

Report to the Department for Business, Energy and Industrial Strategy

Use of funding for the financial year 1 April 2017 to 31 March 2018

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1. Year highlights

£ 865k
Subscriptions

Enabling cost-effective access to standards for HMG departments and agencies

£ 1,990k
Standards Development

Keeping the UK at the forefront of standards development strategic to UK Government policies

£3.74m

£ 881k
Participation

Enabling UK committee members, consumers and public interest groups to influence standards development globally



159 technical committees supported by BEIS funding



2,029 international trips by committee members supported through AITS



1,742 standards published by UK committees including access to international standardization★



15 priority area projects funded

★ UK committees which receive a contribution to their running costs from BEIS

2. Introduction

As the UK National Standards Body (NSB), the British Standards Institution (BSI) represents UK economic and social interests at the European and international standards organizations, manages the national standards-making process, and supports organizations of all sizes and sectors by developing market-led and stakeholder-relevant standards through open public consultation and full stakeholder engagement. Active participation in global standards organizations ensures that standards used to demonstrate compliance with, e.g. European Directives are acceptable to UK stakeholders. The European Commission wrote:

*"Standards support market-based competition and help ensure the interoperability of complementary products and services. They reduce costs, improve safety, and enhance competition. Due to their role in protecting health, safety, security, and the environment, standards are important to the public. [Standards improves] regulation and enhances the competitiveness of European industry."*¹

BSI's relationship with Her Majesty's Government (HMG) is constituted through a memorandum of understanding (MoU)² which sets out its role as the NSB. BSI receives annual funding from HMG through the Department for Business, Energy and Industrial Strategy (BEIS); this funding is the focus of this report.

The overall allocation for the funding year 2017/178 was £3,736,000. Total expenditure on these activities exceeded the allocation. Our traditional grant-associated NSB activities were supplemented by Committee Member training, awareness-raising, higher education work and initiatives with other standards bodies that are developing a standards infrastructure.

Activities funded through the BEIS grant fall under in three main aims:

Influencing and leadership through subscriptions reduces the barriers to standards access for Government departments and its agencies and contributes to subscriptions to key international standardization organisations such as ISO and IEC. Funding provided by BEIS enables BSI to offer significant discounts to HMG departments when they purchase published standards.

¹ European Commission (2016) *Standardisation Policy* [Online]. Available at: https://ec.europa.eu/growth/single-market/european-standards/policy_en. {Accessed on 9 November 2018}

² DTI (2002) *Memorandum of Understanding between the United Kingdom Government and The British Standards Institution* [Online]. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/461415/Memorandum_of_Understanding.pdf {Accessed on 9 November 2018}

Supporting standards development by developing standards content that promotes key HMG policies, such as competitiveness, innovation, reduction of trade barriers, protection of consumer interests, environmental protection and procurement.

Supporting participation in standardization by enabling UK experts to participate in and influence European and international standards work by contributing towards their travel costs. This funding stream also supports continued consumer participation in standardization, enabling consumer and public interest groups to attend standards committee meetings, as well as recruitment and training, for our network of consumer representatives (Consumer and Public Interest Network, CPIN).

3. Summary of funding

BEIS Funding Letter 2017/18			
	Original funding allocation (£k)	Agreed movement of funds (£k)	Final funding allocation (£k)
Influencing and leadership through subscriptions			
BSI membership for HMG	365	0	365
Contribution to membership of ISO/IEC/CEN/CENELEC	500	0	500
TOTAL	865	0	865
Supporting standards development			
NSB activity & public interest standards development (incl. Staff Travel Fund)	1,186	0	1,186
Priority Areas Standards Development	750	0	750
Management fee	54	0	54
TOTAL	1,990	0	1,990
Supporting participation in standardization			
Assisted International Travel Scheme (AITS)	798	2.5	801
Support for consumer & public interest participation in standardization (CPITEF)	83	-2.5	80
TOTAL	881	0	881
TOTAL FUNDING			3,736

4. Influencing and leadership

4.1. Subscriptions: BSI membership for HMG

A central BSI membership agreement enables HMG departments and agencies cost-effective access to standards, and related advisory and information services.

During the funding year 2017/18, all HMG departments and agencies were given access to BSI member services and discounts, including:

- 50% off British Standards (including BS adopted by European and international standards)
- 50% off subscription products, including the online database British Standards Online (BSOL)
- 10% off international (ISO) and non-UK standards (e.g. DIN German standards)
- 50% off many of BSI's conferences on strategically important topics
- Credit when purchasing standards
- Private List Updating Service (i.e. validation and tracking of a standards list provided by the member, with new versions sent automatically when updated)
- BSI Knowledge Centre, including advanced subject searches and fast identification of international equivalents from more than 200 standards organizations in 23 countries
- Free postage and packing when buying hard copy standards

In addition, BEIS has access to BSOL as the lead HMG department working with BSI. This access makes using standards easier and more effective.

BSI continues to work with BEIS to promote standardization within government. As part of its membership, BSI's account managers work closely with several government departments to manage their key accounts. As a result, BSI has developed productive relationships with HMG contacts, ensuring individual department and agency requirements are met.

4.2. Subscriptions: Contribution to BSI membership of ISO/IEC/CEN/CENELEC

BEIS contributes to BSI's membership of crucial international and European standards organizations (ISO, IEC, CEN and CENELEC), which represent direct support to the standards infrastructure. This supports the UK's obligation under European Regulation to prevent the creation of new technical barriers to trade because BSI's membership enables the UK to be consistent with European standards policy.

Membership of these organizations also opens gateways for international discussions, enabling UK stakeholders to participate in the development of international and European standards, while enabling the UK to influence at a high level the policies and strategies of these organizations. Under European Regulation 1025/2012, EU member states must give notification of any new national standards being developed. This year, 67 new British Standards projects were reported to CEN/CENELEC.

BSI participates in all key policy development committees of the international and European standards organizations, including administrative boards and technical boards.

BSI also provides leadership by holding the secretariats of international standards committees in key areas for the UK such as environmental management systems, asset management, risk management, governance of organizations, health and safety, and vulnerable consumers. This year BSI took on the secretariat of a new international committee 'Privacy by Design' which was proposed by the global consumer community and continue to support conveners of high profile working groups in areas such as Building Information Modelling (BIM).

This year, BSI Director of Standards Dr Scott Steedman began the first of his two official terms as the Vice President (Policy) of ISO. In this role, Dr Steedman chaired the selection panel to appoint a new ISO Secretary General Sergio Mujica; chaired the ISO Strategy and Policy Committee; lead a successful review of the ISO Statutes and Rules of Procedure; and oversaw the development of a new regional engagement strategy for the organization.

4.3. Activities that support influencing and leadership at the UK and international level

CEN, CENELEC and ETSI

BSI hosted the annual meetings of CEN and CENELEC, including their Boards and General Assembly meetings in Edinburgh in June 2017. This was the first time the event had been hosted in the UK in this format. The event was a huge success and reinforced the valuable contribution of BSI to the CEN and CENELEC community. BSI also organized an additional day entitled 'Standards Matter' which provided an opportunity to host a range of events, workshops and talks from leading UK experts on a range of themes including: sustainability, emerging technologies, standards and regulation, consumer issues and trade. This 3-day event attracted over 250 attendees.

BSI continues to hold full membership of ETSI. This allows UK stakeholders who are not members to influence ETSI's work. In addition, BSI continues to perform the function of an ETSI National Standards Organization, adopting ETSI specifications as ENs.

In January 2018 BSI provided an annual report to CEN, CENELEC and ETSI under EU Regulation 1025/2012, covering transparency in national standards, use of ICT, and involvement of SMEs, environmental stakeholders, consumers and unions in national standards development committees.

UK engagement

BSI engaged widely across Government to communicate the role of standardization in support of Government policy objectives. BSI highlighted the role of standards in promoting trade, improving productivity, accelerating innovation, protecting consumers and providing an alternative to regulation. BSI has engaged with a number of stakeholders, which included BEIS, Department for Digital, Culture, Media & Sport, the Cabinet Office, Department for Environment, Food and Rural Affairs, Ministry for Housing, Communities and Local Government, Department for Exiting the European Union, and Department for International Trade. BSI was invited by the Better Regulation Executive to join its 'family of experts' and to contribute to the Food Standards Agency's 'Regulating our Future' programme.

BSI also further developed its interactions with industry, particularly through trade associations, who nominate experts to BSI committees. Engagement with cross-sector business organizations such as the CBI, the British Chambers of Commerce and EEF has also been developed.

BSI continued to organize Standards Forum events for BSI committee members and extended invitations to organization that nominate experts to committees. Events were held in Edinburgh (June 2017) and London (November 2017). The London event included the annual BSI Awards.

BSI and the United Kingdom Accreditation Service (UKAS) held a joint reception at the House of Lords in June 2017. The event was attended by more than 100 civil servants and BSI/UKAS staff and included a keynote speech by Lord Willetts.

BSI has continued its work through the year on Brexit, based on the position of continued full membership of the European Standards Organizations, CEN and CENELEC post-Brexit. This work has included secondments of BSI staff into Government departments, giving evidence to select committees, speaking at conferences and events, taking part in Brexit groups for key stakeholders and developing communications materials, such as a Brexit webinar and the BSI Brexit position statement (February 2018). BSI has also been working with the governance bodies of CEN and CENELEC to make the necessary adaptations to articles of association to reflect the UK's position outside the EU and EFTA. BSI has worked with UK government to secure a commitment to the single standard model in the UK, recognizing the continuing role of BSI as the National Standards Body, including its membership of the European Standards Organizations.

BSI continued to support the BEIS Working Group on Product Recalls and Safety. At the request of BEIS, BSI produced a Publicly Available Specification (PAS) to document good practice in preparing for and managing product recalls. PAS7100 "Consumer product safety related recalls and other corrective actions" was published in March 2018. The PAS was produced with two parts - Part I: Code of practice for business and Part II: Guidance for regulators.

Recognizing the importance of standards to Trading Standards Officers, BSI was pleased to agree a subscription with BEIS to enable market enforcement officers to access standards via British Standards Online (BSOL).

BSI continued to work with BEIS and Innovate UK to support the UK's Industrial Strategy and held a workshop in December 2017 with Innovate UK to discuss the role of standards in the Industrial Strategy Challenge Fund. Opportunities were subsequently pursued with individual challenge areas. BSI also continued to work closely with its 'quality infrastructure' and innovation partners, including UKAS, NPL, Innovate UK and the Catapult Centres.

BSI responded to numerous consultations, offering advice to Government and regulators on how standards can be used to support policy and regulatory objectives. Subjects covered included clinical services, artificial intelligence, information security, productivity, medical devices, internet safety, energy and carbon reporting, infrastructure, international trade and Brexit.

BSI worked with DFID to develop a Commonwealth Standards Network, to be officially launched by the British Prime Minister at the Commonwealth Business Forum, part of the Commonwealth Heads of Government Meeting in April 2018. The Commonwealth Standards network will build a community of National Standards Bodies (NSBs) and key stakeholders across the Commonwealth to share information and good practice to support the increased use of international standards to facilitate positive developmental and trade outcomes. The network will deliver an online portal, a framework of standards for implementation throughout the Commonwealth, training programmes for Overseas Development Assistance eligible NSBs to support build capacity and to empower them to play a stronger role in international standards development, and workshops with stakeholders and standards users to increase the viability and use of standards. The programme will further deliver three technical assistance programmes (one in Africa, one in the Pacific and one in the Caribbean).

Education

BSI's Education Development Manager continued to lead BSI's engagement to promote standardization to university postgraduates and early-career professionals. This included working with education partners to develop and deliver a range of learning activities.

BSI's engagement included supporting university teaching of standards through the growing 'guest talks' programme, the creation of a Student Research Programme, offering practical support to master-level students and their research projects, and Public Committee Meetings. BSI is developing plans to expand this work through, for example, collaboration with other European national standards bodies and UK business schools to produce materials and resources to engage management students on the role of standards in improving business performance.

BSI held its annual Young Engineering Professionals Conference at the Institute for Engineering and Technology, which was attended by delegates from universities and industries. The conference was hosted by BSI's Director of Standards Policy. As in previous years BSI confirmed the three UK representatives for the IEC Young Professionals Programme, held in October 2017. A similar event is planned for 2018.

International projects

Working with donor agencies, BSI's International Projects team delivered a range of projects to support standards and quality infrastructures in countries across the globe, including key trading partners, emerging economies and developing countries. While helping to improve fundamental market infrastructure throughout the world, the projects managed by the team also enhance the UK's influence worldwide. Fast growing regions are the target of many of these projects, making their markets more accessible to trade with the UK.

Committee member training

BSI delivers free training courses for those directly involved in the standards-making process. The courses cover a broad range of technical and interpersonal subjects that aid new and established committee members in undertaking their roles. Due to increased demand, the induction course now runs monthly. For UK committee members acting as Convenors in international standardization, we offer a one-to-one advisory service for those needing guidance and support, and we have co-hosted events with other standards organizations.

5. Support for standards development

This funding stream provides support for our standards development programme, including programme management (committee secretary) support for eligible BSI committees, access to international standardization provided for committees by our Committee Service Centre (CSC) and BSI staff travel in support of standards development through the Staff Travel Fund (STF).

5.1. General standards development programme update

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

- Government or public interest (i.e. regulation, consumer protection and safety);
- 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 which protects UK interests, exploits UK expertise and has significant impact on UK industry, including international secretariats).

Non-commercially viable UK committees are defined as committees in which the total value of the resources used exceeds the average annual income generated by sales of standards assigned to that committee. Staff resources are usually assigned to committees to support them and any corresponding BSI-run European or international secretariats.

BEIS funding contributed towards programme-management support for 159 UK standards technical committees in 2017/18. The Committees facilitated the publication of 811 new and updated standards. Their programmes overwhelmingly comprise European and international work, with a small proportion of national work. BSI acts as the gateway for UK parties to take part in international standardization, through the Committee Service Centre (CSC). A further 931 standards were published due to access, facilitated by the CSC, to international standardization.

Please refer to **Annex 1** for details of the committees supported.

A review is carried out each year to create a forecast of eligible committees. Its remit includes work programmes and HMG priorities supported by UK committees and their corresponding UK-held secretariats. 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 of the year, the actual resource employed during the funding year is determined and committees with a main HMG priority confirmed. The list of committees supported with a contribution from BEIS in the year is detailed at **Annex 1**.

5.2. Staff Travel Fund

An allowance for travel is available within the Support for standards development budget. It enables BSI staff to accompany UK committee members to meetings and provide guidance and support that enables UK 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 study: Cyber Security and Data Protection

Cybercrime costs an estimated £30 billion³ annually for UK businesses. In addition, the EU General Data Protection Regulation and the UK Data Protection Act 2018 came into effect on May 2018. Therefore, it is timely and important that the UK continues to lead the way in information security through standardization at the international level, to ensure that the UK business complies with regulation and saves in costs. Standards have an important role in information security: they can support organizations in managing and protecting their information assets, as well as compliance with relevant laws and regulations.

The Staff Travel Fund (STF) was used for a BSI staff member to support UK committee members at relevant international standards meetings focused on information security, data protection and safeguarding against cybercrime. Jaskirat Sahota, a Lead Programme Manager for BSI, used the STF to attend the first CEN/CLC/JTC 13 'Cybersecurity and Data Protection' meetings in Brussels and the ISO/IEC JTC 1/SC 27 'IT Security Techniques' Working Group and Plenary meetings in Wuhan, China.

BSI's attendance at these meetings was crucial to maintain a coordinated oversight of all national, international and future European work in this area. Additionally, Jaskirat provided guidance to technical experts to ensure the UK maximizes its influence, through her knowledge of standardization directives and policies.

Through participation at the international level, BSI enables the UK to lead on ISO committees, and there are many UK committee members in high profile roles on these committees. Participation also facilitates the development of the UK's standards development strategy.

³ Innovate UK (2018) *Essential tips for cyber security* [Online]. Available at: <https://innovateuk.blog.gov.uk/2018/03/05/essential-tips-for-cyber-security/> {Accessed on 9 November 2018}

5.3. Priority Areas standards development programme

The Priority Areas fund provides for several individual projects per year - a varied programme of standardization activity that supports policy priorities and the innovation agenda, ranging from standards strategy and delivery work to awareness-raising activities. All 2017/18 project proposals put forward – including those that proposed funding for a repeated intervention – went through an investment case process and received sponsorship by a representative of a relevant government department.

2017/18 Priority Area Projects	
INN17-01	Priority Areas management
INN17-02	Priority Areas committee support
INN17-03	Standards and regulations in the context of Brexit
INN17-04	Virtual Reality/Augmented Reality
INN17-05	Taxonomy for resilience standards
INN17-06	Graphene - standards scoping/community building
INN17-07	Patient data governance
INN17-08	Flood resilient measures
INN17-09	Supply chain innovation
INN17-10	Energy Innovation (EI)
INN17-11	Offsite Construction

An additional four projects were funded using reallocated funds:

Priority Area Projects - additional	
INN17-12	Procurement in the Built Environment supply chain
INN17-13	Longer term UK export opportunities
INN17-14	Procurement - trust test of supplier
INN14-25	Systems thinking

In detail: INN17-04 Virtual Reality/Augmented Reality

Virtual/Augmented Reality (VR/AR) is an emerging area gaining global traction where the UK sees there is a perspective to develop niche areas of expertise. There are clear challenges emerging around health and safety, terminology, acceptance in industrial sectors, etc. At present there are no specific standards that exist for Virtual/Augmented Reality, but there are some relevant standards activities planned, including standardisation internationally of media formats. Given that this is a rapidly emerging area BSI believes that there is a need for further work to map out the landscape and develop a standards roadmap applicable to circumstances in the UK, that will meet the needs of UK stakeholders and feed into the needs for national and/or international standards.

This project aimed to determine what the key areas requiring standardisation are and who the key players are that BSI needs to engage with. The results of the research were presented to BSI on 24th January and a report released to the public at the end of March: <https://www.bsigroup.com/en-GB/about-bsi/media-centre/press-releases/2018/march/uks-virtual-reality-tech-sector-needs-industry-agreed-standards-in-order-to-take-off1/>.

Next steps:

- *Develop thinking in standards development from a corporate perspective (e.g. with AREA- Augmented Reality for Enterprise Alliance)*
- *Take forward results with Innovate UK as part of the Industrial Strategy Challenger Fund on Audience of the Future*

Support for standards development: spend summary			
Committee focus area⁴	Number of eligible committees	Days worked Apr 2017-Mar 2018	Funding requirement⁵
Government or public interest Regulation, consumer protection, safety	79	1,403	£787k
Priority Areas⁶ Project programme			£281k
Innovation, Procurement, Better Regulation, Sustainability, Infrastructure	65	1,922	£1,078k
NSB international work programme Committee Service Centre (CSC)	372	2,742	£1,538k
Specific/urgent industry standardization Productivity, UK competitiveness	15	253	£142k
Total	531	6,320	£3,826k

⁴ The total cost and days worked are assigned to one category only, although some committees are eligible in more than one.

⁵ The full cost of the support in the areas shown exceeds funding provided, with BSI covering the shortfall.

⁶ Funding applied for Priority Areas projects relates to activity delivered in the year.

6. Support for participation in standardization

6.1. Assisted International Travel Scheme (AITS)

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 updated. Without this assistance many experts and delegates would not be able to participate.

In 2017/18, AITS funding of £801k was awarded. The scheme supported 2,029 UK committee members attending international meetings in various roles throughout the funding year.

The fund is primarily used by SMEs, as SME access to international standardization meetings was identified as a government priority. Although this funding is crucial for smaller businesses that lack the resources to attend, it also allows technical staff within larger companies to justify travel costs and time away from their employers.

Case studies: Electrical infrastructure products/systems & domestic product safety



Organizations, trade associations and SMEs aren't often able to attend standards meetings held internationally without support of the AITS fund, due to lack of capacity or the travel budget restrictions. The AITS fund enables the UK to influence standards development at the European and International level, supporting the attendance of small business and associations.

Raj Vagdia is the Technical Manager for BEAMA, which is the leading trade association representing electrical infrastructure products and systems. BEAMA works with stakeholders in the UK and in Europe to ensure safety standards are developed and maintained, in order to instil confidence in UK customers. BEAMA is ranked as the top trade association providing expertise to BSI's committees. Raj is a member of several BSI committees including PEL/23 Electrical Accessories, PEL/213 Cable Management and L/1 Electrotechnical Sector Policy and Strategy Committee. Raj uses AITS funding to contribute to the costs of his travel when he represents the UK at numerous CENELEC and IEC Technical Committees, sub-committees, maintenance teams and working groups. Raj is also the serving Secretary to cable management systems committees: IEC/SC23A and CLC/TC213.

Standardisation is seen increasingly as a bridge between research, innovation and the market. Participation in standardization by using the AITS scheme, Raj states, "ensures the UK has a strong voice in international standardisation and the voice of SMEs is not ignored." AITS funding also ensures that UK committee members are kept informed of developments at the international level, and small manufacturers can make timely changes to their products.

Barany Sothirajah is the Technical Manager for the Association of Manufacturers of Domestic Appliances (AMDEA); the UK trade association made up of 35+ members representing manufacturers of small and large domestic appliances. AMDEA supports the UK domestic appliance industry on all crucial stages of development, manufacture, marketing, service and product disposal. AMDEA works closely with number of partners, including the UK government, on relevant regulations that affect the sector. Barany benefits from AITS funding contribution to his travel costs when he represents the UK at number of CENELEC and IEC Technical Committees, sub-committees and working groups; and is a member of BSI committee CPL/59 and GEL/111 (which corresponds to the IEC TC 59X and IEC TC 111) and participates in CENELEC/TC 59X and SC 59F. Barany also plays an important role as secretary for IEC/SC 59F/WG 4, provides consistency in which topics are discussed at UK standards meetings.

Barany says that reduced attendance at international standards meetings would severely impact the UK's influence, not just at the SME level. He notes that sometimes AMDEA is the only representative at IEC standards meetings, which means it feels responsible for "protecting the interests of the whole of the UK". Similarly, Raj comments that without AITS funding, SME participation wouldn't be possible, and in some cases, there would be no UK participation at international standards meetings.

6.2. Consumer & Public Interest Travel/Expenses Fund (CPITEF)

The mission of BSI's Consumer and Public Interest Network (CPIN) is to deliver better British Standards through an engagement and awareness-raising network and through the representation of consumer and public interest views in BSI's standards committees by consumer representatives in standards, from the BSI network and representatives from other consumer and public interest organizations.

Activities that receive CPITEF funding include:

- Attendance of consumer representatives at UK and international standardization meetings
- Consumer & Public Interest Network (CPIN) meetings
- Training of Consumer Representatives
- Awareness-raising publications / background research projects, to develop a robust evidence base

CPIN priorities

CPIN carried out a review of its priorities by appointing a consultant to research the priority areas of other consumer organizations in the UK and to map them against current CPIN priorities. This work confirmed the CPIN priority areas: children's interests, inclusivity, data/privacy, services, sustainability, wellbeing.

CPIN technical work

Throughout the year CPI Reps have been involved in 155 UK and international standards technical committee meetings and working groups. Areas that have benefited from consumer involvement include:

- Children's interests: Children's luminaires, finger traps, toy safety, fancy dress costumes
 - Inclusivity: Accessibility of electrical appliances, use of electrical appliances by vulnerable persons
 - Data/privacy: Identification cards, payment cards and personal identification, payment methods, protecting consumers from financial harm
 - Services: complaints handling, customer services, diving services, mobile payments, tattooing, volunteer tourism
 - Sustainability: Environmental management, sanitary appliances
 - Wellbeing - product safety and behavioural risk: e-cigarettes, fire extinguishers, ladders, lasers, textiles, safety signs, nanotechnology, respiratory equipment, mechanical safety, AV safety, robots, power charging systems, doors and windows, societal security
-

Case study: privacy by design

CPIN actively works to promote the development of standards to address consumer detriment and provide consumer protection.

An initiative led by CPIN led to work to develop ISO 23485 'Consumer protection: privacy by design for consumer goods and services.' Technical Committee (TC) ISO/PC 317 will develop the standard, which has participants from 13 countries; the UK (BSI) is the TC secretariat. CPIN plans to participate in developing the standard and a consumer task group will be led by the CPIN Digital Coordinator to feed in the UK consumer position. To inform and coordinate consumer organizations and government about the standard, a roundtable was held at BSI, in which BEIS attended.

The standard aims to support companies to comply with regulation (e.g. GDPR, DPA 2018) and to avoid data breaches, which can have devastating effects on consumer confidence. With CPIN involvement representing consumer interests, the consumer will be at the heart of the design process and enable them to take control over the use of their data. The standard also aims to address cybersecurity of consumer products for us in our homes, right from the design stage.

The impact of the standard will be wide ranging, particularly for building consumer trust in new and innovative technologies such as smart homes, connected cars, and smart watches.

Events attended and organized

Several meetings were organized/attended by CPIN members and the BSI CPI team during the year:

- In June one BSI staff member and two CPIN members attended the ISO and ISO Consumer Policy Committee (COPOLCO) Joint Services Workshop and ISO COPOLCO Working Group and plenary meetings.
- BSI staff members attended the Chartered Trading Standards Institute (CTSI) Conference in June. This included a BSI stand and a session on standards and Brexit.

- BSI exhibited at the Electrical Safety First Product Safety Conference in November presenting work of CPIN and recruiting new Reps.
- BSI sponsored and attended the National Consumer Federation (NCF) Consumer Congress titled 'The best Brexit for consumers'. BSI took part in a panel on the impact of Brexit on consumers.
- A BSI stand was manned at the Citizens Advice conference by CPI team members.
- The CPI team organized summer and winter all members' CPIN meetings on the themes of 'Consumers and innovation – Responding to Challenges' and 'Sustainability' respectively.

Training for Consumer Reps

Two face-to-face training sessions on representing the consumer voice in standards were organized and facilitated by the CPI team and experienced consumer trainers.

Changes to BSI CPIN

Following the doubling of resources available to BSI's CPI Team in early 2017, a thorough review of CPIN and how it delivers improvements to British Standards through consumer representation was delivered. The CPI team has since worked on a roll-out of new practices and a recruitment drive. It has also reinvigorated the Consumer and Public Interest Strategic Advisory Committee, which reports to BSI's SPSC, and has run *ad hoc* working groups on key and upcoming consumer issues, such as white goods, services and robotics.

7. Annexes

ANNEX 1: BSI standards development committees

Technical committees are responsible for creating and maintaining our standards across a broad portfolio of sectors, demonstrated in Figure 3, including construction, agriculture and food, ICT and transport. Figures 1 demonstrates how the standards published are split between government priority areas and Figure 2 reveals that 50% of projects published are new documents.

Published projects by main government priority

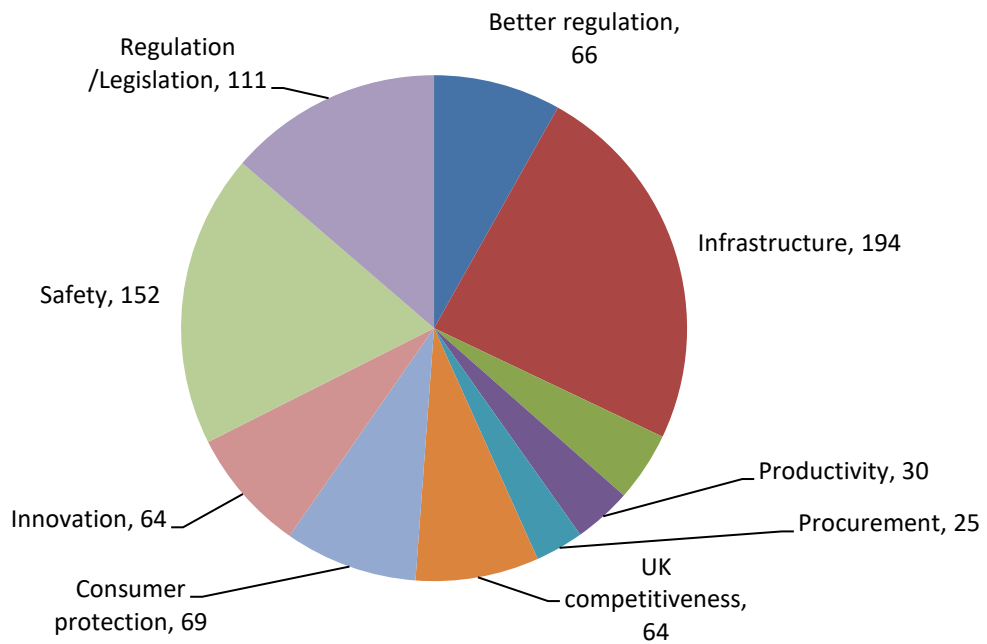


Figure 1: Projects published against the main government priority areas.
 Nb. Better regulation: helping the government agenda towards better regulation; Regulation/Legislation: supporting UK regulation and legislation

Published projects by project type

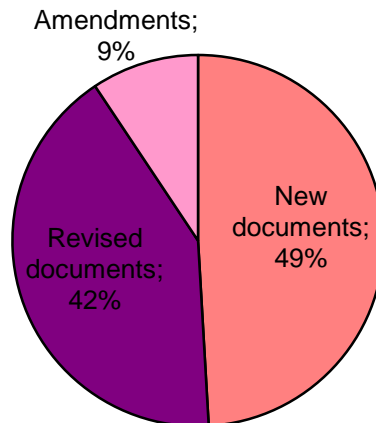


Figure 2: Types of projects published, either new, amended or revised.

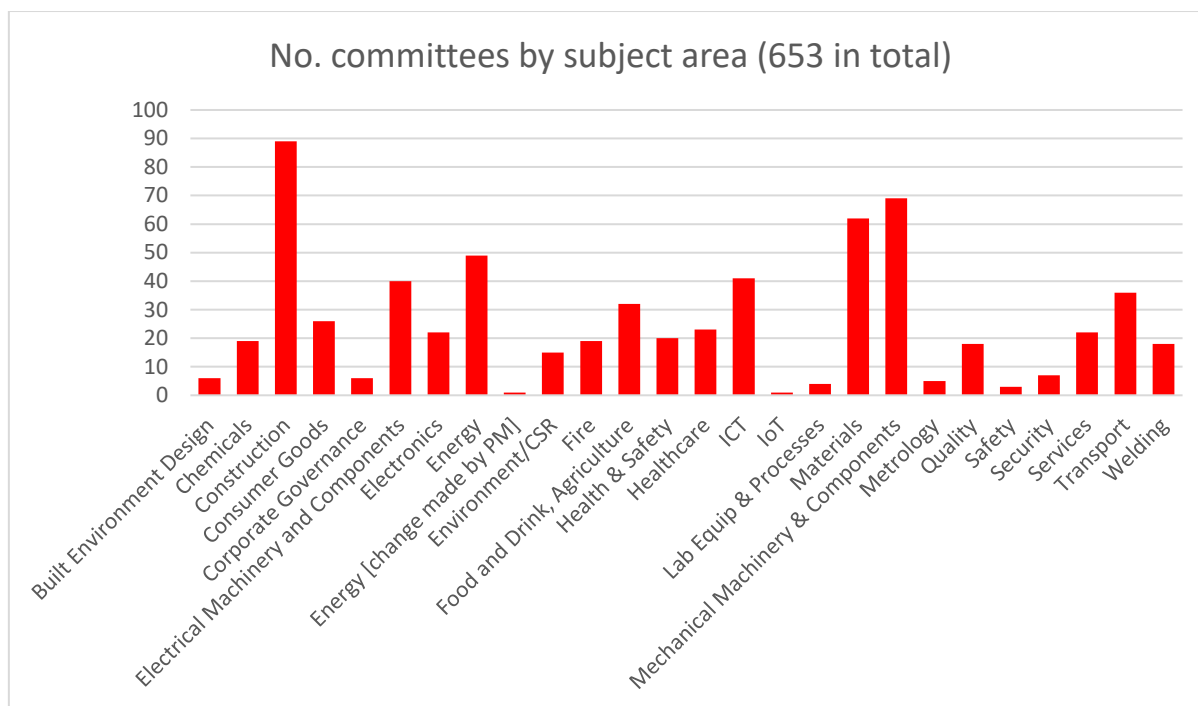


Figure 3: Number of committees broken down into subject area categories.

To search for individual committees or committees by subject area, refer to:

<https://standardsdevelopment.bsigroup.com/>

The table below lists the BSI standards development committees that received a funding contribution through the BEIS grant money in 2017/18. Committees are grouped by subject area. BEIS funding contributes towards committees running costs when that committee is deemed non-commercially viable but supports HMG priorities.

Table 1: Standards development committees that are supported by a contribution by BEIS. There are 159 committees in total.

Main subject area	Technical Committee reference and title	BEIS funding category
Built Environment Design	CB/501 - Flood risk & watercourses	Infrastructure
Chemicals	CII/47 - Pyrotechnic articles	Consumer protection
Chemicals	CII/62 - Treatment of water for boilers	Safety
Chemicals	STI/10 - Test methods for paints	UK competitiveness
Chemicals	STI/28 - Paint systems for non-metallic substrates	Consumer Protection
Chemicals	STI/33 - Electrodeposited and related coatings	Procurement
Chemicals	STI/36 - Vitreous enamel coatings	UK competitiveness
Chemicals	STI/40 - Thermal spraying and thermally sprayed coatings	Procurement
Construction	B/209 - General building codes	Better regulation
Construction	B/506 - Chimneys	Regulation /Legislation
Construction	B/512 - Ladders	Consumer protection
Construction	B/513 - Construction equipment and plant and site safety	Safety
Construction	B/519 - Masonry and associated testing	Regulation /Legislation
Construction	B/520 - Glass and glazing in building	Safety
Construction	B/524 - Precast concrete products	Infrastructure

Main subject area	Technical Committee reference and title	BEIS funding category
Construction	B/540 - Energy performance of materials components and buildings	Better regulation
Construction	B/555 - Construction design, modelling and data exchange	Innovation
Construction	B/557 - Construction products - Assessment of dangerous substances	Regulation /Legislation
Construction	B/558 - Sustainability of construction works	Sustainability
Construction	CB/- - Construction & Built Environment Sector Policy and Strategy Committee	Innovation
Construction	FMW/1 - Facilities management	Procurement
Construction	RHE/2 - Ventilation for buildings, heating and hot water services	Better regulation
Construction	CB/30 - Construction Products Advisory Committee	Regulation /Legislation
Construction	CB/20 - Structures advisory committee	Innovation
Construction	CB/70 - Facilities management advisory committee	Procurement
Consumer Goods	CPL/116 - Safety of motor-operated electric tools	Safety
Consumer Goods	CPL/59 - Performance of household electrical appliances	Regulation /Legislation
Consumer Goods	CPL/61 - Safety of household and similar electrical appliances	Consumer protection
Consumer Goods	CPL/72 - Electrical control devices for household equipment and appliances	Consumer protection
Consumer Goods	CPW/172 - Optics and Photonics	UK competitiveness
Consumer Goods	PAI/43 - Graphic technology	Productivity
Consumer Goods	PKW/0 - Packaging	Regulation /Legislation
Corporate Governance	G/1 - Governance	Better regulation
Corporate Governance	HCS/1 - Human Capital	Innovation
Corporate Governance	RM/1 - Risk management	Better regulation
Electrical Machinery and Components	EPL/80 - Maritime navigation and radiocommunication equipment and systems	Safety
Electrical Machinery and Components	PEL/14 - Power transformers	Infrastructure
Electrical Machinery and Components	PEL/2 - Rotating electrical machinery	UK competitiveness
Electrical Machinery and Components	PEL/78 - Tools for live working	Safety
Electronics	AMT/9 - Printed Electronics	Innovation
Electronics	EPL/278 - Intelligent transport systems	Infrastructure
Energy	CPL/35 - Primary cells	Sustainability
Energy	GEL/105 - Fuel cell technologies	Innovation
Energy	GEL/8 - Systems Aspects for Electrical Energy Supply	Infrastructure
Energy	GSE/25 - Gas Meters	Infrastructure
Energy	L/13 - Smart Energy Systems coordination group	Infrastructure
Energy	NCE/2 - Radiation protection and measurement	Infrastructure
Energy	NCE/8 - Instrumentation, Control & Electrical Systems of Nuclear Facilities	Infrastructure

Main subject area	Technical Committee reference and title	BEIS funding category
Energy	PEL/114 - Marine energy - Wave, tidal and other water current converters	Infrastructure
Energy	PEL/13 - Electricity Meters	Infrastructure
Energy	PEL/57 - Power systems management and associated information exchange	Infrastructure
Energy	PEL/88 - Wind turbines	Sustainability
Energy	PSE/265 - Carbon Capture Transportation and Storage	Sustainability
Energy	PTI/12 - Petroleum Measurement and Sampling	Regulation /Legislation
Energy	PTI/15 - Natural Gas and Gas Analysis	Sustainability
Energy	PTI/2 - Liquid Fuels	Consumer Protection
Energy	PTI/20 - Sustainability of bioenergy	Sustainability
Energy	PVE/15 - Storage Tanks for the Petroleum Industry	Consumer protection
Energy	SMG/1 - Smart Meter Group	Infrastructure
Energy	ESL/120 - Electrical Energy Storage	Infrastructure
Environment/CSR	EH/3 - Water quality	Better regulation
Environment/CSR	EH/4 - Soil quality	Regulation /Legislation
Environment/CSR	EH/5 - Sludge characterization	Regulation /Legislation
Environment/CSR	RHE/25 - Solar Heating	Sustainability
Environment/CSR	SDS/1 - Organizational change in sustainable development	Sustainability
Environment/CSR	SDS/2 - Smart and sustainable cities and communities	Innovation
Fire	FSH/0 - Strategic Policy Group for Fire Standardization	Safety
Fire	FSH/16 - Hazards to life from fire	Safety
Fire	FSH/17 - Fire & Rescue Service Equipment	Procurement
Fire	FSH/18 - Fixed fire fighting systems	Safety
Fire	FSH/21 - Reaction to fire tests	Safety
Fire	FSH/22 - Fire resistance tests	Safety
Fire	FSH/24 - Fire safety engineering	Safety
Fire	FSH/25 - Smoke, heat control systems and components	Safety
Fire	GEL/89 - Fire hazard testing	Safety
Fire	PH/14 - Firefighters' personal protective equipment	Safety
Fire	PH/4 - Respiratory protection	Safety
Food and Drink, Agriculture	AW/20 - Topsoil, other growing media and turf	Regulation /Legislation
Food and Drink, Agriculture	AW/415 - Sustainable and traceable cocoa	Sustainability
Health & Safety	FSM/1 - Forensic Science Processes	Regulation /Legislation
Health & Safety	PH/2 - Eye protection	Safety
Health & Safety	PH/6 - Head protection	Safety
Health & Safety	PH/8 - Graphical symbols	Consumer protection
Health & Safety	PH/9 - Applied ergonomics	Innovation
Health & Safety	RTS/1 - ISO 39001 Road Traffic Safety Management systems	Safety
Health & Safety	SME/32 - Ships and marine technology - Steering committee	Regulation /Legislation
Healthcare	CH/100 - Healthcare and Medical Equipment	Safety
Healthcare	CH/121 - Anaesthetic and respiratory equipment	Safety
Healthcare	CH/150 - Implants for surgery	Safety
Healthcare	CH/157 - Mechanical contraceptives	Consumer Protection
Healthcare	CH/172 - Ophthalmic optics	Safety
Healthcare	CH/173 - Assistive products for persons with disability	Consumer Protection

Main subject area	Technical Committee reference and title	BEIS funding category
Healthcare	CH/239 - Rescue systems	Regulation /Legislation
Healthcare	CH/403 - Aesthetic Surgery and Aesthetic Non-Surgical Medical Services	Safety
Healthcare	CH/437 - Electronic Cigarettes & E-liquids	Consumer protection
Healthcare	CH/440 - Adult social care	Safety
Healthcare	RGM/1 - Regenerative medicine	Innovation
ICT	AMT/10 - Robotics	Innovation
ICT	AMT/4 - Industrial data and manufacturing interfaces	Procurement
ICT	DLT/1 - Blockchain and Distributed Ledger Technology	Innovation
ICT	ICT/-/1 - Information systems co-ordination	Infrastructure
ICT	ICT/-/6 - ICT Accessibility	Consumer Protection
ICT	IST/34 - Automatic identification and data capture techniques	Innovation
ICT	IST/37 - Coding of picture, audio, multimedia and hypermedia information	UK competitiveness
ICT	IST/38 - Cloud Computing and Distributed Platforms	Infrastructure
ICT	IST/44 - Biometrics	Innovation
ICT	IST/47 - Electronic Supply Chain	Regulation /Legislation
ICT	IST/6 - Data communications	Productivity
ICT	IST/46 - Sustainability for, and by IT	Better regulation
IoT	IOT/1 - Internet of Things	Infrastructure
Materials	ISE/100 - Steel, General Issues	Procurement
Materials	MI/2 - Bio-based products	Innovation
Materials	NTI/1 - Nanotechnologies	Innovation
Materials	PRI/-/1 - GB Co-ordination for International work on plastics standards	UK competitiveness
Materials	PRI/-/2 - GB Co-ordination for International work on rubber standards	UK competitiveness
Materials	PRI/26 - Burning behaviour of plastics and rubbers	Safety
Materials	PRI/42 - Fibre reinforced thermosetting plastics and prepregs	UK competitiveness
Materials	PRI/89 - Plastics - Environmental Aspects	Sustainability
Materials	PRI/90 - Rubber and rubber products - Environmental aspects	Sustainability
Materials	TCI/66 - Apparel and interior textiles	Consumer protection
Materials	WEE/3 - Welding of thermoplastic moulded components	Innovation
Mechanical Machinery & Components	GSE/22 - Safety and control devices for gas and oil burners and gas burning appliances	Safety
Mechanical Machinery & Components	GSE/29 - Gas-fired central heating boilers (domestic and non-domestic) and domestic gas-fired water heaters	Consumer Protection
Mechanical Machinery & Components	GSE/35 - Gas cooking appliances (domestic)	Consumer Protection
Mechanical Machinery & Components	GSE/36 - Independent gas-fired space heaters	Consumer protection
Mechanical Machinery & Components	MCE/6 - Pumps and pump testing	Regulation /Legislation

Main subject area	Technical Committee reference and title	BEIS funding category
Mechanical Machinery & Components	MTE/1 - Machine tools	Safety
Mechanical Machinery & Components	PRI/66 - Rubber and plastics tubing, hoses and hose assemblies	UK competitiveness
Mechanical Machinery & Components	PVE/3 - Gas containers	Regulation /Legislation
Mechanical Machinery & Components	RHE/10 - Heating boilers	Regulation /Legislation
Metrology	CPI/113 - Hydrometry	UK competitiveness
Metrology	CPI/30 - Measurement of fluid flow in closed conduits	Infrastructure
Metrology	LBI/50 - Fine Bubble Technology (FBT)	Innovation
Quality	AT/452 - Assistance animals and animal training competencies	Consumer protection
Quality	DS/1 - Dependability	Safety
Quality	KMS/1 - Knowledge management systems	Productivity
Quality	MS/2 - Project, programme and portfolio management	Productivity
Quality	MS/6 - Methodologies for business process improvement using statistical methods	Productivity
Safety	SW/136 - Sports, playground and other recreational equipment	Consumer protection
Security	DEF/1 - Defence standardization	Procurement
Security	GW/2 - Secure storage of cash, valuables and data media	Consumer protection
Security	SSM/1 - Societal security management	Consumer Protection
Services	IMS/1 - Innovation management	Innovation
Services	SVS/0 - Customer service - Fundamental principles	Consumer protection
Services	SVS/2 - Tourism services	Consumer protection
Transport	ACE/1 - International and European Aerospace Policy and Processes	Infrastructure
Transport	ACE/68 - Space systems and operations	Infrastructure
Transport	AUE/-/1 - International work on road vehicles	Safety
Transport	AUE/12 - Ergonomics (Road vehicles)	Safety
Transport	AUE/14 - Motor cycles and mopeds	Safety
Transport	AUE/16 - Data Communication (Road Vehicles)	Regulation /Legislation
Transport	AUE/17 - Vehicle security	Safety
Transport	AUE/18 - Tanks for the transport of dangerous goods	Safety
Transport	AUE/20 - Vehicle on-board diagnostics, repair and maintenance information	Safety
Transport	AUE/32 - Electrical and electronic components and general system aspects (Road vehicles)	Safety
Transport	AUE/4 - Tyres and wheels for motor vehicles	Regulation /Legislation
Transport	AUE/7 - Automobile occupant restraint systems	Safety
Transport	PEL/69 - Electric vehicles	Sustainability
Welding	WEE/40 - Health and safety in welding	Safety

ANNEX 2: Projects delivered by BSI with funding from other HMG bodies

Government department	Project	Status in 2017/18
BEIS	Amendment No. 1 to PAS 91:2013, Construction prequalification questionnaires	Live during year
BEIS	PAS code of practice for product corrective action	Live during year
BEIS	PAS 2030, EEM Installation	Started in year
BEIS	PAS 2035, Dwelling energy retrofit	Started in year
BEIS	Smart appliances standards map	Started in year
BEIS	Legislation standards map	Started in year
BEIS	Green and Sustainable Finance	Started in year
BEIS (Construction Directorate)	Fund to support the maintenance of BIM Level 2 standards, delivery of additional domestic and international guidance (PAS 1192)	Live during year
BEIS, HSE, Environment Agency	PAS 1192-6, Specification for collaborative sharing and use of structured hazard and risk information for health and safety	Started in year
CPNI	PAS 170, Low energy impact test method for vehicle security barriers	Live during year
CPNI	PAS 301, Civilian armoured vehicle – Automotive test methods	Live during year
CPNI	PAS 7010, specification for the secure destruction of sensitive and classified material	Live during year
CPNI	Standards watch service	Live during year
CPNI	Preparation of ISO seed document on vehicle security barriers (based on IWA 14-1 and IWA 14-2)	Live during year
CPNI	PAS 185, Smart cities – Specification for establishing and implementing a security-minded framework	Completed during year
CPNI	PAS 1885, Automotive cybersecurity	Started in year
CPNI	PAS 300, Civilian armoured vehicle	Started in year

Government department	Project	Status in 2017/18
CPNI	PAS 11281, Road transport security	Started in year
CPNI	Standards watch 2018 to 2019	Started in year
DEFRA	Revision of PAS 96:2014, Guide to protecting and defending food and drink from deliberate attack	Live during year
Dfid	Commonwealth Standards Network	Started in year
Dfid	SmartCities – India	Live during year
Environment Agency	Fund BSI to run the secretariat of ISO/TC113/SC2 'Hydrometry - Notches, weirs and flumes'.	Live during year
Greater London Authority	Private Standard	Started in year
Innovate UK	PAS 1085, Security minded manufacturing	Started in year
Innovate UK	PAS 280, Through-life engineering	Started in year
Innovate UK	Pharma standards roadmap	Started in year
Innovate UK	Additive manufacturing private standard	Started in year
Innovate UK	PAS 1201, Graphene information	Started in year
Innovate UK	PAS 212 Agile development	Started in year
Innovate UK	Persistent Digital Identifiers for Construction Products	Live during year
Innovate UK	Hypercat (Internet of Things)	Completed in year
MHRA	AI in healthcare workshops 2018	Started in year
(Horizon 2020)	European Metrology Programme for Innovation and Research (EMPIR)	Live during year