



# BSI Standards: Report to the Department for Business, Innovation & Skills

Use of BIS funding and NSB activity for  
the financial year 1 April 2013 to 31 March 2014

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# 1. Introduction

BSI is the UK's National Standards Body (NSB), representing UK interests internationally and delivering a world-class formal standards making process at home.

As the UK National Standards Body (NSB), BSI represents UK economic and social interests at the European and international standards organizations CEN, CENELEC, ETSI, ISO and IEC. We manage the national standards making process, providing a service for organizations of all sizes and across all sectors to develop market led voluntary consensus standards through open public consultation and full stakeholder engagement. Our relationship with Her Majesty's Government (HMG) is constituted through a memorandum of understanding (MOU)\* that sets out our role as the NSB.

The importance of standards to the European Commission in supporting EU legislation is highlighted on the website of the Directorate General for Enterprise and Industry: "While the use of standards remains voluntary, the European Union has, since the mid-1980s, made increasing use of standards in support of its policies and legislation. Standardization has contributed significantly to the support of the completion of the Internal Market in the context of 'New Approach' legislation, which refers to European standards developed by European standards organizations."\*\*

Effective participation in European standards organizations safeguards UK interests by ensuring that standards used to demonstrate compliance with European Directives are acceptable to the UK.

Former Minister for Universities and Science, the Rt Hon David Willetts MP, visited BSI in March 2014. He was briefed on the role of standards versus regulations, how standards support innovation as well as gaining a better understanding of our role.

During the year 2013/14 we have significantly increased our engagement activity with UK business, industry and societal interests, strengthened our dialogue with our standards committee members and continued to invest in future standards making capabilities. This report addresses the use of funding from HMG, which comprised around 6% of BSI Standards revenue over that period.

\* [http://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/16505/Memorandum\\_of\\_Understanding.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/16505/Memorandum_of_Understanding.pdf)  
 \*\* [http://ec.europa.eu/enterprise/policies/european-standards/index\\_en.htm](http://ec.europa.eu/enterprise/policies/european-standards/index_en.htm)



"The use of BIS funding has enabled BSI, in its role as the National Standards Body, to drive global leadership for the UK."

Scott Steedman CBE, Director of Standards, BSI

## 2. Main funding envelope

HMG funds activities in key areas of public policy interest and priority areas such as innovation.

### 2.1 Introduction

During 2013/14 we continued to implement our strategy of providing a clear market sector focus for our standardization work programme. This enables timely and effective solutions to the needs of businesses trading in the UK and internationally, and supports associated UK Government priorities.

Our standards work continues to be more than 90 per cent self-funded. HMG funds activities in key areas of public policy interest and priority areas such as innovation.

Our standards-related activity met the objectives for the 2013/14 funding year set by the annual funding agreement between the Department for Business, Innovation & Skills (BIS) and BSI. This section of the report summarizes our activity during the year relating to the funding agreed for our work as the UK NSB.

The overall allocation for the funding year 2013/14 was £4,430k. The full BIS contribution towards standards-related activities was used. Total expenditure on these activities exceeded the 2013/14 allocation. Our traditional fund-associated NSB activities were supplemented by committee member training, higher education work and initiatives with other standards bodies that are developing a standards infrastructure.

### 2.2 Areas of activity supported

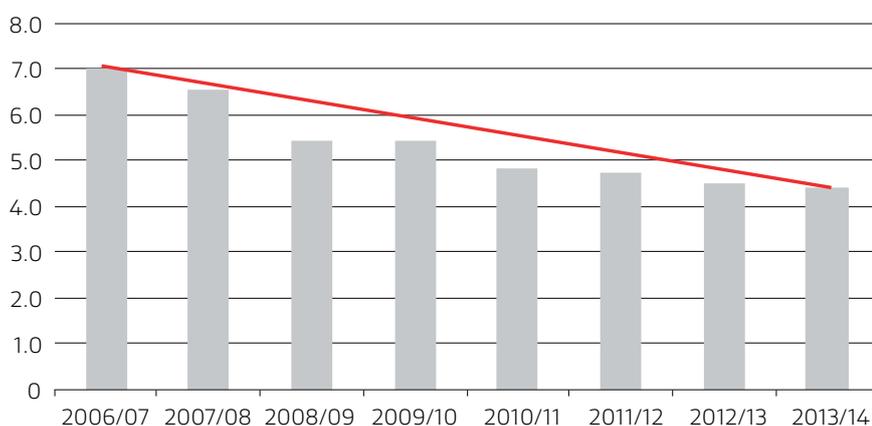
Recognizing the importance of the work we do and that some aspects are not self-funding, BIS fund specific activity in three main areas:

**Influence and leadership** supports the infrastructure necessary for the UK to participate in European and international standardization, while giving HMG access to standards. The fund includes a subscription fee that gives all HMG departments and agencies a large discount when buying standards published by BSI.

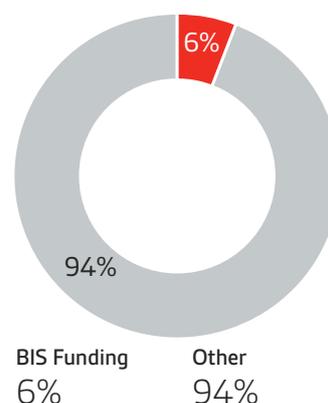
**Support for standards development** covers activities relating to developing standards content. Most of the total funding is made available for development activities in areas that promote key HMG policies, such as competitiveness, innovation, reduction of trade barriers, fair trading and protection of consumer interests, environmental protection and public procurement. There is specific development in emerging technology areas in support of Technology Strategy Board priorities.

In 2013/14 BIS funding contributed towards full programme-management support for 147 UK standards technical committees. Their programmes largely comprise European and international work (95%), with some national

BIS main funding grant to BSI (£m)



BSI Standards revenue 2014



work (5%). In addition, we continued to act as the gateway for interested UK parties to take part in international standardization through support received from our Committee Service Centre (CSC).

In 2013/14 BIS-funded UK standards technical committees, including those managed via our CSC, facilitated publication of 1,954 new and updated standards, with 1,297 withdrawn from circulation. Please refer to Appendix 5.1 for details of committees supported and Appendix 5.2 for subject areas of the standards published.

**Support for participation in standardization** enables UK participants in European and international standards work by contributing towards their travel costs. Making sure that UK delegates attend overseas standards meetings is often key to ensuring that UK interests are represented when European and international standards are created or updated. This fund also helps ensure continued consumer participation in standardization by providing support towards travel to standards committee meetings, recruitment and training for our network of consumer representatives. During the year, BIS funding contributed to the travel costs of 2,946 UK experts participating on behalf of the UK at overseas European and international standardization meetings.

## 2.3 Funding allocation

	Original funding allocation (£k)	Agreed movement of funds up to 25% (£k)	Final funding allocation (£k)
<b>Influence and leadership</b>			
BSI membership for HMG	365	0	365
Contribution to membership of ISO/IEC/CEN/CENELEC	500	0	500
Management fee	54	0	54
<b>Total</b>	<b>919</b>	<b>0</b>	<b>919</b>
<b>Support for standards development</b>			
General – NSB activity and public interest standards development (including staff travel)	1,231	0	1,231
Priority Areas standards development	1,000	0	1,000
<b>Total</b>	<b>2,231</b>	<b>0</b>	<b>2,231</b>
<b>Support for participation in standardization</b>			
Assisted International Travel Scheme	1,190	19	1,209
Support for consumer participation in standardization	90	(19)	71
<b>Total</b>	<b>1,280</b>	<b>0</b>	<b>1,280</b>
<b>Total funding</b>	<b>4,430</b>	<b>0</b>	<b>4,430</b>

“Development and application of standards are key factors in supporting competitiveness, innovation, reduction of trade barriers, protection of consumer interests, sustainability and economic growth. BSI’s strengths as the UK’s national standards body, especially in developing standards in new areas, help to give the UK a competitive edge in the global economy. BSI’s growing partnership with the Technology Strategy Board in the development of new standards in emerging technologies – for example synthetic biology, cell therapies, assisted living and offshore renewable energy – is an especially exciting opportunity.”

Mark Holmes, Deputy Director, Innovation Infrastructure & Impact, Department for Business, Innovation & Skills.

## 2.4 Influence and leadership



### Objectives

HMG departments and agencies hold a central BSI Membership agreement that enables them to access standards in a comprehensive and cost-effective manner, as well as other BSI membership benefits such as alerting, advisory and information services.

- Membership benefits to all government departments and agencies.
- BIS, as the lead HMG department working with BSI, receive subscription access to British Standards Online (BSOL) for department use only. Extensions to other HMG bodies are excluded.
- BIS to work with BSI to agree activities to raise awareness of the Membership services available to HMG departments and their agencies.

### BSI Membership for HMG

All HMG departments and agencies were provided with access to BSI Member services, which includes:

- 50 per cent off British Standards (including adopted European and international standards)
- 50 per cent off BSI's online database product, BSOL
- Up to 10 per cent off international (ISO) and non-UK standards (e.g. DIN German standards)
- 50 per cent off many BSI conferences
- Free postage and packing when buying hard copy standards, as well as credit where prepayment when buying a standard is not necessary
- Access to the Private List Updating Service (i.e. validation and tracking of a standards list provided by the Member, with new versions sent automatically when they are updated)
- Expert help from the BSI Knowledge Centre, including advanced subject searches and fast identification of international equivalents from more than 200 standards organizations in 23 countries
- Inexpensive access to international and foreign national standards including American, ISO and DIN, through a postal loan service; and the sale of withdrawn British Standards

We continue to work with BIS to make HMG aware of BSI Membership benefits. In 2012/13 we updated and refreshed our leaflet that explains the benefits of the HMG Membership package. Distribution continued throughout 2013/14. In May 2013 it was sent to HMG members of our standards committees and in June it was promoted via a news story on the BIS intranet, alongside access instructions for the BSOL account. We're working to get similar stories on other government department intranets.

This activity is carried out in conjunction with other efforts to promote standardization within government departments, as well as supporting BIS in meetings and follow-up actions from the cross-governmental Taking Standardization Forward committee.

As part of their Membership, we continue to manage several government departments as 'key accounts', where our key account managers work closely with their HMG contacts to develop a strong relationship, ensuring individual department and agency requirements are met.

"Defra value the relationship cultivated between themselves and BSI. Both parties invest time to work collaboratively to identify areas that could be improved and would benefit by the introduction of British Standards. Defra are conscious that standards have proven to be highly successful for businesses, and they can be used as a basis for the development of government regulation.

The discounted access to standards, provided by the BIS-funded HMG BSI Membership, is useful as a cost effective tool to acquire a standard for those requiring specific standard information."

Sue Proudman, Resource, Atmosphere and Sustainability (RAS), Defra

### Contribution to membership of ISO/IEC/CEN/CENELEC



#### Objectives

This fund supports UK obligations under European Regulation 1025/2012, which aims to prevent the creation of new technical barriers to trade. The purpose of this activity is to:

- Ensure we maintain an appropriate presence on key international and European committees and fora to enable the UK to influence standards policy.
- Ensure that UK obligations under European Regulation 1025/2012 have been fulfilled.

The financial contribution to our international and European subscriptions represents part of BIS's direct support to the standards infrastructure. Our membership of international and European standards organizations supported through this contribution enables the UK to maintain a standards infrastructure consistent with European standards policy as required by the MoU between BSI and HMG.

Membership also opens gateways for international discussions, enabling UK stakeholders to participate in the development of international and European standards, while enabling us to influence, on behalf of the UK at a high level, the policies and strategies of organizations such as ISO, IEC, CEN and CENELEC.

Under European Regulation 1025/2012, EU member states must give notification of any new national standards being developed. During this year, 125 new British Standards projects were reported to CEN/CENELEC.

BSI Director of Standards, Dr Scott Steedman, continued his role as CEN Vice President (Policy) during the year. We participate in all key policy development committees of the international and European standards organizations, including administrative boards and technical boards. We also provide leadership by holding international standards committee secretariats in key areas for the UK, such as energy management, sustainability, quality management, nanotechnologies, environmental management, anti-bribery and wave energy.

The BIS contribution makes up approximately 23% of our annual subscriptions to ISO, IEC, CEN and CENELEC.

### 2.5 Support for standards development



#### Objectives

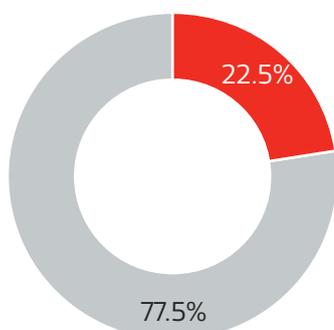
Support of our standards development programme including: programme management support for eligible BSI committees meeting scheme criteria; access to international standardization provided for committees by our Committee Service Centre (CSC); BSI staff travel in support of standards development and the Priority Areas for Standardization projects.

Implementation of the 2013/14 Priority Areas programme of work, as agreed with BIS in relation to HMG priorities/policies, including use of the Investment Case and One Page Project Plan templates for effective programme management and monitoring.

This funding contributes towards activities we undertake to meet UK formal standardization needs and to facilitate UK participation in international standardization. These activities include:

- Support via named BSI staff as programme managers for eligible UK national committees and European/international committees (including where the UK holds the secretariat of the latter)
- Support via the BSI CSC for some UK national committees, providing a gateway to interested UK parties for participation in European and international standardization
- A continued Priority Areas programme of proactive development of standardization supporting HMG policy priorities, via projects drawing on a unique mix of BSI standards development activities (e.g. pilots and case studies, research, funded leadership positions, etc.)

### Subscriptions to ISO/IEC/CEN/CENELEC



BIS contribution  
22.5%

BSI contribution  
77.5%

### Standards development programme

Under our standards development programme scheme rules, funding is applied to non-commercially viable UK committees whose work supports HMG priorities in relation to:

- Government or public interest (i.e. regulation, public procurement, consumer protection and safety)
- Standardization supporting Priority Areas (pre-competitive standardization supporting innovation, such as Technology Strategy Board priorities)
- NSB international work programme (i.e. activities the NSB conducts to fulfil its core function on behalf of the UK)
- Specific/urgent industry standardization (i.e. promoting productivity or UK competitiveness in world markets through standardization that protects UK interests, exploits UK expertise and has a large impact on UK industry, including international secretariats)

Non-commercially viable UK committees are those where the use of resource (in the form of our staff supporting the UK committee and, where applicable, any corresponding BSI-run European or international secretariats) exceeds the average annual income generated by sales of standards assigned to that UK committee.

A forecast of the eligible committees and the HMG priorities supported by their work programme is developed via a review of the work programme and drivers for UK committees and their corresponding UK-held secretariats, supported by named BSI programme managers. The review is integral to the overall BSI Standards market development planning process, whereby each sector team analyses its overall standards pipeline and forecasts resources accordingly. The use of our staff in support of UK committees (and corresponding BSI-run international secretariats where applicable) is monitored each quarter. At the end of the final quarter, the actual resource employed during the funding year is determined and committees

Category <sup>2</sup>	Number of eligible committees	Chargeable days worked Apr 13-Mar 14	Funding requirement <sup>1</sup>
<b>1. Government or public interest</b>			
Regulation, consumer protection, safety, etc.	77	1,425	£799k
<b>2. Standardization supporting Priority Areas</b>			
BSI Priority Areas programme <sup>3</sup>			£720k
Priority Areas committees			
Innovation, Procurement, Better Regulation, Sustainability, Infrastructure	55	1,554	£872k
<b>3. NSB international work programme</b>			
(includes technical and sub-committees)	425	2,310	£1,327k
<b>4. Specific/urgent industry standardization</b>			
Productivity and UK competitiveness	15	338	£189k
<b>Total Cost</b>		<b>5,626</b>	<b>£3,908k</b>

1. The full cost of the support in the areas shown exceeds funding provided, with BSI covering the shortfall.  
2. The total cost and days worked are assigned to one category only, although some committees are eligible in more than one category.  
3. Funding applied for Priority Areas projects relates to activity delivered in the year. The total value of projects committed to in the year was £520k, in line with the prior year.

with a main HMG priority are confirmed and added to the initial forecast list or removed as appropriate.

The list of technical committees supported by Standards Development funding in the year is detailed in Appendix 5.1.

At the end of the funding year, 147 technical committees identified as candidates required support from the Standards Development fund. The costs of supporting these committees and those managed via the BSI Committee Service Centre exceeded the available contribution.

### Published output of committees supported by BIS funding

During 2013/14, the 147 UK standards committees that received BIS funding and support from named BSI Programme Managers facilitated the publication of 939 new and updated standards, with 435 withdrawn from circulation.

A further 1,015 standards were published and 862 withdrawn as a result of access to international standardization facilitated by the CSC. Please refer to Appendix 5.1 for details of committees supported and Appendix 5.2 for the subject areas of the standards outputs.

### Priority Areas standards development programme

We delivered a varied programme of standardization activity to support policy priorities and the innovation agenda, ranging from standards strategy creation and delivery work to communication and awareness-raising activities.

As previously, the cross-departmental Taking Standardization Forward committee, managed by BIS, validated and shaped the Priority Areas Standards Development Programme. All 2013/14 project proposals put forward – including those that proposed funding for a repeated intervention – went through an investment case process.

#### 2013/14 Priority Areas programme highlights:

##### Raising awareness of BS 8848

Numerous events were held to raise awareness of the newly revised *BS 8848 Specification for the provision of visits, fieldwork, expeditions, and adventurous activities, outside the United Kingdom*. BS 8848 is gaining recognition as the industry benchmark for organizations planning, operating or organizing adventurous activities outside of the UK. It seeks to ensure that risks are managed and minimized. We

sought to raise the standard's profile among the mainstream tourism industry, wider public, education institutions and charities. This coincided with the standard's first revision and the need to maximize stakeholder engagement and stimulate views from across the industry so the revised standard met the needs of the market, consumers and government.

More than 300 comments were gathered, aided by an event we staged in June 2013 at the Royal Geographical Society (RGS), which sought input from the adventure travel market. We also exhibited at the RGS Explorer event in November 2013 and at The Telegraph Outdoor Adventure & Travel Show in January 2014 at Excel, London. Consumer and industry engagement has been strong throughout, and a BS 8848 awareness-raising event in April 2014 attracted a high registration rate of 190 people.

Our BS 8848 consumer guidance is being revised to create a brochure that will help ensure that participants and their families can make better-informed decisions when choosing a provider.

Wiltshire-based Year Out Group represents leading UK-based providers of year-out programmes. Its CEO Richard Oliver says: "The

revised version will be even easier to follow. The original document was written primarily with groups in mind, which was problematic for those offering individual activities. This has been addressed. The ultimate benefactors will be those taking part in activities overseas – their safety is paramount." Shane Winsor of RGS summarizes: "BS 8848 is a groundbreaking tool that can help organizers of adventurous activities overseas to benchmark safety."

##### Enabling self-regulation of financial services

Co-funded and in partnership with the Chartered Institute for Securities and Investment, we commissioned research into how standards could enable better self-regulation of the financial services sector. It also aimed to illustrate how standards function in this way in other sectors, while identifying gaps and possible barriers to adoption.

The resulting report – *Backing Market Forces: How to Make Voluntary Standards Markets Work for Financial Services Regulation* – was published in November 2013. As well as being made available online, 3,000 hard copies were distributed and a soft launch event was held with representatives from industry, trade bodies and regulators in attendance.



Several high-profile media organisations and publications (e.g. *Reuters UK*, *The Economic Voice*, *HR Director Magazine* and *The Evening Standard*) reported key findings and BSI Director of Standards, Dr Scott Steedman, was interviewed on BBC Radio 4's *Today* programme. Follow-up research and industry engagement under 2014/15 funding is underway. It aims to identify specific areas where standards can add value to the financial services industry.

#### Responsible sourcing stakeholder forum

Standardization in responsible sourcing is characterized by lack of harmonization, a proliferation of labels, consumer confusion and burden of costs on producers. A 2012/13 BIS-funded report provided a thorough exploration of standards and policy in this area, while identifying areas where responsible sourcing standards could be created or improved.

A stakeholder forum was held in October 2013 to validate and prioritize research results. It brought together key stakeholder group representatives to discuss where collaborative standardization is most needed and how it could be taken forward. On the day we hosted a lively conversation between stakeholders, as well as engaging key organizations (such as ISEAL, the global membership association for sustainability standards). Sustainability leaders shared their perspectives on key challenges and opportunities, while our research findings were reported, with attendees later splitting off into discussion groups.

Outcomes and next steps were captured in a report later circulated to all attendees and made available on our website (together with presentations from the day). Findings are being analyzed to determine specific actions and projects to take forward. We will continue the conversation with stakeholders and work closely with DEFRA to ensure policy fit.

#### The 2013/14 Priority Areas budget was allocated to the following:

Reference number	Project title
INN13-01	Priority Areas management
INN13-02	National and international secretariats for eligible Priority Areas committees
INN13-03	Construction and Built Environment Policy and Strategy Committee (CB/-) – committee leadership
INN13-04	BS 8848 Specification for the provision of visits, fieldwork, expeditions and adventurous activities outside the United Kingdom – awareness-raising activities
INN13-05	BS EN 16274-1 Energy Audits – pilots/case studies and communication event
INN13-06	Financial services – research to determine future standards strategy
INN13-07	BS 8892 Transition of facility related services – document development
INN13-08	Strategic Policy Group for Fire Standardization (FSH/O) – committee leadership
INN13-09	Responsible sourcing standardization – stakeholder forum
INN13-10	Education about standardization – research
INN13-11	BS 8900 Managing sustainable development of organizations – research
INN13-12	Biometrics (IST/44) – committee leadership
INN13-13	Security techniques (identity management and privacy technologies) (IST/33/-/5) – committee leadership
INN13-14	Circular economy/waste prevention – research and stakeholder event
INN13-15	Product carbon footprinting – SME guidance
INN13-16	Internet of Things – stakeholder forum and standards strategy
INN13-17	BS 8895 Designing for material efficiency in building projects, part 2: Code of Practice for Concept and Developed Design – document development
INN13-18	BS 7543 Guide to durability of buildings and building elements, products and components – document revision
INN13-19	Information security management – research (market survey)
INN13-20	Understanding the UK SME market – research
INN13-21	Standards for societal security – mapping and guidance
INN13-22	Strategic relationship with EPSRC Centre for Innovative Manufacturing in Through-life Engineering Services at Cranfield University: year three
INN13-23	Packaging and defence standardization pilot project

### IoT stakeholder forum

According to the Technology Strategy Board (TSB), the "Internet of Things" (IoT) will enable "internet-enabled devices [to] network and communicate with each other and other web-enabled gadgets". It could transform how we live and age, travel and find out about services and entertainment as our surroundings change.

It is estimated that the number of connected objects will reach 50bn by 2020 and the potential added value of IoT-enabled services amounts to hundreds of billions of pounds a year. The TSB has launched an initiative that seeks to accelerate an ecosystem of applications and services. The IoT is an underpinning technology for TSB initiatives in Connected Digital Economy and Future Cities, as well as an enabler for Future Transport, Healthcare and Big Data. This project we undertook proposed stakeholder engagement and mapping to better understand standardization requirements in this area.

The event took place on 24 January 2014, with 95 people attending. The day began with presentations on security, privacy, lessons from history, the role of biometrics, etc., continued with networking over lunch and ended with discussion workshops. A Twitter feed to capture attendees' comments was broadcast during the event.

Standards mapping work (in progress) will result in a report with recommendations we will take forward. We're hosting an international workshop as part of the international IoT committee meeting in July 2014.

### Staff Travel Fund

An allowance for staff travel is available within the Support for Standards Development budget. It enables our staff to accompany UK committee members to meetings and provide the guidance and support that enables technical experts and delegates to maximize their influence during overseas meetings, which ultimately benefits the UK. This funding continues to provide valuable support to UK committee members.

## Case studies



### Halal food

Programme Manager Joanna Macnamara supported UK delegates new to standardization in the new European technical committee for Halal food.

The Staff Travel Fund enabled her to attend the first launch meeting and a second meeting at which a first draft of a new standard was approved. This support is likely to continue for the next few meetings, because the CEN chair and secretary are new to standardization. The guidance given to UK attendees ensures progress can be made, with the UK position promoted.



### Water quality

The fund enabled our Programme Manager Tom Digby-Rogers to attend the European Technical Committee on Water Quality to support the UK

delegation in advancing a UK proposal. The proposal aims to improve the environment of endangered species, supporting both the EU Water Framework Directive and the Habitats Directive.



### Horology

Horology is the science of measuring time. Programme Manager Sarah Horsfield attended a meeting of the international technical committee on horology to

support the UK delegation. With a key UK expert leaving the national committee, UK international involvement had been limited in recent years, but with a new expert who was new to standardization representing the UK, and the REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) European regulation impacting on the watch and jewellery industries, guidance on progressing standards was essential. The ISO committee discussed an important European standard for which the UK had put forward a proposal to amend. After the ISO meeting, the UK committee amended its proposal to give it a better chance of succeeding.



## 2.6 Support for Participation in Standardization



### Objectives

Financial support to UK delegates for meetings related to international standardization through the Assisted International Travel Scheme (AITS).

- Continued management of AITS spend by allocating the fund across four period phases. The projected spend against budget for each phase will be monitored to prevent overspend.
- Monitor use of the fund for 2013/14 to ensure maintenance of UK presence at core meetings.
- Monitor use of the fund for 2013/14 to ensure it is used predominantly by SMEs (i.e. small and medium-sized businesses).

### Assisted International Travel Scheme

The AITS fund supports UK participants in international standards work by contributing towards their travel costs. The presence of UK delegates at international standards meetings ensures UK interests are represented when international standards are created or amended. Without this assistance many experts and delegates would not be able to participate.

In 2013/14 AITS funding of £1,209k was awarded. The scheme supported the attendance of 2,946 UK committee members at international meetings in various roles over the course of the funding year.

During 2013/14 the fund was used mainly by SMEs, in line with government priorities for SME access. Although this funding is crucial for smaller companies without resources to attend, it also allows technical staff within larger companies to justify travel costs and time away from their employers.

## Case study



### Quality management systems

Colin MacNee has been involved in the UK national committee for 23 years and in the international committee for 18. Up until

three years ago a global corporation supported his participation, but for the past three years he has run his own one-person business. In that time he has received almost £5,500 in AITS funding, while providing more than £6,000 in personal funding to travel to ISO meetings, as well as £2,500 for UK meetings. That equals 10 weeks of international meetings and four of national meetings. In that time he has contributed internationally to ISO 9001, ISO/TS 9002 and ISO/IEC 17021-3 and nationally to the ISO/IEC 22000 and ISO/IEC 27001 – a considerable investment of his time and money.



Colin explains: "As the owner of a very small business, I can't commit the resources of a hundred billion dollar business. However, I can make a significant personal investment. As the secretary of ISO/TC 176/SC 2/WG 24 I'm a critical resource in the delivery of ISO's most successful management system standard, which now has more than a million accredited certifications worldwide. If it were not for AITS I couldn't do the work and UK plc would suffer in participation and prestige," he stresses.





### Support for consumer participation in standardization



#### Objectives

Manage effective consumer and public interest participation in standardization through their contributing innovative ideas and playing a key role in shaping standards.

- Support for consumer participation in standardization (including assisted consumer travel).
- Organize Consumer & Public Interest Network (CPIN) meetings and training focussing on topics relevant to the consumer and public interest (at least two CPIN meetings and at least one at an appropriate external venue).
- Maintain awareness of standards. Arrange the preparation/revision of at least one publication and/or at least one relevant background research/specific project to ensure evidence base.
- Maintain the number and relevance of individuals involved in the process to match CPIN priorities. Widen the age profile of CPI representatives to include a higher proportion of younger members.
- Ensure CPI representatives' attendances at UK and international standardization meetings in accordance with relevant areas of interest (at least 100 during the year).

### Case study



#### Packaging and environmental standardization

John Swift is the Chairman of the national standards committee on Packaging, PKW/O. "The AITS scheme and the support it gives to

experts in my specialist area of packaging and environmental standardization have always been invaluable," he says. "But with the financial pressures businesses have been under in recent times it's become absolutely invaluable in maintaining UK involvement and influence in key European and international standards meetings."

Recounting two recent examples he adds: "I'm the lead UK and European expert in packaging terminology. At the end of 2013 a working group meeting was held in Minneapolis, USA. Without the AITS funding, I would not have been able to attend and there would have been a very slanted outcome. My attendance ensured a much more balanced approach, safeguarding UK and wider European interests."

"Representation on the ISO environment technical committee has reduced in recent years mainly because an increasing number of experts are self-employed, so they don't receive the support large companies used to provide. The AITS scheme is vital in enabling the continuing attendance of many UK experts. Experts such as myself are still able to ensure that UK interests are properly safeguarded," he argues.



### Consumer involvement in standardization

The current priority areas for consumer involvement in standardization are:

- Inclusivity (includes accessibility, design for all and vulnerability)
- Security, privacy and identity
- Sustainability (includes energy and environment)
- Wellbeing (includes health and safety)
- Services standardization

With these areas as the focus, CPI representatives have been involved in more than 115 UK and international standards technical committee meetings and working groups. Topics have included: accessibility guidance to standards developers; aesthetic surgery; biotechnology; child safety guidance; comparative testing of consumer products; complaints handling; customer services; design life of buildings; environmental management and labels; fairground and amusement parks; ladders; nanotechnology; performance description of houses; privacy and data protection; public information symbols; recreational diving services; robots

and robotic devices and; safety of electronic equipment, household electrical and motorized appliances.

CPI representatives plan what they wish to achieve in meetings to develop specific standards and report against these objectives. Some examples of the purpose and benefits of consumer involvement include:

#### Societal and citizen security

A CPI representative (and human factors expert) organized a successful workshop at a meeting of the relevant European technical committee. This included presentations from the Chair of the ISO consumer policy committee and President of ANEC (the European voice of consumers in standardization). A plenary resolution was made to set up a task group to develop guidance on consumer and citizen issues relating to societal security, to be led by the UK CPI representative.

### Robot ethics

A CPI representative is a key member of the group that considers social and ethical issues relating to developing robots to be used in social, personal, domestic and medical applications. The group explored instances when people would and wouldn't feel happy about close interaction with robots, leading to a proposal for a guide on the ethical design and application of robots and robotic systems.

#### Child safety issues

Led by a CPI representative (and child safety expert from the Child Accident Prevention Trust), the ISO Consumer Policy Committee (COPOLCO) working group has revised guidelines for standards developers on child safety issues. The CPI representative led a discussion on the draft guide at the COPOLCO meeting in May 2013.

#### Increasing consumer awareness of standardization

Standards matter to consumers is a new brochure that was partially funded by BIS and distributed at the Trading Standards Institute Consumer Affairs & Trading Standards conference in Brighton in June 2013. It covers standards in the consumer and public interest priority areas of services, wellbeing, inclusivity, sustainability, security and privacy. An accessible PDF version (and other consumer standards leaflets) can be downloaded from our website.

In early 2014, our staff and several CPI representatives worked with the BBC on 15 half-hour programmes broadcast in March relating to standards, product testing and improvements made over the years. Topics covered included the safety of glass oven doors, cycle helmets and blind cords.





#### Contacts with wider organizations

Our Consumer and Public Interest Unit (CPIU) staff have maintained or renewed contacts with various public interest organizations at events or specific meetings, including Age UK, Legal Services Board, Trading Standards Institute and the UK European Consumer Centre (which assists consumers in handling cross-border complaints).

We're a member of the Electrical Safety Council Electrical Safety of Products Committee, which enables us to share knowledge about electrical product safety concerns and how this feeds into standards committees. A CPI representative from the manufacturing sector attends this committee and the CPI Coordinator for Risk presented a poster on the new international instructions standard at the Electrical Safety Conference in May 2013.

In April 2013, CPIU staff and CPI representatives met with staff from renowned (Consumers' Association-published) magazine *Which?* to identify how they can work with network members to influence standards. Knowledge and contacts were exchanged and hopefully more references to standards will appear in the magazine, with increased input in standards development from *Which?* staff, particularly where testing has revealed areas where standards could be improved or

extended. A subsequent meeting took place between *Which?* and the CPI Coordinator for Risk to discuss product recall in relation to standards.

Information has been provided to SWASA (Swaziland's standards body) on how we organize consumer and public involvement in standardization. The topic was also covered in a study visit by 13 delegates from Commonwealth developing countries in November 2013.

A closer relationship is being developed with the UK Sustainability Network for Standardization. The Trades Union Congress and new organizations HealthWatch and HolidayTravelWatch have been added to the CPI Network.

#### Consumers International

Through the CPIU, we're now supporter-members of Consumers International (CI), which gives our CPI representatives access to worldwide information and training. The CPIU Manager gave our perspective on consumer interests and standards in a CI training webinar that attracted more than 90 participants from developing countries.

#### Access to complaints data

We've signed a data sharing arrangement with Citizens Advice to gain access to basic statistical data about complaints. This can be used to feed into standards development and negotiations are continuing to get more valuable detailed case information.

#### Encouraging young consumers

Once again we were proud to be one of the sponsors of the Trading Standards Institute Young Consumers competition. We also sponsored a similar competition for schools for children with learning disabilities, organized by Birmingham City Council.



### **Policy, planning and informative meetings**

Our Consumer & Public Interest Strategic Advisory Committee (CPISAC) consists of representatives from key UK consumer and public interest organizations, including new members, the Electrical Safety Council and HealthWatch.

It provides a forum for discussing consumer concerns and how they influence or are influenced by standardization, at national, European and international level. The CPISAC chair also provides consumer representation on the BSI Standards Policy and Strategy Committee. CPISAC is now chaired by Christine Heemskerk, former chair of the Trading Standards Institute, who took over from consumer journalist and broadcaster Lynn Faulds Wood in October 2013.

CPISAC met at Citizens Advice in September 2013 and at BSI in February 2014. The February meeting was a workshop to which a broader group, including the British Retail Consortium and Financial Conduct Authority, were invited to help develop the 2015-17 CPI Strategy.

Two CPI network meetings took place in 2013: the summer meeting at the TSI Consumer Affairs & Trading Standards conference in Brighton in June and the winter meeting at BSI in December.

### **ISO COPOLCO**

Our involvement with CPIN in the ISO Consumer Policy Committee (COPOLCO) is manifold. The UK has representatives on the COPOLCO Chairs Group and it co-chairs (with Argentina) a key working group – Consumer Participation & Training. There are UK representatives on all other working groups and several task groups, and CPI representatives lead on such topics as graphic symbols, nanotechnology and protection of personal data.

The COPOLCO plenary and workshop was held in Malta in May 2013. Because it was in Europe, a larger than usual UK delegation attended this valuable information-sharing and networking opportunity.

### **Development of 2015-2017 CPI Strategy**

A key activity during 2013/14 was the development of the next three-year CPI Strategy. Discussion took place at the December 2013 all-members meeting, CPIC panel meetings and CPISAC workshop in February 2014. It included discussion on how broadly the 'public interest' and CPIN membership should be interpreted and it considered some of the recommendations from the Regional Diversity project that started in 2013. Proposals for the new strategy went to the Standards Policy and Strategy Committee.

## 3. Working in the UK national interest

As in 2012/13, we continued to use our own funding to cover important work carried out by the international projects, education and committee member training functions, which continue to thrive.

We also support consumer and public interest in standards development by funding the BSI Consumer & Public Interest Unit (CPIU) and honoraria for the volunteer Consumer & Public Interest Coordinators.

Throughout 2013/14 we continued to improve our standards development tools to ensure they provide an excellent, accessible service to committee members and wider stakeholders, while maximizing the transparency of standardization activities.

More than 1,300 committee members completed an online survey in October 2013, which provided detailed insight into members' attitudes and the demographics of our committees. A standards forum event held in November 2013 in London attracted 200 delegates, with more than 60 attending a workshop to discuss the survey results.

From this we identified key themes to focus on for ongoing engagement with members: the need for better recognition, recruitment and communication; improved ways of working; more cross over between committees; and wider engagement in standards making. A current project is seeking to deliver initiatives across all of these areas, including an awards scheme for committee members, development of collateral to help recruit new members and a welcome pack for new members.

BSI Director of Standards, Dr Scott Steedman, travelled to China as part of the Prime Minister's trade delegation. While there, he signed an agreement with the Minister for General Administration of Quality Supervision, Inspection and Quarantine (signatory for China's National Standards Body) in front of the Chinese Premier Li Keqiang and UK Prime Minister David Cameron. The agreement opens the door for business to put forward British and European standards for potential recognition or adoption by China.

The Rt Hon David Willetts MP, former Minister for Universities and Science, visited BSI on 13 March. He was briefed on how standards can complement or be used in place of regulations and support innovation, as well as finding out more about our work.

During the year, Dr Scott Steedman remained in his role as Vice President (Policy) for CEN, continuing our record of holding leadership positions in the European and international standards organizations to ensure UK influence.

Working with donor agencies, we delivered a range of projects to support the standards and quality infrastructures in countries across the globe, including key trading partners, emerging economies and developing countries.

We've continued to work to improve access for small businesses to the standards development process. The establishment of a new SME forum to provide opportunities for them to feedback to us on standardization strategy and policy matters and the continued investment in web-based tools and video conferencing are two major developments. We've also commissioned a two-stage research project into UK SMEs to better understand what they need from standards and how their access to the standardization process can be improved (see list of Priority Areas projects, section 2.5). We continue to take a leading role in the small-business related activities of CEN/CENELEC.

### 3.1 Working with government

In his 2012 report, *No stone unturned: in pursuit of growth*, Lord Heseltine gave his wide-ranging economic plan to improve the UK's ability to create wealth. One of his recommendations was for BSI to work closely with the Technology Strategy Board (TSB) and Research Councils to create standards for new technologies and services at the earliest opportunity.

In 2013 we started working on four TSB pilot studies concerning offshore renewable energy, synthetic biology, cell therapy and assisted living. We're researching the role standardization can play in the rapidly developing sphere of offshore renewable energy (i.e. wind, tidal and wave power) and standardization projects could follow. We're also working with SynBiCite, the Imperial College-led Innovation and Knowledge Centre in synthetic biology, to develop a standards strategy to help accelerate development of synthetic biology. We've also been working with the Cell Therapy Catapult, a London-based centre of excellence for regenerative medicine established by the TSB in 2012 to build the UK's position as a global leader in cell therapy.

Synthetic biology and cell therapies/regenerative medicine have been identified by the Rt Hon David Willetts MP, former Minister for Universities and Science, as one of the "Eight Great Technologies" the UK needs to prioritize and in which the Government is to invest more than £600m.

Working with the United Kingdom Accreditation Service (UKAS), in 2013 we developed a handbook for government ministers called *Standards and accreditation – Tools for delivering better regulation*. It explains how standards and accreditation can help government to deliver policy through self-

regulation, earned recognition and co-regulation, in line with better regulation principles. The handbook was distributed from the Prime Minister's office to all government ministers, with a letter that highlighted the benefits of standards and accreditation as alternatives to regulation. The handbook can be downloaded from our website ([bsigroup.com/externalpolicy](http://bsigroup.com/externalpolicy)).

Reporting directly to the Prime Minister, we're also a member of a special Champion Group established to help create dementia-friendly communities. The Prime Minister has put his full weight behind efforts to tackle the UK's worsening dementia problem, which he described as a "terrible disease" and "national crisis" when launching his Dementia Challenge in March 2012.

The Challenge seeks to significantly improve dementia care and research through better health, care and research, while creating dementia-friendly communities. We'll continue to work with the Prime Minister and others to seek to improve dementia care in the UK.

In 2013 we began work on a consultation project for HS2 Ltd, the Department for Transport-owned company responsible for developing and promoting the planned high-speed rail network that will link London, the Midlands and the north of England.

The project aims to find ways to better manage and improve infrastructure design codes and standards to improve efficiency and make cost savings. Our initial research has focused on three areas – civil engineering, buildings and railway systems. We're working with expert on our committees to revise or remedy codes deemed obsolete, inefficient or duplicate. Work will begin on a publicly available specification that will guide designers efficiently through the various design codes, standards and available methods for use on the HS2 project.

### 3.2 CEN, CENELEC and ETSI

We've been participating in a CEN and CENELEC project called Bridging the gap between standards and research (or 'BRIDGIT'). Part of this has involved leading training for fellow CEN/CENELEC members to equip all standards bodies across the system with the knowledge of how to approach their own research communities. Further aims of the BRIDGIT project include producing materials that will enable researchers to better understand standardization, particularly as standards are mentioned as possible research dissemination mechanisms in the Horizon 2020 EU R&D funding calls.





As Vice President (Policy) of CEN, BSI Director of Standards Dr Scott Steedman led the European Commission High-Level Group on business services, seeking to make recommendations on completing the European Single Market for services.

CEN will now have a smaller administrative board and its constitution was passed in November 2013. The new arrangement has 12 members (previously all 34 CEN member bodies could send up to two delegates), agreed by an election process each year. Dr Steedman will continue as Vice President (Policy) in the new structure.

European Standards Strategy 2020: we continue to advocate closer working between CEN and CENELEC, and the two organizations have agreed to an aligned implementation plan.

We chaired a meeting where CEN and CENELEC members and European stakeholder groups discussed new initiatives to improve access for SMEs and societal stakeholder organizations to standardization and make the system more accessible to all.

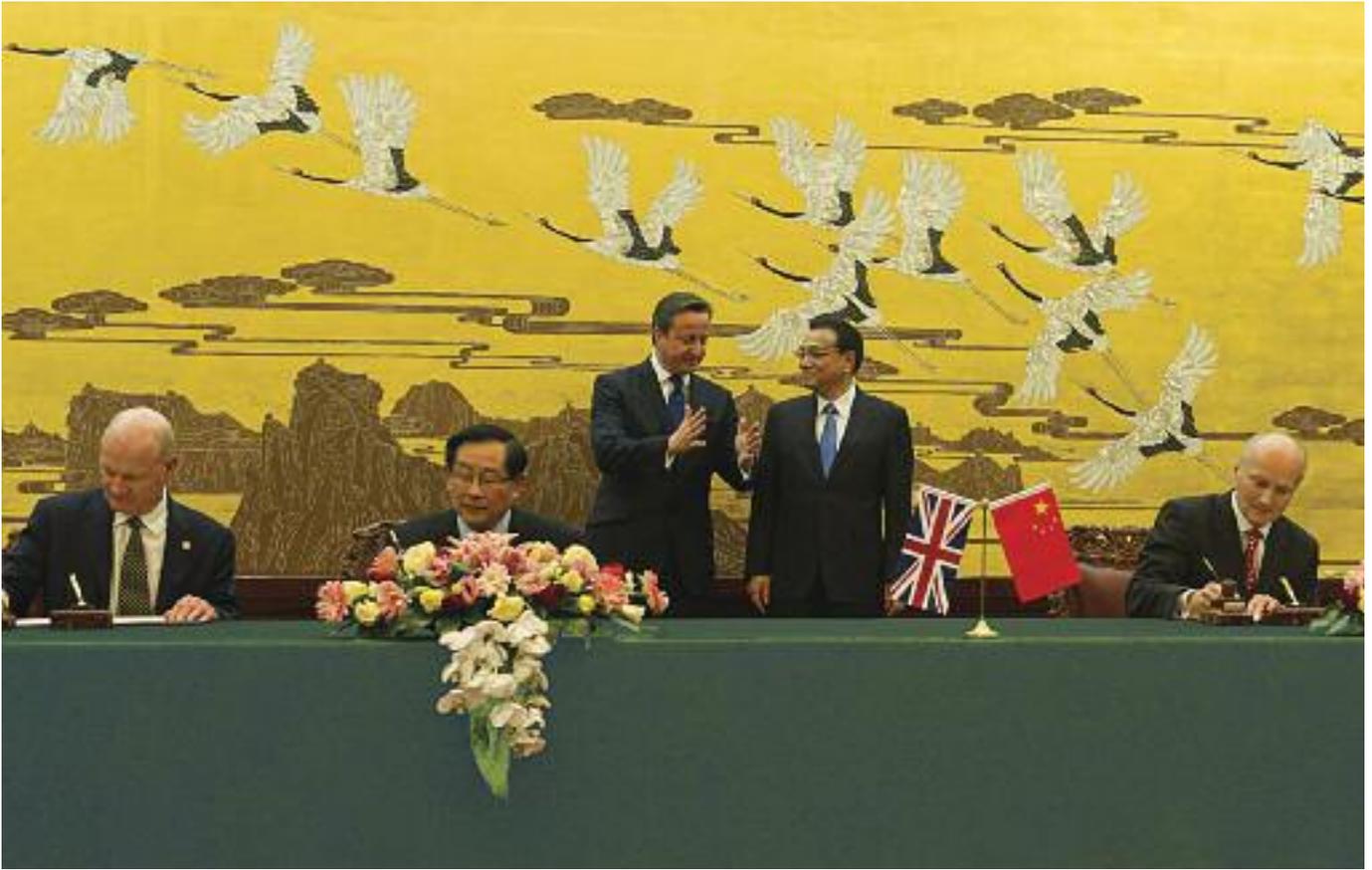
The European Standards Organizations (ESOs) and the US National Standards Body (ANSI) have continued to discuss how agreements on standards can be used to promote trade between the US and EU.

We provided the first set of annual reporting under standardization regulation 1025/2012. Reports on transparency, ICT use, consumers, environmental groups, unions and SMEs were submitted to CEN/CENELEC, which then gave a consolidated report to the European Commission with results from all NSBs.

We developed a new telecommunications standards website to facilitate the publication of European Telecommunications Standards Institute (ETSI) standards and gave a presentation about this at the organization's general assembly.

We hosted the annual meeting of the UK, French and German governments, standards bodies and accreditation bodies with the European Commission in Cambridge (5-7 June 2013). The theme was the role that standards can play to supporting research. EC DG Research participated for the first time and the Institute for Manufacturing hosted a workshop comparing the different approaches to standards and innovation in the three countries. During the meeting, we hosted a dinner at Jesus College attended by Professor Sir John O'Reilly (Director General of Knowledge and Innovation at BIS) and other senior figures.

Reporting directly to the Prime Minister, we're a member of a special Champion Group established to help create dementia-friendly communities.



### 3.3 ISO, IEC and other international issues

BSI Director of Standards, Dr Scott Steedman, travelled to China as part of the Prime Minister's trade delegation and signed an agreement that will open the door for business and industry to put forward British and European standards for potential recognition or adoption by China.

Following the signing of this historic agreement between the UK and China on standards, we received numerous recommendations of British Standards for adoption in China. The purpose of this recognition will be to promote UK trade in China.

The new Administrator of the Standards Administration of China (SAC), Dr Tian, visited BSI in March. BSI and SAC have signed a new cooperation agreement to reflect new interests, replacing the old one, which was signed ten years ago.

We've joined the Pan-American Standards body, COPANT, as an adherent member. This gives us access to the annual meeting. We will also make a keynote speech at the General Assembly of ARSO, the regional standards body for Africa. The assembly is the biggest

gathering of standards bodies on the African continent and will provide opportunities for BSI to meet NSBs from across Africa.

As the UK member of ISO, we participated in a conference organized by UNECE (the United Nations Economic Commission for Europe) on Standards and Regulations, and presented views on the strengths of voluntary standards supporting regulation.

We addressed an audience of 600 senior politicians, including 20 heads of state and business leaders from Africa and Asia, at the Smart Partnership Dialogue in Tanzania in June 2013. Key messages about the role standards can play as knowledge for socio-economic transformation were debated for an hour with heads of state. We also led sessions on standards and new technologies and standards and regulations. We've worked with the organizers (Commonwealth Partnership for Technology Management) for some three years, but this is the first time that standards have been on their global dialogue agenda.

We provide a Co-Chair for the Consumer Participation & Training Working Group of the ISO Consumer Policy Committee (COPOLCO). Members of our Consumer & Public Interest Network lead on nanotechnology, symbols and personal data. We're also leading a societal stakeholders group, looking at the needs of other stakeholders with regard to the European standardization system.

In October 2013 we supported the International Federation of Standards Users conference in London. BIS funding from 2012/2013 ensured free attendance for ten UK small businesses. High quality presentations, discussions and workshops helped to earn very positive feedback for the event.

### 3.4 UK engagement

Our Standards Forum, which was free to attend, took place in November 2013 and attracted 280 delegates (twice as many as usual). Speakers covered consumer involvement in standardization, the user perspective, the Technology Strategy Board and the Construction Products Directive (CPD) becoming a regulation.

## We continued extensive engagement with BIS on the Industrial Strategy and the Eight Great Technologies initiative and have been building contact with officials leading the various strands of work.

In April 2013 we organized a standards symposium at the Institute of Ergonomics and Human Factors annual conference in Cambridge. A plenary lecture from Dr Scott Steedman started the morning and was followed by five speakers on the use of ergonomics and standards in their work (e.g. medical devices, banking and the nuclear sector).

BSI and the United Kingdom Accreditation Service (UKAS) held a joint reception at the House of Lords in June 2013 that was attended by some 120 civil servants and BSI/UKAS staff. It provided a great networking opportunity, as well the chance to explain how standards can help deliver government policy.

We continued extensive engagement with BIS on the Industrial Strategy and the Eight Great Technologies initiative and have been building contact with officials leading the various strands of work.

We've also continued to place importance on our participation in the Innovation Infrastructure group of organizations, which focuses on how a more strategic approach to standards, accreditation, patents, metrology and other innovation support structures can deliver benefits to the UK.

### 3.5 Education

Our Education Development Manager and others continue to promote standardization in UK seats of learning. Recently he has managed a BIS Priority Areas for Standardization-funded research project benchmarking the teaching of standardization in UK higher education, as well as gathering important feedback from students, academic staff and employers (see list of Priority Areas projects, section 2.5). In partnership with other European standards bodies we've set up a project group to create education content that will be shared. Our

initial contribution will be case studies that shed light on good practice examples of standardization education in the UK.

We've also established a network to enable our people to deliver standards-themed lectures at UK universities and colleges and feedback has been extremely positive. We've been delivering lectures on BS 8888 to design students at De Montfort University in Leicester for three years. The standard brings together international standards that govern preparation of technical product specifications.

"The lectures have been enjoyable and highly informative. Students have learned a lot – even knowing they can search the BSI website for information about standards is very useful," comments Dr Eujin Pei, Senior Lecturer in Product and Furniture Design at De Montfort University. "In 2013 we invited students and staff from other departments. The lectures have been very well received."

In 2013 we provided material that was integrated in to the MSc Management (International Standards) course at Swansea University. We've already worked with Middlesex University, the University of Manchester, De Montfort University, Kingston University and Birmingham City University. We'd like more UK academic staff to join our Education Stakeholders Group and work with





us to benefit students, academic institutions, standardization and the UK economy.

We're assisting in the restructuring of the CEN/CENELEC Joint Working Group on Education about Standardization, to create a project-based group that will be better prepared to meet its objectives. And we're continuing to work on the steering committee of an EU-funded NEN (Dutch standards body)-led project to build an SME-focused e-learning platform for standardization.

### 3.6 International projects

Our International Projects team coordinates technical assistance and provides support for quality infrastructures in developing countries. Its role is to design, manage and implement projects to strengthen quality institutions worldwide.

While helping to improve fundamental market infrastructures throughout the world, projects also enhance the UK's influence worldwide. The improved infrastructures that result are often in fast-growing regions and our work helps to make markets more accessible and open to trade with the UK.



Below are some highlights of work carried out more recently by our International Projects team (a full project list is provided in Appendix 5.3).

We worked with the National Accreditation Agency of Ukraine (NAAU) on a two-year 'twinning' project that ended in October 2013. Twinning projects bring together public bodies and institutions in the EU and beyond to share best practice to enable reform. A key objective was to secure greater international recognition for NAAU's accreditation services and better align them with international standards.

Information and document management systems were improved, which will enhance NAAU's efficiency, while strengthening its capacity to accredit conformity assessment bodies for products falling under the EU New Approach Directives.



In 2013, work started on the Lebanon twinning project, which ended in summer 2014. The objective was to increase competitiveness of Lebanese products in international markets through conformity with international standards, while better protecting the health and safety of Lebanese consumers.

Our work included: producing gap analyses, marketing and action plans; reviewing existing legislation and technical regulations; training; developing quality manuals and procedures; technical support to laboratories; facilitating standards development and updating technical committee structures; and awareness raising. We've passed the midpoint of a five-year project working for the Chinese Government to support reform in line with the country's sustainable development objectives. A key goal is to improve China's framework for developing new and revising existing technical regulations, standards, conformity assessment, market surveillance and accreditation systems.

The improved infrastructures that result are often in fast-growing regions and our work helps to make markets more accessible and open to trade with the UK.

By 2020 China aims to become an “innovative society”, which is why its government has prioritized development of the nation’s product quality infrastructure to meet international standards.

In May 2013, we began work on a new EC-funded project for India’s Ministry of Commerce and Industry. It supports the Capacity Building Initiative for Trade Development, which seeks to strengthen India’s capacity to achieve economic growth, sustainable development and reduce poverty through better integration into global trade by increasing product safety and quality, reducing costs and impediments to trade.

In particular, the project aims to improve food safety and increase government agencies’ capacity for export certification, testing, accreditation, conformity assessment, risk management and safety/quality standards enforcement throughout the food export value chain. It also aims to improve technical regulations and standardization.

### 3.7 Committee member training

We deliver training courses for all those directly involved in the standards-making process. The courses cover a broad range of technical and interpersonal subjects that aid committee members, both new and established, in undertaking their roles and they are free to such experts.



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## 4. Other sources of funding

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We're contributing to international standards on sustainable community development, global city indicators and infrastructure metrics.

### 4.1 Smart Cities initiative

The Smart Cities of the future will use data capture and communication management technologies to deliver high quality services to citizens. Smart approaches to transport, utilities and waste management could transform the efficiency and sustainability of urban communities, significantly reducing service provision costs and carbon emissions.

With funding from the BIS Services Unit, we continue to work with stakeholders to develop Smart City standards. Our Smart Cities Initiative seeks to explain the role standards can play in accelerating the implementation of Smart Cities and develop a programme of standards to assure citizens that risks are being managed appropriately. Specific projects include:

**Terminology:** establishing a common terminology for Smart Cities to promote a shared understanding of concepts. PAS 180 Smart Cities – Vocabulary was published in February 2014.

**Smart City governance:** providing a decision-making framework for Smart City leaders and setting out how to deliver a Smart City project. PAS 181 Smart City framework - Guide to establishing strategies for smart cities and communities was published in February 2014.

#### Economic assessment and funding of Smart

**City initiatives:** A scoping workshop was held in October 2013 to set out principles for the economic assessment and funding of Smart City initiatives. Potential business models were covered, as was procurement. Numerous areas were identified for future standardization work.

**Interoperability:** To aid sharing of data between different agencies within a city, PAS 182 Smart City Data Concept Model is in progress, with publication planned for September 2014. An online tool for the PAS (Publicly Available Specification) is also being developed.

**Mapping the Smart City landscape:** One element of the programme involves mapping the current Smart City landscape across different standards bodies internationally and sharing best practice. A report published in February 2014 will influence international work in this area at CEN/CENELEC and IEC forums. CEN/CENELEC and IEC activities have been supported further with UK input at international meetings in January and February 2014.

**Leading internationally:** We're contributing to ISO standards on sustainable community development, global city indicators and infrastructure metrics.

**Promotion of current activities:** A BSI Smart Cities website has been created (<http://www.bsigroup.com/en-gb/smart-cities/>) as has a promotional document – *The Role of Standards in Smart Cities* – which is available on the website. An awareness-raising event for PAS 181 and PAS 180 was held on 26 February 2014.

**Smart City planning guidelines:** PD 8101, scheduled for publication in October 2014, will contain Smart City planning guidelines to explain how major new residential, retail and business developments can support the wider plans of a city in becoming smarter.

#### Smart City Overview:

Scheduled for publication in November 2014, PD 8100 will give an overview description of a Smart City, to provide the basis for communicating the benefits of Smart Cities to key decision-makers.





## How will the Smart Cities of the future be different?

- 1 Roads**  
Smart traffic systems will better regulate traffic flow. There will be less congestion and real-time traffic jam warnings will enable drivers to take alternative routes.
- 2 Vehicles**  
Hydrogen will power public buses, while on-street recharging points will support electric cars. Self-driving cars will be able to locate available parking spaces.
- 3 Transport**  
Soft transport options such as walking and cycling will be favoured. Public transport will be better integrated, ultra-efficient and sustainable. Passengers will be able to use their smartphones to pay for travel.
- 4 Buildings**  
Structures will be built to rigorous environmental standards and they will be super energy efficient, with carbon dioxide emissions minimized.
- 5 Street lights**  
Dynamically operated city lights will significantly reduce energy consumed.
- 6 Homes**  
It will be possible to operate air conditioning, heating, lighting and appliances remotely by mobile phone. Green meters will track daily energy consumption, enabling better control. Solid waste will be removed by a pipe network.
- 7 Rubbish**  
Smart bins on public streets will automatically notify waste removal service providers when they are full.
- 8 Water**  
Water consumption will be significantly more efficient. Grey water (i.e. waste from wash basins, showers and baths) will be recycled. Municipal authorities will be able to detect water leaks more quickly and easily.
- 9 Electricity**  
Consumer behavior data will be used by the grid to maximize the efficiency, reliability and sustainability of electricity production and distribution.
- 10 Shopping**  
Consumers will be able to use their smartphones to pay at shops, restaurants, cafés, etc. Information about special offers will be revealed by pointing smartphones at shops.
- 11 Health**  
Health-related services and information will be delivered via telecom technologies. Data about people's health will be generated by wireless sensors located in their homes.
- 12 Wifi**  
High-speed internet will be available in public places throughout the smart city. Public displays will communicate information about the weather, traffic, transport, health, tourism and entertainment.



## 4.2 Developing Standards in Emerging Technologies

In his 2012 report, *No stone unturned: in pursuit of growth*, former Deputy Prime Minister Lord Heseltine recommended that BSI, the Technology Strategy Board (TSB) and Research Councils UK work together to ensure that new standards are created earlier in the development of new technologies.

Standards play an important role in driving innovation and are seen as a useful alternative to regulation or legislation. Lord Heseltine was particularly keen to see if the UK could gain first-mover advantage by developing standards in new or emerging technology areas. To this end, work commenced in July 2013 to foster collaboration between BSI and the TSB to accelerate development of emerging technologies in four key areas – synthetic biology, cell therapies, offshore renewable energy (ORE) and assisted living.

Synthetic biology refers to the design and construction of biological parts, devices and systems. Cell therapies/regenerative medicine refers to replacing or regenerating human cells, tissues or organs to restore or establish normal function. A key challenge is to establish how standards can encourage innovation and advancement in both.

In partnership with and with funding from the TSB, we've been working with SynBiCite (an Innovation and Knowledge Centre based at Imperial College London) to develop a strategy for standards in synthetic biology to help create a digital biomanufacturing industry and accelerate the rate of commercial success using the technology.

We've also been working with the Cell Therapy Catapult, a London-based centre of excellence for regenerative medicine that was established by TSB in 2012. It was created to bolster the UK's position as a global leader in the development, delivery and commercialization of cell therapies.

The UK is already an ORE world leader, but to maximize the benefits of technological development pioneered here and fuel rapid market growth, knowledge must be codified. We're working with the ORE Catapult Centre and Carbon Trust to identify priority areas for standards development, mapping existing standards, consulting with industry experts on priority areas for future standardization and developing pilot codes of practice.

With people generally living longer, major changes to how long-term care is delivered are necessary and solutions will need to be found to enable older people to live as independently as possible. Standards are key to the deployment of assisted living technologies.

With other partners, we're participating in the TSB Long Term Care Revolution project, working to identify how standards can support new healthcare provision, ensuring that the UK takes a leading role in revolutionizing care provision. Standards development towards this end is gathering pace.

### 4.3 Support and commissioning from other HMG bodies

Below is a list of projects we carried out during the year for other government bodies.

Government department	Work	Status
BIS Retail, Services & Construction Unit	PAS 91 Construction related procurement – Prequalification questionnaires - revision	Completed
BIS Services Policy Unit	PAS 180 Smart Cities - Vocabulary	Completed
BIS Services Policy Unit	PAS 181 Specification for a decision-making framework for establishing a Smart City	Completed
BIS Services Policy Unit	PAS 182 Smart City concept model – Guide	Open
BIS Services Policy Unit	PD 8100 Smart Cities Overview	Open
BIS Services Policy Unit	PD 8101 Smart Cities Planning Guidelines	Open
Centre for the Protection of National Infrastructure (CPNI)	IWA Vehicle security barriers	Completed
Centre for the Protection of National Infrastructure (CPNI)	PAS 68 Impact test specifications for vehicle security barriers - revision	Completed
Centre for the Protection of National Infrastructure (CPNI)	PAS 69 Guidelines for the specification and installation of vehicle security barriers - revision	Completed
Centre for the Protection of National Infrastructure (CPNI)	PAS 170 Low energy impact test method for vehicle security barriers	Open
Centre for the Protection of National Infrastructure (CPNI)	PAS 300 Civilian armoured vehicles – Test method	Open
Department of Culture, Media and Sport (DCMS)	PAS 2017 Next generation access in business premises – Guide	Completed

<b>Government department</b>	<b>Work</b>	<b>Status</b>
Department of Energy and Climate Change (DECC)	PAS 2030 Edition 2 Improving the energy efficiency of existing buildings – Specification for installation process, process management and service provision - revision	Completed
Department of Energy and Climate Change (DECC)	PAS 51215 Specification for the competency of energy assessors	Open
Department for Environment, Food & Rural Affairs (DEFRA)	PAS 44 Official identification for cattle – Specification	Open
Department for Environment, Food & Rural Affairs (DEFRA)	PAS 66 Official identification ear tags for sheep and goats– Specification	Open
Department for Environment, Food & Rural Affairs (DEFRA)	PAS 96 Guide to the deterrence, detection and defeat of ideologically motivated and other forms of malicious attack on food and drink and their supply arrangements - revision	Open
Department of Health (DH)	PAS 5748 Specification for the planning, application and measurement of cleanliness services in hospitals - revision	Open
Environment Agency	PAS 1188 Flood protection products - revision	Open
Environment Agency	Fund BSI to run the secretariat of ISO/TC113/SC2 'Hydrometry - Notches, weirs and flumes'	Open
European Marine Energy Centre (EMEC)	Fund BSI to run the secretariat of IEC/TC114 'Wave Energy' (new agreement for July 2013 – July 2016)	Open
Greater London Authority (GLA)	PAS 2070 Specification for the assessment of greenhouse gas emissions of a city – Direct plus supply chain, and consumption-based methodologies	Completed
Home Office Science – Centre for Applied Science and Technology (CAST)	PAS 127 Non-aviation security screening guidance	Completed

Government department	Work	Status
HS2 Ltd	Guide to application of design standards for High Speed 2 - Phase 1: Mobilization	Completed
Identity & Passport Service (now renamed as HM Passport Office)	Biometrics: Monitor & support progress of the JTC1 SC37 XML projects & projects for the use of mobile biometrics for personalization and authentication	Completed
Technology Strategy Board (TSB)	Developing Standards in Emerging Technologies - two year programme	Open
Technology Strategy Board (TSB)	PAS 157 Raw materials selection in the design of human cell therapy manufacturing processes - Guide (first PAS output of above programme)	Open

## Case study

### High Speed Two

We've been working with High Speed Two Ltd (HS2), the company formed by the Government to develop the high-speed rail link between London and Birmingham and the north of England.

We're working on a consultation project that is part of HS2's Efficiency Challenge Programme. It seeks to enable better management of infrastructure design codes and standards to deliver efficiency and cost savings. Several new standards have been proposed, which industry believes will streamline design practices and lead to better use of existing design standards. Our initial research was focused on three areas: civil engineering, buildings and railway systems. Input came from designers, consultants and contractors from industry and professional bodies. We're working with our expert committees to revise or remedy codes considered obsolete, inefficient or duplicate. A Publicly Available Specification (PAS) is planned that will guide designers efficiently through the various design codes, standards and available methods for use on the HS2 project.



# 5. Appendices

## Appendix 5.1

### Committees supported by Standards Development funding

The table below lists non-commercially viable committees that were identified for funding in 2013/14. The work of these committees falls under the criteria for Standards Development funding.

Subject area	Technical committee reference	Committee title	Main BIS priority	Managed portfolio of standards	Active standards projects
Built Environment Design	CB/10	Design Advisory Committee	Innovation	1	0
Built Environment Design	CB/501	Flood risk & watercourses	Sustainability	2	1
Chemicals	CII/47	Pyrotechnic articles	Consumer protection	55	8
Chemicals	STI/10	Test methods for paints	UK competitiveness	166	25
Chemicals	STI/40	Thermal spraying and thermally sprayed coatings	Procurement	40	16
Construction	B/506	Chimneys	Regulation /Legislation	38	9
Construction	B/512	Ladders	Safety	9	4
Construction	B/519	Masonry and associated testing	Infrastructure	70	14
Construction	B/520	Glass and glazing in building	Safety	93	33
Construction	B/524	Precast concrete products	Infrastructure	48	1
Construction	B/542	Roofing and cladding products for discontinuous laying	Safety	46	8
Construction	B/553	Geotextiles and geomembranes	Procurement	73	35
Construction	B/555	Construction design, modelling and data exchange	Innovation	32	8
Construction	B/557	Construction products - Assessment of dangerous substances	Regulation /Legislation	8	11
Construction	B/558	Sustainability of construction works	Sustainability	12	6
Construction	B/564	Noise control on building sites	Safety	3	1
Construction	CB/-	Construction & Built Environment Sector Policy and Strategy Committee	Innovation	1	0
Construction	CB/101	Service Life Planning	Procurement	38	4
Construction	CB/30	Construction Products Advisory Committee	Regulation /Legislation	0	0
Construction	CB/506	Water reuse	Sustainability	4	4
Construction	FMW/1	Facilities management	Procurement	11	3
Construction	MHE/6	Hoists of builders' type	Safety	5	0
Construction	RHE/2	Ventilation for buildings, heating and hot water services	Sustainability	64	34
Consumer Goods	CPL/116	Safety of motor-operated electric tools	Safety	60	22
Consumer Goods	CPL/59	Performance of household electrical appliances	Consumer protection	61	32
Consumer Goods	CPL/72	Electrical control devices for household equipment and appliances	Consumer protection	24	10
Consumer Goods	CPW/172	Optics and Photonics	UK competitiveness	176	43
Consumer Goods	CW/217	Cosmetics	Consumer Protection	26	7

Subject area	Technical committee reference	Committee title	Main BIS priority	Managed portfolio of standards	Active standards projects
Consumer Goods	PAI/43	Graphic technology	Productivity	87	26
Consumer Goods	PKW/0	Packaging	Regulation /Legislation	368	35
Consumer Goods	STI/53	Specifications and test methods for jewellery and horology	Consumer Protection	45	18
<b>Electrical Machinery &amp; Components</b>	<b>PEL/2</b>	<b>Rotating electrical machinery</b>	<b>UK competitiveness</b>	<b>48</b>	<b>13</b>
Electronics	EPL/46	Cables, wires and waveguides, radio communication and signalling	UK competitiveness	230	60
Electronics	EPL/501	Electronic assembly technology & Printed Electronics	UK competitiveness	152	28
Energy	GEL/105	Fuel cell technologies	Innovation	13	6
Energy	GEL/111	Electrotechnical environment committee	Sustainability	18	9
Energy	GEL/8	Systems Aspects for Electrical Energy Supply	Infrastructure	11	4
Energy	GEL/82	Photovoltaic Energy Systems	Innovation	54	33
Energy	GSE/25	Gas Meters	Infrastructure	10	3
Energy	L/13	Smart Grid policy	Infrastructure	0	1
Energy	PEL/114	Marine energy - Wave, tidal and other water current converters	Sustainability	2	3
Energy	PEL/88	Wind turbines	Sustainability	22	9
Energy	PEL/894	Remote Meter Reading	Innovation	7	5
Energy	PTI/2	Liquid Fuels	Innovation	21	7
Energy	PTI/20	Sustainability of bioenergy	Sustainability	4	2
Energy	SEM/1	Energy Management	Sustainability	10	17
Environment/CSR	CPI/113	Hydrometry	UK competitiveness	58	17
Environment/CSR	CPI/30	Measurement of fluid flow in closed conduits	Infrastructure	62	13
Environment/CSR	EH/3	Water quality	Better regulation	285	56
Environment/CSR	EH/4	Soil quality	Sustainability	122	40
Environment/CSR	EH/5	Sludge characterization	Regulation /Legislation	31	3
Environment/CSR	EH/6	Effects of materials on water quality	Regulation /Legislation	27	14
Environment/CSR	EPL/29	Electroacoustics	Regulation /Legislation	57	14
Environment/CSR	H/-/4	Environmental testing programmes	Regulation /Legislation	13	0
Environment/CSR	RHE/25	Solar Heating	Sustainability	16	8
Environment/CSR	SDS/1	Sustainable development Co-ordination Committee	Sustainability	10	5
<b>Fire</b>	<b>FSH/0</b>	<b>Strategic Policy Group for Fire Standardization</b>	<b>Safety</b>	<b>0</b>	<b>0</b>
Fire	FSH/16	Hazards to life from fire	Safety	16	3
Fire	FSH/17	Fire brigade equipment	Procurement	41	8
Fire	FSH/18	Fixed fire fighting systems	Safety	65	20
Fire	FSH/21	Reaction to fire tests	Safety	45	15
Fire	FSH/22	Fire resistance tests	Safety	85	33
Fire	FSH/24	Fire safety engineering	Safety	28	13
Fire	FSH/25	Smoke, heat control systems and components	Safety	18	9
Fire	FSH/9	Fire terminology	Safety	3	1
Fire	GEL/89	Fire hazard testing	Safety	31	14
Health & Safety	FSM/1	Forensic Science Processes	Regulation /Legislation	0	1
Health & Safety	PH/2	Eye protection	Safety	25	4
Health & Safety	PH/3	Protective clothing	Safety	157	43
Health & Safety	PH/4	Respiratory protection	Safety	75	17

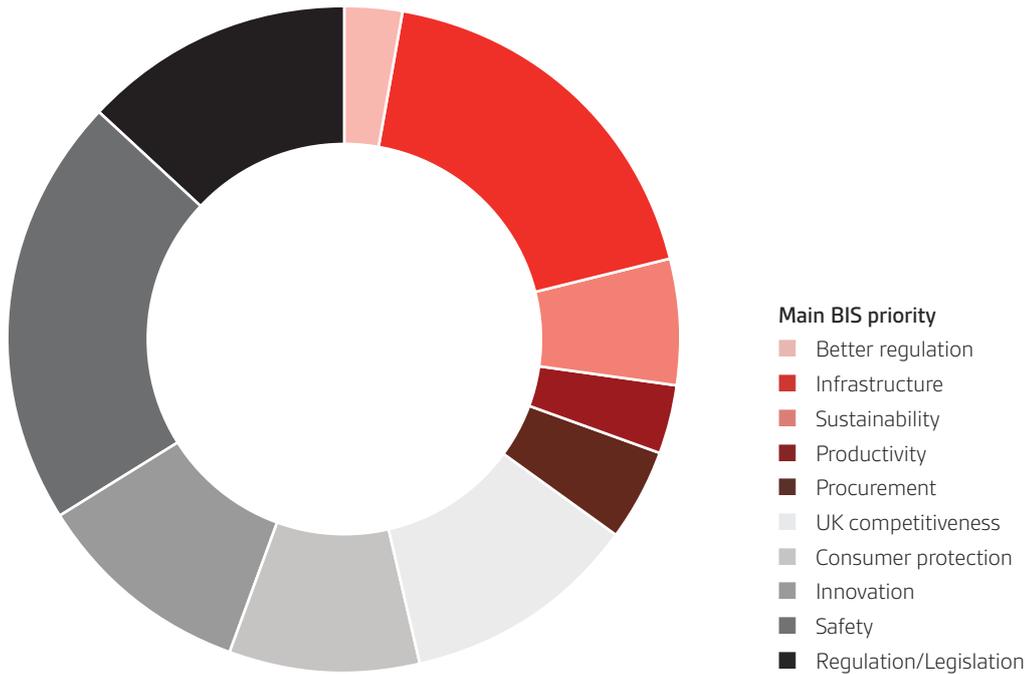
Subject area	Technical committee reference	Committee title	Main BIS priority	Managed portfolio of standards	Active standards projects
Health & Safety	PH/6	Head protection	Safety	31	6
Health & Safety	PH/7	Hearing protectors	Procurement	12	1
Health & Safety	PH/8	Graphical symbols	Safety	21	11
Health & Safety	PH/9	Applied ergonomics	Safety	123	19
<b>Healthcare</b>	<b>CH/100</b>	<b>Healthcare and medical equipment (European and International)</b>	<b>Safety</b>	<b>7</b>	<b>21</b>
Healthcare	CH/106	Dentistry	Consumer Protection	164	52
Healthcare	CH/121	Anaesthetic and respiratory equipment	Safety	85	39
Healthcare	CH/150	Implants for surgery	Procurement	139	37
Healthcare	CH/157	Mechanical contraceptives	Consumer Protection	17	8
Healthcare	CH/172	Ophthalmic optics	Safety	94	28
Healthcare	CH/173	Assistive products for persons with disability	Innovation	55	17
Healthcare	CH/205	Non-active medical devices	Safety	27	9
Healthcare	CH/239	Rescue systems	Procurement	11	5
Healthcare	EPL/87	Ultrasonics	Safety	27	3
Healthcare	RGM/1	Regenerative medicine	Innovation	1	0
ICT	AMT/-/2	Robots and robotic devices	Innovation	5	7
ICT	AMT/4	Industrial data and manufacturing interfaces	Procurement	49	15
ICT	EPL/278	Intelligent transport systems	Infrastructure	218	83
ICT	GEL/86	Fibre optics	Infrastructure	584	144
ICT	ICT/-	Information and communications technology co-ordination and strategy committee	Productivity	2	0
ICT	ICT/-/1	Information systems co-ordination	Infrastructure	267	34
ICT	ICT/-/6	ICT Accessibility Co-ordination	Consumer Protection	7	22
ICT	IST/31	Computer graphics, image processing and environmental data representation	Innovation	38	1
ICT	IST/34	Automatic identification and data capture techniques	Innovation	109	53
ICT	IST/37	Coding of picture, audio, multimedia and hypermedia information	UK competitiveness	43	35
ICT	IST/38	Distributed application platforms and services (DAPS)	Productivity	0	5
ICT	IST/43	Information technology for learning, education and training	Productivity	27	25
ICT	IST/44	Biometrics	Innovation	66	52
ICT	IST/46	Sustainability for, and by IT	Better regulation	0	5
ICT	IST/6	Data communications	Productivity	201	27
ICT	IST/70	Sensor Networks	Innovation	6	2
<b>Infrastructure</b>	<b>CB/50</b>	<b>Infrastructure</b>	<b>Infrastructure</b>	<b>0</b>	<b>0</b>
Materials	MI/2	Bio-based products	Innovation	0	6
Materials	NTI/1	Nanotechnologies	Innovation	34	30
Materials	PRI/10	Terminology for rubbers and plastics	Procurement	15	3
Materials	PRI/26	Burning behaviour of plastics and rubbers	Safety	25	3
Materials	PRI/42	Fibre reinforced thermosetting plastics and prepregs	UK competitiveness	195	9
Materials	PRI/89	Plastics recycling	Sustainability	9	2
Materials	PRI/90	Rubber and rubber products - Environmental aspects	Sustainability	1	0
Materials	TCI/100	Co-ordination of activities in textiles and clothing	Consumer protection	1	2
Materials	TCI/66	Apparel and interior textiles	Consumer protection	133	18

Subject area	Technical committee reference	Committee title	Main BIS priority	Managed portfolio of standards	Active standards projects
Materials	TCI/80	Chemical testing of textiles	Consumer protection	57	21
<b>Mechanical Machinery &amp; Components</b>	<b>GME/21</b>	<b>Mechanical vibration, shock and condition monitoring</b>	<b>Safety</b>	<b>156</b>	<b>28</b>
Mechanical Machinery & Components	GSE/22	Safety and control devices for gas and oil burners and gas burning appliances	Regulation /Legislation	29	8
Mechanical Machinery & Components	GSE/29	Gas-fired central heating boilers (domestic and non-domestic) and domestic gas-fired water heaters	Consumer Protection	21	5
Mechanical Machinery & Components	GSE/36	Independent gas-fired space heaters	Consumer protection	8	0
Mechanical Machinery & Components	MCE/6	Pumps and pump testing	Regulation /Legislation	45	6
Mechanical Machinery & Components	MTE/1	Machine tools	Safety	146	25
Mechanical Machinery & Components	PRI/66	Rubber and plastics tubing, hoses and hose assemblies	Safety	125	28
Mechanical Machinery & Components	PVE/3	Gas containers	Regulation /Legislation	118	45
Metrology	LBI/37	Particle characterization including sieving	Safety	62	10
Quality	SS/2	Statistical Interpretation of Data	Productivity	10	0
Quality	SS/6	Precision of test methods	Regulation /Legislation	21	1
Safety	CW/1	Safety of child use and child care products	Safety	41	4
Safety	CW/2	Safety of child use and child care horizontal issues	Safety	0	0
Safety	SW/136	Sports, playground and other recreational equipment	Consumer protection	129	48
Security	GW/2	Secure storage of cash, valuables and data media	Consumer protection	10	0
Security	SSM/1	Societal security management	Innovation	9	12
Services	IMS/1	Innovation management	Innovation	6	5
Services	SVS/2	Tourism services	Consumer protection	20	4
Services	SVS/4	Postal services	Regulation /Legislation	30	5
Transport	AUE/-/1	International work on road vehicles	Safety	1	1
Transport	AUE/11	Braking systems	Safety	26	0
Transport	AUE/12	Safety related to occupants	Safety	19	9
Transport	AUE/14	Motor cycles and mopeds	Safety	39	12
Transport	AUE/16	Electrical and electronic equipment	Regulation /Legislation	153	54
Transport	AUE/17	Vehicle security	Productivity	10	0
Transport	AUE/18	Tanks for the transport of dangerous goods	Safety	29	10
Transport	AUE/20	Vehicle on-board diagnostics, repair and maintenance information	Safety	2	5
Transport	AUE/3	Renovation of tyres for motor vehicles	Safety	2	0
Transport	AUE/4	Tyres and wheels for motor vehicles	Regulation /Legislation	73	21
Transport	AUE/7	Automobile occupant restraint systems	Safety	29	13
Transport	GME/33	Small craft	Safety	76	16
Transport	PEL/69	Electric vehicles	Sustainability	36	21
Transport	SME/32	Ships and marine technology - Steering committee	Regulation /Legislation	206	47
<b>Welding</b>	<b>WEE/18</b>	<b>Gas welding and cutting appliances</b>	<b>Safety</b>	<b>28</b>	<b>5</b>
<b>Welding</b>	<b>WEE/40</b>	<b>Health and safety in welding</b>	<b>Safety</b>	<b>11</b>	<b>3</b>

## Appendix 5.2

### Outputs of committees supported by Standards Development funding

The chart below shows the 939 published standards from committees with a named programme manager, by main BIS priority. In addition to this 1,015 standards were published as a result of access to international standardization provided by the Committee Service Centre.



## Appendix 5.3

### Technical assistance provided to developing countries

Project title	Status	Funded by	Description
Further development of National Accreditation Agency of Ukraine capacities to European practices	Closed in year	EC	The purpose is to enable international recognition of the National Accreditation Agency of Ukraine in providing accreditation services in testing laboratories, calibration laboratories, management system certification bodies, product certification bodies, and inspection bodies.
Africa, Caribbean, Pacific Region (ACP) EDES Framework Contract	Closed in year	EC	The overall objective of EDES, an ACP-EU Programme, is to contribute to poverty alleviation through the integration of food products from ACP regions into international, and particularly European, trade flows. The specific objective is to support the development in ACP of risk-based food safety systems for exports in line with European, international and regional standards.

Project title	Status	Funded by	Description
Bosnia & Herzegovina (BiH)	Closed in year	EC	The purpose is to further develop the capacity of the market surveillance system in BiH (Market Surveillance Agency BiH and Inspectorates of Federation of BiH, Republika Srpska and Brčko District BiH) regarding its task to guarantee the safety and compliance of technical products in accordance with EU market surveillance good practice.
Technical Assistance: Programme for support in the production of seeds of basic grains for food security in Nicaragua (PAPSSAN)	Ongoing	EC	The aim is to develop the market for certified seeds, both at local level and nationally, supplying surplus of certified seeds produced in other territories to cover demand in other regions while improving food security. This will allow producers to buy fresh seed adapted to the conditions of their environment and at the lowest possible prices. The project will strengthen and build the capacity of small and medium producers in the areas of production, business development and processing, marketing, provision of infrastructure equipment and access to services. It will also provide support and equipment to cooperatives and other organizations through the financing of investments in equipment and infrastructures dedicated to the production, processing and marketing of seeds.
Technical assistance to the quality infrastructure and standards programme, Ministry of Tourism, Trade and Industry, Uganda	Ongoing	Swedish International Development Cooperation Agency	The objective is to strengthen the quality infrastructure and standards programme to improve the competitiveness of Uganda's products, processes and service delivery systems in domestic, regional and international markets.
Support to China's Sustainable Trade and Investment System	Ongoing	EC	The overall objective is to support China's economic, trade and investment reform in line with its sustainable development path. The purpose is to provide technical assistance to strengthen the design and implementation of trade and investment policy, legislation and regulation at central and provincial level. BSI and CEN are managing delivery of Component II: Quality Infrastructure/Technical Barriers to Trade, which aims to: <ol style="list-style-type: none"> <li>1. Improve the legislative and regulatory framework for developing new and revising old technical regulations, standards, conformity assessment, market surveillance and accreditation systems while strengthening compliance to standards and regulation and</li> <li>2. Build capacity to support China's quality infrastructure bodies, trade, sector and consumer associations including establishing and strengthening partnerships/cooperation with international bodies and counterparts.</li> </ol>

Project title	Status	Funded by	Description
<b>INOGATE Technical Secretariat and integrated programme in support of the Baku Initiative and the Eastern Partnership energy objective</b>	Ongoing	EC	The INOGATE Programme is an international energy cooperation programme between the EU and the partner countries of Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. The overall objective is to contribute to the progress of the INOGATE partner countries to achieve Baku Initiative and the Eastern Partnership objectives. The programme supports a reduction in dependency on fossil fuels and imports, improvement of the security of energy supply and climate change mitigation.
<b>Strengthening quality infrastructure in Rwanda</b>	Ongoing	<b>TradeMark East Africa (TMEA)</b>	The objectives of this project are to assist the institutional development of the Rwanda Bureau of Standards by offering strategic support, and to raise the awareness of the private sector of standards and increase its capacity building in this area.
<b>Twinning contract with Armenia: harmonization with EU standards and institution building of the State Inspectorate of Protection of Markets and Consumer Rights</b>	Ongoing	EC	The purpose of this twinning contract is to develop and enforce national market surveillance practices in line with internationally recognized best practices in the sector, with the aim of preparing the country for wider international agreements concerning the free movement of goods.
<b>Lebanon: Support to the Ministry of Economy &amp; Trade – Quality Unit</b>	Ongoing	EC	The overall objective of this twinning project is to increase the competitiveness of Lebanese products on international markets, through better conformity to national and international technical standards, and to improve the level of health and safety protection of Lebanese consumers, as well as protecting the environment.
<b>India Lot 1: Food Safety and SPS, Technical Regulations and Standardization, and Support to Post Clearance Audit (PCA) in Customs (2014-2017)</b>	Started in year	EC	We're leading this lot and contributing to the overall objective of the Capacity Building Initiative for Trade Development (CITD) to support India in strengthening its capacity to achieve economic growth and sustainable development through further integration into the global trading system. The aim is to achieve this by increasing the safety and quality of products, and by reducing costs and impediments to trade. The project addresses the need to enhance the capacity of India's trade-related regulatory institutions and enforcement systems to meet international standards and requirements and business needs, while supporting India's trade-related training institutions in strengthening their capacities.

Project title	Status	Funded by	Description
<b>Jordan: Capacity building for the Ministry of Industry and Trade within the Framework of the EU-Jordan ENP Action Plan</b>	Started in year	EC	This project, led by BSI, contributes to enhancing the institutional capacity of the Jordanian Ministry of Industry and Trade and Services (MITS) in dealing with trade and industry development in Jordan in light of the revised EU-Jordan Action Plan and is conducive to increased growth and job creation. The specific objective of the project is to strengthen the ability of various departments in MITS to address the economic challenges of Jordan in their respective fields of competence.
<b>Support for the development of a modern system of standardization and technical regulations in Azerbaijan</b>	Started in year	EC	The purpose of this twinning project is to support the State Committee for Standardization, Metrology and Patents of the Republic of Azerbaijan in the development of a standardization and regulatory system that complies with European requirements and meets requirements for implementation of the WTO Technical Barriers to Trade (TBT) Agreement.
<b>Support to modernization of Mongolia's standardization system</b>	Started in year	EC	We're lead partner on this EuropeAid project to assist Mongolia in developing its standardization infrastructure. The specific objective is to support the Mongolian government's initiative to adopt European principles, norms and standards relating to the free movement of goods through institutional capacity building. The project will provide technical assistance to the Mongolian authorities in modernizing and improving the Mongolian standardization system, notably through policy development, enacting legislative reform, standards setting and reinforcing the country's market surveillance and inspection regime. Such assistance will take the form of workshops, seminars, studies, and study assignments.
<b>Cambodia: Technical assistance to the EU-RGoC programme entitled 'Promotion of inclusive and sustainable growth in the agricultural sector: fisheries and livestock'</b>	Started in year	EC	The specific objective of this technical assistance project is to trigger sustainable and inclusive socio-economic growth in Cambodia's fisheries and livestock sub-sectors, through support by government, civil society and development partners in line with Programme-Based Approach principles. Results to be achieved include: capacity building in the Ministry of Agriculture, Forestry and Fisheries on overall sector planning, monitoring and evaluation; review and recommendations concerning the agricultural sector [and sub-sector] strategies and policies development; and reinforcement of the sector's policy dialogue and aid coordination platform.



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