



➤ ISO 14001 Whitepaper

Background and update to the 2015 revision

Approaching change

ISO 14001 at a glance

What is ISO 14001?

In the early 1990s BSI began working on BS 7750 and the British Standard was published around the same time as the Earth Summit in Rio. Soon after, ISO started developing the international environmental standard and it was finally published in 1996. In 2004 minor changes were made to ISO 14001 to align it better with the ISO 9001 Quality Management Standard, making its requirements clearer. This also meant that organizations no longer had to duplicate their efforts when implementing the two systems.

How does ISO 14001 work?

ISO 14001 can be applied to all types and sizes of organizations and helps them put systems and processes in place to boost their environmental performance. This includes energy consumption, waste management, regulatory compliance, supply chain requests and resource planning.

By reducing their impact on the environment and following a more sustainable business model, companies can save money and energy, while helping to preserve the world's resources for future generations. Being ISO 14001 certified also means organizations are more likely to achieve and comply with legal and industry legislation – leading to fewer fines and lower clean-up costs.

More about ISO 14001's structure

As an internationally recognized standard for environmental management, ISO 14001 is built on the Plan-Do-Check-Act (PDCA) approach. This is the operating principle of all ISO management system standards, including ISO 9001.

Put in the context of environmental management, the PDCA approach works as follows:

- **Plan.** Do an environmental review and identify what will affect your organization. Define your objectives, targets and action plans to improve your environmental performance – all in line with your company's policy.
- **Do.** Implement your environmental management action plans.
- **Check.** Monitor and measure your processes and operations against the company's objectives and report the results.
- **Act.** Take actions to improve your environmental performance on an ongoing basis.

➤ ISO 14001:2015 The impact on organizations

ISO 14001:2015 will help organizations to put a policy in place that promotes environmental protection specific to the context of their business. This will strengthen their commitment to sustainable development and resource use, climate change and the protection of ecosystems. The revised standard will also look at environmental aspect identification and the evaluation process from a lifecycle perspective – which means companies need to think beyond the areas where they have direct control.

In future, environmental objectives will take both internal and external factors into account and be linked to programmes with at least one or more performance indicators. These objectives also need to be fully integrated with company processes.

When it comes to value chain planning and control, ISO 14001:2015 will introduce a new set of requirements to manage or influence upstream and downstream processes. These include all outsourced activities, such as transport, packaging and disposal, as well as the procurement of goods and services.

Lastly, organizations may need to collect and provide information about the impact they have on the environment during the use and end-of-life treatment of the product, or during the delivery of their services. They also have to show their compliance with the relevant legal requirements at all times.

Who can benefit from ISO 14001?

ISO 14001 is designed to benefit any organization – whatever their size or number of sites. This includes public, private and not-for-profit organizations wanting to cut waste and energy costs or companies in supply chains challenged to become more environmentally friendly. Once ISO 14001 has successfully been implemented, companies can look forward to an improved overall

company performance, a better reputation, enhanced sales and market access, effective operational controls to manage impact, reduced risk of litigation and fines, product differentiation and a positive influence on the bottom line.

➤ Why ISO 14001 is changing

Usually standards are reviewed every five years to make sure they stay relevant and in 2011, the ISO Technical Committee agreed that ISO 14001 should be revised. One reason is the fact that technology and business practices have changed significantly since its last major revision, and with companies using multiple standards at a time, there is a clear need for a common format to make implementation easier. The revised standard will also be valid for 10 to 15 years, so a large number of people felt that ISO 14001 needed to be improved.

In today's world, environmental management systems have to be part of a sustainability and social responsibility policy. These systems help organizations to understand and optimize their environmental performance in line with legal and other important external requirements. Once an effective environmental management

system is part of the overall strategic business objectives, it'll help to regulate internal, external, direct or indirect environmental impacts.

To date, the revision has taken into account the final report of the ISO/TC 207 SC1 Future Challenges for EMS Study Group. It will also look at how to maintain and improve the basic principles of ISO 14001:2004, as well as keeping and enhancing its existing requirements.

The revision process, explained by Nigel Leehane, ISO working group member:

The ISO WG5 Working Group met for the first time in 2012. Once the initial scoping stage was finalized, the terms of reference for the working group were confirmed.

Their first task was to agree on two key input documents for the process. These had

to incorporate the new high level structure' requirements with ISO 14001 text, plus the findings of the ISO Future Challenges for EMS report – both of which encourage the integration of environmental management into mainstream business. After refining the text, they created a series of working drafts and subsequently released a Committee Draft, asking for comments from ISO's members, including BSI.

Over 1,000 comments on the latest Committee Draft were addressed by the Working Group at its last meeting. In order to deal with them all, task groups were established to tackle sets of comments. Once the task groups have worked on their allocated clauses, the full Working Group will confirm all changes," Nigel added.

➤ The key changes

ISO 14001:2015 will be based on Annex SL – the new high level structure that brings a common framework to all management systems. This helps to keep consistency, align different management system standards, offer matching sub-clauses against the top-level structure and apply common language across all standards. Based on the PDCA approach, ISO 14001:2015 will follow the structure shown in the table.

With the new standard in place, organizations will find it easier to incorporate their environmental management system into the core business processes and get more involvement from senior management.

0	Introduction	6	Planning
1	Scope	7	Support
2	Normative references	8	Operation
3	Terms and definitions	9	Performance evaluation
4	Context of the organization	10	Improvement
5	Leadership		

➤ Outlining the proposed changes

The first significant change is **Clause 4: Context of the organization**. This is an entirely new clause that brings a better and more strategic understanding of all the factors affecting the way organizations manage their environmental responsibilities. Some examples are the climate, resource availability and social, regulatory, financial and technology changes.

Clause 5, Leadership, has been enhanced to ensure more commitment, responsiveness, active support and feedback from the organization's top management. Their buy-in is critical for the success of the environmental management system, so they'll be directly or indirectly tasked with specific responsibilities. These changes will help to raise the profile of an environmental management system, making sure top management looks at it from a strategic, tactical or operational level. "The amendments to this clause will require a real change in the way Certification Bodies will audit against the standard", according to Nigel.

The concept of planning preventative action will now be covered in **Clause 6, Planning**. The committee felt that this section was a better fit than the 'acting part' in the current standard. This clause will specifically focus on heightened awareness and competence.

Although the requirements of **Clause 7, Support**, have not changed, they will be more prescriptive to encourage consistency across the organization. One example is communication requirements. These, previously part of 'future challenges', have now been revised to make all communication more transparent, appropriate, credible and reliable. The clause separates internal and external communication and requires more detail when reporting externally.

Clause 8, Operations, now places greater emphasis on the concept of the 'value chain' that impacts the environmental management system. It also looks at how organizations

control changes and outsource specific processes.

Clause 9, Performance evaluation, is a new clause that has pulled together a number of existing clauses from the current version including monitoring and measurement and management review. This will help companies to gather the right records and prove that their environmental management system meets their business objectives.

A more structured approach has been suggested for **Clause 10, Improvement**. Although it retains the principle of the current non-conformity and corrective action clause, the new standard is more detailed in its consideration of nonconformity and resulting action needed.

➤ Where to go from here?

What does the future hold for organizations?

Although the revised standard changes the way organizations interpret and meet the requirements of ISO 14001, a large part remains the same. At the moment companies don't have to take any action but once the new version is published and the changes are known, they'll have to transition to ISO 14001:2015. This means revising their processes and documentation in line with the standard's new requirements.

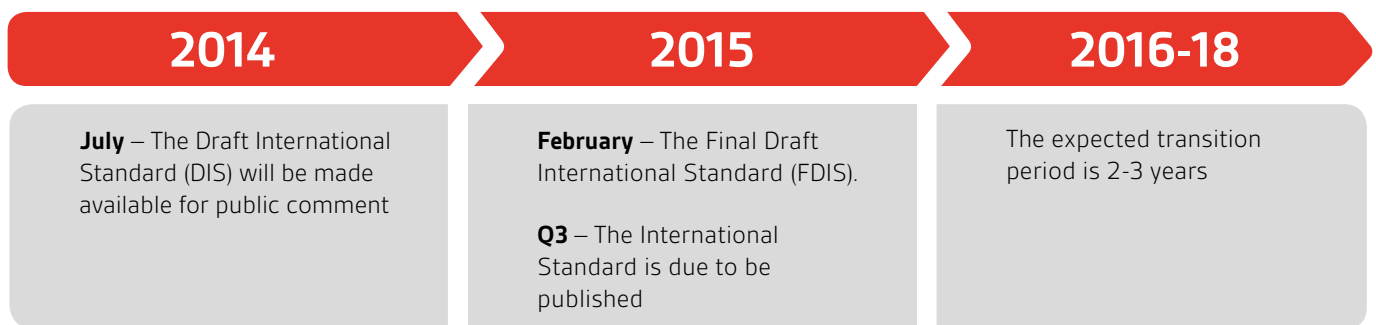
In the past organizations had two years to transition, but the exact period will only be confirmed once the new standard is published.

What are the ISO Committee's next steps?

Nigel explains: "Following the next ISO meeting in Panama, the Committee will agree on the text that will go into the Draft International Standard (DIS). From there ISO will take about three months to adjust and format all the work and comments from their meeting to finalise the DIS – without making any changes to the technical content."

➤ The revision and transition timeline

Here is the expected timeline for the publication of ISO 14001:2015:



➤ Stop press

Here is the very latest news from Panama where the committee met to further review the comments against the second draft in preparation for the DIS. Nigel Leehane, member of the ISO 14001 Committee working group, reports:

'At its meeting at the end of May, the working group completed its review of the comments received on the CD2 version and made further modifications to the document. At the end of the meeting it was resolved to recommend that the document should be issued by ISO as a "Draft International Standard" (DIS), for public consultation. A small number of the working group will continue to edit the document and aim to send it to the ISO secretariat in early July, for formatting and translation. ISO will then issue the DIS for a three-month consultation. The working group will meet again in February to review the responses to that consultation and produce a final version (FDIS), for vote by the ISO member bodies. Assuming that the vote is positive, ISO 14001:2015 will be published in the summer of

2015. Finally, it was confirmed that at a recent meeting, the IAF, the accreditation body for certification organizations, has accepted the working group's recommendation for a 3-year transition to the new standard. This will harmonise with the timescale for transition to the revised ISO 9001

Bio:

Nigel Leehane is Managing Director of environmental management consultancy CRA Europe Ltd. Nigel has over 20 years consultancy experience, working with a wide range of organizations in the UK and globally, in implementing and improving management systems and processes. He chairs the BSI sub-committees on environmental management systems and environmental auditing, and is one of the UK's technical experts working on the revision of ISO 14001. He also participates in the working group which is developing ISO 45001, the new health and safety management systems standard.