



# Shaping a sustainable world

Founded in 1901, BSI became the world's first UK National Standards Body.

We exist to have a positive impact on society, from early standards for safe tramways to the future of nano-technology.

Today, clients all over the world rely on our experience raising standards to accelerate progress towards a sustainable world.

# BSI was incorporated by British Royal Charter in 1929

Our Royal Charter sets out our purpose and broadly defines our activities, including our function as the UK's national standards body and a provider of global accredited training, testing, and certification.





# Shaping trust in AI

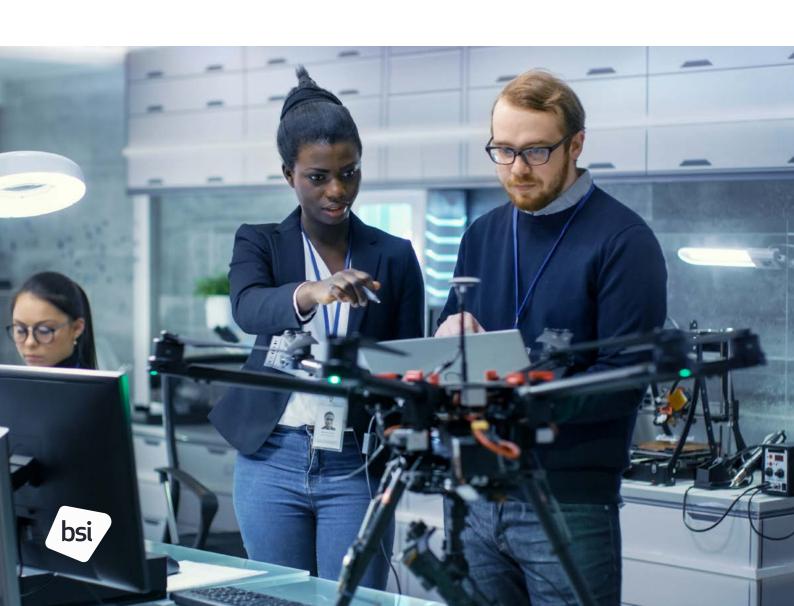
As artificial intelligence (AI) continues to evolve and permeate different aspects of our lives, it becomes imperative to address the need for standardization and regulation. The regulation of AI is necessary as it creates a framework that ensures the rights and values of individuals are protected while fostering innovation. By establishing clear guidelines and standards, regulated AI promotes accountability and minimizes risks, ultimately creating a safer and more beneficial environment for everyone.

While initially aligning to the EU AI Act, BSI is currently working towards designation as an AI notified body, focussing on AI products that require notified body oversight, as well as providing services to manufacturers and software providers proactively seeking AI Technical Design Assessments of their AI-enabled products and AI management systems.

## **Innovating with AI**

BSI has a history of innovation, and we are continuing the innovation journey using AI. BSI has a Data Science and AI (DSAI) team that has been setup to explore the latest AI technologies and assess the potential value these could bring to BSI and to clients.

From leading edge machine learning techniques to provide predictive analytics to clients, to forward thinking computer vision and virtual reality software to provide an immersive audit experience for clients, BSI is uniquely positioned to deliver a trusted service in the use of AI.





# Global AI legislation

Governments around the world have started to develop global regulations for AI, and the Regulatory Services Division of BSI is taking a proactive approach to meet the needs of these regulations. The world's first comprehensive AI law, the EU AI Act, will regulate the use of artificial intelligence in the EU.

# European Union (EU) AI Act

The European Union AI Act, draft released on April 20, 2021, is the regulatory foundation for which AI systems may be placed on the market or put into service within the EU. The Act aims to ensure that AI is developed and deployed in a manner that is safe, ethical, and respectful of fundamental rights.

The EU AI Act is a significant step towards ensuring trust in the life cycle of AI systems; and aims to ensure that AI systems are developed and used in a way that is fair, ethical, and respects fundamental rights. While the implementation of the Act will require significant effort, investment, and coordination from global stakeholders, it is a necessary step towards building a future where AI is used to benefit all members of society, without amplifying existing inequalities.

As AI adoption extends across industries, the BSI team are proactively offering services such as conformity assessments, white paper guidance, and AI training from its technical experts.



# EU AI Act timeline

#### **Entry into force**

20 days after publication in the Official Journal of the EU.

# Entry in to force

#### 6 months after

Prohibitions on unacceptable risk AI.

#### 9 months after

Deadline for crafting Codes of Practice for GPAI

#### 12 months after

Obligations for GPAI, AI Governance, plus penalties go in to effect.

#### 18 months after

Commission implementing act on post-market monitoring.

#### 24 months after

Obligations for high-risk AI systems (Annex III), member states to have implemented rules on penalties, review, and possible amendment of, the list of high-risk AI systems.

#### 36 months after

Obligations for high-risk AI systems that are not prescribed in Annex I but are intended to be used as a safety component of a product, or the AI is itself a product, and the product is required to undergo a third-party conformity assessment under existing specific EU laws,



# Expanding our capabilities to meet the needs of AI Regulation

## AI training

Our on-demand and instructor-led AI training courses are designed to equip individuals and organisations with the knowledge and skills necessary to navigate the complex landscape of AI standards and regulation. In this rapidly evolving field, understanding the ethical, legal, and compliance aspects of AI is essential for responsible and sustainable deployment.

We are currently developing courses that will offer a diverse range of topics, from the fundamentals of AI regulation to specialised industry-specific considerations, providing participants with the tools they need to develop, deploy, and govern AI systems with confidence.

Whether you're a professional seeking to enhance your expertise or an organization aiming to ensure regulatory compliance, our future training programs will be developed to meet your needs and empower you in this AI-driven era.

## AI technical design assessments

As artificial intelligence (AI) continues to revolutionize industries and shape our daily lives, companies face the challenge of ensuring their AI technologies are used responsibly and ethically. While regulations may not explicitly mandate AI assessments, there are compelling reasons why companies should proactively opt for AI Technical Design Assessments of their AI-enabled products, such as:

- · Proactive Readiness
- Leading Expertise
- Competitive Advantage

In an era where AI technologies are transforming industries, companies that choose to conduct assessments of their AI-enabled devices reap numerous benefits. From ensuring ethical use to gaining a competitive advantage and building stakeholder trust, AI Technical Design Assessments foster responsible AI practices, positioning companies for success in the AI-driven future.







# Expanding our capabilities to meet the needs of AI Regulation

#### AI algorithm auditing & dataset testing

Algorithm testing is of paramount importance in the field of AI as it directly impacts the reliability, accuracy, and performance of AI systems. AI algorithms, such as machine learning models, deep neural networks, and natural language processing, underpin the decision-making processes of AI applications. Rigorous testing is essential to validate these algorithms' correctness and efficiency, ensuring they produce trustworthy results and perform optimally in real-world scenarios.

# AI management system certification (ISO/IEC 42001)

The need for a robust AI governance framework has led the international standards community to produce ISO 42001, which provides a certifiable AI management system framework within which AI products can be developed as part of an AI assurance ecosystem. The aim is to help businesses and society get the most benefit from AI and reassure stakeholders that their systems are being developed responsibly.

ISO 42001 is applicable to any organization, regardless of size, type, and nature, that provides or uses products or services that utilize AI systems.



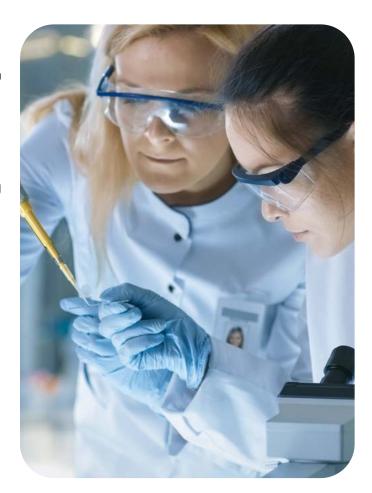
### Medical device conformity assessments

The BSI Medical Device Notified Body offers certification services to support your EU market access goals. Our mission is to ensure patient safety whilst supporting timely market access to medical technology in a sustainable manner.

We strive to set the global standard through conducting impartial, responsive, robust, and thorough conformity assessments, evaluations and certifications that are recognized and trusted worldwide.

- A designated EU Notified Body
- A UK Approved Body
- An accredited ISO 13485 Certification Body
- A recognized Auditing Organization under the Medical Device Single Audit Program (MDSAP)
- A recognized Certification Body in many global markets

Full information can be found at bsigroup.com/medical



## Citadel AI partnership

BSI has partnered with Citadel AI, a Japanese-based provider of automated AI testing and monitoring tools, to ensure AI is used ethically, safely, and responsibly in industries that pose risks to humans.

The partnership seeks to reassure users that the cutting-edge technology increasingly being integrated into potentially high-risk innovations aligns with best practice and complies with forthcoming EU regulations on AI.

The partnership is designed to ensure that the AI used to help people in a variety of ways, from robotics to biometric identification, becomes more trustworthy, transparent, and responsible, with any risks of "AI going wrong" being minimized.

Through Citadel AI's tools BSI can measure AI compliance against technical standards, supported by in-depth technical analysis including fairness testing, bias detection, and robustness testing. They can also automatically generate comprehensive analysis and reporting for supporting the assessment process, assuring the safety and reliability of AI systems.



# **FAQs**

#### What is the EU AI Act?

The EU AI Act is the proposal for a Regulation laying down harmonised rules on artificial intelligence within the European Union.

#### What are the key objectives of the EU AI Act?

The EU AI Act aims to ensure the ethical and trustworthy use of AI, promote transparency, protect fundamental rights, and enhance user safety within the European Union.

#### What will the role of BSI be as an AI Notified Body?

BSI, as an AI Notified Body, will be responsible for carrying out third party conformity assessments of limited AI systems as outlined in the EU AI Act.

#### How can BSI assist companies in complying with the EU AI Act?

BSI's various business units offer the ability for conformity assessments, white paper guidance, and ondemand training to assist companies in understanding the expectations put forth from the EU AI Act and other internationally recognized standards.

#### What are the benefits of conforming to the EU AI Act requirements?

Conformity is required prior to EU market entrance for AI systems falling under the EU AI Act. Conformance to the EU AI Act and achieving CE marking enhances public trust, facilitates market access, and demonstrates a commitment to responsible AI practices, which can be advantageous for businesses.

#### What are the potential consequences of non-compliance with the EU AI Act?

Non-compliance with the EU AI Act may result in legal penalties, such as fines or restrictions, and with placing on the market and use of AI systems within the EU.

## Collaborating to shape trust in AI























BSI Group 389 Chiswick High Road London, W4 4AL United Kingdom +44 345 080 9000 bsigroup.com

