

Prepare for Landing

How to get ready for the revised AS9100 series of standards

THE AS9100 SERIES of standards, which is based on ISO 9001, provides quality management system (QMS) requirements for aviation, space and defense organizations. The AS9100:2016 revision is developed by the International Aerospace Quality Group (IAQG) with plans for publication in October 2016 concurrently across the Americas, Asia-Pacific and European sectors.

The reason for the revision is that the AS9100:2016 series is aligned to the ISO 9001:2015 standard published last year. The goal of the AS9100 series revision is to clarify requirements and make it easier to use while addressing aerospace industry and stakeholder needs.

The transition of the forthcoming

AS9100:2016 revision will align with the ISO 9001:2015 QMS transition, which is required by Sept. 15, 2018. Aligning the standards to a common transition date will help organizations better manage and coordinate their planning.

There are several new and revised areas in the AS9100:2016 series (see Table 1), and several other sector-specific standards are being revised to harmonize with AS9100 and to address stakeholder inputs.¹

What should certified organizations do now?

Understand the new requirements.

The first step is to understand the new ISO 9001:2015 and AS9100:2016 series'

requirements. There are three ways you can start doing this:

1. Organizations are encouraged to review and understand the requirements of ISO 9001:2015, which is the foundation for the AS9100:2016 series. These new requirements include high-level structure and terminology changes such as the concepts of organization context, risk-based thinking, change management and knowledge management.
2. Take advantage of the updated deployment-support material and information on the IAQG website related to the AS9100:2016 series, such as a presentation on key changes, a clause-by-clause summary, a correlation matrix between AS9100:2009 and AS9100:2016, and a frequently asked questions section. The AS9100 series team was proactive in providing these resources to aid stakeholders in their preparations and communications.²
3. Key members of your organization's implementation and auditing teams should participate in formalized training on ISO 9001:2015 or the AS9100:2016 series to better understand their new requirements. Training and awareness must be cascaded throughout the organization, starting with top management.

Develop a plan and schedule for your transition. QMS changes must be well-planned and coordinated. A plan and schedule of activities for how an organization will implement these steps with allocated resources is important for leadership and employee engagement.

Perform a gap assessment. Tran-

New and revised areas of the AS9100:2016 series / TABLE 1

Risk	Merges current AS9100 series (operation) risk management requirements with the new ISO 9001:2015 requirements on risk-based thinking, which permeate the entire management system.
Configuration management	Clause clarified and considerably improved to address stakeholder needs to specify requirements in more simplified terms for physical and functional attributes during the product life cycle.
Product safety	Plan, implement and control the processes needed to ensure product safety during the entire life cycle, as appropriate to the organization.
Counterfeit parts	Introduces prevention of counterfeit or suspected counterfeit parts in carefully selected areas to establish basic requirements appropriate to the product.
Awareness	Reinforces requirements for awareness of the individual contribution to product or service conformity, contribution to product safety and importance of ethical behavior.
Human factors	Says organizations should consider human factors when determining the causes of a nonconformity to ensure a true root cause is identified and nonconformities do not recur.

sitioning to a revised standard is an excellent opportunity to review your organization's processes against the new requirements. Engage the organization's functional teams and process experts in finding any gaps and planning for ways to close them.

Revise your plan as necessary, apply resources and implement system changes to address any gaps. Identified gaps may require adjustments to your plan and schedule, depending on

changed AS9100:2016 series processes to ensure compliance and effectiveness. Independent internal audits can verify that an organization has effectively implemented and maintained processes to comply with the new requirements and that it's achieving planned results. Corrective action plans should be developed, and any identified nonconformities and opportunities for improvement should be implemented.

Certification bodies or registrars **must understand your organization's transition schedule** to **appropriately plan** their resource needs.

the magnitude of the gaps and resource constraints. All gaps that are to be addressed should be closed to ensure not only compliance, but also the QMS's effectiveness and ability to achieve planned results.

Make changes to documented information or procedures as necessary. Addressing the gaps may require changes to documented information or procedures. These revised standards allow organizations flexibility about how to effectively communicate documented information requirements to their employees.

Perform internal audits of the

Perform a management review for the new AS9100:2016 series. Management reviews provide an organization's top management an opportunity to demonstrate leadership and commitment to the QMS transition process. Top management engagement is expected throughout the transition process, and the management review is a way to wrap up the transition while ensuring management-review requirements are met.

Coordinate with your certification body or registrar for transition arrangements. Certification bodies or registrars must understand your

organization's transition schedule to appropriately plan their resource needs. All AS9100 series-certified organizations will need to transition and plan their resource allocations.

The AS9100:2016 series of standards is in the publication phase. Organizations should develop transition plans and begin the process now by using the guidelines presented in this column.

They also should regularly review the www.iaqg.org website for additional deployment support material, and use the clarification process through the Online Aerospace Supplier Information System for specific questions about the requirements.³ **QP**

NOTES

1. To view the list of standards that are being revised to harmonize with AS9100, read the July 2015 Standards Outlook column, "On-Time Departure" (pp. 54-55). *AS9101—QMS Audit Requirements for Aviation, Space and Defense Distributors* also is being revised. Its revision will align to the AS9100:2016 series revision and incorporate *ISO/IEC 17021-1:2015 Conformity assessment—Requirements for bodies providing audit and certification of management systems*. AS9101's revision also will help clarify the standard, improve its usability, and address industry and stakeholder needs. The revision includes simplified process realization wording.
2. You can view a complete list of documents to help prepare for AS9100:2016 revision by visiting <http://tinyurl.com/as9100-2016-documents>. Additional deployment support materials are available for other AS9100:2016 series standards at <http://tinyurl.com/as9100-additional-information>.
3. Specific questions about the AS9100:2016 series can be submitted through the International Aerospace Quality Group's Online Aerospace Supplier Information System at <http://tinyurl.com/online-information-system>.



L.L. "BUDDY" CRESSIONNIE is the Americas Aerospace Quality System Committee (AAQSC) chair and AAQSC leader of requirements, projects and AS9100. He is active in standards development as a liaison member to ISO Technical Committee 176 Working Group 24 in writing ISO 9001:2015, and he serves on the U.S. Technical Advisory Group Interpretations Committee. Cressionnie worked for more than 30 years in aviation, space and defense and is a certified AS9100, AS9110 and AS9120 aerospace-experienced auditor.

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