

WORLD ACCREDITATION DAY

ACCREDITATION:
EMPOWERING TOMORROW AND SHAPING THE FUTURE



9 JUNE 2024

#WAD2024



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ACCREDITATION

Empowering Tomorrow and Shaping the Future

A framework for trust in a turbulent world

The global economy continues to confront the challenges of inflation, low growth prospects, economic fluctuations, trade disruptions, and accelerating climate change. In parallel, advancements in technology and shifting consumer behaviours are reshaping markets.

The theme of this year's World Accreditation Day, 'Accreditation: Empowering Tomorrow and Shaping the Future', reflects this global outlook. It highlights how accreditation can have a positive impact on these challenges and opportunities, on aspects of life ranging from digitalization and new technologies to sustainability.

Accreditation has been a key pillar of societal assurance for decades, from its origins in metrology and calibration, generating trust in the accuracy and traceability of measurements, to testing services to protect the consumer and government revenues. Accreditation now underpins trust in almost every aspect of everyday life.



Supporting innovation and technical advancement

Innovation is widely recognised as a driver of business growth and an essential contributor to national productivity and economic and social development. Standards and accredited conformity assessment play a vital role in supporting technological evolution in a number of ways.

Firstly, they avoid the need to 're-invent the wheel' by enabling businesses to build on proven designs, thereby reducing duplicative or redundant product development efforts. They can also act as an accelerator of trade and market development through consumer confidence and established networks. Technological change and its commercial exploitation is expedited through the dissemination of information and an accepted framework which remove technical barriers to trade.

New technologies bring new threats and governance challenges. A greater reliance on networked devices presents the threat of cyberattack, while advances in artificial intelligence (AI) technologies present risks of deepfakes or privacy violations. With greater emphasis placed on how businesses report their environmental, social and governance (ESG) performance, how can we trust the credibility of sustainability claims across supply chains?

In today's fast-paced and constantly evolving business environment, accreditation and the other components of the quality infrastructure strive to remain agile and flexible, while maintaining high standards in terms of their role in defining and assessing compliance. Tools like IAF CertSearch (<https://www.iafcertsearch.org/>) demonstrate how the conformity assessment industry is adapting to embrace digitalization and address stakeholder needs. This global database of validated management system certificates allows users to quickly confirm whether a certificate is valid and whether the certification body in question is accredited to issue certifications to that standard.





Supporting cybersecurity and privacy - Managing risk in a connected world

The cyber threat is constantly evolving and organisations are faced with greater challenges to protect themselves from ever-more sophisticated attacks.

The shift to cloud-based services, greater connectivity of devices and the rise of data processing makes it imperative that organisations manage their digital risk, security and operational reliance. Connected Internet of Things (IoT) products are becoming increasingly popular and present additional cybersecurity challenges. These products are often connected to the internet and can transmit sensitive data. As a result, it is important to ensure that cybersecurity solutions are in place to protect these devices and the data they contain.

Ensuring consumer privacy is also a major challenge for businesses in the era of connectivity and big data. Due to its societal impact, cybersecurity has also become a compliance topic. In Europe, for instance, privacy is regulated through the General Data Protection Regulation (GDPR) to protect consumers' private information (<https://gdpr-info.eu>). The Regulation tightens controls on companies dealing with European Union (EU) citizens' data and imposes significant fines for non-compliance.

To address these threats, accredited certification schemes have been developed to protect organisations from breaches, non-compliance, reputational damage and disruption. Data protection and cybersecurity schemes are certified to enable businesses to implement comprehensive data protection processes, prevent potential security breaches, safeguard customer privacy, and protect critical data assets. By adopting and certifying to these standards, companies can assure consumers that their data will remain secure.



Case Study

Providing cyber protection for Spanish authorities

The Spanish Public Administration and any private operator seeking to provide services to a public body must hold a National Security Framework (ENS) certificate. Organisations must demonstrate that they meet the principles, requirements and protection measures necessary to provide the necessary protection of information, as well as for business continuity, and access controls.

In order to provide trust, the certificates are provided by accredited certification bodies. The programme has impacted private companies along with the Spanish public sector, with companies such as Microsoft, Google, Telefónica, Cisco Systems, Vodafone, Orange, KPMG, Deloitte, Salesforce, EY, Zoom, and Canon obtaining ENS certification.

Read more at the link: <https://publicsectorassurance.org/case-study/accredited-certification-on-cybersecurity-a-must-to-provide-services-to-spanish-public-administration/>



Enabling the development of new and digital technologies

Innovative technologies typically originate from private enterprise rather than quality infrastructure bodies. However, standards and accreditation play a critical role in making new technologies something that businesses and other end-users can be confident to adopt. They are therefore an enabler of new technologies becoming mainstream, whether supporting sustainable practices, IoT, blockchain or cloud computing. Accreditation provides a wide range of benefits, from eliminating duplication of reconciliation efforts to reducing the need for third-party intermediaries.

As an example, blockchain acts as a method of safeguarding against data tampering, allowing the digital record to be trusted. It provides a shared ledger that is updated through peer-to-peer replication and validated by all parties every time a transaction occurs, rather than all actors throughout the supply chain keeping their own record. It offers a wide range of benefits, from reducing the need for third-party players to driving efficiencies through the elimination of reconciliation. However, the introduction of any new technology has the potential to expose users and the wider markets to new risks. For blockchain to work effectively, it requires governance. For example, the identity of participants must be verified to guarantee their liability, and data entry processes and interfaces need verification to ensure that accurate data is being captured correctly.

Accredited conformity assessment is already delivering confidence in the quality assurance of goods and services in areas where blockchain technology has been adopted. The food industry uses blockchain technology to help implement globally recognised standards into its supply chain. From laboratory test data to sampling and inspections under food verification schemes, blockchain technology enables a continual and practical way to access information at each stage of the product's journey, from farm to fork. In addition to mitigating risk, the data derived at each stage of the supply chain can also be used to drive improvements in both productivity and quality, as well as to address industry-wide challenges.

The application of standards and accredited conformity assessment is also supporting organisations to adopt more eco-friendly practices to demonstrate assurance that requirements are being met and claims made can be trusted. Accredited conformity assessment demonstrates compliance to environment-related parameters.

The IoT is a disruptive technology that has the potential to have a transformative impact on business and society. The opportunity to network devices that connect and exchange data with other IoT devices and the cloud, through technologies such as sensors and software, enables businesses to operate more efficiently, deliver enhanced customer service, and improve insight and decision-making. However, these innovations present challenges through the lack of industry alignment on standards and interoperability, and issues with security and privacy. Businesses are seeking solutions to demonstrate their products are secure and cyber risks are minimized, whilst consumers demand products they can trust. Testing laboratories are now accredited to carry out testing that ensures the effective cybersecurity of smart and connected devices. Devices are tested for functionality, interoperability, and security.

Case Study

Trust in media content in West Africa

Trust in content published online is an issue that societies in many countries are facing. In West Africa, the **Journalism Trust Initiative (JTI) standard** helps to ensure that media content is reliable, particularly what is published on social media channels. The accuracy of online content impacts all aspects of life, playing a pivotal role in informed-decision making.

Media outlets can be certified to the JTI standard. Accredited certification bodies are used to bring rigour to the process. The JTI also carries out actions with governments so that the repository could serve as a basis for allocating national aid to the press. There are also scholarships for press organizations, which enable them to cover certification costs.

The **JTI / ISO/IEC 17065** program became effective at the Système Ouest Africain d'Accréditation (SOAC) in 2023, with a first file registered for an accreditation pre-assessment finalized in June 2023. Ultimately, for the JTI it is a question of certifying as many media outlets as possible, to increase the availability of reliable information around the world, including in West Africa.

This initiative contributes to SDG 1 – No Poverty, SDG 3 – Good Health and Well-being, SDG 4 – Quality Education, SDG 5 – Gender Equality, SDG 10 – Reduced Inequalities, SDG 13 – Climate Action, SDG 16 – Peace, Justice and Strong Institutions.

Read more at the link: <https://publicsectorassurance.org/case-study/iaf-mla-contributes-to-the-reliability-of-media-content/>



Case Study

New era of smart testing in the Hong Kong construction industry

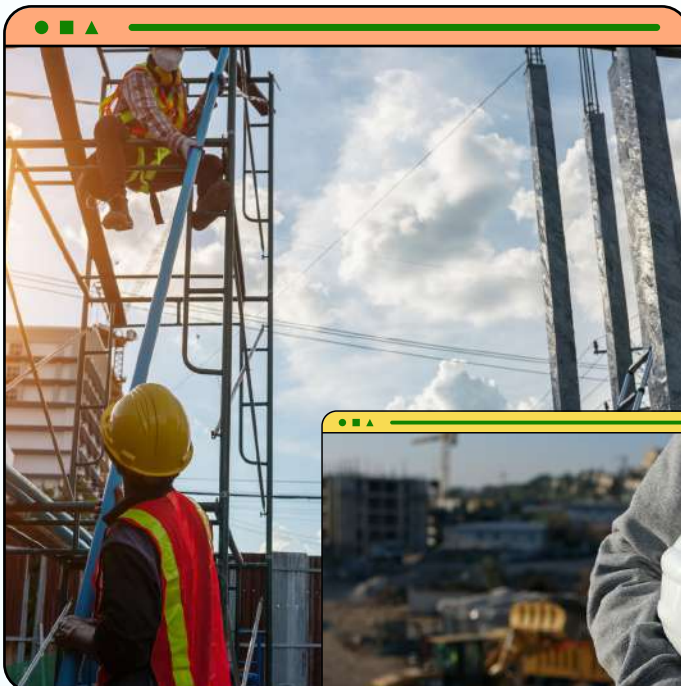
Digitalisation and automated construction materials testing have brought many benefits to construction projects. Automated systems have higher reliability, repeatability and precision, and can reduce the chance of human error, as well as allow for the more efficient use of resources.

To facilitate the digitalisation of site records, including construction materials compliance test results, Public Works Laboratories (PWL) under the Civil Engineering and Development Department of the Government of the Hong Kong Special Administrative Region (HKSAR), switched to test certificates/reports in electronic format. PWL typically processes more than 600,000 test items each year. By going paperless, up to 2 million sheets of paper can be saved every year.

PWL has also developed new automated systems for testing concrete cubes, reinforced steel bars and soil. By adopting a number of advanced technologies, including high-precision robotic arms, computer vision analysis and AI, the testing processes can now be fully automated, significantly enhancing the efficiency of testing services. These innovations were assessed by the Hong Kong Accreditation Service to confirm that the issuing of electronic test reports, as well as the newly developed automated systems, comply with relevant accreditation requirements.

These initiatives contribute to SDG 9 – Industry, Innovation and Infrastructure, SDG 11 - Sustainable Cities and Communities, and SDG 13 – Climate Action.

Read more at the link: <https://publicsectorassurance.org/case-study/new-era-of-smart-testing-in-construction-industry/>





Navigating the evolving landscape of ESG

While the Environmental, Social and Governance (ESG) agenda is not new, it has evolved and accelerated in recent years, primarily due to the new social context in which we operate.


In addition to increasing regulation, businesses are facing increasing pressure to report on and improve ESG performance, driven by investors, shareholder needs, consumer behaviours, and reputational risk. Businesses are facing increased expectations regarding the management of their operations and products, at a time when societal trust is in decline.

There has been a proliferation of assurance schemes and tools to address ESG performance. However, many businesses lack staff with specialist skills in ESG, and the variety of assurance schemes causes confusion and disparities between stakeholder expectations and realities in practice. There are also incidences of 'greenwashing' where companies publish misleading information about their environmental performance. To establish trust, assurance provided by accredited conformity assessment is essential. It demonstrates a business's commitment to openly track progress against its goals and values.

The global quality infrastructure has developed many tools to instil trust in markets and can offer solutions to address the needs of users in the ESG market. The International Organization for Standardization's committee for conformity assessment (ISO/CASCO) offers a toolbox (<https://casco.iso.org/toolbox.html>) that can be further leveraged to verify, demonstrate, and certify results which will increase trust in reporting and disclosure, as well as provide guidance on best practices and ways to continuously improve operations in response to ESG expectations.

Accredited certification bodies are working with companies to help them identify their most pressing issues to drive more sustainable operations. This is being done through data-driven verification, supply chain due diligence and science-based assessments that provide evidence that companies are reducing emissions. These activities are readying businesses to meet the requirements of regulations such as the EU Green deal, the Sustainable Finance Disclosure Regulation (SFDR), the EU Taxonomy, the Corporate Sustainability Reporting Directive (CSRD), and the Corporate Sustainability Due Diligence Directive (CSDDD).





Supporting diversity and inclusion, promoting fair practices in organizations

Accreditation helps organisations promote diversity and inclusion in the workplace, as well as supporting compliance with fair employment practices such as equal pay and non-discrimination.

From Australia, to the United States, to the EU, regulations are being developed to tackle modern slavery, child labour, protection of human rights, and fair wages. Diversity, equity & inclusion (DE&I) initiatives have therefore become standard items on many corporate agendas. Internal and external scrutiny is increasing and there is greater awareness of the value that a more diverse workforce brings. National and international reference standards, such as **ISO 30415 Human resource management – Diversity and inclusion**, can guide a company on their journey to deliver on their commitment to DE&I.

Certification to standards like **FSSC 24000** and **BRCGS's Ethical Trading and Responsible Sourcing standard** provides a framework and the opportunity to evidence their performance.

These schemes demonstrate commitment to ethical and social best practices throughout a business and supply chain, by verifying diversity, ethics and human rights data.



Case Study Supporting gender equality in Italy

In Italy, the Department for Equal Opportunities is providing grants of up to 12,500 euros to assist micro-, small- and medium-sized enterprises in achieving accredited certification for gender equality. These grants are for technical assistance and support services, provided in the form of tutoring, and for gender equality certification services.

Certification is issued in compliance with **UNI/PdR 125/2022**, by bodies accredited by Accredia in accordance with the **UNI CEI EN ISO/IEC 17021-1** standard. Areas of evaluation include culture and strategy, governance, human resources processes, opportunities for growth and inclusion, remuneration equity by gender, protection of parenthood and work-life balance.

Since the publication of **UNI/PdR 125**, company sites that have obtained certification have grown rapidly, reaching over 3,100 units as of September 2023. The certifications have been issued by 48 accredited conformity assessment bodies.

This initiative contributes to SDG 5 – Gender Equality and SDG 10 – Reduced Inequalities

Read more at the link: <https://publicsectorassurance.org/case-study/accredited-certification-in-italy-promoting-accessibility-in-tourism-and-sports/>

Case Study

Supporting healthier food options in India

In pursuit of its vision to transform India into a nation that is free of trans fat, the Food Safety and Standards Authority of India (FSSAI), the regulatory body overseeing food safety & standards in the country, conducted a comprehensive nationwide survey to assess the prevalence of trans fat in different categories of food products. The FSSAI partnered with the Quality Council of India (QCI), an apex body for accreditation & quality promotion in India, on this initiative to conduct an impartial and thorough market survey on trans fats and acrylamide content in various food samples.

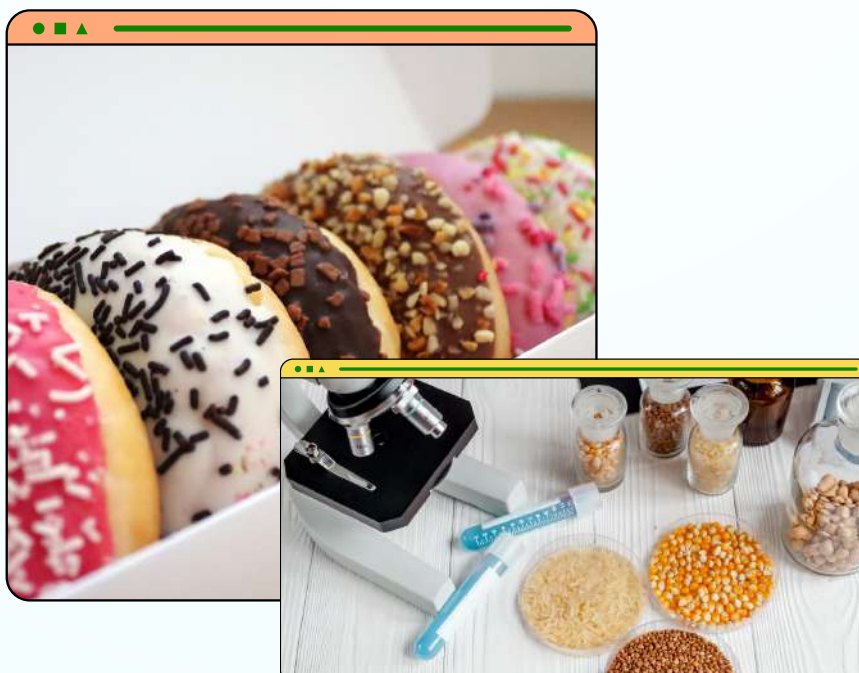
More than 6,000 samples of packaged food products were gathered from a diverse range of sources, including stores, hypermarkets, and grocery shops. The selection process ensured a random and representative sampling from different strata of the food market.

All samples underwent analysis for trans fat content, while around half of the samples were also specifically analysed for total acrylamide content. To maintain the integrity of the survey, samples were collected and analysed by the accredited conformity assessment bodies of the National Accreditation Board for Certification Bodies (NABCB) and National Accreditation Board for Testing and Calibration Laboratories (NABL)-accredited laboratories, ensuring the accuracy and reliability of the survey results.

The survey, with reliable test data provided by accreditation, helped in targeting the specific food groups or states in order to achieve the goal of eliminating industrially produced trans fat in Indian foods in a phased manner.

These initiatives contribute to SDG 2 – Zero Hunger, SDG 3 – Good Health and Well-being, SDG 15 – Life on Land, and SDG 17 – Partnerships for the Goals.

Read more at the link: <https://publicsectorassurance.org/case-study/building-national-trust-by-ensuring-food-safety-and-quality-through-accredited-conformity-assessment-bodies/>





Supporting the transformation to a circular economy

Today's global economy is shifting away from the concept of 'linearity' to one of 'circularity', whereby the lifecycle of products is extended and waste is reduced to a minimum.

A circular economy provides a way of mitigating the climate crisis and making the planet more sustainable and resilient. It sets out measures that minimize pollution and waste, extend product lifecycles and enable the sharing of natural assets. It covers all stages of the supply chain, from production to consumption, including repair and remanufacturing, waste management, and secondary raw materials that are fed back into the economy. Accreditation, therefore, has a critical role to play in providing assurance that these specified needs or expectations are met.

Accreditation is critical to the robustness of circularity. This includes aspects such as safety, efficiency, repairability, durability, upgradability, recyclability and reusability. Accredited conformity assessment offers a range of tools that can be used to provide the necessary assurance, whether it regards the effectiveness of a supply chain management system, the declaration of a product's life cycle, or the raw material's recovery process.

Accredited tests, measurements and verification and validation services also strengthen the global response to the threat of climate change by playing a central role in energy efficiency programmes, energy generation from renewable sources, and public policies such as carbon pricing, financing for low-carbon development projects, and by incentivizing the promotion of low-carbon solutions and carbon emission reduction schemes like **ICAO CORSIA** (<https://www.icao.int/environmental-protection/CORSIA/Pages/default.aspx>).



Case Study

The efficient use of water in Mexico

The Mexican State assumes the responsibility of administering, managing, and preserving both the quality and quantity of water, as specified in the National Water Law. Water is a critical social, economic, and environmental resource.

Due to data collection issues relating to the real amount of national waters extracted by users, there were inefficiencies in the use of water and, at times, under-declarations in the volumes reported to the Mexican authorities.

The national water program in Mexico has designated the **NMX-AA-179** standard as mandatory. It establishes that accredited Integrated Service Providers (ISPs) and the Inspection Bodies are responsible for the selection, installation and operation of the meters or measurement systems, as well as the remote transmission of the measurement information to the authority. In addition, they play a crucial role in ensuring the correct measurement of national waters through the conformity assessment procedure.

This policy, supported by accreditation, ensures the accuracy of data collection and certainty in the volumes used, whilst not imposing additional measurement costs on the user.

This positive impact contributes directly to Mexico's Sustainable Development Goals, which seek, by 2030, to significantly increase the efficient use of water resources in all sectors and ensure the sustainability of freshwater extraction and supply to meet current challenges. They aim to reduce water scarcity and significantly reduce the number of people suffering from water deprivation.

These initiatives contribute to SDG 8 – Decent Work and Economic Growth, SDG 9 – Industry, Innovation and Infrastructure, SDG 11 - Sustainable Cities and Communities, SDG 12 – Responsible Consumption and Production.

Read more at the link: <https://publicsectorassurance.org/case-study/accreditation-for-the-efficient-use-of-water/>



Case Study

Supporting Jordan's drive for clean energy

The Hashemite Kingdom of Jordan is mostly dependent on oil, however it is keen to generate cleaner, yet efficient, energy sources.

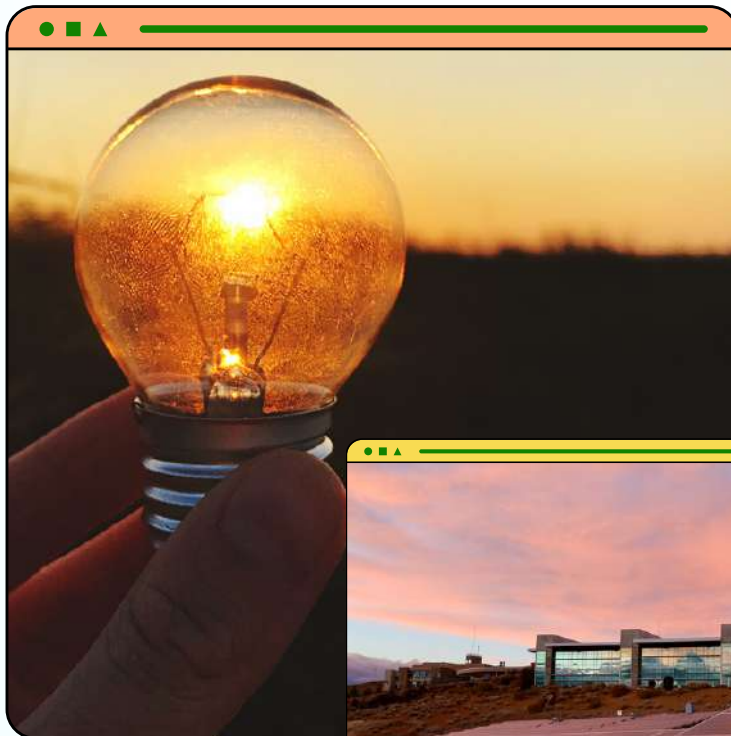
Solar energy, like other alternative energies, remains underutilized in Jordan. The solar potential in Jordan is significant, as it lies within the solar belt of the world with average solar radiation ranging between 5 and 7 KWh/m², which implies a potential output of at least 1000 GWh per year.

As a result, the Kingdom has invested in a solar distribution system to generate electricity, which is used for water heating, especially in the domestic sector. The efficiency of the solar panel cells is demonstrated through accredited laboratory testing.

The accredited testing provides confidence that this energy source will deliver cost savings and efficiency. As a result, a greater proportion of the population will have access to electricity from renewable resources.

This initiative contributes to SDG 7 – Affordable and Clean Energy.

Read more at the link: <https://publicsectorassurance.org/case-study/accreditation-supporting-the-provision-of-solar-energy-in-jordan/>



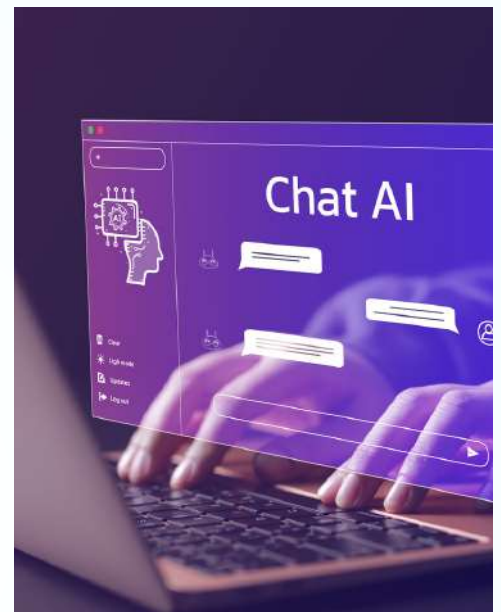


The transparent and ethical use of AI

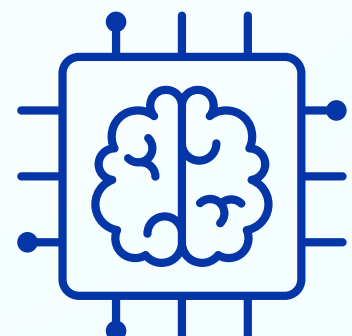
AI and Machine Learning are already having a considerable impact on business operations and society as a whole. The ability to analyse and interpret vast data sources in seconds, autonomous vehicles, and remote diagnostics of human health represent some notable advances.

Although intended to bring about positive societal benefit, the inappropriate use of the technology, the lack of controls in place, and a current lack of regulatory frameworks represent risks that require governance.

To bridge these gaps, the **ISO/IEC 42001 Information technology — Artificial Intelligence — Management System Standard** has been developed to specify requirements for establishing, implementing, maintaining, and continually improving an Artificial Intelligence Management System (AIMS) within organisations. It is designed for organisations providing or utilizing AI-based products or services, ensuring their responsible development and use.



It is the first global AI management system standard, providing valuable guidance for this rapidly changing field of technology. It addresses ethical considerations, transparency, and continuous learning. It provides organisations of all sizes with a common language and standardized approach for developing, implementing, and managing AI systems in line with the organization's goals and objectives. It also ensures how effectively an organisation balances AI governance against innovation.





Further Information

Visit www.publicsectorassurance.org to access research, case studies and supporting information showcasing how accredited conformity assessment is used around the world by central governments, local governments and regulators to deliver positive benefits.

Visit www.business-benefits.org/ for examples of how businesses can benefit from standards and accreditation.







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