ISO/IEC 27001:2022 Information Security Your implementation guide

Inspiring trust for a more resilient world



What is ISO/IEC 27001?

Data and connectivity are accelerating the extraordinary transformation of organizations, from the establishment of digital ecosystems to the optimization of supply chains and operational procedures.

But with every technological advancement, cyber attacks, data breaches, and other operational disruptions become inevitable.

That's why organizations need to build resilience around their information security management with an internationally recognized framework like ISO/IEC 27001.

ISO/IEC 27001 helps organizations show their stakeholders that they prioritize safety, privacy, reliability, cyber security and data ethics throughout their organization. And that their information management system is aligned with global best practice.

At BSI, we have the experience, expertise and support services to help you get the most from ISO/IEC 27001 and make your organisation more resilient and responsive to threats.

This guide shows you how to implement ISO/IEC 27001, enabling your organization to demonstrate its commitment to information security and safeguarding its reputation with clients, suppliers and partners in an increasingly competitive digital world. We also showcase our additional support services, which help you not only achieve certification, but continue to reduce risk and protect your business.

Contents:



Benefits



ISO/IEC 27001 clause by clause



Top tips from our clients



Your ISO/IEC 27001 journey



BSI Training Academy



BSI Connect



How ISO/IEC 27001 works and what it delivers for you and your company

The ability to manage information safely and securely has never been more important. ISO/IEC 27001 not only helps protect your business, it also protects your reputation. This standard sends a clear signal to customers, suppliers, and the market place that your organization has the ability to handle information securely.

ISO/IEC 27001 is a robust framework that helps you protect information such as financial data, intellectual property or sensitive customer information. It helps you identify risks and puts in place security measures that are right for your

business, as well as giving you the ability to continually review and refine the way you do this, not only for today, but also for the future.

That's not all. ISO/IEC 27001 lays the foundation from which you can build and strengthen digital trust across your entire digital ecosystem. It helps you effectively implement a range of complementary standards and solutions that enhance your information security practices, such as as ISO/IEC 27002 (Information Security Controls) and ISO/IEC 27701 (Privacy Information Management).

Benefits of ISO/IEC 27001*



 $[\]star$ Source: BSI Benefits survey - BSI clients were asked which benefits they obtained from ISO/IEC 27001



How ISO/IEC 27001 works

The latest version of ISO/IEC 27001 was published in 2022 to provide businesses with more robust controls that will help them adapt to today's cloud-based and digitally reliant business practices (such as remote working and "bring your own device"). The updates will enable organizations to address increasingly sophisticated security risks, ensure business continuity, and gain a competitive advantage

ISO/IEC 27001:2022 is also designed to help businesses

strengthen their information security posture, which in turn supports digitalization strategies and builds brand trust. A crucial advantage for businesses in an increasingly competitive landscape.

The standard is based on the harmonized structure (HS) Annex SL, which is a common framework for all revised and future ISO management system standards, including ISO 9001:2015 and ISO 14001:2015.

Concept	Comment
Context of the organization	Consider the combination of internal and external factors and conditions that can affect the organization's information.
Issues, risks and opportunities	Issues can be internal or external, positive or negative and include conditions that affect the confidentiality, integrity and availability of an organization's information. Risks are defined as the "effect of uncertainty on an expected result".
Interested parties	A person or entity that can affect, be affected by, or perceive themselves to be affected by a decision or activity. Examples include suppliers, customers or competitors.
Leadership	Requirements specific to top management who are defined as a person or group of people who directs and controls an organization at the highest level.
Risk associated with threats and opportunities	Refined planning process replaces preventive action and is defined as the 'effect of uncertainty on an expected result'.
Communication	The standard contains explicit and detailed requirements for both internal and external communications.
Documented information	The meaningful data or information you control or maintain to support your ISMS.
Performance evaluation	The measurement of the ISMS and risk treatment plan effectiveness.
Risk owner	The person or entity that has been given the authority to manage a particular risk and is accountable for doing so.
Risk treatment plan	A risk modification plan which involves selecting and implementing one or more treatment options against a risk.
Controls	Any administrative, managerial, technical, or legal method that is used to modify or manage an information security risk. They can include things like practices, processes, policies, procedures, programs, tools, techniques, technologies, devices, and organizational structures. They are determined during the process of risk treatment.
Continual improvement	Methodologies other than Plan-Do-Check-Act (PDCA) may be used.

Key requirements of ISO/IEC 27001:2022



Clause 1: Scope

The first clause details the scope of the standard.



Clause 2: Normative references

All the normative references are contained in ISO/ IEC 27000, Information technology – Security techniques – Information security management systems – Overview and vocabulary, which is referenced and provides valuable guidance.



Clause 3: Terms and definitions

Please refer to the terms and definitions contained in ISO/IEC 27000. This is an important document to read.



Clause 4: Context of the organization

This is the clause that establishes the context of the organization and the effects on the ISMS. Much of the rest of the standard relates to this clause.

The starting point is to identify all external and internal issues relevant to your organization and your information or information that is entrusted to you by 3rd parties. Then you need to establish all "interested parties" and stakeholders as well as how they are relevant to the information. You will need to identify requirements for interested parties which could include legal, regulatory and/or contractual obligations. You'll also need to consider important topics such as any market assurance and governance goals.

You will be required to decide on the scope of your ISMS, which needs to link with the strategic direction of your organization, core objectives and the requirements of interested parties.

Finally, you'll need to show how you establish, implement, maintain and continually improve the ISMS (including the processes needed and their interactions) in relation to the standard.



Clause 5: Leadership

This clause is all about the role of "top management," which is the group of people who direct and control your organization at the highest level. They will need to demonstrate leadership and commitment by leading from the top.

Top management need to establish the ISMS and information security policy, ensuring it is compatible with the strategic direction of the organization. They also need to make sure that these are made available, communicated, maintained and understood by all parties.

Top management must ensure that the ISMS is continually improved and that direction and support are given. They can assign ISMS relevant responsibilities and authorities, but ultimately they remain accountable for it.



Clause 6: Planning

This clause outlines how an organization plans actions to address risks and opportunities to information.

It focuses on how an organization deals with information security risk and needs to be proportionate to the potential impact they have. ISO 31000, the international standard for risk management, contains valuable guidance. Organizations are also required to produce a "Statement of Applicability" (SoA). The SoA provides a summary of the decisions an organization has taken regarding risk treatment, the controls you have included, and those you have excluded and why you have decided to include and exclude the controls in the SOA.

Another key area of this clause is the need to establish information security objectives and the standard defines the properties that information security objectives must have.

Finally this clause requires an organization to perform changes to the ISMS in a planner manner.



Clause 7: Support

This section of ISO/IEC 27001 is all about getting the right resources, the right people and the right infrastructure in place to establish, implement, maintain and continually improve the ISMS.

It deals with requirements for competence, awareness and communications to support the ISMS and it could include making training and personnel available, for example.

This clause also requires all personnel working under an organization's control to be aware of the information security policy, how they contribute to its effectiveness and the implications of not conforming.

The organization also needs to ensure that internal and external communications relevant to information security and the ISMS are appropriately communicated. This includes identifying what needs to be communicated to whom, when and how this is delivered.

It's in this clause that the term "documented information" is referenced. Organizations need to determine the level of documented information that's necessary to control the ISMS.

There is also an emphasis on controlling access to documented information, which reflects the importance of information security.





Clause 8: Operation

This clause is all about the execution of the plans and processes that are the subject of previous clauses.

It deals with the execution of the actions determined and the achievement of the information security objectives, requiring organizations to establish criteria for the required processes and implement those processes accordingly. In recognition of the increased use of outsourced functions in today's business world, these processes also need to be identified and controlled. Any changes, whether planned or unintended need to be considered here and the consequences of these on the ISMS.

It also deals with the performance of information security risk assessments at planned intervals, and the need for documented information to be retained to record the results of these.

Finally, there is a section that deals with the implementation of the risk treatment plan, and again, the need for the results of these to be retained in documented information.



Clause 9: Performance evaluation

This clause is all about monitoring, measuring, analyzing and evaluating your ISMS to ensure that it's effective and remains so. This clause helps organizations to continually assess how they are performing in relation to the objectives of the standard to continually improve.

You will need to consider what information you need to evaluate the information security effectiveness, the methods employed and when it should be analyzed and reported.

Internal audits will need to be carried out as well as management reviews. Both of these must be performed at planned intervals and the findings will need to be retained as documented information.

It should be noted that management reviews are also an opportunity to identify areas for improvement.



Clause 10: Improvement

This part of the standard is concerned with corrective action requirements. You will need to show how you react to nonconformities, take action, correct them and deal with the consequences. You'll also need to show whether any similar nonconformities exist or could potentially occur and show how you will eliminate the causes of them so they do not occur elsewhere.

There is also a requirement to show continual improvement of the ISMS, including demonstrating the suitability and adequacy of it and how effective it is. However how you do this is up to you.

ISO/IEC 27001 also includes Annex A which outlines 93 controls to help protect information in a variety of areas across the organization. ISO/IEC 27002 also provides best practice guidance and acts as a valuable reference for choosing, as well as excluding, which controls are best suited for your organization.



Top tips on making ISO/IEC 27001 effective for you

Every year we help tens of thousands of clients. Here are their top tips.

Top management commitment is key to making implementation of ISO/IEC 27001 a success. They need to be actively involved and approve the resources required.

"The earlier that organizations talk to senior managers, the better it will go for them so have those discussions early".

John Scott, Overbury, leading UK fit-out and refurbishment business

Think about how different **departments** work together to avoid silos. Make sure the organization works as a team for the benefit of customers and the organization.

"The key to implementing the standard lay in getting staff to think about information security as an integral part of the daily business and not as an additional burden".

Mr. Thamer, Ibrahim Ali Arab, Assistant General Manager I.T.

Review systems, policies, procedures and processes you have in place – you may already do much of what's in the standard, and make it work for your business. You shouldn't be doing something just for the sake of the standard – it needs to add value.

"Don't try and change your business to fit the standard. Think about how you do things and how that standard reflects on how you do it, rather than the other way around".

Paul Brazier, Commercial Director, Overbury

Speak to your customers and suppliers.

They may be able to suggest improvements and give feedback on your service.

"This certification allows us to go one step further by offering our customers the peace of mind that we have the best controls in place to identify and reduce any risks to confidential information".

Jitesh Bavisi, Director of Compliance, Exponential-eBavisi

Train your staff to carry out internal audits of the system. This can help with their understanding, but it could also provide valuable feedback on potential problems or opportunities for achievement.

"The course was loaded with practical exercises and real-case scenarios and was structured in a way that it encouraged participants to be interactive and share their experiences in information security".

Nataliya Stephenson Manager, Information Security, NSW Attorney General's Department

And finally, when you gain certification celebrate your achievement and use the **BSI Assurance Mark** on your literature, website and promotional material.





Your ISO/IEC 27001 Journey

Whether you're new to information security management or looking to enhance your current system, we have the right resources and training courses to help you understand and implement ISO/IEC 27001. We can help make sure your system keeps on delivering the best for your business.

You need to: We help you: Buy the standard and read it; understand Discover information on our website, the content, its requirements and how it will including case studies, whitepapers and Understand and prepare improve your business webinars at bsigroup.com • Contact us, we can propose a solution to Strengthen knowledge through various meet your organization's needs training courses such as: - Implementing ISO/IEC 27001:2022 - Requirements of ISO/IEC 27001:2022 - Lead implementer ISO/IEC 27001:2022 Ensure your organization understands the Access a self-assessment checklist See how ready principles of ISO/IEC 27001 and the roles ISO 27001:2013 Implementation training individuals will need to play, and review Support ISO/IEC 27001 implementation your activities and processes against with BSI Connect, our integrated the standard technology solution Contact us to book your certification BSI ISO/IEC 27001:2022 Internal and Lead assessment Auditor training get certified We will then carry out system and Complete your BSI certification assessment document assessments (a 2-stage process). The length of this may depend of the size of your organization

Accelerating progress towards a more secure, sustainable world

Your journey doesn't stop with certification. We can help you to fine-tune your organization so it performs at its best.

- Celebrate and promote your success download and use the BSI Mark of Trust to show you are certified
- ISO/IEC 27001 Registered Auditor qualification can help advance your auditing skills
- BSI Connect will help you to manage systems and drive performance
- Your BSI Client Manager will visit you regularly to make sure you remain compliant and support your continual improvement
- Consider integrating other management system standards to maximize business benefits



BSI Training Academy

Boost your knowledge with our expertise: BSI has a comprehensive range of training courses ranging from in-person, remote and on demand, to support implementation of ISO/IEC 27001 and help build the skills in your organization. Our expert instructors can transfer the knowledge, skills and tools your people need to embed the standards of excellence into your organization. We've also optimized our on-demand

courses for interactive, classroom-grade learning through interactive videos, self-assessment quizzes and drop-down menus.

What's more, the accelerated learning techniques applied in our courses will help make sure that what you learn stays with you. And with BSI's

Courses that help you understand ISO/IEC 27001 include:

ISO/IEC 27001:2022 Requirements

- One-day classroom-based training course
- Learn about the structure and key requirements of ISO/IEC 27001:2022
- Essential for anyone involved in the planning, implementing, maintaining, supervising or auditing of an ISO/IEC 27001:2022 ISMS

ISO/IEC 27001:2022 Lead Implementer

- Five-day classroom based training course
- Learn and understand the tools and methodologies to lead an ISO/IEC 27001 implementation
- Recommended for anyone involved in planning, implementing, maintaining, supervising or auditing of an ISO/IEC 27001 ISMS

ISO/IEC 27001:2022 Lead Auditor

- Five-day classroom based training course
- Gain the skills and understanding required to lead and successfully undertake a successful management system audit
- Recommended for anyone involved in auditing maintaining or supervising an ISO/IEC 27001:2022 ISMS

ISO/IEC 27001:2022 Implementation

- Two-day classroom based training course
- Discover the stages of implementation and how to apply a typical framework for implementing ISO/IEC 27001
- Recommended for anyone involved in planning, implementing, maintaining, supervising or auditing of an ISO/IEC 27001 ISMS

ISO/IEC 27001:2022 Internal Auditor

- Two-day classroom based training course
- Learn how to initiate an audit, prepare and conduct audit activities, compile and distribute audit reports and complete follow-up activities
- Ideal for anyone involved in auditing, maintaining or supervising an ISO/IEC 27001:2022 ISMS

ISO/IEC Auditor Qualifications

- We've developed auditor qualifications for ISO/ IEC 27001 – information security management systems - to give you the skills and knowledge you need to be an auditor practitioner, and by teaching you techniques in process improvement to become an auditor professional.
- Once you've achieved your professional qualification, you can apply to become certified

 a 3-year rolling programme to validate the practical application of your learning and your continuing professional development within your industry.



BSI Connect Solution

Accelerate implementation time and deliver continual improvements

The decision to implement a new management system standard is a huge opportunity to drive business improvement, but initiating, implementing and maintaining this can also be a challenge. Ensuring you get the most from your investment is a key driver to your future success.

BSI Connect provides a solution that can significantly reduce the cost and effort to implement an effective management system, such as ISO/IEC 27001. It can be configured to the requirements of ISO/IEC 27001 and provide your organization with the tools necessary to manage essential elements of ISO/IEC 27001 across your organization. The start of your ISO/IEC 27001 journey is an ideal time to implement BSI business improvement software and sustain the standard successfully.

It can help you to:

- Accelerate implementation time by up to 50%
- Manage your document control effectively
- Provide company-wide visibility on implementation of the standard so you know exactly where you are at any one time
- You can easily and accurately input actions related to audits, incidents/events, risk and performance
- Through its customizable dashboards and reporting tools it gives you early insight into trends that help you make business decisions early on and drive improvement

By addressing issues at the facility level, you'll avoid costs. This is how Connect generates savings.





BSI has been involved in the development of ISO/IEC 27001 since its inception as a security management standard, originally based on BS 7799 and developed by BSI in 1995 to advance digital trust.

For more than 120 years, our experts have been challenging mediocrity and complacency to help embed excellence into the way people and products work.

We've helped 80,000 clients in 182 countries, achieve their goals and grow sustainably – all while balancing the need for profit with the needs of the planet and its people. As your independent trusted partner, we're committed to shaping the future of society together.

Our products and services

BSI provides a unique combination of products and solutions.

Knowledge

The core of our business centres on the knowledge and insights we create and impart to our clients. As a partner in progress, we provide data-driven insights that help our clients identify future opportunities to strengthen digital trust, and accelerate progress towards a sustainable world.

Assurance

Our end-to-end digital trust solutions, along with our focus on health, safety, well-being and sustainability, enable us to shape positive change and provide assurance to clients. We have a holistic approach to digital trust, focused on our society 2050 vision, that incorporates digital governance and risk, cybersecurity and privacy, ethical AI, and sustainable transformation.

Compliance

We invest in BSI's innovation and transformation so that we can strengthen our team's digital knowledge and assurance expertise. This allows us to empower our clients to create trust in the digital era by ensuring they are compliant with regulations and requirements, for which we provide a range of products, tools, services.

bsi.

Call: **+44 (0)345 080 9000**

Visit: bsigroup.com

Start your digital trust journey with BSI today