How to integrate ISO 9001, ISO 14001 and ISO 45001?

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Introduction

There is an ever-increasing competition in the market with a higher awareness of both environmental and health & safety performance for companies. This awareness is driving businesses to implement three of the ISO standards, ISO 9001 (click here to learn more about ISO 9001), ISO 14001 (click here to learn more about ISO 14001) and ISO 45001 (click here to learn more about ISO 45001). Many companies have seen the benefit of implementing these three standards, as they provide focus on different and important aspects of the organization; the Quality Management System (QMS) for ISO 9001, the Environmental Management System (EMS) for ISO 14001 and the Occupational Health & Safety Management System (OHSMS) for ISO 45001. With the release of the new versions of these three standards in the last few years, the best option is to integrate the standard requirements and create an Integrated Management System (IMS). Implementation of the standards at the same time, but separately, can compound the challenges and even things that seem easy during implementation of one standard can become problematic. Since the complexity of implementation grows with more than one standard, the necessity of the systematic approach was never so crucial.

Why Integrate?

Having three management systems implemented separately will triple the time and resources needed for maintenance. This includes performing the same activity more than once, such as internal audit or management review, not to mention the proliferation of documentation to support the management systems.

In some cases, each standard is implemented by a different team or group, so the systems may follow different logic or have different structures. Also, the documents and processes that are common for the standards can be established differently, thus bringing added confusion to an already complex system. Having separate management systems inside of one company can easily be turned into an organizational nightmare, and instead of benefiting to the business, they become a burden that everyone tries to avoid.

On the other hand, having one Integrated Management System that meets the requirements of all the standards facilities an easier maintenance and coordination of activities. One quick glance at the text of the standards shows that there is a great similarity between the requirements, especially now that they are all aligned with Annex SL (for more information about Annex SL and the Plan-Do-Check-Act cycle related to it, see Has the PDCA Cycle been removed from the new ISO standards?). One of the objectives in the revision of the standards was to facilitate their integration, and that is the reason why the common requirements of all the standards have the same clause numbers.

For more information, see How to integrate ISO 45001 with ISO 9001 and ISO 14001.

Common clauses of ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018

As mentioned earlier, the new versions of the standards are following the Annex SL structure and are more compatible than ever before, because the same requirements are under the same clause numbers in all standards. Here is an overview of the clauses and their similarities. Since the implementation requirements are located in clauses 4 to 10, we will focus on these:

Clause Numbers			Note
ISO9001	ISO 14001	ISO 45001	
4: Context of the organization	4: Context of the organization	4: Context of the organization	The requirements are the same; only ISO 9001 refers to quality, ISO 14001 refers to environment and ISO 45001 refers to occupational health & safety.
5: Leadership	5: Leadership	5: Leadership	The requirements are the same; only the focus of the policies are different.
6: Planning	6: Planning	6: Planning	In addition to addressing risks and opportunities, which is required by all standards, ISO 14001 has additional requirements related to environmental aspects and compliance obligations. ISO 45001 also has additional requirements related to OH&S hazards and legal requirements. The requirements for objectives are almost the same, only ISO 9001 refers to quality, ISO 14001 refers to environment and ISO 45001 refers to occupational health & safety.
7: Support	7: Support	7: Support	The requirements are the same.
8: Operation	8: Operation	8: Operation	All standards require the organization to establish operational controls for processes. ISO 9001 discusses the processes to provide products and services, while ISO 14001 and ISO 45001 include additional requirements for emergency preparedness and response.
9: Monitoring, measurement and analysis	9: Monitoring, measurement and analysis	9: Monitoring, measurement and analysis	The requirements are the same, only with different perspectives. ISO 9001 has a requirement to monitor and measure customer satisfaction, while ISO 14001 and ISO 45001 require evaluation compliance to obligations.
10: Improvement	10: Improvement	10: Improvement	The requirements of all standards are the same.

The benefits of integration include the following:

- Possibility to preserve resources
- Possibility to decrease the volume of documentation
- Possibility for better connection between processes and activities
- Possibility to avoid overlapping activities, processes, etc.

Where to start?

The starting point for the implementation and integration process can be different, depending on the situation in your company. The company may be implementing the standards for the first time, it might already have implemented one of the standards and wants to upgrade the system by implementing more, or the company might have implemented the standards separately and now wants to integrate them into one IMS. This equation can have additional variables, such as if an older version of a standard is implemented or a previous management system is in place (such as OHSAS 18001, which is being replaced by ISO 45001), so the project of integration could include transition as well.

It is vital to determine the starting point and the current state of the management system, and to define what needs to be achieved. When possible, it is best that the standards be implemented simultaneously, following the PDCA cycle that is built into the standards (for more information about PDCA, see Plan-Do-Check-Act in the ISO 9001 standard and Plan-Do-Check-Act in the ISO 14001 standard). A company should start with the requirements for determining context of the organization from all three standards and move forward to the continual improvement clause.

Developing a project plan

Making such a complex system should not be done ad-hoc. For a successful implementation and later maintenance of your IMS, it is crucial to approach it systematically and develop a project plan. This plan needs to include precisely defined activities, resources, responsibilities and deadlines. Doing this enables the company to clearly identify what needs to be done, how long it will take, what resources are needed, and who will do it in the best way. A good plan will facilitate the integration and allow some of the tasks to be performed simultaneously, decreasing the time needed for the implementation project.

The diagram below shows the timeline and sequence of the activities to be performed and requirements to be met in order to acquire certification to ISO 9001, ISO 14001 and Iso 45001 together.

The best way to start is to perform a gap analysis to determine what requirements of the standards are already met, and what needs to be done to achieve full compliance. The gap analysis results may show discrepancies between standard requirements and organizational practice, and can give a direction for certain implementation activities.

Implementation activities can vary depending on the organizational standardization stage, and could mean that:

- It is only necessary to implement the requirements of the new versions of the standards.
- It is possible to integrate the common requirements of the standards that are already implemented.
- It is necessary to implement new standard(s).
- It is necessary to conduct a transition of the already implemented standard.
- It is necessary to implement all standards at once from the beginning.

Whatever the case, the integration is a good opportunity to revise existing systems and introduce the improvements.

For more information, see: Four things you need to start your ISO 9001 project, 5 elements of a successful ISO 14001 project and 5 tips to make your ISO 45001 implementation project successful.

Defining the scope of the integrated management system

To set a firm foundation for the system, the company must first determine the scope of the management system by defining what locations and processes the system applies to. Having separate systems for ISO 9001, ISO 14001 and ISO 45001 allows having separate scopes, which can be convenient in some cases but, for most companies, the scope will be the same. The scope is usually the entire company, or it could be only some of the processes and locations. For more information, see: How to define the scope of the QMS according to ISO 9001:2015, How to determine the scope of the EMS according to ISO 14001:2015 and How to determine scope of the OH&SMS.

All standards require the scope to be documented (see here for a free preview of Scope of the Integrated Management System); the only difference is that ISO 9001 allows organizations to determine what requirements of the standard are not applicable to the organization, and can therefore be excluded from

the scope of the IMS. This is only applicable if the exclusion does not affect the company's ability to ensure conformity of products and services, or the enhancement of customer satisfaction, and justification must be given for any exclusions. For more information, see: What clauses can be excluded in ISO 9001:2015?

Searching for common ground

The next step is to identify all of the common requirements from the three standards, and this is not a short list. Basically, clauses 4, 5, 7, 9 and 10 are almost the same, with some small differences. There are quite a lot of common requirements that, with minor adaptations, can be met through a single process or document.

The next sections will explain how the standard requirements should be met, the similarities and differences between standards, and the sequence for implementing the requirements.

Policies

The requirements of the quality, environmental and health & safety policies can be met either by combining them into one integrated policy, or by having separate policies. The important thing is that they are compliant with the requirements of the standards, appropriate to the purpose and context of the organization, aligned with the strategic direction, provide a framework for setting objectives and include a commitment to continual improvement. The differences are that the quality policy includes a commitment to satisfy product and service requirements, the environmental policy includes commitment to protect the environment and fulfill compliance obligations, and the occupational health & safety policy includes a commitment to eliminate hazards and reduce risks, to prevent workplace injury, and to consult with workers. The requirements for communicating the objectives is the same in all standards.

For more information on this topic, please see the articles How to write a good quality policy, How to write an ISO 14001 environmental policy and How to write a good OH&S Policy.

Objectives for improvement

The requirements for the quality, environmental and occupational health & safety objectives are pretty much the same; they need to be consistent with the organization's policy, measurable, monitored, communicated effectively, and updated when needed. Again, the company may use a single document to record the objectives, or make separate documents. Having them in one place will enable the company to monitor them as part of one process and review them easily as part of management review. It will also be much easier to manage the resources needed for planning actions if all the information is in one place. For more information on this topic, see the articles How to Write Good Quality Objectives, How to Use Good Environmental Objectives and How to define ISO 45001 objectives and plans.

Context of the organization

This is a new clause that is found in all ISO management system standards, and it requires the organization to determine all internal and external issues that may be relevant to the purpose and strategic direction

of the company. These issues must be applicable to quality, environmental and health & safety elements which are, and may be capable of, affecting these objectives and outcomes in the future. If one standard is already implemented, the scope of this process needs to be expanded to cover all standards. Although a documented procedure is not required to address this clause, it might be a good idea to have one if this process is new for your company. Here you can find a free preview of our Procedure for determining context of the organization and interested parties. For more information on this topic, see these articles How to identify the context of the organization in ISO 9001:2015, Determining the context of the organization in ISO 14001 and Defining the context of the organization according to ISO 45001.

Understanding the needs and expectations of interested parties

The standard now requires the company to assess who the interested parties are within the context of the organization. Interested parties are those relevant to the quality of products and services, and customer satisfaction, environmental protection and compliance obligations. They also include occupational health & safety performance and compliance obligations. The process must include the needs and expectations that may be related to the IMS and, consequently, if any of these should become compliance obligations. For more information on this topic, see the articles How to determine interested parties and their requirements according to ISO 9001:2015, How to determine interested parties according to ISO 14001:2015 and Determining interested parties according to ISO 45001.

Leadership and commitment

Top management needs to demonstrate leadership and commitment by taking accountability for the effectiveness of the management system, establishing the policies, setting objectives, and complying with other requirements prescribed in clause 5.1 of the standards. Without top management commitment, the management systems will not work properly. For more information, see the articles How to comply with new leadership requirements in ISO 9001:2015 and How to demonstrate leadership according to ISO 14001:2015.

Risks and opportunities

This requirement is new for all the standards and the purpose is the same: to enhance a proactive approach to the management system. None of the standards require a formal methodology or a documented procedure for addressing this requirement. The purpose is to mitigate risks that affect the organization's ability to meet its objectives, and to seize the opportunities for improvement. The only difference is the focus of the standards. Although a documented procedure is not required, it might be useful to document all the elements that need to be considered (here you can find a free preview of a Procedure for addressing risks and opportunities). For additional information on this topic, click on the articles Risk-based thinking replacing preventive action in ISO 9001:2015 – The benefits, Risk Management in ISO 14001:2015 – What, why and how? and What are the new   requirements for risks and opportunities according to ISO 45001?

Environmental aspects and OH&S hazards

There is an obligation in ISO 14001:2015 to identify the methodology for the evaluation of environmental aspects, and the criteria for determining their significance in the EMS. This obligation is very similar to the one in ISO 45001:2018 to identify the occupational health & safety risks present in your company, and each can use a similar methodology. These obligations are both related to clause 4.4 in ISO 9001 which emphasizes the necessity to define the business activities, including interactions. For more information

on this topic, see the articles 4 steps in identification and evaluation of environmental aspects and How to identify and classify OH&S hazards.

Compliance obligations

This is a relatively straightforward, but obviously vital part of both ISO 14001:2015 and ISO 45001:2018. The company must decide what legal and other requirements are related to its environmental protection and occupational health & safety hazards and how to best assess them and decide how they apply to the organization. This can easily be merged into the process for identification and evaluation of interested parties and their needs and expectations, since documented evidence needs to be recorded for these obligations. For more information on this topic, see the articles Compliance requirements according to ISO 14001:2015 – What has changed? and How to identify and comply with legal requirements in ISO 45001.

Operation

This is the core of the standard, the "Do" phase of the Plan-Do-Check-Act cycle, and this is where integration can pay benefits. If the company has integrated the ISO 9001, ISO 14001 and ISO 45001 standard, operational planning and control will not be conducted separately and will not triple the use of resources in some phases. It might seem easier to have separate operational information, however if you keep these process instructions separate, then the people who need to perform the processes will need to look for the information in different places to do their job. This is why it is important to include the requirements of all standards when developing a procedure for a single process. When defining the process required to provide products and services, establishing criteria and resources, it is vital that you also include the operational controls for the environment and health & safety. By doing this, you can create one workflow for the process that includes everything employees need to know.

For more information, see this article Understanding relationship between environmental aspects and operational procedures.

Common support processes

Documented information - The requirements on documented information are the same for all standards, identifying how to create, update and control the documents and records you need. This means that integrating these systems will ensure that the process of document and record control will be easy, and you will facilitate control of all documents and records throughout the company. For more information on this topic, please see the articles New approach to document and record control in ISO 9001:2015, A

new approach to documented information in ISO 14001:2015 and A new approach to ISO 45001 documentation.

Managing Resources – This can be done simultaneously and will be compliant with the requirements of all standards. Simply put, the standards advise that the organization needs the resources required to achieve the stated objectives. ISO 9001 additionally separates these resources into several sub-clauses: people, infrastructure, environment for operation of processes, monitoring and measurement resources and organizational knowledge.

Competence & Awareness - Awareness is closely related to competence in the standard, and the requirements can be met through the same process for quality, environment, and health & safety. This can even facilitate the process since all the training and awareness-raising sessions will be better coordinated. For more information, see the articles How to ensure competence and awareness in ISO 9001:2015 and ISO 14001 Competence, Training & Awareness: Why are they important for your EMS?

Communication - All of the standards have the same core requirements, you need to determine the details of communication such as who, what, when, and how. ISO 14001 and ISO 45001 additionally expand the requirements by dividing them into internal and external communication, emphasizing compliance obligations and consistency of information. The same communication process can be used to meet the requirements of all the standards.

Emergency preparedness and response

While not a requirement of ISO 9001, both ISO 14001 and ISO 45001 have emergency preparedness and response as a key element in the mitigation of risk. It is the responsibility of the company to be prepared should a predictable problem happen, and a number of elements should be considered and planned for to mitigate incidents. Regular emergency response testing and relevant training need to be considered and undertaken. For more information on this topic, see the articles ISO 14001 emergency preparedness and response and How to be prepared for a health and safety incident.

Monitoring, measuring, analysis, and evaluation

All of the standards require that the company define what will be monitored and measured, how it will be done, how often it needs to be done, and how the results will be analyzed. Besides the different perspectives of the standards, the difference is that ISO 9001 has a separate sub-clause with requirements regarding monitoring and measuring customer satisfaction, while ISO 14001 and ISO 45001 have additional requirements for the evaluation of compliance. For more information on this topic, see the articles Analysis of measuring and monitoring requirements in ISO 9001:2015, ISO 14001 Monitoring & measurement equipment control and What is the purpose and structure of the Health & Safety hazard evaluation record?

Internal Audit

How the internal audit is conducted is common to all standards. While you may choose to audit the requirements separately, having one internal audit program will help the organization to better coordinate audits and avoid overlapping of resources. In fact, you can find benefits by auditing all aspects of a process during one audit. For more information on this topic, see the articles Five Main Steps in ISO 9001 Internal Audit, Using internal audits to drive real improvement in ISO 14001:2015 and How to perform internal audits in ISO 45001.

Improvement

Having one process to identify nonconformances and manage corrective actions is another easy win for the integrated management system. Regardless of the origin of the process nonconformity, or which part of the system it comes from, nonconformities can be resolved in the same way. This fact should be used to develop a single process for managing nonconformities, incidents and corrective actions. For more information on this topic, see the articles ISO 9001 – Difference between correction and corrective action, Environmental Nonconformity Management: How is ISO 14001 different from ISO 9001 and Using corrective actions to eliminate nonconformities and drive health & safety improvements.

Management Review

Top management is always happy to save their time on a process, and having one management review process to discuss the topics related to all standards can do just that – save time. With all of the information from all management system standards together in one place, it can become much easier to make decisions, since the information will provide a wider perspective on the whole system, the resources needed, and the overall performance. It should be noted that the management review does not have to be done all at once; it can be a series of high-level meetings with topics tackled individually. For more information on this topic, see the articles How to Make Management Review More Practical, The importance of management review in the ISO 14001:2015 process and How to perform the initial management review in ISO 45001.

Conclusion

Having one integrated management system instead of three separate systems makes the initial implementation harder but, in the end, the effort invested in the project will be fruitful, as the IMS will be easier to manage in the long run. Among others, the greatest benefits of having an integrated management system are:

- Decreased volume of documentation
- Better coordination of activities and resources
- Better understanding of all aspects of a process for employees
- Integrated workflow of activities without overlapping and doubling tasks
- Systematized information for more effective management review

The key point of a successful integration project, or any implementation project, is a good understanding of the requirements and how they can be fulfilled with small engagement of resources to achieve the greatest effect. To learn more about the ISO 9001, ISO 14001 and ISO 45001 standards see these whitepapers Clause-by-clause explanation of ISO 9001:2015, Clause-by-clause explanation of ISO 14001:2015 and Clause-by-clause explanation of ISO 45001:2018.

Sample of documentation templates

Download this free preview of the ISO 9001/ISO 14001/ISO 45001 Integrated Documentation Toolkit. It will allow you to see samples of policies and procedures used in the implementation of an integrated management system based on ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018.

References

- 9001 Academy
- ISO 9001 Quality management
- 14001 Academy
- ISO 14001 Environmental management
- 45001 Academy
- ISO 45001 Occupational health and safety

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