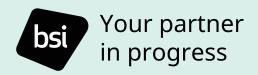


Practical progress with AI

How BSI partners to deliver impact



Introduction

AI, like any powerful tool, can be a force for good. It is poised to deliver huge benefits and sustainable growth to business and to society but it's up to us to learn how to use and manage it.

BSI has been helping the world to harness new technology for good for 125 years; we know that practical action is the best way to face the future with confidence. Here we share some examples of our work to support the safe and responsible use of AI.



International standards development

BSI has a long standing history in helping to develop leading standards that enable businesses to balance the risks and opportunities of digital solutions. These risk management standards include Information Security Management (BS 7799 now ISO/IEC 27001), Business Continuity Management (BS 25999 now ISO 22301) and Privacy Management (ISO/IEC 27701). We continue to forge trusted partnerships across the world in digital governance and risk to generate trust and confidence with recent standards such as the Artificial Intelligence Management System standard (BS ISO/IEC 42001).

Responsible AI management

The Artificial Intelligence Management System standard (BS ISO/IEC 42001) is the world's first internationally recognized standard guiding organizations on how to responsibly develop or use an AI system, published by BSI in its role as the UK National Standards Body in December 2023.

As part of our ongoing commitment to building trust in AI, we offer a portfolio of training courses and an accredited certification scheme against BS ISO/IEC 42001. These services are designed to support organizations to build trust, gain competitive advantage and develop a robust approach to safe and responsible AI.

Environmentally sustainable artificial intelligence

Whilst the sustainability impacts of Large Language Models (LLMs) such as ChatGPT continues to be a source of concern, we cannot overlook AI's potential to support global sustainability goals and drive towards net zero. There are huge benefits offered by the technology if we get the balance right.

That's where standards such as Environmentally Sustainable Artificial Intelligence (PD CEN/CLC TR 18145:2025) can help. It's designed to provide guidance to AI developers and deployers on the environmental sustainability issues that should be considered when using AI. It includes information on the processes and physical systems involved in the production, distribution, and consumption of energy, as well as how to precisely measure and report an organization's AI carbon footprint.



Standards programmes

To help build trust in AI, BSI participates in several standards programmes to shape collective outputs to deliver societal benefit.

BridgeAI

Innovate UK's BridgeAI (BAI) programme aims to drive growth and productivity in high-growth sectors through the adoption and development of AI.

BSI is a strategic partner of BAI, collaborating with Innovate UK, industry stakeholders, and SMEs to tackle barriers in AI adoption across the four selected sectors: built environment, transport, agriculture, and creative.

We deliver a programme of standards-centric support to the SME community to aid development and adoption of AI solutions, including:

- Research on SME AI adoption challenges
- The BAI Standards Community, with 400+ members
- Webinars on the benefits of AI and Data standards for SMEs
- Digital standards training to help SMEs enhance their business and personal profile on risk and AI management

AI Standards Hub

To help stay ahead of the rapidly growing range of AI-related work underway in Standards
Development Organizations (SDOs) around the world, the AI Standards Hub formed in October 2022. It is a collaboration between BSI, the Alan Turing Institute, the National Physical Laboratory, and is funded by DSIT. It focuses on helping stakeholders to navigate and participate in international AI standardization, informing them on how standards can support their use of AI.

Dedicated to knowledge sharing, community and capacity building, and strategic research, the Hub brings together industry, government, regulators, consumers, and academia to facilitate the assessment and use of standards.

Recognized in government papers as a key AI initiative for the UK, the Hub has a global reputation as a trusted resource on AI standards and governance.



ContestAI

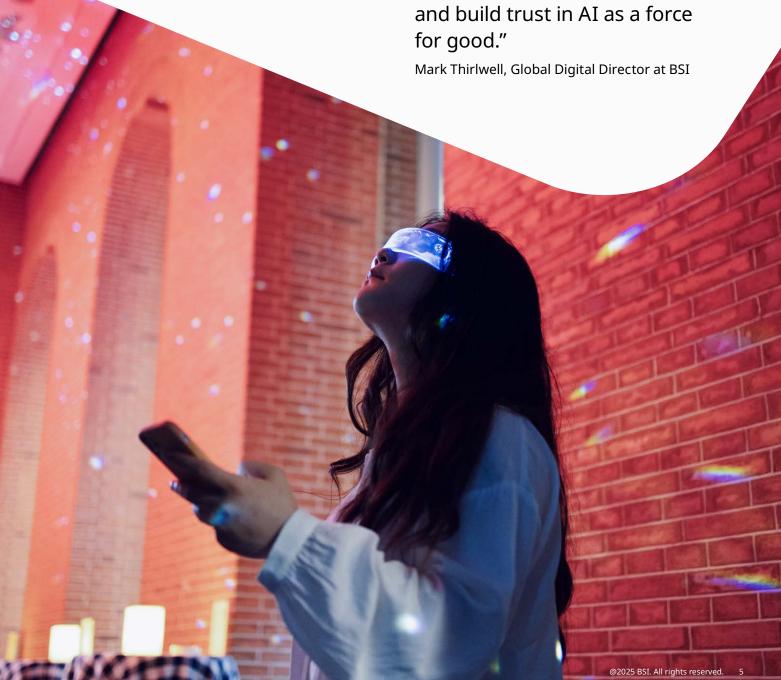
Recognizing the absence of a standardized way of flagging when AI is displaying bias or producing problematic outcomes, BSI carried out a series of workshops exploring the topic of AI contestability.

Drawing on insights from technical specialists, academics, consumer rights experts and more, this programme's initial findings revealed that a standardized contestability or feedback tool built into all AI systems could enhance digital rights and build trust and confidence in AI as a force for good, provided questions of accessibility, cost, liability, scalability and how to satisfactorily resolve complaints could be addressed.

The next phase of this initiative will focus on key industries (e.g. healthcare and education), exploring the boundaries of contestability. This includes what can be contested, who can contest, who should be responsible, and the human-contestability loop, which involves determining where humans should be involved and how.

11

There is no doubt that such a tool built into all AI systems could enhance digital rights and build trust in AI as a force for good."



Public impact

As a Royal Charter organization, public interest and impact is at the fore of our activity. Here are some examples of how we feed into policy and governance discussions and support regulatory and industry developments to influence the adoption of AI as a force for good.

AI governance and standards

Standards play a fundamental part in delivering a responsible AI governance framework, helping to ensure that the opportunities presented by AI are harnessed in a way that benefits all society. We work closely with UK government Department for Science, Innovation and Technology (DSIT), to enable the use of standards as part of a policy, regulatory and assurance framework. This involves feeding into international standards, such as the harmonized standards underpinning the EU AI Act.

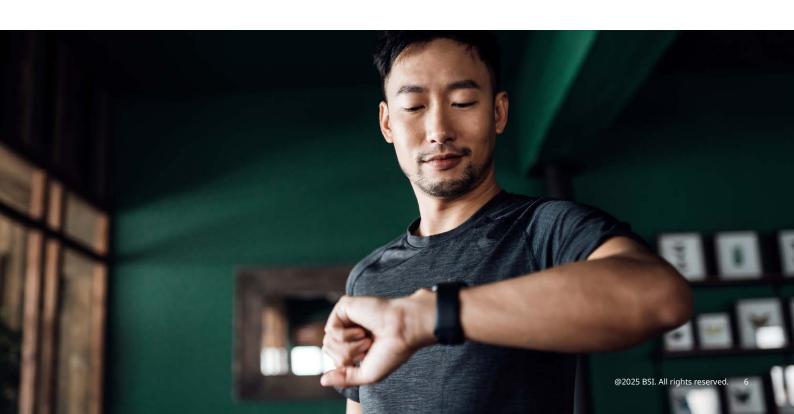
With diverging regulatory approaches being considered for AI internationally, standards can help enable interoperability and provide the required presumption of conformity that underpins outcomes based regulatory requirements.

The AI Management System standard provides agility in a fragmented market, and can help accelerate trusted AI development and use, addressing risks and building confidence as AI becomes part of our daily lives. The standard has been drawn on by the UK government as part of its ongoing activities around AI policy and governance for supporting business with responsible AI.

AI Notified Body

BSI is working towards being designated as an AI notified body under the EU's AI Act, to enable impartial assessments of the safety of AI-enabled products.

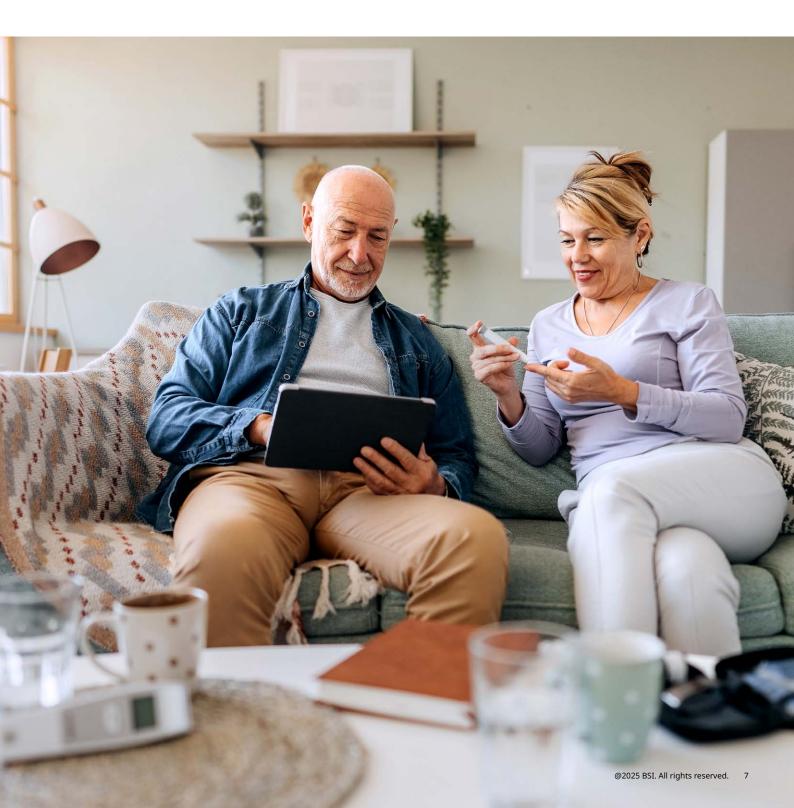
Our commitment is to drive trustworthy and ethical adoption of AI. We have been building our capability since the AI Act was first drafted in 2022. We have a world leading team of AI technical and regulatory specialists and have partnered with a specialist technology provider to develop the advanced tooling needed to assess AI Algorithms. We offer a range of services that support organizations to prepare to meet their obligations under the AI Act, such as Algorithm Auditing and Dataset Testing.



AI in healthcare

BSI is committed to progressing safe and responsible use of AI to address some of the healthcare sector's most pressing challenges. This includes utilizing AI to reduce inefficiencies, support an aging workforce and ultimately improve patient outcomes.

BSI has worked closely with an NHS Teaching Hospital to investigate how a Validation framework for AI in healthcare (BS 30440) can support its deployment of AI technology in clinical situations. BSI is a notified body for medical devices in Europe, assessing them for safety before manufacturers can access the market. Since 2023 we have actively conducted specialist AI reviews of AI enabled Medical Devices under the remit of the MDR.



AI generation of tomorrow

BSI is committed to supporting AI skills development and careers to evolve with the future workforce.

In 2024, BSI introduced the AI Talent Academy scheme, offering scholarships to students at the University of Edinburgh to support them through their AI studies. The scholarships aim to support them in becoming the AI experts of the future.

We also have a range of teams driving AI initiatives across BSI, from regulatory experts to innovation and data science specialists.

