



Guidebook Series

How to support SME Policy  
from Structural Funds.

Using standards  
to support growth,  
competitiveness  
and innovation



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from Structural Funds.

## Using standards to support growth, competitiveness and innovation

A smart guide on promoting and facilitating SME competitiveness through the development and use of standards with the help of EU structural funds

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It's based on the information gathered in a number of projects and studies executed in this field. Although the work has been carried out under the guidance of the European Commission officials, the views expressed in this document do not necessarily represent the opinion of the European Commission

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This guidebook is part of a Series. The titles published so far are :

Nr.1 Building Entrepreneurial Mindsets and Skills in the EU

Nr.2 Using standards to support growth, competitiveness and innovation

Nr.3 Facilitating Transfer of Business

Nr.4 The Smart Guide to Service Innovation

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# Preface



Standards are a vital element of the society in which we live, providing a common and repeatable basis for doing things and helping to bring order to the world. They also play an important role in the economy, facilitating business interaction and access to markets. With a focussed portfolio of specific strengths in each region, there are differing sectors of high importance to each region.

SMEs are a critical part of the European economy and have a central role to play in growth and job creation, but their use of standards and their involvement with standardisation is typically low. Both SMEs and the economy more widely could benefit from SMEs being more involved in the standardisation world, and external support and encouragement is needed to overcome the barriers that exist.

The EU's Cohesion Policy supports authorities and stakeholders to deliver growth, competitiveness and innovation in the regions. The current economic challenges require to focus particularly on supporting innovation and improving the competitiveness of SMEs.

One of the ways to achieve this is through promoting and enabling greater and more effective use of standards and standardisation. Regional authorities are encouraged to develop proposals for innovative projects that will best utilise available ERDF funding.

This guidebook has been produced to advise on how EU regional funding can be used to foster SME competitiveness through boosting SMEs' use of standards and standardisation. It aims to assist authorities, stakeholders and managing authorities with the overall planning as well as the preparation of concrete proposals for specific support measures in this area.

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# Summary

## 1.1 This guide

The **objective of this guide on standardisation and SMEs** is to assist Structural Funds managing authorities and other policy-makers involved in the preparation of the post 2013 generation of Structural Funds with the preparation of support measures aimed at boosting SMEs' use of standards and standardisation. The greater and more effective use of standards and standardisation across Europe is an important element for fostering growth, competitiveness and innovation of SMEs.

SMEs need to find in their proximity the help, information, support and services they need. Amongst other benefits, standardisation is the gateway to opening up the opportunities of the Single Market for European enterprises. Standardisation support can be a useful tool in the policy-mix used for the implementation of research and innovation strategies for smart specialisation, however standardisation may have been overlooked in the past use of the Structural funds.

This guide:

- Provides an **introduction** to standards and how they are developed
- Highlights the **benefits** of standards for SMEs and the wider economy
- Summarises the main **barriers** faced by SMEs in developing and using standards
- Presents **ideas** on how Structural funds can be used to help SMEs overcome barriers and increase their competitiveness through better use of standards
- Explains the **next steps** for regional authorities to implement these ideas

## 1.2 Why Structural Funds should support standardisation in SMEs

Small and Medium-sized Enterprises (**SMEs**) and craft enterprises are a very important part of the European economy, accounting for 99,8 % of all businesses, 67,5 % of all jobs and 58,4 % of value added. Their central role has been recognised by the European Commission and the Member States through various policy pronouncements, including the Small Business

Act (2008) and its Review<sup>1</sup>, which promote the ‘think small first’ principle in policy making, from regulation to public services.

**Standards** are commonly agreed reference documents that help to bring order to the world. They are a common and vital element of the society in which we live, and form an essential component of everyday life. Each year many existing standards are revised and updated so as to remain up to date and fit for purpose, while at the same time many new standards are also being developed. Section 2 of this booklet provides an introduction to the world of standards and standardisation.

Standards play a number of important roles in the economy, and ultimately **support innovation**, growth and competitiveness across Europe. Indeed, studies in selected countries suggest that growth in the stock of standards may account for up to a quarter of recent productivity growth. Standards also offer many significant **benefits** for individual businesses and industries, and provide **SMEs** with a vital competitive edge. There are benefits to be gained from both using standards that currently exist and from participating in the process of revising or developing new standards. Section 3 of this booklet provides information on the importance of standards and the benefits that flow to SMEs and the wider economy from their development and use.

### 1.3 Barriers and problems faced by SMEs

Standards are written by technical experts in their field and always represent the background and interests of the companies these experts work for. In order to have SMEs background and interests properly reflected in the process of standard creation, it is important to facilitate the participation of experts from SMEs in this process.

Studies have shown that SMEs could play a fuller role in standardisation, but are often hampered

by a number of factors. These **barriers** include a lack of awareness of standards relevant to their business, a perception that they are more relevant to large business, and a lack of human (technical) and financial resources to both develop and make use of standards. As a result, participation by SMEs in the standardisation process (accessing information, participating in committees, implementing and using standards) is typically low, relative to their importance within the economy.

Because participation by SMEs in standardisation is lower than desirable, there is a risk that published standards do not fully take account of the needs or interests of SMEs. This can further exacerbate the issue of relatively few SMEs using and implementing relevant standards fully and effectively. As a result, SMEs and the economy more widely are not fully reaping the benefits offered by standards and may even have unnecessary requirements placed on them. Section 4 of this booklet explains in more detail the barriers and problems that are faced by SMEs in realising the full benefits of standards.

### 1.4 Measures to support SMEs

The **European Commission**<sup>2</sup> is aware of this situation and of the necessity of both effective SME participation in standards development and effective uptake and use of standards by SMEs. Over time it has increased its budget allocation specifically for the promotion of SMEs in the standardisation process and for its co-funding to support the participation of experts representing SMEs’ interests in the process. It provides financial support directly to a European organisation that represents and supports SMEs in relation to standards and standardisation.

**Standardisation bodies** are also supporting various initiatives to improve standardisation in order to make it more appropriate and beneficial for SMEs, and a variety of different initiatives have been instigated at the regional

<sup>1</sup> A “Small Business Act” for Europe COM(2008) 394 and Review of the “Small Business Act” for Europe COM(2011) 78

<sup>2</sup> Communication on a strategic vision for European standards COM(2011)311 dated 1 June 2011  
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0311:FIN:EN:PDF>

or national level in different parts of Europe to support this process. However, there is still a need to provide more assistance to help and encourage the participation of SMEs in standardisation and to ensure these businesses are making full use of standards.

The managing authorities should look to use available **European structural funds** (ERDF and ESF) to finance initiatives that support SMEs in making better use of relevant existing standards, and being more active in the standardisation process. Particular attention should be paid to the sectors of economic

importance for the regional economic tissue and its SMEs in order to insure their continued competitiveness in this sector. Section 5 of this guide provides information on various support measures that could be introduced to ensure that SMEs and the economy gain the full benefits offered by standards.

In the final section of the guide (Section 6), we set out the next steps that regional authorities can take to develop a package of support on 'standardisation and SMEs', and provide links to further information.



## 2

# An introduction to standards and standardisation

*This section introduces the world of standards and standardisation. It explains what standards are, why they are important both to businesses and society, how they are developed and which types of actors are involved.*

## 2.1 An introduction to standards

### 2.1.1 What is a standard?

Standards (or 'norms') are a vital element of the world in which we live. It would be hard to imagine a world without standards.

Standards are officially defined as documents that are "established by consensus and approved by a recognised body that provide for common and repeated use, the rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context"<sup>3</sup>. They are usually formal technical documents that set out and define criteria, methods, processes and practices.

For most people, standards are commonly agreed reference documents that help to bring order to the world. Most people know what shoe size they wear, because shoe sizes are 'standardised'. And when we purchase an electrical product such as a television we can reasonably assume that it will be able to be connected to the electricity supply in our home. This is because the plugs that are fitted to electrical products and the sockets that are installed in our homes have both been designed to meet commonly agreed and widely accepted 'standards'.

It is believed that the ancient Egyptians developed the very first standards. They defined the 'cubit' as a standard unit of length equivalent to the width of six palms (or 24 fingers) and used this standard to help construct the great pyramids. Down through the ages more and more standards have been developed, and today they are an essential component of everyday life. They provide a common and repeatable basis for doing things and help to bring 'order' to the world. Quite simply, without standards there would be chaos.

<sup>3</sup> ISO/IEC Guide 2:1996, definition 3.2

Most standards have been around for a long time, but many new standards are developed every year. In addition, many existing standards are regularly revised and updated to ensure that they remain fit for purpose as new materials, technologies and processes become available. External factors can also prompt the need for new standards, such as an increased need to protect the environment or to address concerns on the part of consumers or public bodies about products or services.

### 2.1.2 Why are standards important?

Section 3 of this report provides a full account of the manifold benefits that developing and using standards bring to businesses and to the economy as a whole, and why it is important for SMEs in particular to make full use of standards and to participate actively in the standards development process.

Standards support industry competitiveness by assisting with the codification and dissemination of new knowledge and innovations, helping to improve products and services, ensuring interoperability and enabling trade. They also help businesses to demonstrate to regulators and customers that their products and services meet defined safety, quality and environmental standards.

Participation in the standardisation processes allows businesses to exchange new knowledge, increase their profile and ensure that standards meet their needs. It can also provide early warning of new developments and requirements. Standards are therefore an essential business tool, and failure to make full use of standards and participate in standards development can inhibit industry competitiveness at individual firm, sectoral and regional levels.

### 2.1.3 What types of standards exist?

Standards can be broadly sub-divided into three categories, namely product, process and management system standards:

- **Product standards** cover various features of products and often refer to characteristics related to quality and safety, or to aspects that ensure their interoperability with other related products
- **Process standards** refer to the conditions under which products and services are to be produced, packaged or refined
- **Management system standards** assist organisations to manage their operations. They are often used to help create a framework that then allows the organisation to consistently achieve the requirements that are set out in product and process standards

Increasingly, **service standards** are also emerging as a discrete type of standard. They are typically developed to ensure a consistent 'minimum' standard of quality in the provision of a service, and to clarify the rights and responsibilities of both the provider and the user of the service.

Standards can also be broadly divided into 'formal standards' or 'informal standards', depending on the structure within which the process of developing the standard takes place:

- **Formal standards** are developed at the International, European or national level by one of the recognised official standardisation bodies, which include for instance the International Organisation for Standardisation (ISO), the European Committee for Standardisation (CEN) and National Standards Bodies (NSBs) such as BSI (UK) and DIN (Germany). With the increasing globalisation of markets, International Standards (as opposed to regional or national standards) have become critical to the trading process, ensuring a level playing field for exports, and ensuring imports meet internationally recognised levels of performance and safety
- Other bodies such as industry associations, groups and fora may also develop

**‘informal’ standards**, and while those bodies and the standards they produce may not be recognised by public authorities as ‘official’, that does not prevent the standards from becoming both widely used and crucial to the performance of an entire sector. For example, many of the standards on which the Internet is based were developed by industry groups rather than by the officially recognised standardisation bodies. In fact, industry groups and fora (rather than officially recognised bodies) have developed a large proportion of the standards used within the field of Information and Communication Technologies (ICT). Standards that have not been developed by an official body, but which become widely accepted and used are sometimes referred to as ‘de facto’ standards. Informal standards can even be developed by individual businesses, such as a standard procedure for how to answer telephone calls or a defined process for handling customer complaints

A wide range of types of document might be termed ‘standards’. The officially recognised standards bodies publish **‘full standards’** (International, European or National), each of which are developed according to well-defined processes and procedures, and due to various ‘checks and balances’ may take several years to produce. European ‘harmonised’ standards (ENs) are a special category of standards, compliance with which confers a presumption of conformity to specific elements of Community laws, regulations or EU legislation. When European standards are published, individual countries within Europe are required to withdraw from use any similar national standards so that the European standards can become widely adopted and are not in conflict with standards in use at national level.

**Other types of standards** are also developed and published by recognised bodies but involve simpler and faster consensus building processes. These other types of documents include Technical Specifications and Technical

Reports, Workshop Agreements, and Publicly Available Specifications. These standards do not carry the same status as ‘full’ standards and cannot be used to demonstrate compliance with legislation or regulations, but may nonetheless be highly valuable for industry and can bestow many important benefits. These standards are primarily used in innovative fields and as part of research projects.

Finally, there are the **‘informal standards’** developed by industry associations, groups, fora, and individual businesses. As mentioned above, some of these can be of huge significance and be widely adopted across the world, while others may have limited scope / use and operate only at the level of individual firms.

The vast majority of standards are **voluntary** in the sense that they are offered for adoption by people or industry but without any legal requirement that they are used. Some standards become mandatory when regulators specify that compliance with a standard is a legal requirement. Within Europe almost all standards are voluntary, but some are considered to be ‘de facto’ mandatory as they are the primary route through which manufacturers can demonstrate that their products comply with legal (usually safety) requirements. Compliance with standards is not the only route by which legislative requirements can be met, but this is widely accepted to be the most efficient and effective approach, so using standards is an essential activity for many businesses.

## 2.2 Who are the main actors and what are their roles?

Standardisation is an industry process and industry is the most important group of actors involved, both individual businesses and industry associations and federations. However, other groups such as regulators, public bodies, certification and testing bodies, scientific experts, and societal stakeholders (NGOs) are also actively involved. Below we introduce the main bodies that coordinate the standards

development processes at national, European and International levels, as well as other types of organisation that only or primarily operate in the field of standardisation.

### 2.2.1 Standards Bodies

A standards or **standardisation body** (also commonly referred to as a standards organisation, standards developing organisation, or standards setting organisation) is any organisation whose primary activities are developing, coordinating, promoting, revising, amending, reissuing, interpreting, or otherwise producing technical standards.

Normally, the term standards body is not used to refer to the individual parties that actually write (i.e. develop) standards, but refers to the organisations that coordinate the process, and who provide the necessary infrastructure for standards to be conceived, developed, adopted (in the case of formal standards) and distributed.

In most but not all cases standards bodies are **membership-based** organisations, and it is the members (and other interested parties) who are principally involved in writing and approving standards through participation on committees and working groups established for this purpose. This is the position for the standards bodies in Europe, most of which are relatively small organisations but coordinate and manage the activities of very large numbers of other organisations and individuals who take on the role of writing standards.

#### 2.2.1.1 National Standards Bodies

Each country within Europe (with a small number of exceptions, e.g. Lichtenstein) has an officially recognised standardisation body. The National Standards Bodies (NSBs) in Europe do not develop (i.e. write) standards but act as coordination bodies for the wider system of actors that do.

Most NSBs within Europe are independent, non-profit making organisations, although

some are part of the structure of Government and operate more or less as public bodies. The principal roles of the NSBs are to oversee, coordinate and manage the process of standards development, and to formally adopt, maintain and distribute (i.e. sell) the approved standards. The NSBs in Europe are active in the standards development process at national, European and International levels.

The process of developing standards, as managed by the NSBs, is covered in the next Section (2.3) of this guide. In addition to developing national standards, the NSBs of the 27 EU Member States, three of the EFTA countries (Iceland, Norway and Switzerland) plus Croatia and Turkey are members of the European and International standards bodies, and so also have a major role in the development of European and International standards.

In addition to coordinating and managing the process of standards development, the NSBs also undertake a wide range of activities connected to standardisation. For example, NSBs play a major role in assessing and responding to demand for new standards, and are responsible for informing industry and other stakeholders about new standardisation projects and about the publication (or withdrawal) of standards. NSBs are also responsible for the final approval, adoption, publication, promotion and sale of standards.

Some NSBs also act as certification bodies. Certification is the process of evaluating and confirming that organisations have met the requirements set out in a standard. Many organisations that use standards need to demonstrate to regulators or wish to demonstrate to their customers that they meet the required standards and they do this through 'third-party' testing. Certification Bodies are accredited to carry out such testing and will issue certificates to organisations that meet the necessary requirements.



Regional authorities that wish to develop projects that can help SMEs make better use of standards should discuss their ideas with their NSB first. A list of dedicated SME contacts within each of the National Standards Bodies in the EU Member States, EFTA countries, Turkey and Croatia, along with their contact details, can be found via the following link –

<http://www.cen.eu/cen/Services/SMEhelpdesk/Contacts/Pages/default.aspx>.

### 2.2.1.2 European Standards Bodies

The legal foundation and key features for the current European standardisation system (ESS) were laid down in a European Directive (98/34/EC), which recognised three official European Standardisation Organisations (ESOs) and enabled the European Commission to request them to undertake standardisation work in specific areas. The ESOs are the only organisations that are currently able to develop formally recognised European standards (ENs), which must be implemented at national level (by being given the status of a national standard and by withdrawal of any conflicting national standard). Therefore, a European Standard (EN) automatically becomes a national standard in each of the countries that form part of the European standardisation system. The three ESOs and their main sphere of operations and key differences are described briefly below:

- The **European Committee for Standardization (CEN)** is an international non-profit association established in 1975, with headquarters in Brussels. CEN provides the platform through which stakeholders come together to plan and develop European standards and other reference documents (such as technical specifications, technical reports and workshop agreements) across a wide range of industry sectors. Its members are the National Standards Bodies of EU Member States, EFTA countries and Croatia and Turkey.

CEN works in a decentralised way – its members operate the committees and technical groups that draw up the standards, while the CEN-CENELEC Management Centre (CCMC) in Brussels manages and coordinates this system. More than 60,000 technical experts are involved in the CEN network. CEN also cooperates with the International Organisation for Standardisation (ISO) in the development of international standards.

CEN's spheres of operations are very broad and include the development of standards in the fields of accessibility; air and space, bio-based products, chemistry, construction, consumer products, energy and utilities, environment, food, health and safety, healthcare, heating, ventilation and air conditioning (HVAC), innovation, machinery safety, materials, measurement, nanotechnologies, pressure equipment, security and defence, services, transport and packaging.

- The **European Committee for Electrotechnical Standardization (CENELEC)** is a non-profit organisation created in 1973 as a result of the merger of two previous European organisations: CENELCOM and CENEL. CENELEC's main business is to coordinate the development of European Standards (ENs) and other reference documents (such as technical specifications, technical reports and workshop agreements) in the electrotechnical field. Its members are the National Electrotechnical Committees of the EU Member States, EFTA countries, plus Croatia and Turkey. CENELEC also cooperates with the International Electrotechnical Commission (IEC) in the development of international standards.

CEN and CENELEC operate in similar ways and share a central secretariat in Brussels (the CEN-CENELEC Management Centre). CENELEC focuses on the development of electrotechnical standards in the fields of

electric vehicles, smart grids, smart metering, household appliances, electromagnetic compatibility (EMC), electrical engineering, fibre optic communications, fuel cells, medical equipment, railways, solar electricity systems, etc. A growing number of sectors are being addressed by both CEN and CENELEC in the framework of their joint activities.

- **The European Telecommunications Standards Institute (ETSI)** is an independent, not-for-profit organisation based in the technical park of Sophia Antipolis (Nice) in the south of France. ETSI produces globally applicable standards for Information and Communications Technologies (ICT), including fixed, mobile, radio, converged, broadcast and Internet technologies. ETSI also cooperates with the International Telecommunications Union (ITU) in the development of international standards.

ETSI conducts its work through Technical Committees, which produce standards and specifications based on consensus. It brings together more than 700 member organisations drawn from 62 countries worldwide. Unlike the other two ESOs, ETSI operates a fully open membership policy where any organisation can become a member (by paying an annual fee), and can then participate directly in the standards development process.

### 2.2.1.3 International Standards Bodies

There are three principal standards bodies involved in the development and adoption of International (i.e. global) standards:

- The **International Organisation for Standardization (ISO)** is a non-governmental organisation with its headquarters in Switzerland, and is the principal body coordinating the development and promulgation of formal International standards. ISO standards are
- developed in almost all industry sectors, with the exception of electrotechnical and telecommunications standards (developed by IEC and ITU respectively).
- The **International Electrotechnical Commission (IEC)** is a non-governmental organisation with its Central Office in Switzerland, and is the principal body coordinating the development and promulgation of International standards for electrical, electronic and related technologies. It publishes 300 to 500 International standards each year, covering a wide range of technologies from power generation, transmission and distribution to home appliances and office equipment.
- The **International Telecommunications Union (ITU)** is a specialised agency of the United Nations based in Switzerland. It is an intergovernmental public-private partnership organisation with a membership of 193 countries and around 700 Sector Members and Associates. The

ISO is a membership-based organisation, and currently has 165 National Members, each of which is the recognised authority on standards in their country. Most of the work of ISO is done by some 2,700 technical committees, subcommittees, and working groups. Each committee and subcommittee is headed by a Secretariat from one of the national member organisations.

IEC is a membership-based organisation and currently has 60 full and 82 associate members, each representing a different country. IEC members are National Committees that represent their nation's electrotechnical interests. The standards development work of IEC is done by some 170 technical committees and subcommittees, as well as around 700 Project and Maintenance Teams. Each committee deals with a particular subject and is composed of representatives of national committees.

ITU Telecommunication Standardisation Sector (ITU-T) is one of three main divisions within the organisation, and is specifically responsible for coordinating standards for telecommunications.

ITU-T produces worldwide standards in all fields of telecommunications. The international standards (“Recommendations”) only become mandatory when adopted as part of national law, but as a specialised agency, ITU’s standards carry more formal international weight than those of most other standards development organisations publishing similar specifications. Most of the work of ITU-T is undertaken by its Sector Members and Associates, and the technical work is managed by Study Groups consisting of experts in telecommunications from all over the world.

## 2.2.2 Other actors

### 2.2.2.1 Certification bodies

Certification is a process of testing, whereby an assessment is undertaken to check whether an entity is in compliance with certain requirements and criteria, and a certificate is issued to attest that the criteria or requirements have been met. The criteria assessed might, for example, be the requirements set out within a specific standard.

Any organisation can undertake certification activities and businesses can self-certify themselves. However, organisations can also employ the services of an external and independent **certification body**, who will undertake the assessment for them and issue a certificate that provides a third party guarantee of adherence to requirements. Accredited certification bodies are those that have gained third-party verification of quality from a National Accreditation Body (NAB). NABs are authorised by national governments

to assess and accredit other organisations that wish to provide certification, testing, inspection and calibration services. There are currently more than 1,000 accredited certification bodies registered with NABs in the EU.

### 2.2.2.2 Representative bodies for SMEs and societal stakeholders

In order to ensure that the interests of SMEs, consumers, workers, and environmental groups are taken into account in the standards drafting process, the European Commission provides co-financing to European representative bodies.

NORMAPME aisbl<sup>4</sup> currently receives European funding to represent **SMEs interests** in the European standardisation system. It is a membership-based organisation, with members that are predominantly European trade associations representing SMEs operating in various industry sectors. As an associate member of CEN and CENELEC, and a voting member of ETSI, NORMAPME is able to provide experts to participate directly in the drafting of European standards.

The financial support provided by the EC enables the organisation to provide support services that help SMEs obtain information on standards and standardisation, make better use of standards and participate more actively in the standards development process. A significant part of its activities involve the management of the team of experts who represent SMEs’ interests in various Technical Committees of the ESOs and ISO. It also provides various information services and regularly consults SME representatives and their members on relevant developments within the European standardisation system, feeding their views into standardisation policy.

The other representative bodies that currently receive European funding to support specific **societal stakeholder interests** in the European standardisation system are ANEC<sup>5</sup> (consumer interests), ECOS<sup>6</sup> (environmental interests), and ETUI-RHES<sup>7</sup> (workers’ interests).

<sup>4</sup> [www.normapme.eu](http://www.normapme.eu)

<sup>5</sup> [www.anec.eu](http://www.anec.eu)

<sup>6</sup> [www.ecostandard.org](http://www.ecostandard.org)

<sup>7</sup> [www.etui.org](http://www.etui.org)

In 2013 a new Regulation on standardisation will come into force, under which the European Commission will co-finance (through an operating grant) the functioning of a European body representing each of the interest groups above, following a call for proposals.

### 2.3. How are standards developed?

Given the many different types of standards that exist and the many different types of organisations and structures that can develop standards, it follows that there is no single process by which standards are developed. However, most technical standards and all 'formal' standards are developed and defined through a process of sharing knowledge and building consensus.

Standardisation is an open process that welcomes all kinds of stakeholders, and those that are typically involved include: business and industry (including SMEs); public authorities and enforcement bodies; professional bodies; trade associations; certification, testing and inspection bodies; environmental and societal organisations; consumer organisations; trade unions; educational establishments; and research organisations.

Below we explain the process of developing formal standards, first at national level, and then at European level. The descriptions are based around the processes as described by BSI (UK) and CEN (Europe), and while most NSBs and ESOs follow similar processes, some small differences may occur from one NSB to the next and across the three ESOs.

#### 2.2.3 Development of national standards

NSBs try to ensure that standards are developed through a real consensus building at national level, and therefore seek to bring together all relevant national stakeholder groups with significant interest in particular standardisation projects.

The task of drafting formal standards is allocated to a technical committee that will then establish one or more working groups or panels comprised of experts. There are specific rules for drafting standards that must be adhered to. These are designed to ensure that standards are developed according to the principles of transparency, openness, impartiality, consensus, efficiency, relevance and consistency. As an individual standard is drafted it will be submitted at various stages to the relevant Technical Committee for comment, refinement and approval.

Lead times for standards vary from a matter of months to several years, although national standards are usually developed within 12 – 15 months.

**Full national standards** are developed through formal stages of drafting and consultation, aimed at achieving consensus and maximum stakeholder input. Initially there will be a proposal for a new project to develop a standard, which will be assigned to a Technical Committee formed of various stakeholders. The Committee will initiate the drafting work and will comment on it at various stages in its development. When a full draft standard is ready the NSB will run a public enquiry to allow any actors not directly involved in the drafting process to comment. The Committee then considers any comments and a final updated draft of the standard is prepared and then subjected to a formal vote. If the Committee approves the draft standard the NSB will then publish it as an official national standard and offer it for sale so that it can be used by industry.

**Private standards** are client driven and privately funded, and have the agreement of stakeholders. They are not subject to a full public enquiry but are robustly developed in accordance with the usual Standards' drafting rules. The process from initial scoping to final publication still follows a rigorous procedure, but private standards can often be developed more quickly than formal standards.

### 2.2.4 Development of European standards

European standards are also developed and defined through a process of sharing knowledge and building consensus. The majority of European Standards are initiated by industry and developed in partnership with other stakeholders. However, approximately 30% of European standards are developed following requests (or mandates) issued to the ESOs by the European Commission in the framework of EU legislation or policies.

Full European Standards (ENs) are developed by CEN and CENELEC according to the 'national delegation' principle. Technical Committees comprised of national delegations (representatives of each of the National Mirror Committees) are established for the purpose of drafting and voting on European standards. The NSBs create these 'National Mirror Committees', which enable all interested parties (enterprises, consumers, public authorities, NGOs, etc.) to participate in the creation of the standard at national level and in their own language. The National Mirror Committees provide inputs to the drafting process at the European level, and when a draft standard is ready they decide what the national vote should be, which is then presented at the European Technical Committee. In this way European standards are developed with wide inputs from many different interested parties in many different countries, but without the need for all of these

actors to travel to the European Technical Committee meetings to provide those inputs. As with formal national standards, European Standards are subject to a full formal public enquiry before the European Technical Committee will vote on their adoption.

The work done by ETSI is also carried out in committees (or 'Technical Bodies') but in most cases its member companies and organisations participate directly in the standards drafting and voting processes (rather than through national delegations). However, when ETSI develops formal European Standards it follows the same processes as CEN and CENELEC, and operates according to the national delegation principle.

The main route for SMEs to participate in the development of European standards is therefore at national level - through National Standardisation Bodies or National Committees - or through national trade associations representing different sectors of business and industry. It is also possible for SMEs to participate via one of the European trade associations, federations and interest groups that are often actively involved in the development of European standards. The European body representing SMEs in standardisation (see section 2.2.2) also provides a route through which SMEs can provide an input to the development of European standards.



## 3

# The benefits of standards (socio economic benefits)

*This section of the report describes the many positive benefits that standards generate. First, the impacts of standards on growth, competitiveness and innovation are described, followed by evidence on the macroeconomic effects of standards. Next, the benefits that SMEs can gain by using standards and participating in the standardisation process are described.*

## 3.1 The importance of standards for growth, competitiveness and innovation

The European Commission recently set out its strategic vision for European standards<sup>8</sup>, in which it highlighted the important role of standards and standardisation in supporting innovation, growth and competitiveness across Europe.

Standards can support **innovation** and promote the adoption of new technologies in a

number of ways. Importantly, they can codify and spread the state-of-the-art in various areas, as well as bridge the gap between research and end-products or services. When information on innovations is codified in standards it is accessible to everybody, and so firms, universities and research organisations can use this knowledge to adopt innovations or generate new ideas.

Standards play a particularly useful role in disseminating knowledge in industries where products and processes supplied by various providers must interact with one another. Here, standards facilitate the introduction of innovative products by providing **interoperability** between the new and the existing products, services and processes. They form the basis for the introduction of new technologies and innovations, and ensure that products, components and services supplied by different companies will be mutually compatible. In this way standards also facilitate international trade, by ensuring the compatibility and interoperability in different markets.

<sup>8</sup> A strategic vision for European standards (COM 2011/311)

Standards have an important role to play in supporting the **competitiveness** of European businesses in the global market, by helping to improve the products and services they provide, and by enabling access to foreign markets and businesses. Standards are trade enhancing because of their cost-decreasing effect and because they reduce information asymmetries between the supply and demand sides, especially in the case of cross-border trade. European and international standards in particular are a powerful means of enhancing the competitiveness of SMEs because they reduce technical barriers to trade across borders and facilitate SME access to wider markets.

Standards strengthen the competitiveness of European companies by reducing costs and facilitating the purchase and sale of products and services, thereby contributing to **economic growth** and job-creation. European standards in particular are a key instrument for the consolidation of the Single Market, and help to reduce unnecessary costs for suppliers and purchasers of products and services, both in the public and private sectors. The following section introduces some of the studies that have tried to quantify the contribution that standards can make to economic growth.

Standardisation can also serve as a very effective **policy tool**. Standards complement national and European policies and make it easier for companies and other actors to respect relevant legislation. For example standards can help to ensure the proper functioning of the Single Market, provide increased protection for consumers, workers and the environment, and promote a high level of social inclusion. They are also increasingly being used to support policy in addressing issues of accessibility, climate change, resource efficiency, and other public policy fields.

The **safety of the consumer** is often a very important element in many standards, and revisions to standards tend to address any safety issues that have been discovered

through market surveillance and other means. As a consequence, there is a close link between standardisation, product safety and market surveillance, which will be strengthened further in the future. Standards can also offer reassurance to consumers in the application of new technologies, for example through the assessment of risks or the measurement of performance.

Standardisation is also moving into **new areas**. Traditionally, standards were produced for technical coordination of production, but are now developed for wider use within organisations (e.g. providing guidance on management systems, services or environmental and social issues) and for use within different sectors of the economy.

### 3.2 Macroeconomic and societal impacts of standards

In a recent study on the economic benefits of standardisation (DIN, 2011), it was noted that in order to ensure continual economic growth, it is not sufficient to only create new knowledge through R&D or to import it, but that this knowledge must also be broadly disseminated, so that as many organisations and individuals as possible can make use of it. Standards are particularly suitable tools for the dissemination of knowledge because of their bottom-up, consensus-based development and their broad accessibility.

Experts from industry bring current knowledge from their own companies, which is supplemented by knowledge from research and scientific organisations, and from other specialists and stakeholders, such that the current state of the art is recorded in standards. As opposed to information in patents, which are subject to intellectual property rights, the information contained within standards is then accessible to all at a low cost. While the full costs of standards development can be significant (given the time and effort devoted by industry, public bodies, and other expert contributors), the purchase price of standards



is relatively low because the amounts charged by standards bodies is only that necessary to cover their own costs. Standards and the information they contain can therefore be disseminated widely in the market at relatively little cost to end-users.

The role of standards in the dissemination and diffusion of knowledge across the economy, and the resulting contribution of standards to economic growth, has been the focus of investigation in numerous macroeconomic studies in Europe and elsewhere.

Several detailed econometric studies have established a clear connection at a macroeconomic level between standardisation in the economy, productivity, and **overall economic growth**. Estimates vary somewhat from study to study, but overall, the growth of the standards catalogue over recent years may account for between one eighth and one quarter of productivity growth over the period (or annual GDP growth of between 0.3% and 1%), depending on the country in question.

For example, an early attempt in Germany (DIN, 2000) to look at the impact of standards on the economy found that, for the time period between 1961 and 1996, the information contained in standards and technical rules was responsible for 1% of the country's gross national product, or €15.8 billion in 1998 prices. While the study also found that an increased stock of capital goods is the single largest factor explaining economic growth, the availability of a stock of relevant standards was the second largest factor (and nearly ten times more important than the 'fruits' of innovation).

Similar methodological approaches were subsequently used to assess the impact in other countries over a similar time period, and these arrived at similar results. All of these national studies demonstrated that standards, through the improved diffusion of knowledge, have a positive influence on economic growth, with a contribution to growth rates estimated

at 0.8% in France and Australia, 0.3% in the UK and 0.2% in Canada.

A 2005 study by the UK government<sup>9</sup> into the portfolio of national standards demonstrated that they are contributing to £2.5 billion a year to the UK economy and account for 13% of growth in UK labour productivity, as well as enabling innovation and international technology transfer, and providing a framework for sustainable growth and profitability through streamlining business efficiency. A very recent update to the German study<sup>10</sup> found an economic benefit to the German economy of €16.77 billion per year, or 0.72% of the country's overall GDP.

Some detailed econometric studies have begun to explore the linkage between **trade and standards** that are concerned with removing technical barriers to trade. These most common pattern found is that the use of international standards in a country increases exports from and imports into that country, while the use of national standards in a country increase the exports from that country.

Other studies have considered the link between **standards and innovation**. While it is sometimes thought that standards might obstruct innovation, the evidence from a number of detailed studies suggests a rather different story. Surveys of innovating firms have found that many enterprises report that standards are a source of information that actually helps their innovation activities.

### 3.3 The benefits to SMEs of using standards

Standards have led to significant benefits for individual European businesses and industries, and offer a vital competitive edge to SMEs. They make life easier and safer, they create a level playing field on which to compete, they allow access to state-of-the-art technology, strengthen innovation capacity, and help achieve the most effective allocation of resources in the toughest of times. For SMEs,

<sup>9</sup> The Empirical Economics of Standards, DTI Economics Paper No.12, June 2005

<sup>10</sup> The economic benefits of standardisation – an update, (DIN, 2011)

they are particularly vital as they remove many of the obstacles that would otherwise hinder their entry into and expansion within a market. SMEs can therefore benefit greatly from understanding, accessing and using standards, as well as actively participating in and influencing their development. Some of the main benefits are highlighted below.

### 3.3.1 Business benefits of using standards

There are a number of clear, tangible benefits for SMEs in implementing standards, which can far exceed the cost of accessing and using these documents. At the most basic level, standards allow SMEs to apply tried and tested best practice to their business. They encourage a business to focus on the products or services being delivered, the processes being followed and the way the business is managed overall. They provide a practical framework for the review and continuous improvement of different areas, and can make a business more efficient, improve the quality of its products and services, assist in obtaining new customers and ultimately boost the all-important bottom line.

Standards should form an important part of any company's strategy to remain competitive. In the current market, where competition is fierce and resources are scarce, it has never been a better time to use standards, and more and more businesses are realising the benefits of their strategic use to achieve measurable improvements to their competitiveness. Some of the common benefits realised from **using standards** are shown below.

- **Improvements to the quality of the product or service provided** – Standards can help SMEs to improve and monitor the quality of their product or service, which can increase customer satisfaction and repeat business, as well as attract new customers.
- **Increased ability to demonstrate the quality of products or services** – By proving their adherence to standards, SMEs can clearly demonstrate the quality of their products and services, which will help to attract new customers and retain existing ones. Proof of adherence can be further strengthened by independent (i.e. third-party) confirmation from a recognised certification body.
- **Increased confidence in the business, and its products or services** – Standards provide reassurance to businesses and their customers that their products or services live up to the state of the art. They add credibility to a business and increase the confidence of its customers by demonstrating a commitment to quality, safety and reliability. Standards provide reassurance and inspire trust, and consumers view businesses that apply standards more favourably than those that don't.
- **Improvements to company image** – Standards can help SMEs to market their products and services internationally. Standards and associated certification marks are a widely recognised and respected sign of commitment to quality, and can prove a beneficial addition to the image of a company, its marketing activities and the content of any tenders or pitches.
- **The ability to cooperate and trade using a common 'language'** – Most standards provide common definitions and terminology for use within an industry. This codification of knowledge can help businesses to cooperate, create strategic alliances and trade in an efficient way. Standardised terms and definitions provide clarity and comprehensibility, and can simplify communication across fields of expertise and across international borders.
- **Interoperability between different products and systems** – Standards provide a collection of harmonised rules and standard methods that allow products and services to have a high level of functionality, interoperability and compatibility, boosting their market acceptance.

- **Improved ability to trade across borders and export** – The use of European and international standards aids access and entry to much wider European and international markets for an SME, and assists with the marketing and acceptance of its products and services in these markets. Using standards as part of an export strategy can create new business opportunities and increased sales, with reduced trading costs.
- **Improved ability to meet legislative and regulatory requirements** – Those who apply standards rely on sound and well-accepted expertise, are aware of the requirements to be met by their products and services, and can prove their reliability and safety by means of standardised testing methods. European harmonised standards provide a direct presumption of conformity to European legislation – this enables the SME to put their product or service on the European market without having to go through further conformity assessment requirements. Because standards reflect the current state of technology, they can help businesses reduce their liability risk in other areas. In questions of liability, legislators often fall back on a general clause that specifies that technical products are to be designed to recognised technical rules, such as standards.
- **Improved access to and success in public procurement** – Standards codify the state of the art of innovative products and services and are often used as references in public procurement. Adherence to standards can make it easier to meet the requirements of public procurement rules as well as have a positive impact on how a business is assessed.
- **Improved access to state of the art knowledge** – Standardisation allows companies to access the latest information and knowledge for their sector, on market trends, the evolution of the state of the art, the best business practices and the latest technologies. This provides access to new knowledge, reduces the resources wasted on duplicative R&D, improves the ability of SMEs to innovate, strengthens their innovation capacity, assists in the development of new products and services, and enables them to compete in the global market on a level playing field. It also enables SMEs to exploit their best competitive advantage over larger enterprises: their size, which gives them the dynamism and flexibility to innovate quickly.
- **Improved internal risk management and planning** – Business who adopt standards are more prepared to deal with potential issues and problems, such as IT failure or failure in the supply chain. This is because standards have helped them to improve their business processes, implement best practice, and monitor their progress and results in a structured way.
- **Reduced costs** – Standards lead to cost reduction through enabling mass production and global purchasing, rationalisation of processes, lower transaction and information costs, reduced adjustment costs and shorter development times, as well as more efficient activities and better management. These cost reductions can be an important driver of profitability.
- **Increased competitiveness** – Standards help to open-up markets by allowing customers to compare offers from different suppliers, thereby making it easier for smaller and younger enterprises to compete with larger and more long-established companies. They can give SMEs a competitive advantage, help them to compete on a level playing field with bigger enterprises internationally and to enter new or established markets.

### 3.3.2 Business benefits of participating in the standardisation process

For many SMEs, active participation in the

standardisation process is a strategic activity that reaps both short- and long-term benefits and competitive advantage. This active involvement in the development process offers additional benefits beyond those that can be gained by simply implementing the standards that are eventually published. Some of the common benefits realised from **participating in standardisation** are shown below.

- **An opportunity to learn and discuss ideas with others** – The actual process of standardisation provides opportunities for SMEs to receive information and knowledge from peers and to observe developments in the market. Fantastic ideas flow everyday in standardisation committees, and these discussions can lead to new ideas, or stimulate future innovation.
- **A unique networking opportunity** – The standardisation process offers a unique forum where you can network with customers, the business community, suppliers, consumers, users, government and regulators. Participating in standardisation on a precise topic together with other stakeholders working on the same issue allows you to increase your network and to identify potential collaboration and trading partners for the future. It offers a chance for SMEs to establish contacts with interested parties and have timely access to their ideas, wants and needs.
- **An opportunity for profile-raising** – SMEs will get recognition within their industry and amongst customers for taking an active and leading role in the standardisation process within a field, and can use this status as a marketing and promotional tool with customers.
- **An opportunity to ensure the final standard best meets market needs** – Participation provides a unique opportunity to influence and input to the content of standards. Participants can drive new trends in market developments and inject their own views into the process, making sure that the standards that are developed support their company strategy and business needs, and possibly reduce any necessary adjustment costs. Only businesses that are active in standardisation at the national level can ensure that their interests are represented in European or international standards organisations, and ultimately, those who set the standard are in a better position to govern the market.
- **Timely access to information and knowledge on future standards** – Participating in standardisation means gaining detailed advance knowledge of standards and their requirements. Participating companies can also have a head start in anticipating and adapting to the market and new technologies because of their better knowledge of the standards being developed, which in turn puts them in a better position to lead the market. By following the standardisation process, SMEs can anticipate future requirements, adapt their business accordingly and shorten their time to market – giving them a distinct advantage over your competitors. Thus, standardisation provides an effective tool – not just for driving innovation – but also for ensuring the success of the innovation process.

## 4

# Barriers faced by SMEs in realising the benefits of standards

*The previous section described the main business benefits of using standards and participating in the development process. While these benefits are widely documented and accepted, in particular by the European Commission, it has long been recognised that SMEs often are unaware of the benefits, fail to make full use of standards, and are under-represented in the standards development process. This in turn can lead to SMEs not realising the aforementioned benefits.*

*The fact that SMEs can fail to realise the full range of benefits that standards can bring, limits their innovation potential, growth and competitiveness. They can be 'left behind' in new technological and*

*market developments, and be at a competitive disadvantage vis-à-vis larger companies who can more readily afford, and have the technical capacity, to drive the standardisation process.*

*In this section we present information and evidence on the main barriers that SMEs face in relation to standards and standardisation, and set out the main reasons why they are currently unable to fully realise the benefits offered. Various studies have pointed to different barriers that restrict understanding and use of standards, or participation in standardisation. A recent study<sup>11</sup> by CEN-CENELEC has helpfully assembled many of these arguments and is used to structure the section.*

<sup>11</sup> SME access to European standardisation (Erasmus University, 2009)

#### 4.1 Barriers restricting SMEs' awareness of standards

Studies have pointed to a range of barriers faced by SMEs concerning their **awareness of standards** (either generally, or of relevance to their business), any or all of which may prevent them from realising the full benefits that standards can bring. Insufficient awareness may originate from employees lacking relevant knowledge, or a failure to communicate effectively to SMEs.

Education can play an important role in increasing awareness of standards amongst future SME employees and founders, but current practices across Europe are small-scale and fragmented. Ongoing training and support is therefore needed to introduce SMEs to standards and to engage these businesses and individuals with the standardisation world.

There is a large amount of information available on standards, but studies have found that a significant proportion of SMEs are not aware of these sources, they struggle to find relevant information or they do not understand what is important. The Commission services have stressed that it is therefore necessary to do more to bring standards to the attention of SMEs.

SMEs may also lack **awareness of the importance of standards** for their own company or the potential added value of standards. Insufficient awareness may originate from SMEs being unable to see or understand the potential benefits of standards to their particular situation, or the standardisation world failing to sufficiently communicate the potential benefits to SMEs.

Because of a lack of strategic resources, SMEs tend to have a short-term view of their business. There is little room for long-term planning and SMEs may not anticipate changes in their business environment, such as future regulations or future standards. As a result, SMEs may see standards as a necessary evil rather than as the powerful tool to achieve business objectives that they really are.

By promoting and explaining the ways in which standards can benefit SMEs, and by showing examples of SMEs realising these benefits in 'real life' it is possible to increase awareness and change perceptions. However, appropriate communication channels are needed to reach out to SMEs and provide properly targeted information that can convince them of the importance of standards.

#### 4.2 Barriers restricting SMEs' use of standards

Once SMEs know that standards exist that can be useful for their company, they may then face problems in finding and **tracing relevant standards**. This may be because of the way that standards are offered and supplied and the ability of SME employees to trace standards.

While generic search engines may help SMEs to locate a specific known standard, being able to find and trace relevant standards more generally can prove more difficult, and be both a barrier and a disincentive to SMEs. Tracing relevant standards requires knowledge of where to look, how to look, and what to look for. It also requires the skills to be able to interpret the information found and to determine whether the standards identified are relevant, complete, and the latest versions available.

The combination of national, European and international standards and formal and informal standards adds another layer of complexity to the process of tracing standards, making it even more difficult for SMEs to know which standards to use. In addition, the stock of standards is not static as standards are revised and new standards are developed on an ongoing basis. Finding and understanding information on such developments can be difficult, and the resources required to retain a vigilant watch on development may not be available.

Once SMEs know which standards they need, the process of **obtaining standards** may still not be easy and straight-forward. The

first potential problem here is related to the cost of buying standards, which, though often discounted, may still serve as a barrier to purchase. This also relates to the extent to which SMEs understand the potential benefits of using standards, as the decision to invest in a standard will not only be based on the cost price, but also the cost relative to the benefits.

Secondly, SMEs sometimes discover that they have bought the wrong standard or are put off purchasing a standard in the first place because they are not sure that it is the right one. A lack of available information on the scope of the standard may be the reason for this, as is an inability to view sufficient information on the contents of a standard before purchase.

Once standards are obtained, SMEs may then face problems in **understanding the standards** as a result of difficult technical content, technical language, non-availability of a version in the national language, too many references to other standards, insufficient information to highlight the differences from the previous version of the standard, or a lack of information about the context of the standard. Or, the SME may lack the knowledge and skills to understand the standard.

Most standards are written by technical experts familiar with the field and the sectors where the standard will be applied, and the requirements should be formulated unambiguously as a result. However, there can be a tendency for the text to be overly complex and difficult to understand, and to take insufficient account of the range of different potential audiences and their prior knowledge and understanding of the subject. References to other standards within the text are a related barrier to understanding. These are however being addressed by the recent CEN-CENELEC 'Guide 17'<sup>12</sup>.

Most European and international standards are prepared in English, often by individuals whose first language is not English. When published, they may only be available initially in English, French or German. This can add to the

confusion and difficulties experienced by SMEs in understanding the final text of a standard in countries where these languages are not used. If standards are not available in the native tongue, problems relating to understanding the standard's content increase.

SMEs may then have difficulties in **implementing standards** because of their complexity a lack of knowledge, skills or resources to do so. Many of the barriers and issues faced here are similar to those mentioned above, in that understanding is a first step to effectively using a standard.

In addition, generic skills needed to use and implement standards may be developed over time with experience, and therefore prove to be another barrier to SMEs taking first steps into the world of standardisation. The time and resources available to dedicate solely to the implementation of standards may also be limited within smaller companies, and they may lack training opportunities for employees to ensure personnel are able to implement a standard.

The reason for the implementation of a standard is to achieve business goals, and it is important that SMEs are able to **evaluate the implementation** of these standards and the impact of their use. However, the management of smaller firms is largely involved in the daily operational practice, and there is little time or money available for activities that are not directly related to this primary process. SMEs may not find the time, or have the ability to assess the implementation of standards, meaning that they will not fully identify or understand the benefits of implementation, learn from the experience or modify their implementation as a result. This may also affect their willingness to continue engaging with standards and to purchase and implement standards in the future.

<sup>12</sup> [www.cencenelec.eu/sme/standards/pages/guide17.aspx](http://www.cencenelec.eu/sme/standards/pages/guide17.aspx)

### 4.3 Barriers restricting SMEs' participation in standards development

SMEs may also face a sequence of barriers, each of which may hinder them from benefiting from becoming involved in the process of standardisation (i.e. the development of standards).

SMEs may be aware of standards but not **realise** that they can actively participate and influence the development process. This problem has two sides: low awareness amongst SMEs and employees, and a failure to create awareness through appropriate and sufficient communication activities.

Once SMEs are aware of the fact that they can become actively involved in standardisation, they may not be **aware of the importance** of participation or its potential benefits (Section 3.2.2). They may also find it difficult to assess whether involvement would be worth the investment.

Once SMEs are aware and interested in the development of standards, they may face problems in **tracing** relevant standards development projects. The barriers here relate to the way that information is offered, and the ability of SME employees to trace relevant standards projects.

An important reason for non-participation and not **becoming involved** in standardisation is simply being unaware of the standardisation process. Lack of resources (money, time, skills and knowledge) is another reason, where the costs of participation in terms of the time

required, travel expenses and membership fees can be proportionally higher for SMEs. Because SMEs are often not sufficiently represented in the standardisation process, standards can be found to be ill-adapted to SMEs' needs. The specific interests of SMEs risk not being properly taken into account in the resulting standards, which they only learn about after their publication.

Being involved does not necessarily imply **effective involvement**. Other participants may ignore an SME simply because it is an SME, or issues presented by a multinational may carry more weight, consciously or unconsciously. Research shows that the role of individuals in standardisation can be decisive, but this may be determined by the skills and knowledge of the particular representatives and their preparedness for active, effective participation.

Involvement in standardisation is a long-term investment and SMEs need to be able to **evaluate** this investment. Cost precedes benefits, and yet a continuous focus on benefits is needed during the process to justify involvement. SMEs may be unable to evaluate the effectiveness of their involvement, or ignore this important step, which may result in decreasing company support over time and sub-optimal priority being given to participation in standards development.

Finally, innovative SMEs may want to **initiate new standardisation activity**, because they need standards to make an invention a market success. However, SMEs may not understand how to go about this process, or have the time and resources to lead the initiation of new work.



## 5

# Measures to support SMEs' use of standards

## – how Structural Funds investment can help

*This section of the guide provides information on the various actions that could and should be taken in order to ensure that SMEs are both actively engaged with standards and are actively involved in the standardisation process, and that they are reaping the full benefits of this involvement.*

### 5.1 Introduction

The European Charter for Small Enterprises (2000) stressed the important role that SMEs have to play in underpinning Europe's competitive position, and called upon the European Commission and Member States to strengthen the technological capacity of small enterprises. The Small Business Act for Europe (2008) has more recently highlighted the importance of supporting greater levels of participation in standardisation and increased use of standards amongst European SMEs.

In order for SMEs (and therefore the wider economy) to realise the benefits of standards and standardisation detailed in section 3, they need to be supported and encouraged to overcome the problems and barriers identified in section 4, and to both make use of standards that currently exist and be active participants in the development of the standards of the future.

Specifically, through the use of structural funds, managing authorities should consider in SME, innovation and entrepreneurship related support measures that contribute to the following goals:

- **SMEs should understand what standards are and what they can do**

SMEs should be aware of what standards are, as well as which standards are currently available and applicable to their business. They should also be aware of the potential benefits to be gained from understanding and implementing standards. Where this is not the case, there is a need to raise awareness and understanding amongst SMEs of the existence of standards (both generally, and in

terms of specific standards) and the benefits of their implementation and use.

- **SMEs should make full use of relevant existing standards**

SMEs should be able to find, access and make effective use of any current standards that are applicable to their business. Where this is not currently happening, there is a need to support and encourage SMEs to identify, obtain and implement these relevant standards. In addition, it may be necessary to help SMEs with understanding and implementing standards, particularly where those standards have been developed without significant involvement from SMEs.

- **SMEs should be active participants in the standardisation process**

SMEs should understand what the standardisation system is, how to be involved (initiating new standards and participating in the revision of existing ones) and what the short and long term benefits of participation in this process are. They should be able to provide effective inputs and actively participate in the development of standards. Where this is not the case, there is a need to raise awareness of the standardisation process and the opportunities available for SMEs, and to support and encourage SMEs to make constructive and significant inputs into the process.

The sections below recap on the main issues that need to be tackled in each of these areas, and then introduce the types of solution that could be employed to address these and implemented at the regional level.

The European Commission and standardisation bodies are already supporting various initiatives to improve standardisation at **European level**<sup>13</sup>, to make it more appropriate and beneficial for SMEs. A variety of different initiatives have also been instigated at the **regional or national level** in different parts of Europe that could usefully be implemented

more widely. It is here that the guide focuses its attention, and details of some example initiatives are provided in 'boxes' below.

The funding could be either directly disbursed to SMEs, e.g. as part of the financing of a research and innovation project grant, or innovation voucher schemes could allow SMEs to access standardisation support services from relevant intermediaries.

In most cases, intermediary organisations – such as trade associations, chambers of commerce, innovation centres, or similar – would seem to be the most appropriate direct recipients of Structural Fund money in order to provide standardisation related advice and guidance to individual SMEs, including possibly by providing an on-going communication channel between the world of standards at the national or international level, and the individual SMEs within a region. These organisations have the benefit of both local / sectoral knowledge and links into national and international systems. They can serve as active centralised conduits of information on standards, as well as sources of further advice and guidance to individual companies.

Managing authorities that wish to develop measures that can help SMEs make better use of standards are encouraged to discuss their ideas initially with their National Standardisation Bodies (see section 6.4 for details).

## 5.2 Raising awareness of standards and their benefits amongst SMEs

### 5.2.1 Awareness of standards

SMEs may be unaware of the existence of standards (in general) or not understand what they are, or they may be unaware of the specific standards that are of relevance to them. Once SMEs know that relevant standards exist, they may then face problems in finding and tracing these standards.

<sup>13</sup> See <http://ftp.cencenelec.eu/EN/SMEs/News/Publications/SMEs.pdf> for details

**Insufficient awareness of standards** may be caused by the standardisation world failing to communicate clearly or effectively enough to SMEs. Initiatives to rectify this situation should therefore focus on increasing awareness raising activities, using one or several modes of communication, and targeting specific groups of SMEs.

There are a number of options for **communication activities** that could be funded to raise awareness of standards. These might include the running of national or regional media campaigns (newspapers, radio, TV, websites, etc.), the development of published or web-based information packs, guides or user manuals, holding conferences with presentations from representatives of the standards world, organising training events, and publishing case study examples of existing standards. In each case, these efforts should seek to raise awareness and understanding of standards generally, but also to provide more targeted information on specific standards of relevance to different groups of SMEs. The information, in whatever form, should be appropriate for the needs of an SME audience and endeavour to encourage a new or increased interest in and understanding of standards.

Intermediary organisations – such as trade associations, chambers of commerce, innovation or technology-transfer centres, Enterprise Europe Network partners, or similar – can play a key role in providing an on-going communication channel between the world of standards at the national or international level, and the individual SMEs within a region by integrating standardisation issues in their advanced business and innovation support activities. These organisations have the benefit of both local / sectoral knowledge and links into national and international systems. They can serve as active centralised conduits of information on standards, as well as sources of further advice and guidance to individual companies. In some parts of Europe dedicated information points on standards have already been established within such organisations and have been successful in increasing awareness levels amongst SMEs.

CEN-CENELEC has published a short brochure on how trade associations and standardisation bodies can help raise awareness among SMEs about standards and promote their participation<sup>14</sup>.

### Example initiatives

**Slovakia** – The Ministry of Economy provides funding for media campaigns (in newspapers, radio, TV, websites) on standards and standardisation that try to increase attention among entrepreneurs

**Netherlands** – NEN provide information on standards to start-up companies via Chambers of Commerce. When they register at the Chamber they receive an information pack about important matters for entrepreneurs, including a sheet on standards and standardisation

**Germany** – DKE publish targeted information about sets of relevant electrotechnical standards in its specific magazines and newsletters

**Denmark** – The national standards body offers an online ‘starter kit’ for SMEs on standards and standardisation

**Czech Republic** – The Economic Chamber makes information on standards available to SMEs through a network of 160 local information points

**Slovenia** – The Chamber of Craft (OZS) organises seminars and workshops for SMEs to provide information on important national and European standards and how these might be implemented. The events help to raise awareness of standardisation and increase the use of standards.

**Italy** – CEI funds Institutional Conventions, which are knowledge and competence pools on standardisation topics, and are made up of experts from SMEs and their representatives in certain industries. They produce affordable material for SMEs and offer technical expertise. The main objective of the conventions is to extend the culture of standardisation by

<sup>14</sup> <ftp://ftp.cencenelec.eu/EN/SMEs/News/Publications/IncludingSMEsStandardisation.pdf>

providing information on existing standards, especially new ones.

**Poland** – The Polish Craft Association (ZRP) provides training projects on Environmental standards to promote and popularise these standards amongst SMEs.

Difficulties experienced by SMEs in **finding relevant standards** may result from the way standards are currently catalogued and offered or the ability of the SMEs to trace these standards themselves, given the sheer number and range available. Initiatives to address this problem should therefore focus on providing relevant, easy to use and transparent information to SMEs on the standards available, as well as guidance and assistance in finding and assessing the relevance of these.

Such efforts might include the production and dissemination of **sector-based summaries** (web pages, brochures) on relevant, available standards within a specific area as well as user manuals that introduce and simplify specific standards. Alternatively, events could be funded that focus on providing similar summary information to a targeted SME audience. As well as introducing relevant standards, these documents or events might also usefully explain the links between regulations, standards and conformity assessment within a sector, which could be very helpful for SMEs in achieving a clear view of the relevant rules in their specific area. Sectoral information and summaries of available standards would need to be updated periodically, and could usefully be accompanied by early information on up-coming drafts and new standards.

SMEs might receive innovation vouchers or be allowed to use parts of their R&I project grants or loans or guarantees for innovation projects for obtaining training on finding and tracing standards.

Again, intermediary organisations would seem to be appropriate actors to provide these services. Where necessary, representatives from

these organisations could be trained to fully understand, search and query existing databases and other sources of information on the stock of existing standards. They could then disseminate the latest information on standards and provide advice and guidance on currently available relevant documents.

They might also provide direct training to SMEs on finding and tracing standards themselves.

### Example initiatives

**Luxembourg** – The Ministry of Economy and Foreign Trade has funded efforts to ‘down-size’ a series of ISO standards relating to information security, in order to lower the barriers faced by SMEs in implementing them. The initiative includes workshops, publications, an information website and coaching, and involves the distribution of a series of key standards amongst SMEs. ([www.cases.lu](http://www.cases.lu))

**Poland** – The Institute of Welding has run a series of seminars and training sessions for SMEs that seek to transfer knowledge of particular welding standards to these businesses ([www.is.gliwice.pl/en/aboutus.php](http://www.is.gliwice.pl/en/aboutus.php))

**France** – The Ministry of Economy, Industry and Employment has established 53 ‘centres of competitiveness’ to support innovation and competitiveness. A contact person for standardisation is available within each centre to provide general information about standardisation, as well as help and advice identifying standards and standardisation activities that are important and relevant

**Austria** – The trade association OVE informs and educates its members about standards by means of workshops, lectures, books, abstracts, and monthly news about drafts and new publications

**France** – AFNOR produces a collection of forms that help SMEs to identify standards that they may have to implement

**Germany** – The Mechanical Engineering Standards Committee (NAM) of the VDMA association provides information to standardisation experts in (mostly) SMEs with respect to new draft standards that are currently being developed at European or international level. The standardisation consultants thoroughly analyse new draft standards and highlight the most important points. In this way they make it ‘digestible’ for SMEs. ([www.nam.din.de](http://www.nam.din.de))

### 5.2.2 Awareness of the benefits of standards

SMEs may be unaware of the benefits that standards can offer to their business, and therefore of the importance of these documents as tools to achieve business objectives.

This lack of **awareness of the benefits** may be caused by the ‘good news’ message about standards not being clearly and sufficiently communicated to SMEs. Initiatives to address this should therefore focus on creating awareness of the importance of standards for individual businesses and highlighting the benefits that have been realised by other similar SMEs.

This could involve the development of **promotional documents** or web pages with targeted information on the potential benefits of using standards, similar to the information provided in the benefits section of this guide, or on many of the websites of standards bodies across Europe. Developing, publishing and disseminating successful case studies of real SMEs implementing and benefiting from standards is also a common route to informing and convincing SMEs of the potential benefits. These should be as relevant to the target audience as possible, and provide real life examples of some of the benefits that have actually been achieved by SMEs in a similar area.

Prizes or awards have also been used to collect best practice cases of the beneficial implementation of standards. These are an interesting means by which to publicise the broad effects of standards and increase awareness, while also encouraging the active use of standards amongst SMEs.

### Example initiatives

**Germany** – BMWI and BDI have organised a conference entitled ‘success with standardisation’ to emphasise the importance of standards for SMEs. At the conference, representatives of the German government and industry promoted the strategic importance of standards for SMEs, and called for greater participation of industrial associations in the dissemination of standards-related knowledge.

**Portugal** – The Portuguese standards body has run a programme for over a decade whereby entrepreneurs are contacted directly by the organisation in order to establish awareness of the benefits to SMEs of using standards. The initiative seeks to overcome the usual lack of attention that most SMEs give to standardisation ([www.ipq.pt](http://www.ipq.pt))

**Belgium** – CEB-BEC provides case studies of SME ‘witnesses’ on its website that highlight the benefits of using standards.

**UK** – BSI has developed a guide for SMEs that seeks to explain the importance of standards for their business and includes cases of specific SMEs that have benefited from standards

**Czech Republic** – The national standards body publishes success stories of SMEs benefiting from the use of standards ([www.unmz.cz/urad/priklady-uspesnych-malych-a-strednich-podniku](http://www.unmz.cz/urad/priklady-uspesnych-malych-a-strednich-podniku))

**Austria** – The national standards body publishes case studies that show practical experiences of SMEs using standards effectively and successfully

**Germany** DIN presents SME success stories in videos (‘Mediathek’ at [www.din.de](http://www.din.de))

**UK** – BSI also provides video case studies of SMEs that have used and benefited from using standards ([www.youtube.com/watch?v=5n7ljxqjQ](http://www.youtube.com/watch?v=5n7ljxqjQ))

**Germany** - The national standards body offers a prize («Benefits of standardisation») that is awarded annually to a company that provides the best demonstration of the benefits of standards ('Nutzen der Normung' at [www.din.de](http://www.din.de))

## 5.3 Ensuring SMEs are making full use of existing standards

### 5.3.1 Access to standards

Once SMEs are aware of the existence of relevant standards and understand the potential benefits they can bring to a business, they may then struggle to obtain them. They might experience difficulties in finding the right standards (or be unsure that they have done so), have limited resources with which to purchase them, or end up purchasing the wrong standard.

These difficulties in accessing standards may be caused by there not being sufficient information available in advance, in an accessible and understandable form, about the content or relevance of standards for an SME to be confident in making a decision about investing. The price of purchasing standards may then be perceived as too high and serve as a barrier or a discouragement to SMEs. Possible initiatives to address these issues should focus on ensuring that there is information and support that will enable SMEs to access the right standards for them, and on reducing the cost to SMEs of purchasing the standards.

Some National Standards Bodies already provide special discounts or lower rates to certain customers, such as SMEs, and yet there is evidence to suggest that the price can still act as a barrier to purchase, especially for those with little or no previous knowledge or experience of using and benefiting from standards. Providing better information on standards, what they can do and their benefits (as above) may help SMEs to better weigh the costs and benefits of purchasing standards, but there may also be scope for providing SMEs with further financial encouragement through subsidies, discounted

prices or free access to standards. It might also be possible for sectoral organisations, trade bodies or SME groups to be able to purchase a package or bundle of standards at a special rate, for use or dissemination amongst members.

It is also common to provide free access to standards in **libraries** or other local centres, so that SMEs can gain access, find appropriate standards and familiarise themselves with the content, so that they might better understand what they can do for their business and be able to make an informed choice about investing in the purchase price. Funding could also be used to produce good quality **summaries** of specific standards, or suites of standards, that would clarify the scope and main contents of the standards and provide clear information on the main changes made (in the case of updates). User manuals simplifying a specific standard can be usefully written by intermediary organisations.

### Example initiatives

**Malta** – The Maltese standards body offers standards at a reduced rate to encourage craft and SME enterprises to adopt international standards. It is believed that this policy has encouraged many SMEs to purchase standards, particularly for the purposes of tendering for public procurement contracts that reference a particular standard ([www.msa.org.mt](http://www.msa.org.mt))

**Germany** – Libraries in 80 locations across Germany provide the opportunity for SMEs to access and read standards for free

**Bulgaria** – The standards body BDS offers sets of standards for specific target groups, such as construction products, Eurocodes, food labelling, translation services, and social responsibility

**Germany** – SPECTARIS offers its members access to a set of standards of particular importance, and pays the standards publisher a yearly license fee to do so.

**Austria** – The standards institute has enhanced its online catalogue by providing a preview of the front page, contents, foreword, introduction and scope of all standards ([www.as-search.at/](http://www.as-search.at/))

### 5.3.2 Using standards

Once a standard is obtained, SMEs may not understand its content, or may lack the contextual information or referenced documents that are necessary to fully implement the standard. They may experience difficulty in using the standard because of its complexity, or because they lack the necessary knowledge or skills within the business. SMEs may also be unable to assess and evaluate the implementation of a standard in order to grasp the benefits gained, to make further changes within the business, and to make informed decisions about the future purchase of standards.

The difficulties in **understanding standards** may be caused by the content of the standard (language, technicality, necessary additional or contextual information), or by the SME lacking the knowledge and skills to be able to understand it. To resolve this issue, initiatives should focus primarily on ensuring that there is strong SME participation and input to the original development of standards (discussed further in the next section). However, once standards are published, initiatives to support SMEs should focus on increasing their understanding of the content of the standards.

For European or international standards, **translation** into national languages can be a significant help in ensuring that SMEs are able to fully and properly understand the content of standards and that they are able to easily and effectively implement them. Many standards are developed initially in English by representatives whose first language is not English, and then translated into French and German. Many standards, when adopted at the national level are left in one of these languages, putting many SMEs across Europe at a disadvantage. European funding is available to part-fund translation costs, but this needs to be matched from within

Member States. Studies have shown that the availability of translated versions of standards has led to increased sales, particularly amongst SMEs, but there can be insufficient funding available nationally to support this.

SMEs would also benefit from better information on the **changes and interrelations** between standards. When standards are revised, the provision of information on changes and updates made to the text of the new version would make it a lot easier for SMEs to stay up to date and to understand the changes necessary within their business to meet the requirements of the newest version. Similarly, SMEs would benefit from a meta-document for sets of interrelated standards, in which the structure of cross-referenced standards is presented. This would provide SMEs with a clearer picture of the standards available in an area and any need to purchase multiple standards.

Information to explain **why a specific standard is important** and therefore what its value is would encourage uptake and aid understanding by SMEs. Standards are developed for a reason and to meet certain market needs or to address certain legislative requirements, but this rationale is often not obvious within the text of the final standard itself, which focuses instead on just technical requirements. Where standards do not make such contextual information clear in their text, it would be a worthwhile initiative to produce supporting introductory documentation that provides background information on the need and how the standard addresses this need.

Specific **training** initiatives and events that look in detail at a specific standard or set of related standards of relevance to SMEs in a region would help to make the technical content of standards clearer and aid understanding. This training could be provided by intermediary bodies (possibly in collaboration with standardisation bodies) either on individual basis or as events, workshops or information and guidance documents explaining the content of standards and providing assistance in understanding and implementation. SMEs could be allowed use innovation vouchers and parts of other financial support to pay for their

participation. Similarly, a related initiative would be the establishment of a **helpdesk** to aid SMEs in the understanding and interpretation of the content of standards, for instance integrated in Structural Fund sponsored advanced business and innovation support services.

### Example initiatives

**Netherlands** – The Dutch standards body prepares an A4 information sheet on a number of ‘flagship’ standardisation projects, which includes the problem, the way it has been solved by developing and implementing a standard, the role of NEN in the project, and some general information about NEN and how to get in touch

**Germany** – DKE runs a helpdesk to help SMEs interpret European standards relating to the electrical installation of buildings

**France** – BNITH, the French Textile- Apparel Industry Standardisation Office, produces a guide for SMEs on the use of the main European textile standards

**Spain** – Asimelec, the Spanish Association of Electronic and Communication Enterprises, supports the creation of working groups to disseminate information on standardisation. The groups bring together enterprises from different, but related markets to discuss standardisation issues that are relevant to them. These groups assess information on various standards, develop a master document on them, and then disseminate this to all enterprises in the sector ([www.asimelec.es](http://www.asimelec.es))

**Slovakia** – The Ministry of Economy of the Slovak Republic provides money for professional translations of European and international standards in the Slovak language.

The difficulties experienced by SMEs in **implementing standards** may be caused by the complexity of the documents, as well as a lack of necessary resources within the SMEs themselves

to apply the standard. These problems can relate to both the implementation of the standard within the business and to the demonstration of adherence to the standard externally (i.e. through certification). Again, initiatives to reduce complexity should focus initially on ensuring strong SME participation and input to the original development of standards (next section). However, once standards are published, efforts should focus on providing training and support to SMEs that will aid the implementation and certification process.

Intermediary organisations could provide **education and training** to SME representatives and (future) entrepreneurs (e.g. business, science and engineering students, participants in vocational training) on the implementation of a particular standard, or set of standards. This might include the provision of training seminars and workshops, or online tools, guides and manuals that would provide the relevant knowledge and skills to be able to fully and successfully understand and implement standards and undertake certification activities. This knowledge and understanding would then be transferred back to the individual enterprises and shared amongst colleagues. Such efforts could be combined with a follow-up service to provide support, advice and guidance to trainees.

Online forums could be established relating to a standard or group of standards that would enable discussion and interpretation as to how standards can and are being implemented, or problems encountered. Such a forum could be used for SMEs to share information and support each other, but could also be a means for standardisation bodies or intermediaries to provide external input and support to the implementation process.

As indicated previously, subsidies, voucher schemes, financial instruments (loans etc.) could be used to support the implementation process. For example, in reducing the cost for an individual company of obtaining consultancy services, education or training to support the implementation of standards, or in undertaking related certification services.



## Example initiatives

**Germany** – SPECTARIS provides bilateral consultancy services to its members to assist with the implementation of standards and European directives and regulations.

**France** – A chamber of commerce has produced a user manual that simplifies and guides SMEs through the process of using and certifying to environmental management standards (“Le management environnemental simplifié avec la certification par étapes” at [www.strasbourg.cci.fr](http://www.strasbourg.cci.fr))

**Austria** – The Austrian standards body provides a «quick info» service that provides a compact and comprehensible guide for the effective implementation of standards in all areas.

**Slovakia** – The Ministry of Economy provides direct support to SMEs via a ‘de minimis’ grant scheme. The activities covered can be in the area of R&D support, quality management, or the introduction of technical standards in production and services. One part of the programme is focused specifically on the development and implementation of standards, and enterprises may receive a grant covering 65% of the costs related to standardisation. ([www.economy.gov.sk](http://www.economy.gov.sk))

**Croatia** – The Ministry of Economy, Labour and Entrepreneurship operates a programme of grants for the certification of business systems. It co-finances consultancy services that are engaged by SMEs to help with the implementation of standards and the adoption of quality systems. The objective of this scheme is to increase the use of standards in SMEs to increase the total number of enterprises that are using total management systems. The measures are thought to have contributed to a significant increase in the number of certified enterprises.

**Italy** – A company (Legno Legno) was created by intermediary organisations to help SMEs in the wood and furniture sector make the most

of their entrepreneurial activities. It offers technical and promotional advice and services to improve the quality of production and the image of enterprises. Its services include certification and training ([www.legnolegno.it/chisiamo/inglese.htm](http://www.legnolegno.it/chisiamo/inglese.htm))

**Belgium** – The “SME-wallet” scheme is a support programme that allows smaller businesses and professionals to claim subsidies of up to €15,000 each year to assist with one of four different types of efficiency improving measures: training, business advice, technological investigation and international business advice (<http://www.agentschapondernemen.be/themas/kmo-portefeuille>)

## 5.4 Mobilising SMEs in the standardisation process

### 5.4.1 Understanding the system

In addition to being unaware of the existence of standards and their importance, SMEs may also lack awareness and understanding of the standardisation system that is used to create the documents, or of how they can be involved in and influence this process. SMEs may also be unaware of the importance of active involvement in standardisation and what the short and long term benefits of participation might be, or be unable to accurately assess the costs and benefits.

A **lack of awareness** amongst SMEs of the opportunities to participate in the process comes from both a lack of understanding amongst these companies of the standardisation system, and a failure within the standardisation world to sufficiently communicate the opportunities to an SME audience. Initiatives to resolve this issue should therefore focus on communication and awareness activities.

A range of **awareness raising activities** have already been discussed above in the context of increasing SME knowledge and understanding of standards. Similar types of activities are

relevant here in relation to raising awareness of standardisation. These might include regional media campaigns, information packs or guides, websites, conferences and events, and the publication of case study examples. In each case, these should include relevant information about the standardisation process and explain how the target audience specifically can play an active role.

As with raising awareness of standards, intermediary organisations can play a key role in providing communication channels, and can tailor generic information to make it more appropriate to specific audiences (e.g. a particular sector in a particular country).

### Example initiatives

**Austria** – Austrian Standards have produced a video that presents ‘everything about standardisation in 9½ minutes’, which includes a section on how standards are developed. ([www.austrian-standards.at/en/medienservice/image-video/](http://www.austrian-standards.at/en/medienservice/image-video/))

**UK** – The trade association Gambica organises meetings and publishes newsletters to increase awareness of standardisation and support participation among its members ([www.gambica.org.uk](http://www.gambica.org.uk))

Once SMEs are aware of the standardisation process and understand that they are able to participate, they may not understand the **importance of participation**, or be able to assess whether their involvement would be worthwhile. There is therefore a need for initiatives to communicate clearly the main reasons why SMEs should become actively involved in standardisation.

This might include training courses and events, or other **promotional campaigns** (websites, brochures, etc.) that highlight and explain the benefits of involvement. Such benefits were already discussed in the previous section and revolve around three main areas: influencing the

content of the standard, receiving information, and establishing contacts. Promotional material commonly includes case study examples of successful SME participation in the standardisation process.

### Example initiatives

**Netherlands** – The national standards body NEN produces informational leaflets on the benefits of standardisation ([www.nen.nl/web/OverNEN/Klanten-aan-het-woord.htm](http://www.nen.nl/web/OverNEN/Klanten-aan-het-woord.htm)), and a movie on standards development: ‘how and why’ ([www.youtube.com/watch?v=qutw5AJKQ18](https://www.youtube.com/watch?v=qutw5AJKQ18))

**Sweden** – The standards body SiS produces brochures with cases of successful SME participation

### 5.4.2 Participating in standardisation

Once SMEs are aware of and interested in the development of standards, they may face further barriers to participation. For example, they may encounter problems in tracing relevant development projects, or lack the resources (money, time, skills and knowledge) to participate in the process. Those SMEs that are participating in the process may not be doing so in the most effective way, or they may not be able to accurately weigh the short and long term benefits against the resource cost of involvement. Finally, SMEs may want to initiate new standardisation activity where there is currently no committee in place, but may struggle to know how to take this forward.

Difficulties in **tracing relevant standardisation projects** may be caused by the way in which information about these standardisation projects is offered or the abilities of SMEs to trace these projects. Initiatives to deal with this problem should therefore focus on providing information to SMEs that will help them to understand current standardisation activities in relevant areas.

Specifically, an intermediary service could be provided, that would track new and ongoing

standardisation projects and then provide information and advice to SMEs on relevant projects in a clear and understandable form. This information should include user-friendly overviews of the relevant activities, details of the relevant groups and committees involved, and details of a point of contact for further information. Where information is already provided at the European level on ongoing standardisation activities, there may be a need for this to be translated into local languages to aid understanding at the national level. Similarly, national information on current activities may need sifting for relevance to a particular sector, or the information may require some transformation to make it more accessible for SMEs.

### Example initiatives

**Austria** – The Austrian standards body produces sector reports that provide insights into trends in standardisation and current work priorities for standards development, as well as discussing future issues and challenges ([www.as-institute.at/development/sektorberichte/](http://www.as-institute.at/development/sektorberichte/))

Barriers to the **involvement of SMEs** in standardisation may include a lack of awareness of the opportunities available and a lack of resources (be that money, time or the appropriate knowledge or skills) to get involved. Therefore initiatives to enable involvement should focus on encouraging SMEs to participate directly and providing them with any resources that they lack, or on encouraging the participation of intermediaries on behalf of SMEs.

Direct **invitations** to SMEs to get involved in specific new projects of relevance should help to encourage greater levels of participation. However, such an invitation should be combined with sufficient information on the activity, the potential benefits of the standard, and the importance of involvement, in order to help the SME to make the decision to participate. A stakeholder analysis should reveal whether SMEs have an interest in the standard being developed.

Intermediary organisations are the most obvious bodies to undertake monitoring activity and to be undertaking efforts to encourage relevant SME involvement from amongst the businesses that it represents.

Where SMEs are unable to participate directly, intermediary organisations such as SME associations, cluster organisations and value-chain networks could play a role in making sure that their members' interests are represented during the development, drafting and revision of relevant standards, at all geographical levels.

Providing financial support (i.e. travel subsidy, allowance or tax credit) for SME participation in standards development meetings is likely to encourage greater levels of SME participation. Where cost is a barrier to involvement, the availability of funding for travel and attendance at meetings, should ensure greater levels of participation and has been shown to increase the representation of SMEs in standardisation in a number of countries. Making involvement easier, in terms of the time and cost implications for SMEs, can also be achieved by ensuring that contributions can be made without having to travel to committee meetings. For example, online discussion forums and web-based devices for input to draft standards can encourage wider participation in to the process, without the same cost implications on individual SMEs. In this case, intermediary organisations will have a role in ensuring that the collected inputs are represented within drafting committees.

### Example initiatives

**Spain** – The association AFME gives advice about product standards to its members, and tries to stimulate their participation in national, European and international standardisation committees

**Sweden** – The Swedish standards body SEK offers a travel grant for attendance at standardisation meetings. One of the conditions of receiving a grant is that the recipient must submit a report from their own perspective on the standardisation meeting

they attended, which are then used to inform a much wider group of enterprises in a language that they understand ([www.sekom.se](http://www.sekom.se))

**Finland** – The standards body SESKO similarly provides a travel allowance to cover part of the travel expenses incurred from participation in international standardisation meetings. The grant is offered to enterprises operating in the field of electronics and electrical engineering and is used to subsidise involvement in the development of new standards, as well as the revision of existing standards. The grant is believed to stimulate SMEs participation ([www.sesko.fi/english](http://www.sesko.fi/english))

**Netherlands** – The Dutch standards institute (NEN) provides an open platform for Dutch stakeholders to view and comment on draft standards ([www.normontwerpen.nen.nl/](http://www.normontwerpen.nen.nl/))

The fact that SMEs are not always able to **participate effectively** in standardisation may suggest that their views are being ignored, or over-ridden by other interests. It might also be caused by SMEs not having the necessary knowledge and skills to play a decisive role in the process. Initiatives should therefore focus on supporting SMEs in being better prepared and more able to effectively contribute to the standardisation process.

One solution to this issue is to provide **training** and support initiatives to SMEs on effective participation in standards development. Such training might be in the form of face-to-face or e-learning courses, and may include the provision of written information and guidance documents to support participation. Other support for participants might include financial aid (discussed above) to enable SMEs to delegate participation to a knowledgeable individual and specific support in the form of background research and information (that might come from an intermediary organisation or trade association).

## Example initiatives

**Denmark** – The Danish standards body DS offers a series of one-day seminars on participation in standardisation. These free courses seek to provide a first look at the opportunities of participation, to highlight potential problems and ways to address these.

**Germany** – The German standards body DIN produces a practically-oriented guide for SMEs on how to participate in standardisation ('Kleines 1x1 der Normung')

Where a committee has not yet been appointed in an area that innovative SMEs wish to **initiate standardisation** activities, there is a need to provide information and support to the SME on how to go about initiating a new project and in communicating with other relevant actors. An intermediary organisation would appear to be the most appropriate means to do this, possibly through allowing SMEs the use of innovation vouchers or groups of SMEs parts of grants or loans for joint innovation projects to pay for support services to initiate the standardisation activities. Also sector based groups, forums or communication channels could be considered. There may also be a need to provide some financial support to test the feasibility of a new area of standardisation and to undertake preliminary activities in an area.

## Example initiative

**Norway** - Eforum I Standard Norge is an online forum, or network of competence, that is linked to the national standards body. The forum has led to the start up of new standardisation processes, as well as increased knowledge amongst SMEs of existing standards. ([www.eforum.no](http://www.eforum.no))

# Information on structural funds

*The aim of this guide is to encourage and support the submission of innovative proposals for ERDF funding, and to assist authorities in initiating measures that will boost SMEs' use of standards and standardisation, and thereby foster SMEs' competitiveness and growth.*

*This final section of the guide introduces the next round of ERDF funding and briefly summarises the 'next steps' that regional or managing authorities can take to utilise available funds in initiating and implementing effective support measures for SMEs. It also provides various sources of further information that will provide additional help and guidance in this process.*

## 6.1. Regional policy and funding

EU regional policy supports job creation, competitiveness, economic growth, improved quality of life and sustainable development. The **Cohesion Policy** includes three funds: the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund, and is available to all European Union regions. Management of programmes receiving support is the responsibility of the Member States, and managing authorities are designated to inform potential beneficiaries, select projects and generally monitor implementation.

For information on European regional policy and how it works, or to find out more about the funding that is available, you can visit the European Commission's Regional Policy website. Here you can also select your country and discover further information about funding priorities, responsible organisations, and the activities that have received funding in the past.

**Regional Policy Website** - [www.ec.europa.eu/regional\\_policy/index\\_en.cfm](http://www.ec.europa.eu/regional_policy/index_en.cfm)

The **ERDF**, which is the element of Cohesion Policy that is the specific focus of this guide, aims to strengthen economic, social and territorial cohesion in the EU by correcting imbalances between regions. This is achieved by supporting the development and structural adjustment of regional economies, including the conversion of declining industrial regions. The fund supports regional and local development across thematic objectives by setting out detailed priorities that increase focus on areas such as ‘research, development and innovation’, and ‘business support to SMEs’.

More about the ERDF specifically can be found on the funds section of the Regional Policy website.

**ERDF Website** - [www.ec.europa.eu/regional\\_policy/the\\_funds/regional/index\\_en.cfm](http://www.ec.europa.eu/regional_policy/the_funds/regional/index_en.cfm)

In order to focus policy support and investments on key national / regional priorities, challenges and needs, the Commission services want national and regional authorities across Europe to draw up research and innovation strategies for ‘**smart specialisation**’. This involves identifying the unique characteristics and assets of a country or region and highlighting its competitive advantages.

The Commission services have produced a «Guide to Research and Innovation Strategies for Smart Specialisations (RIS 3)». Within the actions<sup>15</sup> covered by the structural funds, actions promoting SMEs and standardisation fit in «innovation friendly business environments for SMEs» and aim to improve access to markets inside the Union and globally, as well as to improve the framework conditions for the competitiveness and sustainability of Union enterprises.

The Commission services have produced a factsheet on smart specialisation, which may help regions or countries to decide on which sectors to invest in and therefore ensure that EU structural funds are used more efficiently. This is available from the smart specialisation platform website.

**Regional strategies and smart specialisation** - [www.s3platform.jrc.ec.europa.eu/home](http://www.s3platform.jrc.ec.europa.eu/home)

## 6.2 Cohesion policy 2014 - 2020

Current regional funding programmes will run until 2013, after which a new round of cohesion policy will begin. The Commission has suggested that these funds should remain an essential element of the next multiannual financial framework, and has proposed budget of €376 billion for the 2014 – 2020 period. A draft legislative package was adopted in October 2011, which will frame **future cohesion policy** and establish the priorities for investment in this area for the next round of funding. These proposals will be adopted at the end of 2012, when final allocations and lists of eligible regions will also be decided.

The new proposals are designed to reinforce the strategic dimension of Cohesion Policy and to ensure that EU investment is better aligned and targeted on Europe’s long-term goals for growth and jobs, as set out in the **Europe 2020 strategy**. The new package concentrates on a menu of thematic objectives from the strategy, with investment targeted particularly on three key areas for growth – energy efficiency, innovation, and the improvement of the competitiveness of SMEs. Minimum allocations to these three areas will be fixed at the national level, for example at 80% of ERDF resources in more developed and transition regions.

In 2013, each Member State will be asked to draw up a **Partnership Contract** (in an Operational Programme), where they will assess their development needs and define their national priorities and targets for delivering on the Europe 2020 strategy. The Contract will contain the thematic objectives chosen by the Member State, as well as investment priorities for each objective and targets to be met by the end of the programming period. It will set out the overall national contribution to European objectives and provide commitments to concrete actions to deliver on objectives from these funds.

<sup>15</sup> Guide to research and innovation strategies for smart specialisations (RIS3), annex II, page 65 and page 74

As part of EU Cohesion Policy in 2014–2020, the Commission services are also proposing to make smart specialisation (see above) a pre-condition for ERDF funding of investments in innovation.

Further information on current proposals for the next round of funding, including allocations and eligibility by country, and relevant priorities can be found on the Regional Policy website.

**Future policy** - [www.ec.europa.eu/regional\\_policy/what/future/proposals\\_2014\\_2020\\_en.cfm](http://www.ec.europa.eu/regional_policy/what/future/proposals_2014_2020_en.cfm)

### 6.3 Applying for funding

We hope that this guide helps to convince regional and managing authorities to include schemes for helping SMEs in the standardisation area within their future Partnership Contracts and Operational Programmes, and that it has provided plenty of ideas for relevant projects and initiatives.

ERDF funding is granted on a project basis and applications for regional funding should be made through a project proposal to the authority managing ERDF funding within a region or country. That body will evaluate the project proposal and decide whether or not to grant funding. To find your managing authority and obtain relevant contact details, visit the Regional Policy website<sup>16</sup>.

**Managing authorities** - [www.ec.europa.eu/regional\\_policy/manage/authority/authority\\_en.cfm](http://www.ec.europa.eu/regional_policy/manage/authority/authority_en.cfm)

Before applying for a grant, you should check the European operational programmes in your region. The project application must meet the selection criteria and investment priorities of your regional programme and you will have to follow the application procedures of the relevant managing authority. Some have an ongoing procedure, others accept applications at certain times only, and you should see the website of their managing authority for details.

Before proposing a new initiative to help SMEs in using standards and standardisation to support growth, competitiveness and innovation, you should also discuss your ideas further with your national standards body or national committee (see below).

### 6.4 Further useful information on standards, standardisation and SMEs

This guide has provided an introduction to the world of standards. However, there is a large amount of further information available on the websites of the main actors in the standardisation process.

Further information on **European standardisation** policy and activities can be found on the SME pages of the CEN-CENELEC website. Similarly, information on how SMEs can access information about new and/or existing standards and standardisation activities at the **national level** can be obtained from the relevant standards body within your country. These bodies will also be able to discuss possible project ideas with you further.

CEN and CENELEC members have also established **national SME helpdesks** to provide direct support to SMEs. These helpdesks may also be able to help you understand the standardisation system within your country.

**CEN-CENELEC SME pages** - [www.cencenelec.eu/sme/Pages/default.aspx](http://www.cencenelec.eu/sme/Pages/default.aspx)

**CEN National Members** - [www.cen.eu/cen/Members/Pages/default.aspx](http://www.cen.eu/cen/Members/Pages/default.aspx)

**CENELEC National Committees**  
- [www.cenelec.eu/dyn/www/?p=104:5:429096601317833](http://www.cenelec.eu/dyn/www/?p=104:5:429096601317833)

**ETSI SME pages** - [www.etsi.org/WebSite/AboutETSI/ETSIforSMEs.aspx](http://www.etsi.org/WebSite/AboutETSI/ETSIforSMEs.aspx)

**SME Helpdesks** - [www.cencenelec.eu/sme/standards/NationalContacts/Pages](http://www.cencenelec.eu/sme/standards/NationalContacts/Pages)

<sup>16</sup> In candidate or potential candidate countries, contact the Instrument for Pre-Accession Assistance (IPA).











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