



Department for
Business & Trade



Office for Product
Safety & Standards

**THE UK GOVERNMENT PUBLIC POLICY INTEREST IN
STANDARDISATION 2025**

Introduction

The UK Government recognises the important role that standards can play in supporting the delivery of its public policy ambition and its core mission to drive economic growth across the nation. Standards can be a catalyst for economic growth through boosting productivity, facilitating trade, accelerating innovation, ensuring quality, consistency, security and safety, and enhancing the protection of consumers and the environment.

The use of standards and their development as a UK public policy lever requires close co-operation between government, standards bodies and a broad range of stakeholders and partners.

This paper sets out the UK Government's public policy interest in standardisation.

What do we mean by standardisation?

1. Technical standards (referred here after as 'standards') describe agreed good practice in how things are made and done. They are developed through a stakeholder-driven process based on the principles of consensus, openness and transparency and allow their users to maximise efficiency, reduce costs, manage risk, and ensure trust. They differ from regulation in that they are of themselves almost always voluntary. However, certain standards can also enable businesses to demonstrate that their product is safe and compliant with requirements set out in legislation and are recognised by government for that purpose. Standards can contain technical requirements, guidance, vocabularies, or other information.
2. Whilst standards traditionally have often been initiated by industry, responding to commercial incentives to agree on good practice, in fact anyone can suggest a new standard. Business and industry support standards development and provide their expertise to standards based on their market needs, but it is important to ensure that all relevant stakeholder voices are heard in the development of standards. We usually refer to standard development in two contexts:
 - **Formal standards** are standards developed and approved by a standards body through a robust standard setting process. This includes international standards developed by leading international standardising bodies, ISO (International Organization for Standardization), IEC (International Electrotechnical Commission) and ITU (International Telecommunication Union), as well as regional and national standards by CEN (European Committee for Standardization), CENELEC (European Committee for Electrotechnical Standardization) and BSI (British Standards Institution). British, European, and international standards are developed according to strict rules and the national delegation principle. These rules are designed to ensure the process is transparent and fair, and that the resulting standards are robust, relevant, and fit for purpose, giving them the legitimacy also to be used for public policy purposes. In the UK, BSI maintains the national catalogue of standards, many of international or regional origin, and seeks to avoid overlap or conflict within that catalogue and to facilitate UK expert participation in their development.¹

¹ Approximately 90% of British Standards have been adopted through international processes through ISO or IEC or through their regional European components in CEN and CENELEC.

Sector specific standards developing organisations (SDOs), such as the IETF (Internet Engineering Task Force), or the US-domiciled IEEE (Institute of Electrical and Electronics Engineers) and many other bodies also produce standards according to their own published rules and processes, many of which are used on a global basis and those standards may also be suitable to be used for public policy purposes. In the digital context, standards are developed in a range of SDOs and are not limited to the formal system.

- **De facto standards** arise when a solution is developed and is widely adopted by industry and can be codified into specifications through trade groups or consortia. These standards are widely accepted in areas of digital technologies where the pace of innovation is rapid. Some de facto standards can be adopted and become formal standards, if they emerge as a dominant solution first and are then agreed at an international standardising body through its formal standardisation process. Some other proprietary standards are also developed by non-governmental organisations, notably in the area of sustainability.
3. Standardisation is one of the key components in a nation's quality infrastructure. The National Quality Infrastructure (or NQI) is comprised of five core components:
- **Standardisation** – creates the national and international standards that describe good practice in how things are made and done.
 - **Measurement** – implements specifications and standards to ensure accuracy, validity, and consistency.
 - **Accreditation** – ensures that those who carry out conformity assessment, testing, certification, and inspection are competent to do so.
 - **Conformity assessment** – entails testing and certification to ensure the quality, performance, reliability, or safety of products meet specifications and standards before they enter the market.
 - **Market surveillance** – checks whether products meet the applicable safety requirements. If they do not, it involves taking the necessary steps to ensure requirements are met, or imposing penalties.
4. In the UK four globally respected UK institutions help to deliver these components:
- BSI, the British Standards Institution, is the UK's National Standards Body (NSB) responsible for producing national and international standards.
 - NPL, the National Physical Laboratory is the UK's National Metrology Institute, responsible for developing and maintaining the UK's primary measurement standards.²
 - OPSS, the Office of Product Safety and Standards, part of the Department for Business and Trade, provides the regulatory and market surveillance infrastructure enabling businesses to sell their products domestically and export goods globally. OPSS is also the government lead for legal metrology and work with NPL and local authority partners to ensure the accuracy and consistency of weights and measures.
 - UKAS, the United Kingdom Accreditation Service is the UK's National Accreditation Body, responsible for assessing and accrediting against international standards, organisations that provide conformity assessment activities including certification, testing, inspection and calibration.

² Metrology is the science of measurement.

The role of the Government in relation to standardisation

5. Governments, including the UK Government, play a vital supportive role in the global standardisation ecosystem. They are a crucial part of the multi-stakeholder community that shapes standards and work with stakeholders and standards bodies to strengthen and uphold the integrity of the standards ecosystem.
6. The Department for Business and Trade (DBT) is responsible for cross cutting standards policy. It runs the cross-government forum on accreditation and standards that seeks to advocate the effective and appropriate use of standardisation across government and promote the use of standards as a cost-effective and business-friendly policy tool. DBT also leads the Government's relationship with BSI and works in partnership with all the NQI partners.
7. Other government departments lead on and are involved in setting strategy, policy, and engagement around standardisation, for example, the Department for Science, Innovation and Technology (DSIT) leads on emerging technology governance and digital standards strategy, policy, and engagement including delivery of the AI Standards Hub which is led by the Alan Turing Institute in partnership with BSI and NPL.³ The Ministry of Housing, Communities & Local Government (MHCLG) leads on standards strategy, policy and engagement on building safety. The Department of Environment, Food and Rural Affairs (Defra) is the lead department for Codex Alimentarius Commission (CAC) responsible for developing international food standards, guidelines and codes of practice. The Ministry of Defence's (MOD) Standardization Office, known as DStan, develops and pursues MOD's standardisation policy, both nationally and internationally with civil and military partners to support increased interoperability and more effective acquisition. The Foreign, Commonwealth & Development Office (FCDO) has an interest in how the UK engages internationally in support of the development of international standards, and where relevant other globally agreed standards, for example in multilateral organisations and through bilateral activities, as part of its wider strategy for regulatory diplomacy.
8. Government has a role in developing technical regulations, designating standards adopted by international standardising bodies and other standardisation bodies which can be followed to demonstrate regulatory conformity, and promoting UK standards policy through trade and mutual recognition agreements.⁴ Government recognises that more consistent awareness amongst policy makers of the role standards can play is needed to ensure they are being used most effectively to support public policy.

The role of BSI in supporting the public interest in standardisation in the UK

9. BSI is the UK's NSB, incorporated by Royal Charter and responsible for preparing British Standards and coordinating the input of UK experts in the European and international standards committees of CEN and CENELEC and ISO and IEC. BSI is the UK's National Standards Organisation in ETSI (European Telecommunications Standards Institute) and provides support to DSIT and the Government's membership of ITU.

³ <https://aistandardshub.org/>

⁴ <https://www.gov.uk/guidance/designated-standards>

10. BSI operates in accordance with a Memorandum of Understanding with the UK Government which explains what is expected of BSI to fulfil its obligations in respect of the key public policy dimension to standardisation.⁵ This Memorandum recognises that, in addition to carrying out its primary role as the UK NSB, BSI undertakes certain other commercial activities permitted by the Royal Charter. BSI receive some public funding from DBT to support standards development work that is in the public policy interest but may not happen if left to market forces.

Standardisation in the United Kingdom

11. The effective and agile use of standards will bring many benefits and help to deliver our industrial and trade strategies as they play a key role in supporting a number of government policies across different sectors including:
 - economic growth and reducing barriers to trade
 - international development
 - science, innovation, digital and technology
 - net zero, environmental protection and sustainability
 - product safety, consumer protection and health and safety
 - national security
 - better regulation
12. The world is changing faster than ever. The importance of standardisation is increasing with the globalisation of commerce, the convergence of technologies and a growing knowledge economy. The rapid development of the digital economy, AI, and the “Fourth Industrial Revolution” are all underpinned by standards. Economic research suggests standards have been hugely influential in boosting the sales of UK products and services abroad, with a reported £5.4bn of additional UK exports per year attributed to standards (after five years), with 60% of SMEs and 77% of larger companies reporting that standards have increased their capacity to export.⁶
13. For these reasons, the Government has a strong interest in promoting effective and efficient standardisation in the UK and globally. Slow, rigid, out-of-date or inappropriate standards can have adverse consequences, e.g. hindering innovation rather than boosting it, creating barriers to trade rather than removing them. It is important for government to work to avoid such risks by encouraging standards to be reviewed regularly, including through agile approaches. Time to market can be accelerated by using ‘fast track’ standards development processes where appropriate that maintain the consensus principle but can be completed rapidly.⁷ Such accelerated processes, while supporting more rapid innovation, may not be suitable for issues that are for example, security critical, which often require longer timeframes to standardise or consensus-build.

⁵ <https://assets.publishing.service.gov.uk/media/66fe98ea30536cb927482bc4/mou-between-dbt-and-bsi-2024.pdf>

⁶ <https://www.bsigroup.com/globalassets/documents/about-bsi/nsb/cebr/bsi-uk-final-report-1.2-apr22.pdf>

⁷ BSI ‘PAS’ or ‘Flex’ products, ETSI ISGs, and CEN/CENELEC workshop agreements are examples of this.

14. Market forces can drive the development of relevant standards that are fit for purpose. But market forces alone may not enable the full societal benefits of standardisation to be realised, and public policy may be needed to support engagement in the standards-making process. In particular, standard users lacking the awareness, time, and resources to sustain effective participation in the process will leave the development effort and costs in standards making to others; thereby losing the opportunity to make their voice heard.
15. The best standards are those developed in open, transparent, consensus-based, and multi-stakeholder manner, prepared by committees and stakeholder groups that are gender-responsive, diverse, and inclusive in terms of both people and organisational representation. Consumer input is particularly vital, as those who buy, use, and are impacted by products and services are often under-represented in relevant standards discussions.⁸

A global system of standards

16. There are a variety of different organisations involved in the development of standards globally. The term 'international standard' is not explicitly defined in the World Trade Organisation (WTO) Technical Barriers to Trade (TBT) Agreement but in practice international standards are primarily considered to be those developed through international standardising bodies such as the ISO, IEC and ITU which base their international standards development on participation through national delegations.⁹
17. As the UK NSB, BSI support the overall government policy of influencing international standards and furthering the national interest. The UK plays a leading role in the international standards making system through BSI's membership of ISO and IEC and the regional European bodies, CEN and CENELEC. The UK has the joint second highest number of participating experts in ISO committees and chair a significant number of important international and European standards committees. The effectiveness of BSI, and its constructive relationship with the Government, are vital components of that infrastructure.
18. The Government looks to increase UK influence in the governance of international standardising bodies where governments have a formal role, such as the ITU and ETSI. We are known for our positive and effective stakeholder engagement, evidenced through new inroads in the IETF and multi-stakeholder delegations to the ITU. The UK Government also engages directly, alongside other UK participants, in organisations such as the 3rd Generation Partnership Project (3GPP) and the Institute of Electrical and Electronics Engineers Standards Association (IEEE SA).

⁸ BSI and DBT actively support the Consumer & Public Interest Network (CPIN).

⁹ In 2000, the WTO's TBT Committee adopted the Six Principles for the Development of International Standards. They are meant to help international standards work better for global trade. They are widely followed by standards bodies seeking international relevance; they cover transparency, openness, impartiality and consensus, effectiveness and relevance, coherence, and the development dimension

19. Exporting our expertise in the standards world will promote our best practices and build on our first-mover advantages – some of the world’s most popular international standards such as ISO 9001 originated as British Standards. We can work with other countries to secure UK leadership in future industries, including emerging technologies like AI and quantum, while protecting the safety and privacy of UK consumers and workers. For example, the UK led the development with other ETSI members of EN 303 645 setting baseline requirements for the cyber security of consumer Internet of Things (IoT). This standard is based off the UK’s Code of Practice for Consumer IoT Security.
20. Regulatory diplomacy presents an opportunity for the UK to forge strategic alliances with likeminded partners to advocate for consensus-based, industry-led, and multi-stakeholder approaches to standardisation and defend against fragmentation of the global ecosystem by competing approaches. The aim of regulatory diplomacy is for the UK to have a prominent role in the development of international standards, and where relevant other globally agreed standards, as an integral part of the broader ecosystem of global governance, including soft law and norms, international treaties, and national regulation. A coordinated and proactive approach between the Government, NQI, industry and other non-state actors will help leverage UK leadership in shaping standards in ‘future frontier’ sectors of the global economy to ensure our long-term economic security and growth.

Key issues in standardisation for UK Government

Economic growth and reducing barriers to trade:

21. International standards are important to the UK’s ambitions as a global trading nation and to facilitating international commerce. The global adoption of internationally agreed standards and the withdrawal of conflicting national standards is a fundamental basis for reducing or eliminating technical barriers to trade around the world. Ultimately, this makes life easier for UK producers and exporters by bringing easier market access, reduced production and supply chain costs, increased confidence in business services and enhanced consumer trust. For this reason, international standards are considered a ‘passport to trade’.
22. Most trade deals seek to build on the WTO’s TBT Agreement which sets down principles for the global trade in goods including non-discrimination and predictability of market access. International standards are a cornerstone of the TBT Agreement and are an important means to remove barriers to trade between WTO members. Therefore, the TBT Agreement mandates, in most cases, the use of international standards as a basis for national technical regulation.¹⁰
23. Government recognises that through our trade and mutual recognition agreements with partner countries and membership of WTO, we can promote global convergence around international standards, reducing technical barriers to trade. This can be achieved by supporting cooperation between standards bodies and promoting internationally accepted standards as a basis for trading partners’ regulations. To facilitate the trade of goods and services across international frontiers, supporting the interests of consumers, businesses, and the UK economy, we will continue to promote:

¹⁰ Articles 2.4, 5.4 and Annex 3(F).

- International standards developed at consensus-based, stakeholder-led, globally recognised standards development organisations.
- Cooperation between NSBs.
- Use of international standards as a compliment to or in place of technical regulations.
- Review of regulations.
- Digital transformation of the NQI – ‘Digital Quality Infrastructure’, to ensure quality infrastructure information is digitally accessible and available in flexible ways.

International development:

24. There is a proven link between standards and economic development, but research shows that developing countries need technical assistance, skills and information sharing to fully utilise the standards that can benefit them. Working internationally, the UK can increase the capacity of developing countries to use and comply with international standards and regulatory measures needed to trade more with the UK, the rest of the world and benefit from global value chains. This can also deliver secondary benefits by enabling UK businesses to build resilient, diversified supply chains with high quality inputs and providing UK consumers with greater choice and lower prices.
25. BSI and the wider NQI have a long track record of providing technical assistance in developing countries to unlock their investment and growth opportunities while establishing fruitful partnerships to build support for UK positions and influence international standardisation activities.

Competitiveness and innovation:

26. Standards can improve competitiveness by reducing costs ranging from innovation and creating interoperability, both of manufacturing and service provision. They function by reducing uncertainty: i.e. a manufacturer or service provider does not need to reinvent the specifications or performance criteria incorporated in the standard and can concentrate resources elsewhere. Both buyers and sellers in commercial transactions benefit from the shared information conveyed by a standard. This transfer of knowledge and agreed set of ground rules, common terminology and development methods can be useful to innovators who can then make improvements which can help them enter and create markets.
27. Businesses focus on efficiency in providing the standardised aspects, as well as other additional features of products and services, with the aspects incorporated in the standard taken as read. This promotes a rise in the general level of product or service quality, performance, and safety, and encourages competitive suppliers to differentiate their products by additional desirable features. Similarly, management systems standards help to spread best practice and to raise general levels of performance, reduce uncertainties and to automate processes and systems as the requirements laid down in the standard become the expected norm. For example, standards for the exchange of industrial design have allowed new and much closer cooperation between car integrators and manufacturers of parts.

28. The services sector today makes up to around 82% of the UK economy, and at the same time globalisation is driving the need for standards more widely in this sector because of a high wage economy, an aging population and increasing pressure on the UK skills base.¹¹ Service standards identify the criteria by which service providers may be assessed, and by identifying best practice, consumers and regulators are enabled to encourage and ensure acceptable levels of service provision. The public interest in many areas of such provision is thereby facilitated and focusable.

Science, digital and technology:

29. Standards are at the centre of the interoperability of the Internet, telecoms, smart cities, AI, and other established critical and emerging technologies such as quantum technologies. As global governance seeks to match the rapid pace of technological advancement and innovation, robust international standards and other globally agreed standards are a crucial element of the UK's pro-innovation approach to the international governance of critical technologies. They can ensure that the digital and technological infrastructures underpinning our economy and society are designed and implemented in line with open, democratic values, supportive of global economic prosperity, safety and security, and that they uphold human rights principles and support multi-stakeholder governance.

30. Standardisation forms one aspect of the UK's domestic science and technology-enabling environment, not only fostering innovation but facilitating greater commercialisation and trade opportunities for the ecosystem of scientists, researchers, inventors, and innovations across the UK. In this way, standards ensure that the UK's leading research and innovation in emerging technologies translates into prosperity and strategic advantage. Fostering a supporting standardisation ecosystem as part of the science and technology enabling environment means adopting a whole-of-UK approach and working closely with a range of stakeholders including BSI, NPL, Ofcom, industry, civil society, academic institutions, and other regulators.

31. As critical technologies increasingly make up aspects of the UK's national infrastructure, as well as continue to play important roles in everyday life for citizens across the country, standards must also support economic prosperity, cybersecurity, safety, transparency, interoperability, and multi-stakeholder inputs, while protecting rights and freedoms, from the outset. The Government has a particularly important role to play, alongside NQI and other UK stakeholders, in participating in standardisation to ensure that digital technologies promote safety and security by design. This is particularly important in rapidly evolving areas such as space, cyberspace, emerging technologies, and data.

Environment, sustainability, and climate change:

32. Standards are increasingly considered as a contributor to meeting UK Government environmental and sustainability targets and for the UK to be carbon neutral by 2050.¹² This may be through design and construction of low carbon buildings: building regulations require domestic and commercial building to use materials which, for example, reduce energy costs by having better insulation or to support environmental legislation using standards, to create energy efficient products and services.

¹¹ Harari, Daniel (12 October 2023). "A3: Components of GDP" (PDF). House of Commons Library. <https://researchbriefings.files.parliament.uk/documents/SN02787/SN02787.pdf>

¹² Industrial products are bought and sold in every country in the world, making up a significant proportion of international trade, and the sector accounted for just under 30% of global carbon dioxide emissions in 2016 (WRI, 2020) (WRI, 2020) (Climate Watch, 2020; Institute, 2020).

33. UK standards leadership in key growth areas such as greenhouse gas management, energy transition, biodiversity and sustainable finance has the potential to effect significant and rapid global changes, and act as a catalyst for new products, services and markets. This can be seen through innovative approaches such as the UK led ISO Net Zero Guidelines which provides a common framework for organisations to comprehensively transition to net zero and the UK Nature Investment Standards Programme which will establish a standards framework to address barriers to investing in nature.

Product safety:

34. Standards are an integral part of the product safety regulatory landscape with around 3500 designated standards supporting regulatory compliance. In most technical product regulations, manufacturers and other economic operators must ensure products comply with essential requirements. The regulations provide that, where the product follows a designated standard, there is a rebuttable presumption that the product is in conformity with the essential requirements covered by that standard; this is known as 'presumption of conformity'. The Secretary of State responsible for the products and regulations to which a standard relates, designates the standard by publishing its reference.

Fair trading and consumer interests:

35. Standards convey information to consumers that can help them to make informed purchases. Standards concerned with safety or environmental performance also provide a level of assurance to consumers which may otherwise be very difficult for them to obtain. By providing an independent and testable specification for key features of a product or service, standards offer objective evidence which provides fundamental assistance for settling disputes, and so help to reduce the costs of regulating the market.

National security

36. A key element of UK economic growth is national security, a thriving economy must have the right foundations, with security at its heart. The UK should promote and develop standards that safeguard UK national security and defend against disruptive approaches that directly conflict with our values. This requires leveraging UK strengths in shaping global best practice in sectors core to national security by working with key international partners and creating issue-specific likeminded coalitions.

Better regulation:

37. Government utilises standards within the regulatory framework to address complex policy problems and achieve government objectives. Standards and conformity assessment delivered through appropriate assurance processes are a proven and low-cost tool for delivering public policy outcomes and accelerating change that boosts economic growth. Fundamental to the delivery of regulatory policy across all government is in understanding the differences between different forms of standard, and how they may be deployed to best effect. These include full standards, fast track standards and co-regulation (designation). Under certain circumstances, standards can reduce the need for direct government or regulator intervention. Standards enable safe reduction of compliance costs whilst improving outcomes through 'earned recognition'. 'Earned recognition' is where businesses may get a lighter regulatory touch because they are using known standards that already demonstrate compliance to regulations. 'Self-regulation' is where businesses voluntarily agree to meet certain standards, for example an industry might develop its own code of practice or government sponsor a 'fast track' standard for a particular purpose.