189/EEC), which recognises the three European Standardization Organisations (ESOs) CEN, CENELEC and ETSI and the National Standards Bodies/National Committees/National Standards Organisations* (NSBs), enabling the Commission to request them to undertake standardization work in specific areas. Directive 98/34/EC lays down a general framework for the current broad-based European Standardization System (ESS). Council Decision 87/95/EEC provides a specific complementary framework for European standardization in the ICT sector focussing on the implementation of standards in order to promote, for example, interoperability.

This legal framework has contributed to the success of European standardization, enabling the development of European rather than national standards needed by all economic actors for the creation of the European internal market, facilitating world trade and supporting the ever increasing needs of European legislation and policies. However, except when ETSI was recognised as an ESO in 1992, it has not been generally reviewed since its adoption. Concerns have been expressed that the general framework conditions influencing the impact of standards and their development and use may have changed significantly in the meantime.

In the light of the drivers and challenges described in Section 2 of this report, it has become necessary to develop* a strategic approach to European standardization and

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^{*} Throughout this report NSB is used as shorthand for all recognised national standards organisations combined viz. NSB, NC and NSO, the different titles used by the three ESOs, CEN, CENELEC and ETSI, respectively

to review the current ESS in order for it to remain successful and to adapt it to the needs of the forthcoming decade by developing strategic recommendations for action by the European Commission and Member States, ESOs and NSBs and all other standardization stakeholders. The ESOs themselves have undertaken continuous independent reform and development and have already achieved much through initiatives building on $FLES^6$ – the Future Landscape of European Standardization initiative – in which CEN and CENELEC are cooperating to achieve greater integration.

An independent group, the Expert Panel for the Review of the European Standardization System (EXPRESS) was established by the European Commission in January 2009 to review the entire ESS, its functioning, coherence, financing and legal framework and to deliver a report on the outlook for European standardization in 2020. The Panel is composed of 30 individual experts from European, national and international standards organisations, industry, SMEs, NGOs, trade unions, academia, fora and consortia and public authorities from EU Member States and EFTA countries. The European Commission will take account of the Panel's recommendations along with advice on policy matters provided by the Senior Officials' Group on Standardization and Conformity Assessment Policy (SOGS) in forthcoming policy-making and potential legislative proposals, currently foreseen to be presented by the Commission in 2010. These proposals will also take into account the Commission's assessment of the outcome of the consultation on the ICT standardization policy White Paper⁷.

1.2 The current European Standardization System

The objective of the ESS is the implementation of standardization throughout Europe to facilitate the exchange of goods, information and services through the elimination of barriers to trade caused by provisions of a technical nature, and thereby to ensure a large unified European market promoting competitiveness and fostering innovation. At the international level, the ESS facilitates world trade and positions Europe in the global market by taking an active part in international standardization.

As the core of the ESS, the three ESOs are recognised as forming the framework for the elaboration and publication of European standards necessary to support the implementation of European legislation and public policies (in Annex I "European Organizations" and Annex II "National Organizations" to Directive 98/34/EC[†] of the European Parliament and of the Council and the General Guidelines[‡]) and have agreed to:

- Demonstrate through transparent, inclusive, balanced and consensus-based processes their capacities to operate standardization activities efficiently and with the participation of all relevant industrial, societal and public stakeholders;
- Operate a coherent, market-relevant system in which rules of standstill, national transposition and withdrawal apply, where any stakeholders can make requests for European standardization work;

[†] Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations

[‡] General Guidelines for the cooperation between CEN, CENELEC and ETSI and the European Commission and the European Free Trade Association. 28 March 2003-(2003/C 91/04)

- Work according to the principles of the WTO/TBT Agreement "Code of Good Practice for the Preparation, Adoption and Application of Standards" (Annex 3)8;
- Cooperate among themselves §, to implement wherever possible their common agreement and their common objectives, and to formulate medium-term strategic recommendations for standardization;
- Take initiatives, individually or collectively, to promote the European model, their expertise and standards deliverables at the world level including collaboration with other bodies to increase the attractiveness of the ESS.

The ESS provides a range of standardization products from formal, full consensus standards, to less formal, limited consensus products. In following the WTO/TBT Agreement "Code of Good Practice for the Preparation, Adoption and Application of Standards⁸", the ESOs and NSBs are committed to the following standardization principles set forth therein: the inclusion of all interested parties, openness, impartiality and consensus, transparency, balanced representation, effectiveness and relevance, and coherence. Moreover, the ESS enables an active and substantial European contribution to international standardization.

CEN provides standards for most goods, systems and services. CENELEC provides standards in the electro-technical field, while ETSI specialises in providing standards in the field of electronic communications and ICT. Through their joint working the three ESOs aim to avoid duplication, gaps and overlapping standards. Each has developed successfully according to the needs of their operational sectors and there are some marked operational differences, particularly between the three organisations.

1.2.1 CEN and CENELEC

CEN and CENELEC's memberships essentially comprises the National Standards Bodies/National Committees (NSBs) of the EU Member States along with those of the EFTA countries and Croatia and is open to participation of affiliates from "European neighbourhood countries". Standards development within CEN/CENELEC works according to the "national delegation principle" in which NSBs send national delegates to represent the positions at European technical committees that have been nationally agreed among all stakeholders. Hence, consensus building between the different stakeholders is primarily achieved at national level. Certain pan-European organisations have established recognised cooperation with CEN and CENELEC, including those supported through public funds, namely ANEC⁹, ECOS¹⁰, ETUI¹¹ and NORMAPME¹². They may participate directly as observers in CEN/CENELEC technical committees/working groups and in some of the governance structures of the two organisations. Standards are adopted on the basis of weighted voting by national delegations following the European Treaties. European level stakeholders do not have voting rights.

In 2005 CEN and CENELEC initiated the FLES programme⁶ to identify future challenges and opportunities for European standardization and took steps to strengthen the competitiveness of the ESS. The initiative was established because of the similarity between CEN and CENELEC processes and structures. Initial actions are to increase internal efficiency. Secondly, with ETSI invited to join in, is the

 $[\]$ In this context the CEN/CENELEC/ETSI Joint Presidents' Group (JPG)

^{**} Basic Co-operation Agreement among CEN, CENELEC and ETSI

development of joint responses to common current and future challenges. FLES thus provides a clear response to the future development of standardization in Europe.

Currently CEN and CENELEC are implementing their joint roadmap, sharing experiences and taking further steps in close relationship with ETSI to enhance the competitiveness of the ESS.

1.2.2 ETSI

ETSI has over 700 direct member organisations including individual members and national administrations drawn from more than 60 countries worldwide. Societal stakeholders are included in the ETSI "User" category. They usually choose to have a one-unit vote (due to financial constraints) for whenever consensus cannot be reached. National Standards Organisations are responsible for ensuring transparency and wide access for all stakeholders to the process of developing ETSI's European Standards, including public enquiry and adoption via weighted national vote.

Voting on the acceptance of other deliverables is, where needed, weighted according to the membership contribution paid, which in turn depends upon the company's financial turnover, or the country's GDP, with discounts for some membership categories.

Governance matters and EU-specific standards follow the normal consensus-building process. Voting, if needed, takes place through national delegations from the European Conference of Postal and Telecommunications Administrations (CEPT) region, weighted according to the European Treaties to ensure ETSI can discharge its European obligations.

1.3 Vision

The ESS has developed in line with the needs of the different market sectors and stakeholders. With the aim of ensuring that the system continues to meet these needs in the ever changing landscape to 2020 and beyond, *EXPRESS* proposes the following vision statement for the ESS:

- To deliver a continent-wide standardization system capable of sustainably meeting the expectations of both market players and public authorities in the context of a rapidly changing world and society;
- To be influential beyond Europe in the context of global challenges and opportunities;
- To make a major contribution to Europe's innovation and sustainable development in support of Europe's competitiveness, and the welfare of its citizens:
 - by organisations and stakeholders in the ESS working cooperatively, effectively and efficiently within the wider European and international standards framework,

 incorporating, developing and promoting clear, effective market-responsive standards solutions, enhancing sustainable development;

2. DRIVERS and CHALLENGES

In order to consider the future direction of the ESS it is essential to outline the context within which the ESS is expected to operate in the next decade. This section of the report examines the drivers for change and current and foreseen challenges facing Europe and more specifically the ESS.

2.1 Drivers

2.1.1 Political drivers

- Trends for a new world governance: a multi-polar world;
- The need to strengthen transatlantic cooperation;
- The need to strengthen cooperation with emerging new and influential economic actors (e.g. BRIC - Brazil, Russia, India, China);
- The need to maintain Europe's competitiveness in open world markets, while promoting its social and environmental values;
- The consolidation of the EU internal market and the pursuance of EU enlargement;
- The economic integration of countries in the neighbourhood of the European Union.

2.1.2 Economic drivers

- Europe's competitiveness in world markets with a better use of raw materials and natural resources, renewable energies and innovative and quality products and services;
- Capitalising on the knowledge-based economy and the needs for innovation;
- Scaling up of the EU internal market to broaden the base of European industries and services:
- SMEs as a key element of the European economy benefiting from the use of SME-friendly standards;
- Use of standards as tools to support initiatives to address the current and help to avoid future economic and financial crises, through improved management, transparency and a stronger ethical approach, resulting in better risk management and business continuity;
- The growth of the services sectors and the integration of the European services market.

2.1.3 Environmental drivers

 Climate change is the biggest challenge facing the world. There is a need for standards to tackle climate change and related challenges - such as energy and water efficiency - in support of the EU energy and climate change package (20/20/20 goals) and to promote its practice worldwide. This will include the reduction of greenhouse gas emissions, establish credit trading systems and, more generally, provide the metrics (measurement standards) for setting, claiming and verifying environmental achievements:

 Need to facilitate behavioural changes towards more sustainable decisions of all economic players and individual consumers.

2.1.4 Societal drivers

- The future European citizen will have information available anytime through multiple distribution channels - mobile and web-based included - which should result in a more informed consumer, able to choose among a wide choice of products and services available from multiple channels and to engage to an increasing degree with the public sphere through new participative models;
- Exploiting standardization to help reconcile societal and economic needs with an optimal level of protection;
- The drive for social responsibility and ethical business and trade;
- The ageing of the European population:
- The guest for adequate health and social care for all at an affordable cost;
- The demand for equal rights, particularly from historically disadvantaged groups.

2.1.5 Technological drivers

- The convergence of technologies, e.g. electro-technology and ICT everywhere:
- The need to support the dissemination of appropriate new technologies (e.g. nano- and bio- technologies, stem cells, new materials and chemicals) to various sectors while addressing potential risks;
- Need to increase energy efficiency and to manage energy use;
- The need to reduce the time to market, with standards providing tools for take up and inter-operability:
- The compatibility of standardization with customization;
- Optimise the life-cycle of products, from cradle to cradle, addressing the finite nature of resources.

2.2 Challenges

Although the European Standardization System is generally recognised as successful, it is faced with a number of challenges, such as:

- Taking a leadership role within the global standardization system.
- Having the flexibility and pro-activity to address the broadening scope of voluntary standardization, as well as cross-cutting issues (e.g. energy, health, accessibility for all);
- Managing cooperation within an ESS comprising three separate ESOs in an environment of converging technologies and increased international competition; and reaching out to interested and affected stakeholders (e.g. public authorities, societal interests, SMEs), in particular in the broadening of European policies (e.g. environment, safety at work, health, services);
- Increase in environmentally-related policy-setting and growth of related standards-setting organisations (e.g. carbon or water footprint labelling; for

- the sustainable management of natural resources such as forests or fisheries, fair trade, organic agriculture);
- Facilitating innovation by anticipating future business and societal needs in standardization and bringing new knowledge to market solutions and providing a framework for effective integration of technologies and combination of standards into innovative and smart technology solutions;
- Using information technologies to support the collective standards development work and the broader dissemination of standards;
- Demonstrating the benefits of standardization through better measurement of impacts, improved management of developments and better communication towards corporate, political, societal and academic players;
- Clarifying and strengthening the positioning of European standardization with respect to national and international standardization;
- Adapting standardization policies to ensure the fair participation of weak stakeholders and the production of standards adapted to the users' needs;
- Ensuring that standards are developed only when really market relevant;
- Promoting the use of standardization through education.

3. STANDARDIZATION FOR SUSTAINABLE COMPETITIVENESS

3.1 European Standardization in a Globalised World

Trade is a major driver of growth, helping to increase competitiveness, both in Europe and internationally. Standardization is a key factor of trade policy contributing to the removal of technical barriers to trade. Hence, standardization also supports innovation, bringing important benefits, including a solid foundation upon which to build and disseminate new technologies and an opportunity to share and enhance business practices. The future ESS needs to be aimed at achieving best value from national, European and international standardization, using and influencing international standards whenever possible both to enhance market access and international trade and cooperation. In practice, this means having international standards, without national deviations, applied globally. These may be formal standards which have undergone national transposition, or other deliverables that have achieved international recognition by the market. However, European standards are needed, either where international standards do not exist or where they do not adequately serve European needs, in particular those needs determined by European policies and legislation. Europe has a major influence at the international level in standardization, although this is diminishing as emerging economies increase their standardization activities and other countries and regions develop alternative strategies. In order to maintain an effective presence on the global stage, Europe needs to maintain and enhance leadership in areas of strategic importance, and to work effectively with third countries and regions.

The key criterion that decides the success of European standardization is the market. European standards only gain acceptance when they meet the needs of the market and society as recognised by the market's key stakeholders. Increasingly, the competitive capacity, role and positioning of European standardization will be substantially challenged to which the following major developments will contribute significantly:

Some countries and regions may continue to use standards as non-tariff trade barriers

The ESS commitment to international standardization is acknowledged and reflected by the Vienna¹³ and Dresden¹⁴ Agreements and the working methods of ETSI. The ESS recognises the primacy of international standards developed by ISO and IEC as the international standardization organisations in the fields of CEN and CENELEC. ETSI has a cooperation agreement with ITU. By the year 2020, the number of countries driving international standardization is expected to have increased significantly. However, the international approach of European standardization – one standard, one test, accepted everywhere – cannot always be met by the current approach via ISO and IEC. Representatives of a wide range of countries participate in the international standardization organizations of ISO and IEC. These countries increasingly adopt ISO and IEC standards to support their exports and to abide by their WTO/TBT commitments but they usually have no formal obligation to withdraw contradictory national standards related to the same contents.

Standards have the potential to establish non-tariff trade barriers. Not only in the course of the current economic crisis - but also within the context of the realignment of world economy - the political pressure to prevent globalisation losses will increase in certain countries and regions. Consequently, regional standards may gain increasing significance in future. The standstill in the ongoing WTO trade round is an indication that the dismantling of trade barriers for the promotion of global trade may have reached its zenith, with a risk of this trend reversing. There are claims that European companies are obstructed by the lack of recognition of ISO and IEC standards in markets that have been encouraged to favour the standards of sectoral standards development organisations (SDOs) and consortia. For example, the United States of America is strongly promoting its sectoral standardization approach, as well as the dissemination of US-based SDO standards, in threshold economies such as the BRIC countries while retaining leading positions in ISO and IEC. The ESS should therefore promote a more systematic involvement in, and commitment to, international standardization from national sectoral SDOs.

There is a need to safeguard and enhance the position of Europe within the international standardization environment – strategic positioning for competition

To position the ESS strategically to support competitiveness, innovation and growth in Europe requires definition of both the regulatory framework and general conditions in which European standardization should operate in future. In 1985, the emphasis was on the creation of a single European market without trade barriers. Therefore, one of the main aims of European standardization was – and remains – the harmonisation of national standards in the Member States by the implementation of European standards. The European Commission and the Member States embodied this political will through the New Approach, confirmed more recently in the New Legislative Framework². This should remain the principle for future European legislation. The Commission and the Member States should also continue to promote standards-receptive regulatory models, such those developed by UNECE

(WP.6 Recommendation L^{††}) in regulatory and trade related cooperation with the EU trading partners.

In the next decade, one of the objectives of the ESS will continue to focus on strengthening the expanding internal market through European standardization. At the same time, the ESS needs to cope with the challenges of globalisation and to be a tool in support of innovation, thus extending Europe's international role and positioning. A clear political commitment is required if the ESS is to continue to make this contribution within the international framework. This means that the development, implementation and application of standards must be vigorously promoted and facilitated by the European Commission especially where there are aspects related to the common good or public welfare.

Strategic Goal 1: To strengthen the influence of European standardization internationally in order to open and serve markets and to increase European competitiveness and support trade policy.

Strategic Goal 2: To respond effectively and efficiently to the global challenges of the next decade and to maximise the added value of international standardization in tackling these challenges through the promotion of innovation and the dissemination of good business practice.

3.2 Standardization and Innovation

3.2.1 Improved instrument for innovation

Innovation occurs inter alia where inventions reach market acceptance and penetration. In contrast to other innovation policy instruments, standards have the potential to support both the supply and demand-sides of innovation policy. However, there is room for improvement on both sides and to make use of the synergies between the interactions of supply and demand. Hence, in order to foster innovation, Europe should ensure that guidance is available on good practice innovation and that good practice innovation is promoted, remembering always to look for better innovation practices and processes ^{‡‡}. Particular attention should be paid to the processes and guidance that help SMEs to grow and succeed, ensuring that standards development only take place where real benefits can be demonstrated. Where appropriate, consideration of public interest and societal issues related to standardization should be injected at an early stage into research and innovation.

 $http://www.unece.org/trade/wp6/SectoralInitiatives/EarthMovingMachinery/SIEMM_CROs_2009.pdf$

^{‡‡} "Towards an increased contribution of standardization to innovation in Europe" (COM(2008) 133 final)

http://ec.europa.eu/enterprise/standards_policy/access_to_standardisationstandardisation/index_en.htm"

^{††} UNECE Working Party on Regulatory Cooperation and Standardization Policies (WP.6)

A central aspect of the relationship between standardization and innovation is the transfer of R&D results into standards and by the market exploitation of the results of standardization. Standardization can be a major facilitator for the validation and exploitation of new technologies and for market access. But there is a disconnect in the exploitation of R&D results by standards development activities, often due to a lack of awareness of the R&D outputs and missing support and incentives. Awareness of the potential that standardization can offer in this context needs to be created, e.g. in context of the European R&D Framework Programmes. Different options are discussed, e.g.

- including the issue of standardization in the evaluation process for R&D programmes;
- improving the outreach of standards organisations to the research community;
- ensuring innovation-friendly policies and procedures in standards bodies/organisations;
- improved and more sophisticated activities in the area of technology foresight and technology watch, covering also future fields of standardisation.

For an effective innovation policy, the different stages of the innovation lifecycle need to be taken into account, starting with scientific research from the early development of technologies, through to product development and on to broad adoption for market deployment. The role standards play is different at the different stages of the innovation lifecycle:

- Standardization converts new knowledge from scientific research into market in the following areas:
 - o nomenclature/terminology and metrology
 - o measurement and test methods for reliability, quality and safety
 - o conversion in products, processes and systems
 - interoperability
- Regarding the adoption of new technologies, standards supported by innovation-friendly policy and understanding about the implications of intellectual property rights - are a key instrument for technical validation and market access and thus for the transfer of innovative technologies into commercially successful product and solution offerings.
- The availability of standards as a widely-agreed, accepted and implemented base level of new technology provides in itself a platform for innovation and so triggers further innovation in the implementation and application level.
- Standards provide a basis for the integration of technologies into complex, innovative systems and solutions, and assist in ensuring interoperability.
- Standards can offer reassurances to consumers in the application of new technologies (e.g. through assessing risks, measuring performance and impacts, or incorporating 'privacy by design').

It is furthermore important to differentiate more effectively standardization processes in relation to the product and innovation life-cycles. In cases, e.g. where safety issues are to the fore, fuller deliberation may be needed than in cases of fast-moving, competitive markets. Development time is always important but is more critical in some circumstances than for e.g. slower moving technologies. There is also a need to differentiate "ex ante" standardization initiatives (such as GSM) from "ex post" standardization initiatives (significant installed base, requiring appropriate maintenance and servicing) while paying increased attention to societal expectations and market forces. The key factors of success for these two categories are quite different. Hence a flexible approach is essential.

Current public technology foresight activities do not consider standardization and the ESS has not implemented a systematic foresight process of its own. Furthermore, standardization activities and standards are not considered as sources for publicly performed technology foresight exercises. Finally, European standardization is linked to numerous policy initiatives. Consequently, upcoming policy initiatives generate future demand for standardization. In addition to technology foresight from research, ESOs and NSBs will need to consult with industry and public interests, research and development specialists and academics, to refine standardization priorities and actions to better shape the collective European standardization activity with respect to Europe's key long term interests.

3.2.2 Interface between standardization and research

Standardization is an effective and efficient channel of knowledge transfer besides other well-known channels (like collaboration in research and development, licensing, or exchange of personnel). However, many research institutions, companies and policy makers have neglected this channel, especially research funding organisations. Standards bodies have also not consistently addressed development of research-friendly and innovation-friendly policies.

In addition to the interface between research and standardization, the research about the benefits and needs for standardization should also be further developed. Standardization research has rather stagnated despite its increasing relevance for policy and strategy. This represents interesting challenges for researchers. However, one important reason for the stagnation is due to the difficulties in accessing data on standardization processes and standards. There is not a lack of data, but deficits in the quality, completeness, homogeneity and transparency of data.

Strategic Goal 3: To improve mutual awareness and collaboration between standardization and the research communities and innovators.

3.2.3 Education

The diffusion of knowledge about standards and standardization is not uniform. Standardization and the benefits and working processes of standards are not a regular part of education curricula. But knowledge about standards and standardization is also diverse among professionals, be they from industry, academia or the public authorities. There is wide agreement that actions need to be taken to reinforce standards education at all appropriate levels.

Strategic goal 4: To promote the inclusion of standardization practices and benefits in higher education and encourage the development of studies and surveys to assess, quantify and communicate the economic and social benefits of standards.

3.2.4 Intellectual Property Rights (IPR)

Intellectual property rights (IPRs) are important in the context of standardization and innovation. The relationship is complex. Both IPRs and standardization encourage innovation and facilitate the dissemination of technology. However, they contribute to these common objectives by different means. Hence, due regard needs to be paid to

the interrelationship between IPRs and standardization.

European standards are developed in an open process, and there are uniform, non-discriminatory conditions for their development as well as for their sale or distribution. The implications of IPRs relevant to a standard need to be visible to the standards developers during the standardization process. Cooperation should further be improved between the standards bodies and the European Patent Office to ensure that issues where there is an interaction are visible at an early stage, as this would lead to an improved quality of patents and standards. In this context, ETSI has established cooperation with the European Patent Office and recently signed an MoU, thus institutionally confirming their commitment to deepen their established cooperation.

It is important that standards organizations continue to ensure innovation-friendly policies including a balance between the interests of the users of standards and the rights of owners of intellectual property as almost all standards bodies do today. Such a balance may take into account differences regarding the areas of standardisation, according to the consensus of the stakeholders involved. The balance must also ensure compliance with relevant legal requirements, e.g. competition law, and respect the openness of the standardization process for the market participants, understanding that different participants may operate under different business models. Such a balance needs to also consider the requirement to continue incentives to innovate in technical areas subject to standardization. Standards bodies are encouraged to assess their IPR policies with a focus on promoting innovation.

In the Guidelines for cooperation between the EC, EFTA and the ESOs, the ESOs¹⁵ have committed to ensure that standards can be used by the market operators. The objective is to ensure licences for any essential IPRs contained in standards are provided on fair, reasonable and non-discriminatory conditions (FRAND). In practice, in the large majority of cases, patented technology has been successfully integrated into standards under this approach. On this basis, standards bodies are encouraged to strive for improvements to the FRAND system taking into consideration issues that occur over time. Some fora and consortia, for instance in the area of internet, web, and business process standards development have implemented royalty-free policies (but permitting other FRAND terms) agreed by all members of the respective organisation in order to promote the broad implementation of the standards.

The Panel noted the in-depth fact finding study which has been commissioned by the EC with the aim of further investigating the interplay between standards and IPRs and identifying issues, as well as helping to improve the relationship between standardisation, innovation and IPRs where necessary.

ESOs and NSBs are encouraged to closely watch the issue of IPR related to standardisation and if appropriate to adjust their respective IPR policies. This should include a consideration of IPR policies as applied globally in other standardization organizations¹⁶.

Strategic Goal 5: To have a standardisation system that is effective and conducive to innovation by maintaining appropriate IPR policies.

3.3 Standardization of Services

A key part of the Lisbon Council objectives is to open the internal market to services. Services constitute the main source of economic growth in Europe and their volume is large and increasing. Standards have contributed to a considerable improvement in the quality and safety of goods over the last twenty or more years. However, it is questioned whether this has been mirrored by a similar improvement in the quality and safety of services over the same period. According to a study requested by the European Parliament¹⁷, standards for services are expected to give momentum to the European single market. Service standards may in some areas help increase the transparency and quality of the services offered, thus supporting competition, innovation, the reduction of trade barriers, as well as the protection of consumer interests. This is particularly applicable to networked services (e.g. energy, water, telecoms, transportation, postal services) for which deregulation opens up competition and gradually eliminates national monopolies. Furthermore, the Council Conclusions on standardization and innovation draw attention to the innovative potential existing in the services sector and to possible benefits linked to the development of standards in that area, as invited by Directive 2006/123/EC¹⁸ on services in the internal market.

Hence, the services sector has become increasingly important for growth in Europe in recent decades and significantly contributes to the GDP of European economies. The question is whether and how standardization can further strengthen the services sector, provide added value, and be of benefit to the provision and delivery of services in different contexts (for instance in the delivery of services from business to business (B2B) or from business to consumers (B2C)). While the services sector is very broad and heterogeneous, and standardization is a controversial subject for some services stakeholders, there are mainly two aspects to be distinguished in the context of services and standardization:

- The creation and use of standards as a technological base for new and improved service offerings; and
- The development of specific standards (performance and management systems standards) to support the process of service provision and execution.

The creation and use of standards may become a driver for growth in some areas of the services sector and foster, especially, cross-border trade. The ESS could play a more effective role in promoting the benefits of standards to address stakeholder and marketplace needs.

The services sector currently represents more than 30% of the ISO 9001 certificates worldwide, an indicator of the relevance of this generic quality management standard to the sector. However, care is required in presenting new work item proposals for specific management systems standards for the services sector to ensure they are needed and likely to be effective. As a minimum, therefore, every new standardization project for a management systems standard in the area of services needs to meet the criteria defined in ISO Guide 72 – Guidelines for the justification and development of management system standards.

At national level, several NSBs have developed successful national standards for service industries. However, service sectors often rely on internal fora or consortia codes of practice, mainly developed through their trade associations, usually with little or no wider stakeholder involvement in their development. Full and transparent stakeholder engagement and consensus-building delivers many advantages and should be further promoted.

The European Commission mandated CEN to carry out a number of studies investigating the need for the standardization of services and its feasibility. This included the CHESSS project¹⁹. A number of recommendations have been made, including the development of further guidance on the standardization of services, a core generic services standard, and some specific projects. These projects should help to demonstrate where standardization can be beneficial in the services sectors and provide some direction to future standardization in this field. If proven, this will help to accelerate the development of beneficial service standards. An additional mechanism could be to develop standards for public procurement, which has a major demand for services. However, to be successful, both service providers and procurers need to be engaged in the standardization process. If there is a legislative need, the New Legislative Framework methodology should be duly considered, particularly as it has proved an effective tool to open the internal market for goods.

Strategic Goal 6: To promote and use standards in order to further support internal and external markets, especially for the quality and safety of services provided by the market, including business-to-business, business-to-consumer and networked services and in support of the growth and competitiveness of the services sector.

3.4 Societal Interests

3.4.1 General

Health and safety, the protection of workers, consumers and the environment are the pillars of public interest. The impact of standardization on society, and the dimension it takes in support of legislation, under the New Legislative Framework explain the legitimate interest of public authorities and societal stakeholders in the ESS.

Under the Lisbon Agenda, better regulation necessitates that the most appropriate regulatory approach is taken in terms of securing the intended goal whilst minimising the impact on competitiveness and answering the needs of society, such as environmental and consumer protection.

Key areas for public and societal policy objectives are:

- Consumer protection and the reduction of the risk of accidents
- Raised levels of consumer welfare
- Healthcare
- Equal access to products, services and information for people of all ages and abilities
- Open access to products, services and information for all people without specific, single-vendor platform or application requirements
- Environmental protection
- The opening of the internal market for services
- Underpinning the digital age and the information society
- Health and safety in the workplace
- Transportation
- Production, distribution and use of energy and water
- Social responsibility
- Good public governance

For all standardization activities having a public and societal impact, the following aspects are important:

- A thorough impact analysis of standardization including aspects of market and societal needs and expectations
- Involvement of disadvantaged stakeholders e.g. SMEs, consumers, trade unions.

Consideration should be given to expanding the support given by the ESS to European legislation - through the New Legislative Framework methodology - to new policy areas, even beyond the Single Market legislation. This approach supports the need to simplify legislation with regard to better regulation policy and the potential further enlargement of the European Union. However, some stakeholders still perceive a certain tension between the voluntary nature of standardization and the remaining challenges for the integration of public interest concerns on the one hand and its use for the implementation of public policy goals on the other. Increased participation of all relevant stakeholders in the standardization process would be beneficial to increase confidence that public interests are adequately covered in standards used for public policy purposes.

3.4.2 Climate change and environmental issues

There is a high potential for standards in support of environmental and climate change policies, including the use of resources such as energy and water. These escalating changes will soon lead to greater mandatory regulation with a resulting decrease in self and co-regulation. However, this need not necessarily result in a limited requirement for standardization. Standards involving the participation of the targeted stakeholders are needed to provide the metrics and good practices, as well as for enabling the integration of technologies, necessary to formulate and monitor related policies. Regulation is already falling behind the need to address climate change. There is a need for a flexible and effective process with legislation providing the framework for demanding best practice and setting goals and standards delivering the technical and organisational modalities, with the flexibility to adapt more rapidly to changing circumstances.

Tackling climate change and related issues implies developing and promoting clean technologies, "green" products and associated services - including through public policies - thus raising market demands. European industries need to position themselves in these emerging markets to supply the solutions for implementing such policies and to benefit from the growth of world markets in these areas. New areas of global standardization are emerging where Europe must ensure its influence: Electrical and hybrid vehicles, "green" IT and data centres, smart grids, intelligent transport systems, sustainable building design, renewable energies, co-generation.

There is urgent need to integrate environmental aspects into all relevant mainstream product, services and management standards and steps are already being taken to address this within the ESS. However, the ESS needs to develop an improved system to ensure such aspects are properly addressed. The challenge is to ensure that the implementation of this requirement does not lead to a longer standards development process.

Global trade will keep increasing and standardization can help this to be organized in a more sustainable way e.g. transport emissions, closed loop circles. The ESOs have provided various tools for the integration of environmental aspects into European standards, although better coordination with other standards development organizations in Europe and internationally is needed. Process standards, such as for lifecycle assessment are important, but product standards are crucial, since each product standard has a large impact on, for example:

- The use of natural resources, waste/end of life, closed loops of materials;
- Emissions over the lifetime from the product energy use, chemical or nanoparticle content etc.;
- Labelling meaningful labelling must enable consumers to make an informed choice in every purchase decision.

Environmental aspects need to be mainstreamed in the organization of the production process through generic practices described in management systems standards and specific process practices described in dedicated technical standards. Such standards need to integrate the method of using performance benchmarks.

The ESS is challenged to help change relevant elements of its business model from quantitative to qualitative and help businesses be rewarded, not by producing more, but by producing better. Smart technologies encouraging remote monitoring and data exchange could significantly enhance the "greening" and the competitiveness of the European economy.

There is considerable growth in markets related to sustainability, such as organic agriculture, fair trade, sustainable management of natural resources (e.g. sustainable management of forests, fishing and tourism), energy and water efficiency management. As these markets move from niche to mainstream there will be a need for increased cooperation.

Strategic Goal 7: To develop standardization foresight in order to deliver a more effective and coordinated response in supporting global policies to address the issues of climate change and other future global energy, environmental and societal challenges.

3.5 Efficient and effective Standards-setting

3.5.1 Future development of CEN, CENELEC and ETSI

CEN, CENELEC, and ETSI have historically developed according to the needs of their individual markets. However, to meet the challenges outlined in previous sections of this report, a critical challenge will be how the three ESOs work together in future. There is a need for a common work plan, building on the progress in FLES⁶. CEN and CENELEC are encouraged to increase the integration of key back office functions within both organisations with full integration of work plans, better coordinated sector handling, without increasing transaction costs. The challenges listed in this report should be addressed jointly by all three ESOs based on and in line with the FLES process, including "customer" driven work, relationships with fora and consortia, and policy watch.

Whilst a fundamental of good standards making is a bottom-up approach ensuring key stakeholders are engaged from the outset, there is a need for the ESS to provide some active policy development and outreach in areas where policy watch indicates standardization would be beneficial. In this context the European Commission

should regularly consult with the ESOs and all other stakeholders, to identify potential areas where there is a need for action and where no initiatives have been taken either within the ESS or globally, to consider standards that could act as influential demonstrators in the field of e.g. services, public procurement.

3.5.2 Standards development systems

Processes and procedures for the development of standards have been tightened in recent years. In addition, "new deliverables" - technical specifications and workshop agreements - based on limited consensus and informal standardization, have filled a gap in the standardization market. The perception that standardization is slow is no longer correct. Informal standards, and increasingly formal standards, may be produced in only a few months depending on the urgency and needs of the stakeholders. In order to facilitate more efficient standardization processes, there are calls for the ESOs to be a more critical platform for assessing the need for and impact of new work items.

Likewise, the development of modern communication technologies has influenced the means of collaboration and is influencing the way societies work and live. This provides new opportunities as well as challenges for standards bodies and the way their processes are designed. Although accepting the need and benefits from face-to-face contact at key stages of the standardization process, there is need to increase the application of, user-friendly, electronic working methods in standards development and wider public consultation in particular. This will require harmonisation of processes and working tools among the three ESOs and NSBs, and the international standards organisations.

It is important that NSBs follow the ISO Code of Ethics²⁰ to ensure that the impartiality of standards organisations is not endangered by revenues from other activities, such as certification or accreditation. For instance, ISO is working on clarifying the compatibility between standardization and certification. 58% of the top 50 ISO members practice both standardization and certification, increasingly however, in separate legal entities with formal firewalls. 11% practice both standardization and accreditation, but are then not involved in certification. It was noted that any organisation can provide certification services to the market and hence such services are not exclusive to standards development organizations.

3.5.3 The Role of the European Commission and EU Institutions and EFTA

There is insufficient consistency and coordination of policies among the different Directorates-General of the European Commission, other EU institutions and EFTA towards the use of standards in support of legislation and policies (as is also often the case between national government departments). It is recommended that policies be reviewed so that inconsistencies, gaps and overlaps can be reduced. This should cover the whole standardization process, from the preparation and delivery of mandates, through the monitoring of Technical Committee work to ensure the standard produced will meet the essential requirements of the mandate, to the formal adoption and publication of the standards. A closer cooperation is required between all relevant Directorates General.

3.5.4 The impact of standards

The number of standards purchased or downloaded for free may be determined but this is not a direct measure of the value of a standard. Several studies^{21,22} have provided general information on the benefits of standardization to national economies by applying a methodology that correlates economic activity with the number of standards in place. Others are based on the qualitative assessment of stakeholders. Market research could provide some additional data through the determination of market size, the servicing and maintenance activities for a standard, and the remote impact e.g. environmental impact. However, there is little or no data on the precise impact of specific standards. To achieve this, a more radical and innovative approach is needed that:

- Maps out the path standards take e.g.
 - o To various market segments, including SMEs
 - o Dissemination in organizations
 - o Design and process changes that result
- Determines how real cost reductions and other benefits are achieved
- Measures the costs savings or additional costs resulting on enterprises as well as other benefits or burdens
- Utilizes very cost effective sampling and measurement methods as potentially high volumes of survey data could be generated with such detailed path and outcome surveys.

The recent development by ISO of an overall methodology for assessing and communicating the economic and social benefits of standards²³ was noted. This methodology aims to address the three levels where benefits may be assessed (company, industrial sector and country) and could be applied also to regional standardization.

Strategic Goal 8: To deliver an efficient and effective European standardization system that continually develops in line with the needs of the market and public interest.

3.5.5 Improve cooperation, needs analysis and future strategy development.

The ESS is a heterogeneous, regional model with, inter alia, common goals for promoting the use of industry-led standards on a voluntary basis in support of the European internal market and of regulation/legislation and policy making. As such it is a role model in global standardization. In order to ensure a rigorous and widely embracing needs analysis in Europe, EXPRESS recommends the creation of an open forum with broad membership (the "ESS Strategy Forum") and a related coordination group for European standardization. The purpose of the ESS Strategy Forum is to coordinate standardization activities for Europe in the perspective of the European policy priorities and initiatives. The coordination group would have the primary goal to enhance cooperation of the ESOs and fora/ consortia with an outreach into the European market as a whole in between the annual meetings of the ESS Strategy Forum. A more detailed description of this proposal is given in ANNEX 1.

3.5.6 For and consortia

Fora and consortia contribute to the global standardization system by providing specifications with global relevance and impact. This covers the spectrum from early standardization work in immature technologies to mature technology areas and widely implemented and used global specifications.

In the ICT domain, most notably, some fora/consortia have evolved into global organizations producing widely implemented and used global ICT specifications. The development processes adopted by these fora/consortia are open, transparent and consensus-based and may be in accord with the WTO TBT Principles for the Development of International Standards. Guides and Recommendations. The EU Commission's White Paper on "Modernising ICT standardization in the EU – the way forward" has dealt with this specific ICT issue and provides recommendations for solutions. The topic of integration of fora/consortia specifications into the ESS was also addressed by the European Council in its Conclusions of 25 September 2008⁵. as well as in policy priorities of the EC, Parliament and Council.

Public authorities may choose to use fora/consortia specifications in the context of EU legislation/regulation, general EU policies and public procurement. Fora/consortia specifications may provide new technologies tackling important issues, e.g. with high relevance for innovation policies. Or they may be widely used, implemented globally and provide essentially functionality in certain areas which might be relevant in either policy area.§§

The ESOs and NSBs are signatories to the WTO Standards Code, and the NSBs are, thus, accountable to their national governments. Through their network of NSBs the ESOs are transforming specifications developed by fora/consortia into ENs as do the International Standards Organizations - under a consensual, open, balanced process in line with the WTO Standards Code and the WTO Principles.

The ESOs should develop and implement an improved mechanism for the adoption of fora/consortia specifications as ENs. This process could be based on the existing Unique Acceptance Procedure (UAP). It should take into account the ownership and visibility of the originating organization; the copyright, other terms and conditions for the availability of the respective specifications wherever possible and also clarify the maintenance process. It should be noted that the availability of such a process should not restrict the options of fora/consortia to submit their specifications to International Standards Organisations in order to seek a more formal global status.

Where fora/consortia specifications have not been submitted to the ESO process or a respective international formal process but have been widely implemented and used globally gaining a high degree of market acceptance, another process should be The EXPRESS panel was undecided as to the best method for referencing such specifications in EU policy and procurement. It was argued that a modified version of the UAP process, used correctly, could provide a swift solution; alternatively a second process of assessing the development processes of fora/consortia specifications against the WTO TBT Standardization Principles was considered. Some EXPRESS Panel members proposed an investigation into the

eligibility of specifications when they are to be used in cross-referencing in JTC-1 projects.

^{§§}Public authorities in Europe have developed the CAMSS methodology (Common Assessment Method for Standards and Specifications) for assessing the degree of openness and transparency of specifications. Similarly, ISO/IEC JTC-1 has a process in place (ARO process) for assessing the

need for a process able to assess the development processes for fora/consortia specifications against the WTO Principles for the Development of International Standards, Guides and Recommendations with the objective of allowing direct referencing of fora/consortia specifications in EU policies and public procurement, in exceptional cases. However, a significant number of Panel members were against this proposal. Further work is required to assess the situation and the merits of an alternative process. It is recommended that fora/consortia who wish to promote their specifications to policy-makers should engage with the ESOs to consider these options for these special cases and make appropriate recommendations to the European Commission. In doing so they should also bear in mind the findings of the EU ICT standardization White Paper.

Strategic goal 9: To implement improved mechanisms for cooperation within the ESS and in particular between ESOs and foral consortia

3.6 Access

3.6.1 Access Studies

A study by EIM for DG Enterprise & Industry (10 March 2009) reported on access to standardization²⁴. The focus was on access both to the European standardization processes (drafting standards) and to standards documents (use). A second study by Erasmus University for CEN/CENELEC focussed more on SME access to European standardization²⁵. A number of additional studies have been conducted at national level.

3.6.2 Access to Standards Documents

The well-tried model used for the vast majority of formal European standards through ISO, IEC, CEN, CENELEC and NSBs is for standards to be purchased following publication. ETSI, ITU and some other standardization systems use an equally well-tried but different model whereby organizations participating in the standards development process pay for the development. This allows published documents to be supplied either freely or at a nominal sum. It is clear that whichever route is chosen, the development and marketing costs need to be recovered by the standards development organisations in a way that impartiality of the standardization process cannot be challenged.

The key issue in terms of access to standards is whether further subsidy should be given to the development and distribution of standards required in support of European policies and legislation. The EIM study²⁴ concluded that the following are barriers for access to the standardization process:

- The amount of time required
- Travel and subsistence costs
- The cost of participating in technical committees (fee)
- The cost of becoming a member of a standards body.

The top 3 barriers for using standards are:

- price of standards (although other studies came to different conclusions)
- cost of implementing the standards;
- the number of cross references in the standards.

Hence, there have been calls for such standards to be provided free at the point of delivery. An experiment in the zero-cost availability of standards led to a significant increase in downloads, especially in developing countries, persuading ITU Council to continue with zero-cost availability. However, there is contrary evidence from ISO/IEC that the purchase price of standards is not a significant barrier to access.

Generally having sales as a significant source of revenue is one effective mechanism for funding standardization while financing by the membership contribution is another model often applied. Other models applied include government funding, e.g. the case some UN agencies, such as FAO or ITU. Moreover, NSBs may require some membership fee resulting in a mixed model.

Cost is a consideration for any business but purchase of a single standard is less of an issue than when several standards are required for a single product or service. Some standards include a large number of references to other standards, and may provide little or no guidance as to which situations the referenced standards are required. Hence, the aim should be to reduce the number of references to other standards required and/or reduce costs through membership schemes or by "bundling" groups of standards. In addition, consideration should be given to the provision of guidance on complex standards for the benefit of users, especially SMEs.

The ESOs and NSB are encouraged to create summaries of standards and publish these summaries free of charge. The summaries should contain information as to whether items are covered directly in the standard or if they are covered by normative references to other standards.

3.6.3 Access to the Standardization Process

The acceptability of standards depends to a large extent on the full involvement of all relevant parties. The participation of societal stakeholders – those representing consumer, worker, health, safety or environmental interests – in the standardization process has a strong and important dimension of accountability. It reinforces the quality of the consensus and makes the standards more representative.

The ESOs and NSBs operate open door policies for stakeholder participation in standards development but a "balanced" or "appropriate" representation of all relevant stakeholders in the development of a specific standard may not be achieved for many reasons. Indeed there is increasingly a shortage of key experts in some sectors, perhaps where production has moved outside Europe.

NSBs are encouraged to improve the engagement of all stakeholders at national level and to demonstrate how they are engaged at the national level, working with the ESOs to enhance participation across Europe. A key aim, irrespective of differences in structure or legal status between countries, is to have a clear set of benchmarks and best practices for monitoring engagement.

The Erasmus University study for CEN/CENELEC²⁵ reported on issues for SME participation in standardization. Although there are undoubted obstacles to SME participation, many do contribute in a wide range of sectors. However, to further SME interests, the study has developed a set of 58 solutions: first, for greater benefit to be obtained from standards; second, to achieve more benefit from involvement in standardization, and a third category of general solutions to facilitate these aims. This set of 58 solutions may be seen as a 'toolbox' from which NSBs and trade

associations can select the appropriate subset to support SMEs (and also societal stakeholders) in their country.

To encourage increased participation in, and take up of, standardization, there is a need to target more information, evidence and case studies to stakeholder groups. Although this is particularly important for SMEs and societal stakeholders, there is also value in targeting other stakeholders, including service providers. Targeting academia and research communities will also help to raise awareness that should result in longer-term benefits for access.

As already stated above, there is a need to apply proven, user-friendly, electronic working methods for both standards development and the wider public consultation to encourage more effective stakeholder participation.

For CEN and CENELEC, the national delegation principle is a cornerstone of the success of the ESS process and should not be changed. EU technical assistance programmes in this area should therefore seek to reinforce the ability of NSBs to provide effective national input and to develop sustainable business models to this aim. But the difficulties for some key stakeholders (SME, consumer, environmental and trade union interests) to participate in the ESS through national delegations were stressed in the EIM study. Participation of these stakeholders at national level is weak in many countries for several reasons. In order to address this weakness - and so guarantee the relevance of the European standards process built on national delegations - it has been recognised since the 1990s that it is essential to ensure participation of these stakeholders directly at European level. The roles of public authorities and standards bodies in seeking to improve participation at national level have been noted in various Council Conclusions, most recently those of September 2008⁵, and there is an important role too for the European organizations established to represent these stakeholders. Considerable efforts have been made by these organisations to improve stakeholder engagement at national level, with limited success. This indicates the need for additional and improved efforts at national level. The Panel believes that there is a potential for improvement by establishing twinning programmes and closer cooperation among NSBs (e.g. peer review system and exchange of best practice experience) and by increased efforts of the European organisations to build-up and improve collaboration with national structures. However, bearing in mind the very limited progress made until now in improving the engagement of these stakeholders at national level, there will be need for Europeanlevel financial and political support to continue in the period to 2020.

The translation of standards, and ideally drafts (especially public consultation drafts) into national languages removes a significant barrier to access in countries where the first language is not English. It was suggested that this should be a responsibility at national level, with the possibility of cooperation between NSBs and/or national governments to reduce costs where languages are common. However, there is a need to ensure that these technical documents are correctly translated. This is not a simple process and needs expert technical translators to undertake the task. The EC should also continue to support this activity in selected cases.

The convergence of technologies is having an effect on stakeholders with limited resources and this is likely to become an increasing difficulty where they may be required to attend meetings in different committees covering largely the same or closely related issues. For this reason, and more general reasons of efficient and effective working, this issue needs to be addressed by the three ESOs.

The ESOs work by consensus. However, national delegations in the CEN and CENELEC technical bodies have the right to a vote, unlike the representatives of European organizations who participate in the technical bodies only as observers because, in principle, national delegations represent the national consensus of all interested parties. This can give the impression that the views of the European organisations are less important than those of national delegations. Hence calls have been made to allow ANEC, ECOS, NORMAPME and ETUI voting rights in the technical bodies of CEN and CENELEC. This is not generally supported but consideration should be given to ensuring that both CEN and CENELEC have appeal mechanisms that can be used by these organizations that are truly impartial in dealing with fundamental disagreements should they arise. In the alignment of processes between CEN and CENELEC under FLES, CENELEC may need to consider distinguishing these select European-level organisations (i.e. ANEC, ECOS, ETUI-REHS, NORMAPME) - which are established to ensure the participation of these stakeholders and underpin the system of national delegation - from other 'Cooperating Partners'.

Strategic Goal 10: To ensure the easy access of all interested stakeholders to national, European and international standardization work and their effective participation.

3.7 Financial

3.7.1 The economic benefits of standardization

An independent macroeconomic study conducted on behalf of the UK Government in 2005^{21} provided evidence to prove that standards make an annual contribution of GBP2.5 billion to the UK economy. Moreover, 13 per cent of the growth in labour productivity in the UK from 1948 onwards was attributed to the role of standards. The pioneering study published by DIN in 2000^{22} reported benefits of 16 billion \in for Germany. Recent studies in other countries including France, based on a similar macro-economic approach have demonstrated similar benefits.

A study carried out by Roland Berger for CEN in 2000²⁶ on the financing of the European standardization system showed that the cost of developing European Standards was €700m, of which 93% was funded by the private sector with the remaining 7% from public funds.

From these studies, it is clear that the return on investment for both industry and government is very substantial.

Much is made of the cost impact of legislation (and standards) on business. But the application of standards in support of legislation has the potential to very significantly reduce bureaucratic burdens, especially the number and consequently the cost of complaints handling and redress, where the costs of handling the complaints can outweigh the compliance costs to business.

3.7.2 The European Commission and EFTA's financial contribution to the system

As the Roland Berger study showed, more than 90% of the cost of the ESS is funded from the budgets of the NSBs and contributions from stakeholders. However, under the legal framework (Directive 98/34/EC and Council Decision 87/95/EEC), European standardization makes an important contribution to the functioning of Single Market legislation. On behalf of the European Commission, Technopolis Ltd has made an external evaluation of the contribution that the community financing of standardization makes to the fulfilment of the policy objectives of the Commission²⁷. The overall conclusions were that EC/EFTA financing:

- Contributes strongly to the achievement of Commission policy objectives and legislation
- Is considered appropriate and necessary and attracts strong support from all stakeholders
- Is a useful and effective system of support but that efficiency is low due to high administrative burdens
- Has a modest budget (17-20m euro/annum)
- Could deliver a strong case for an increased budgetary allocation under improved conditions due to the significant benefits the support can deliver.

The Panel supports these broad conclusions. The main concern raised by the Panel was the high administrative burden on the ESOs and NSBs. There is an urgent need to reduce these costs that at times outweigh the financial support provided by the European Commission. The current system of Community funding leads to frustration in terms of rule changes, the large cost of auditing, and delays in the authorisation of payments. This will require legislative changes as the Commission has exhausted current mechanisms to fund standardization more efficiently. Hence, a strong rationale for change will need to be developed, clearly defining the benefits and cost savings from potential changes.

There is strong support for public interest standards (standards supporting legislation or the fulfilment of a public duty, such as required for market surveillance) to be financially supported from public funds, along with the translation of all key standards into national languages, whilst industry should continue to fund other standards. However, it is noted there is no clear dividing line between these two standardization objectives.

Further funding support should be considered for:

- Climate change work and related challenges such as energy and water efficiency
- As a lever for the better diffusion of innovation
- Improving access for disadvantaged stakeholders at both the EU and national levels:
 - o To obtain standards and supporting information in national languages
 - o To participate in the standardization process.

There is a need for a better understanding of the full investment costs in standardization, including the main cost that is the expert input, in order to further quantify the value gearing achieved by European Commission and EFTA funding. More evidence of the income and expenditure of the NSBs, along with better

evidence of the impact, value and use of standards could also be used to support improvements in the performance of the ESS.

In many areas, there is a lack of awareness about the benefits derived from standardization. There is a need for a better communications strategy and more consolidated approaches in standards education that should be supported with public funds.

3.7.3 National Authority Funding

In some countries, NSBs are private non-profit associations. In others, they are public institutions. The overall funding models differ widely and are complex. There is a need for a better understanding of the existing funding mechanisms. It appears that no single model for national funding is possible but there are concerns about the viability of some NSBs. The spread of best practice, new models for financing and opportunities arising for more cohesive funding would be welcomed. However, it is essential to remain flexible according to the needs and demands of the major sectors active in standardization.

Strategic Goal 11: To modernize the public funding system in support of the ESS in order to optimize the use of public funds within the ESS and to increase the flexibility for directing and redirecting public funds.

3.8 Legal Framework

As stated before, European standardization has been framed by two legislative instruments: (1) Directive 98/34/EC, which lays down the general framework for the European standardization system and (2) Council Decision 87/95/EEC, which provides a specific complementary framework especially for promoting and achieving interoperability via the implementation of standards in the field of ICT. This legal framework is generally valued as having made a significant contribution to the successful development and implementation of the Single Market. Revision of Council Decision 87/95/EEC is under discussion following publication of the ICT standardization White Paper⁵.

For business, the value of European standards mandated by the European Commission as foreseen by Directive 98/34/EC, lies in the fact that they provide a presumption of conformity with EU legislation following the New Approach, now the New Legislative Framework. This has been used successfully for a wide range of public interest issues, such as safety, health and electromagnetic compatibility. The benefits of the present standardization system need to be preserved. More specifically:

- No change should be made to the current list of ESOs recognised as making up the ESS;
- The ESS should continue to function as an efficient cooperation of of all stakeholders, and in particular a cooperation of the ESOs and NSBs, noting the special case of ETSI and its NSOs. The structures at national level are diverse and are constantly being updated to ensure they meet market needs. A more transparent approach to the roles and work programmes of the different organizations is needed to ensure the work is done in an appropriate way;

• The ESS works efficiently with different structures. While CEN and CENELEC operate according to the principle of national delegation ETSI operates with a mixed model of direct membership and national representation. For many sectors, market needs are best generally notified at national level, as stakeholders are organised on a national rather than European or international basis. However, there are some sectors and domains where notification may occur at European or international levels. This recognizes for several sectors and countries the necessity of communication in the local language. The main goal for CEN and CENELEC is to involve all interested stakeholders at the national level. Hence, the removal of the national delegation principle or national representation would seriously disadvantage participation, especially from disadvantaged stakeholders. However, as above, is also recognized that the representation of disadvantaged groups needs to be supplemented at the European level.

Consideration should be given to incorporating the WTO standardization principles⁶ (transparency, openness, impartiality, consensus, effectiveness, relevance, coherence) directly in the legal framework of Directive 98/34/EC with reference to the commitments taken by the EU signatories of the WTO/TBT agreement.

In order to develop standards for services, in line with the provisions of Directive 2006/123/EC on services in the internal market and in line with ISO Guide 72, Directive 98/34/EC should be reviewed to extend its provisions to those services requiring European or international standards for their supply within the EU.

Strategic Goal 12: To create a flexible and dynamic EU legislative standardization framework to optimise the added value of standardization for competitiveness, innovation and growth.

4. RECOMMENDATIONS

Strategic Goal 1: To strengthen the influence of European standardization internationally in order to open and serve markets and to increase European competitiveness and support trade policy.

SG1: Recommendations

- 1.1 ESOs, NSBs: Support international standardization wherever possible unless the need is uniquely European. Where a European standard is needed, consideration should be given from the outset to its potential future contribution to international standardization.
- 1.2 EC/EFTA, Member States: As a key ingredient of trade policy, work with the ESOs to make better use of standardization in the context of bi- and multi-lateral programme dialogues and engage more effectively in areas of strategic importance in the building of alliances (particularly in relation to enlargement, EU neighbourhood policy, the BRIC countries; and other trade partners).
- 1.3 EC/EFTA, Member States: Promote the methodology of the New Legislative Framework, or equivalent standards-receptive regulatory models, such as those developed by the UNECE (WP.6 Recommendation L) in regulatory trade-related cooperation with EU trading partners. Encourage neighbouring countries to adopt European Standards in order to ensure the coherence of their technical and economic infrastructures with EU/EFTA.
- 1.4 ESOs: Encourage the use of European best practice on horizontal issues such as CEN Environmental Helpdesk at the international level and take into consideration globally applied best practices for improvements in Europe.

Strategic Goal 2: To respond effectively and efficiently to the global challenges of the next decade and to maximise the added value of international standardization in tackling these challenges through the promotion of innovation and the dissemination of good business practice.

SG2: Recommendations

- 2.1 EC: In cooperation with the ESOs, develop a policy watch initiative across and between Directorates-General in order to ensure that policymakers consider, at the earliest opportunity, any potential benefits that standardization can bring.
- 2.2 ESOs: Develop a "thought leadership" work stream to incubate ideas at the European level with the purpose of proposing them as European-led international standards at a later date.
- 2.3 ESOs, EC/EFTA: Develop strong foresight-led portfolio management and provide a framework of priorities for new areas of standards, notably in innovative areas and to support new technologies with clear governance processes.

- 2.4 EC/EFTA, Member States: If standardization is required to support a specific legal instrument e.g. an EU Directive, the respective Directorate-General should follow the work more closely than in the past. Member States' public authorities should also be involved in relevant standardization activities.
- 2.5 EC/EFTA: Strengthen cooperation between all relevant Directorates-General on standardization issues and where appropriate promote the use of the New Legislative Framework-based standardization to support European legislation in new areas.

Strategic Goal 3: To improve mutual awareness and collaboration between standardization and the research communities and innovators.

SG3: Recommendations

- 3.1 EC/EFTA, ESOs, Member States, NSBs: Take a more systematic approach to activities relating to standardization and research, including:
 - Awareness raising for researchers and research executives about the place and opportunities for standardization in research and innovation;
 - Recognising standards as a potential outcome of projects and encouraging researchers to list standards activity as a desired output where appropriate;
 - Promoting the early standardization of terminology, metrology, measurement and testing, and interoperability;
 - Funding research in support of standardization and for standardization as a knowledge and technology transfer activity.
- 3.2 EC/EFTA, Member States, ESOs, NSBs: Link the identification of future fields for standardization with future foresight activities, including technology road-mapping under the R&D Framework Programmes.
- 3.3 EC, Member States: DG Enterprise & Industry and DG Research to work together to ensure future R&D Framework Programmes include:
 - Industrial research opportunities and incentives for researchers focussing on key technologies to consider where standardization could assist in reaching goals;
 - A funding stream under future R&D Framework Programmes to investigate the needs for and benefits of European standardization, for facilitating the development of standards, and for projects facilitating the use of standards by SMEs;
 - Encouraging fund holders and Joint Technology Initiatives (JTIs), Technology Platforms (ETPs) within the R&D Framework Programmes to recognize standards as a potential outcome of projects and encourage them to list standards activity as a desired output where appropriate;
 - Re-establishing "relevance for standardization" as an evaluation criterion in future R&D Framework Programmes as an aspect to be considered in R&D projects but without making it a mandatory component.
- 3.4 ESOs: Provide information to researchers, research institutes and funding organizations, on the place of standardization in achieving longer term goals related to social, health, security, environmental and technological issues, e.g. by using the Integrated Approach developed by CEN/CLC STAIR²⁸.

Strategic goal 4: To promote the inclusion of standardization practices and benefits especially in higher education and encourage the development of studies and surveys to assess, quantify and communicate the economic and social benefits of standards.

SG 4: Recommendations

- 4.1 EC/EFTA, Members States, ESOs, NSBs: Produce targeted information to increase awareness of standardization and its benefits to all key stakeholders, including academia and societal groups, to encourage active participation, and to ensure the effective and influential participation of these stakeholders in the ESS.
- 4.2 EC/EFTA, Member States: Include standardization in the curricula of European universities
- 4.3 ESOs,NSBs: Provide 'teaching themes' for technical schools/colleges/universities and an explanatory memorandum for the effective use of standards on web sites.
- 4.4 EC/EFTA, ESOs, NSBs: Undertake pilot projects in the area of standards education and include a consolidation of existing projects and tools.
- 4.5 ESOs, NSBs: Raise awareness of the strategic importance of standardization in order to achieve a desired 'talent pool' of national and company experts such that NSBs and the ESOs sustain their capability to provide expert participation in priority areas, providing attractive conditions for active participation.

Strategic Goal 5: To have a standardisation system that is effective and conducive to innovation by maintaining appropriate IPR policies.

SG5: Recommendations

- 5.1 ESOs: The ESOs are encouraged to assess their IPR policies with a focus on promoting innovation. This shall include a consideration of IPR policies as applied in other standards bodies.
- 5.2 EC: Carry out an in-depth fact finding study with the aim of further investigating the interplay between standards and IPRs and identifying issues, as well as helping to improve the relationship between standardization, innovation and IPRs where necessary.
- 5.3 EC, ESOs: Improve the links between the ESOs and the European Patent Office to ensure that IPR issues are considered at an early stage, as this would lead to an improved quality of both patents and standards.

Strategic Goal 6: To promote and use standards in order to further support the internal and external markets, especially for the quality and safety of services provided by the market, including business-to-business, business-to-consumer and networked services and in support of the growth and competitiveness of the services sector.

SG6: Recommendations

- 6.1 EC/EFTA: Support and promote the efforts of the ESOs to demonstrate the benefits derived from standards for services, including networked services, to business, government and consumers.
- 6.2 ESOs: Continue to identify standardization needs in the field of services using case studies to demonstrate both the benefits and drawbacks from such standardization.
- 6.3 ESOs: Ensure that any new project for developing management systems standards in the service sectors meets the criteria defined in ISO Guide 72 Guidelines for the justification and development of management system standards
- 6.4 EC/EFTA/Member States: Support the substitution of national legislation and accreditation systems for services with systems based on European standards if and where feasible and appropriate.

Strategic Goal 7: To develop standardization foresight in order to deliver a more effective and coordinated response in supporting global policies to address the issues of climate change and other future global energy, environmental and societal challenges.

SG7: Recommendations

- 7.1 ESOs, NSBs: Work together to ensure a coherent policy and programme in order to respond to energy and environmental challenges, consolidating the current programme of work and ensuring European leadership in key areas in the international standards framework e.g. in carbon management, renewable energy.
- 7.2 EC/EFTA: Provide support to assist a broader standardization programme for climate change and environmental protection, including the incorporation of environmental aspects into all (relevant) standards.
- 7.3 EC: Extend the standards-receptive regulatory approach to deliver solutions to climate change, environmental protection and health and safety at the workplace.

Strategic Goal 8: To deliver an efficient and effective European standardization system that continually develops in line with the needs of the market and public interest.

SG8: Recommendations

8.1 ESOs: All three ESOs continue to enhance their collaboration and increase the integration of their systems and processes in order to be able to meet the

challenges deriving from increasing convergence of technologies and the need for the global outreach of the ESS.

- 8.2 ESOs: Improve the collaborative framework among the three ESOs including a mechanism to ensure that work is done jointly or in the most appropriate organisation and duplication of work is avoided. This should include consideration of "customer" driven work, cooperation with fora and consortia as relevant, and policy watch.
- 8.3 ESOs, NSBs: Accepting the need and benefits from face-to-face contact at key stages of the standardization process, review standards development processes, and enquiry and consensus-building processes, to improve the opportunities for all interested stakeholders to follow the process and contribute, applying new communication technologies where appropriate to facilitate more openness and transparency and to meet the needs of stakeholders and the market. Particular attention should be given to standards development processes needed in areas of short technological life cycles and very dynamic markets.
- 8.4 EC: Develop and implement improved systems for the coordination of standardization activities across all Directorates-General.
- 8.5 ESOs: Strengthen the use of market analyses, including consultations with relevant stakeholders, before initiating standardization work in order to optimize the work and to use resources more effectively.
- 8.6 EC/EFTA, ESOs, NSBs: Investigate the impact of standards to provide evidence of market uptake and use.
- 8.7 ESOs, NSBs: Systematically share experiences of best practice and implement a peer assessment system where relevant.

Strategic goal 9: To implement improved mechanisms for cooperation within the ESS and in particular between ESOs and fora/consortia.

SG 9: Recommendations

- 9.1 EC, ESOs, Fora/Consortia: Implement an annual "ESS Strategy Forum" to coordinate standardization activities for Europe in the perspective of the European policy priorities and initiatives. Additionally to establish a coordination group with the primary goal to enhance cooperation of the ESOs and fora/ consortia with an outreach into the European market as a whole in between the annual meetings of the ESS Strategy Forum, taking account of the outline proposal given in ANNEX 1.
- 9.2 EC, ESOs: Review existing processes e.g. UAP, and develop improved processes for the adoption of fora/consortia specifications as European Standards (ENs) and for their availability in Europe.

Strategic Goal 10: To ensure the easy access of all interested stakeholders to national, European and international standardization work and their effective participation.

SG10: Recommendations

- 10.1 ESOs, NSBs, EC/EFTA, Member States: Implement the main findings of the CEN/CENELEC SME Access Project, including national language issues.
- 10.2 ESOs, NSBs: Review the adequacy of enablers and the impediments for societal stakeholders to participate in standards development work, including the effect of fees on participation.
- 10.3 ESOs, NSBs: Ensure accessibility aspects are addressed, not only in product standards, but also for standards in the field of services in order to ensure the autonomy of end-users and consumers.
- 10.4 ESOs, NSBs: Monitor and record stakeholder representation in standards development and standards policy committee meetings with the aim of identifying and, as appropriate, filling significant gaps in relevant stakeholder representation.
- 10.5 Member States, NSBs: Enable free-of-charge on-line review of draft standards and existing standards at the Systematic Review Stage (usually after 5 years) to ensure public enquiries are effective in reaching all interested parties.
- 10.6 ESOs, NSBs: Need for increased sensitivity towards specific stakeholder needs e.g. SMEs, when developing standards, especially the need for guidance on the use of complex standards and to reduce the number of cross references in standards, offering packages of linked standards where this is not feasible.
- 10.7 EC/EFTA, Member States: Work with the ESOs and NSBs to improve the awareness of societal stakeholders to the benefits from participating in standardization, to encourage and support active participation, through existing NGOs or if needed by establishing national stakeholder groups, either within or external to the NSBs.
- 10.8 NSBs, ESOs, Member States, European organizations of societal stakeholders: Collaborate in order to strengthen national support for disadvantaged stakeholders by implementing, for example, the provision of resources, peer review processes, twinning projects and exchange of best practice experience.

Strategic Goal 11: To modernize the public funding system in support of the ESS in order to optimize the use of public funds within the ESS and to increase the flexibility for directing and redirecting public funds.

SG11: Recommendations

- 11.1 EC: Implement the recommendations of the Technopolis study undertaken for the European Commission into the contribution that the community financing of standardization makes to the fulfilment of policy objectives of the Commission.
- 11.2 EC/EFTA: Review fundamentally EC/EFTA funding mechanisms in support of standardization to improve consistency, transparency and effectiveness and to

reduce bureaucracy, delays and the high administrative burden on the ESOs and NSBs that result from current procedures. Also ensure that the funding provided is paid in a reasonable time period to meet the needs of the market.

- 11.3 Member States: Provide support to NSBs to ensure their viability, especially in newer and/or smaller country members, e.g. by funding the cost of participation in the administrative and technical boards of the ESOs.
- 11.4 EC/EFTA: Maintain financial and political support to ANEC, ECOS, ETUI and NORMAPME, recognising the difficulty that these stakeholder groups have to secure effective participation in all but a few European countries. Support these European Organizations to increase national and European participation of their stakeholder groups in national and European standardization.
- 11.5 EC/EFTA,ESOs: The European Commission, EFTA and ESOs to work together more effectively to follow-up and align EU-funded and EFTA-funded technical assistance projects.
- 11.6 EC: Review procedures for financing CEN/CENELEC/ETSI promotional activities in third regions, where these activities are aligned with European Commission priorities, with the aim of providing easier, less bureaucratic systems.
- 11.7 EC/EFTA, Member States: Especially for those standards published in support of EU policies and legislation including harmonized standards, support where appropriate the translation of standards and public consultation drafts into the national languages of EU/EFTA Member States, noting particularly the need to assist smaller economies.

Strategic Goal 12: To create a flexible and dynamic EU legislative standardization framework to optimize the added value of standardization for competitiveness, innovation and growth.

SG12: Recommendations

- 12.1 EC: Taking account of the above recommendations, revise Directive 98/34 in order to develop a framework for standardization covering both goods and services (in line with Directive 2006/123/EC).
- 12.2 EC: Re-state the principles to be observed in the standards development process in the revision of Directive 98/34: inclusion of all interested parties, openness, impartiality and consensus, transparency, balanced representation, effectiveness and relevance, and coherence.
- 12.3 EC: Revise Council Decision 87/95/EEC taking into account the EC White Paper on "Modernising ICT Standardization in the EU" (COM(2009) 324 final).
- 12.4 EC, Member States: Modify the regulations for financing standardization, taking account of the above recommendations.

5. IN CONCLUSION

The EXPRESS Panel calls for the long-standing political commitment of the EU and EFTA to the European Standardization System to be maintained and further strengthened in order to ensure the ESS is coherent and sustainable in its continued evolution. The EXPRESS Panel also calls on the European Commission and EFTA to promote the value of the ESS and its activities, both within and outside the European Economic Area, as a model for removing technical barriers to trade, increasing the competitiveness of business and enhancing the protection and welfare of people and their environment.

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ANNEX 1 – Proposed "European Standards System Strategy Forum"

The purpose of the ESS Strategy Forum is to coordinate standardization activities for Europe in the perspective of European policy priorities and initiatives. In particular, this includes in particular providing advice to EU policy-makers on the use of standardization in support of EU policies, most notably the use of standardization in the context of industrial (and especially innovation policy) as well as in the areas of health, safety, the environment and other social issues. The purpose is to create an integrated oversight standards plan for Europe.

The ESS Strategy Forum shall be open for broad membership. Members of the ESS Strategy Forum shall be the ESOs, fora/consortia, the European Commission, and EFTA, Member States, Industry, society stakeholders. The Commission shall be the facilitator/convenor for the ESS Strategy Forum; the ESOs shall lead the secretariat. The ESS Strategy Forum shall meet on an annual basis.

A key requirement for all members of the Forum will be a requirement to share their market intelligence and standardisation plans to ensure business, governments and public interests are represented.

The ESS Strategy Forum shall be complemented by the ESS coordination group, the primary goal of which shall be to enhance cooperation of the ESOs and those fora/consortia with an outreach into the market as a whole in between the annual meetings of the ESS Strategy Forum.

The ESS coordination group shall also be responsible for the cooperation with Member States Committees and other expert groups implemented by EU legislation in the field of standardization. The ESS Coordination group shall consist of about 10 (maximum 15) organisations with all three ESOs and the European Commission being constant members complemented by fora/consortia and other stakeholders. The ESS Coordination Board shall meet at least 3 times per year (with virtual meetings to be considered) and will be facilitated by the ESOs.

Based on the annual meetings of the ESS Strategy Forum, the ESS coordination group should specifically be responsible for:

- setting up roadmaps to identify future priorities of key importance for Europe
- considering standardization as an integral part of European Framework programmes
- supporting the European Commission in formulating new research programmes with respect to standards related matters

The ESS coordination group, will organise with other appropriate review groups, the integration of the ICTSB as a sub-committee of the ESS coordination group. The proliferation of bodies and groups shall be avoided;

The ESS coordination group shall note that international standards will be used where appropriate to avoid duplication of work, following the well established working procedures of ISO and IEC (the Vienna and Dresden Agreements), and the relevant arrangements in the telecommunications sector between ETSI and ITU.