

# ISO 9001, 14001 AND 45001: MANAGING RISK EFFECTIVELY AND EFFICIENTLY IN THE CONSTRUCTION INDUSTRY

## CONTRIBUTING AUTHORS:

CHERYL SAVAGE, SENIOR CONSULTANT, EMEA, SAI GLOBAL

STEVE NICHOLAS, COMMERCIAL GENERAL MANAGER, EMEA, SAI GLOBAL

For the first time, organisations in the construction industry will soon have a common structure to enable easier integration of their quality, occupational health and safety (OHS) and environmental management systems. In an industry characterised by significant safety and environmental challenges and increasingly complex processes, this change is a major opportunity for organisations of any size to better meet those challenges and streamline processes.

This whitepaper discusses the organisational benefits this opportunity brings for integration, and provides practical guidance on moving towards integration of ISO 9001, 14001 and 45001.

### THE ISO STANDARDS: AT A GLANCE (AS AT JULY 2017)

ISO 9001 – quality management systems – in transition to a new edition

ISO 14001 – environmental management systems – in transition to a new edition

ISO 45001 – OHS management systems – awaiting publication of new ISO standard

## THREE NEW STANDARDS, ONE COMMON STRUCTURE

### ISO 9001: A QUALITY MANAGEMENT SYSTEM

The latest edition of this quality management system standard, ISO 9001:2015, was released on 15 September 2015 and replaces ISO 9001:2008. It's the foundation of ISO management systems worldwide and first became an ISO standard in 1994.

Today, more than 1 million organisations are certified to ISO 9001.<sup>1</sup> The standard, which is predominantly about the enhancement of customer satisfaction, has had a major revision in arriving at the latest edition. It introduces new concepts, terminology and current thinking.

### ISO 14001: AN ENVIRONMENTAL MANAGEMENT SYSTEM

ISO 14001:2015 was also released on 15 September 2015 and is a major revision to the previous edition issued in 2004. This standard, which is now the foundation to many environmental management systems, aims to help companies improve their environmental performance and reduce the burden of management system documentation in the pursuit of more environmentally sustainable practices.

### ISO 45001: AN OHS MANAGEMENT SYSTEM

The world's first ISO standard for OHS management systems, ISO 45001, is currently going through final review and

approval stages and will replace OHSAS 18001 or AS/NZS 4801. ISO 45001 will help organisations provide a healthy and safe workplace and prevent work-related injuries, illnesses and deaths by bringing OHS management into the heart of the organisation.

### WHAT'S THE COMMON STRUCTURE? ANNEX SL

ISO 9001, 14001 and 45001 all follow Annex SL, a high-level structure approach that ensures consistency, applies common language and enables integration of these systems. This structure also requires full integration into your business, rather than the standards being stand-alone systems.

<sup>1</sup> The ISO Survey of Management System Standard Certifications 2015.

## ANNEX SL HIGH-LEVEL STRUCTURE

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

## AN OPPORTUNITY TO INTEGRATE

Before 2015, standards had different structures, terminology and sometimes conflicting requirements. To address this issue, ISO created a high-level structure using Annex SL, a blueprint for all new and revised management system standards going forward. This common structure means all systems become an integral part of the company's management system. The shift that accompanies this new structure aligns management systems with your organisation's strategic goals and direction and encourages continual improvement.

Integration isn't just incorporating systems into one manual of policies and procedures or cross-referencing procedures. It's not just putting your quality manager, safety manager and environmental manager into one department.

Integration means standards are linked in a way that makes boundaries between processes seamless. Integration is about fixing the standards together into a cohesive whole. It's about having one procedure that controls business risk.

## INTEGRATING ISO 9001, 14001 AND 45001: TIMING

The three standards are at varying stages in the migration and transition cycle, so it's important to get the timing right when looking at integration.

The clock is counting down on the three-year transition period for ISO 9001:2008 to ISO 9001:2015 and ISO 14001:2004 to ISO 14001:2015.

All certifications to the 2008 and 2004 editions that have not been transitioned to the 2015 editions by 15 September 2018 will expire. Those that have not yet made the transition should conduct a gap analysis and consult with their certification body to make arrangements for transition at least six months before this date.

## EXPIRATION OF 2008 AND 2004 CERTIFICATIONS

All certifications to the 2008 and 2004 editions that have not been transitioned to the 2015 editions by 15 September 2018 will expire. Those that have not yet made the transition should conduct a gap analysis and consult with their certification body to make arrangements for transition at least six months before this date.

A second draft of ISO 45001 was released on 19 May 2017 and the published version is expected in February 2018.<sup>2</sup> As with all ISO management systems, there will be a transition/migration period to give you time to implement the new requirements. It's expected that the usual three-year period will be applied to enable certified organisations to move from the existing standards to ISO 45001.

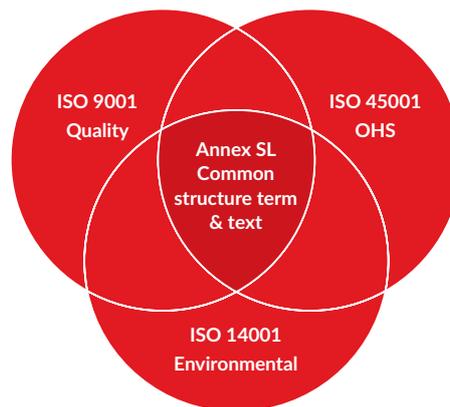


Figure 1: IMS Internal Auditor Slides Issue 1 2016

## PREPARING FOR INTEGRATION

Is your company ready for integration of these new ISO standards? First, make sure your organisation is aware of the benefits of the standards and integration, and is ready to embrace the change – get buy-in from your management team.

Next, you'll need to review and identify the similarities and duplication in the standards. Take organisational context, for example. The revised standards add context to quality, OHS and environmental management systems, requiring an understanding of both the internal and external factors that may affect the intended outcomes of these systems. This is a similarity that allows context to be considered for quality, OHS and environmental outcomes at one time. Similarly, the focus on highlighting risks and opportunities is common across the standards. Identifying these and indicating how they'll be addressed through planning can again be approached in a coordinated way.

The crossover with the standards means you'll have to reassess and define roles and responsibilities within your organisation – without losing the required expertise. Keep in mind, also, that the new standards place increased emphasis on the role of top management, or those people or persons that lead and direct an organisation at the highest level. Top management will have greater accountability and involvement in the organisation's management systems and will be responsible for ensuring management systems are compatible with the organisation's strategic direction.

The new standards also put more focus on processes within an organisation – those interacting activities that turn inputs into outputs. They encourage a full understanding of all the key processes in an organisation, where the key processes cause a risk to the business and how the organisation operates as an integrated and complete system. Using this approach during integration means less disruption to the business, as the processes and its controls are already in place.

<sup>2</sup> International Organization for Standardization, ISO 45001 – Occupational health and safety.



Here's what a process approach to integration can look like:

- Map the key business processes
- Analyse business processes using flow charts
- Identify the risk – business, environmental, health and safety or quality
- Cross-reference with clauses from Annex SL or individual ISO standards
- Formulate operational policies that will govern the processes
- Develop procedures or other methodology to control each business process which define who does what where, when and how

- Implement the controls and communicate to all interested parties
- Evaluate the effectiveness of the processes
- Review and improve

### WHY INTEGRATE?

Integration combines the standards in a way that makes the whole greater than a sum of the parts. You'll have a clear and uniform approach to managing risks and opportunities, bringing many benefits.

### IMPROVED BUSINESS PERFORMANCE

The new standards can together be used as a powerful business management

tool, to improve performance, remove complexity, drive real value and embed continual improvement.

### IMPROVED RISK AND OPPORTUNITY MANAGEMENT

A risk-based approach takes centre stage with ISO 9001, 14001 and 45001, with risk defined broadly as the uncertainty of an intended outcome. This risk-based approach is about identifying both the risks and opportunities for the organisation, and aligning risk and opportunity with the strategic direction of the business. It generates improvements in operational efficiency, reduces duplication, and saves both time and money.

## CONSTRUCTION INDUSTRY STATISTICS

- Although construction accounts for only about 5% of the employees in Britain, it accounts for 27% of fatal injuries to employees and 10% of reported major injuries.<sup>3</sup>
- In the US, 21.4% of the 4379 worker fatalities in private industry during 2015 were in construction and most of those deaths were caused by falls, being struck by an object, electrocution, or being caught in, compressed or crushed by equipment.<sup>4</sup>
- In Australia, the construction industry has the third-highest fatality rate among industry groups.<sup>5</sup>
- In the Australian construction industry, there are 35 serious workers' compensation claims made each day.<sup>6</sup>
- Worldwide, the construction industry is a major contributor to air pollution, climatic change, drinking water pollution, landfill waste and energy use.<sup>7</sup>

<sup>3</sup> Construction Index 2013, 'Construction accident rate slows but is still too high, says HSE', 31 October.

<sup>4</sup> United States Department of Labor, Occupational Safety and Health Administration.

<sup>5</sup> Safe Work Australia, Fatality statistics by industry.

<sup>6</sup> Safe Work Australia 2015, Construction Industry Profile, May.

<sup>7</sup> Sourceable 2016, 'Construction's impact on the environment', Construction News, 1 March; Green Building Council Australia, Putting a Price on Pollution.

## INCREASED EFFICIENCY

Most organisations in the construction industry have more than one management system standard to implement and certify. Doing this on an individual basis requires time and money. The new common structure for all management system standards will ensure that integration of more than one system will be smoother, without investing a lot of extra time and money. The common structure helps prevent duplication of procedures and other documentation covering common elements. ISO standards provide a robust framework and focus, so standards can increase operational efficiency, reduce expensive mistakes, and save time and money.

## INCREASED ENGAGEMENT

By adopting an integrated management system, training and awareness is simplified and organisations can ensure all employees are working toward common goals that are driven by the business strategy.

## CONCLUSION

In an industry plagued by fatalities, injuries and environmental hazards, the integration of ISO 9001, 14001 and 45001, can help your construction organisation – whether big or small – to avoid duplication and conflicts, and manage these risks more efficiently and effectively.

Are you managing risk effectively and efficiently? Are your current systems and processes enough to guarantee quality, safety and environmental risk management?

Contact SAI Global today to learn more.

## ABOUT SAI GLOBAL

At SAI Global, we make Intelligent Risk possible by helping organisations proactively manage risk to achieve business excellence, growth, sustainability and ultimately, create trust.

Our integrated risk management solutions are a combination of world-class tech platforms, services

and advisory capabilities that operate across the entire lifecycle allowing businesses to focus on opportunities presented by uncertainty. Together, these tools and knowledge enable customers to develop a holistic, integrated view of risk. In Australia, we are also a leading provider of settlement related services; company, personal and property information.

SAI Global's head office is located in Sydney, Australia. We employ more than 2,000 people across 28 countries and 51 locations across Europe, the Middle East, Africa, the Americas, Asia and the Pacific.

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