

The Launch of AS9100 Rev C will Make Firms More Competitive

The aerospace, aviation and defense business sectors are poised

The International Aerospace Quality Group (IAQG) released a revision to AS9100, the quality management system (QMS) for the aviation, space and defense industries. But, unlike the recent release of ISO 9001:2008 (which was more of an amended version), Revision C will have considerably more impact. Its benefits, however, far outweigh the impact of implementation. *The new requirements are intended to make significant improvements in quality and reductions in cost—throughout the value stream.*

The Standard's payload includes several new requirements and clauses that focus on planning, project management, and risk management. Its trajectory will also traverse on-time delivery performance, the formal monitoring of customer satisfaction trends, and formal plans to ensure continual improvement—all are mission critical. IAQG's mission is to dramatically raise the on-time, on-quality delivery (OTOQD) performance across all three business sectors.

Background

To do business in aerospace today, you need to comply with AS9100, the international standard for aerospace quality. AS9100 now includes the requirements of the ISO 9001:2008 Standard, plus additional requirements imposed by the aerospace, aviation and defense industries. AS9100 places additional emphasis on structured design and validation methodologies, configuration management, and identification and traceability.

IAQG is the lead organization responsible for revisions. The first draft of the AS9100 revision was developed in July 2007, after considerable inputs from stakeholders. A coordination draft was sent to all stakeholders in November 2007. The IAQG 9100 Team met in April 2008 to address all comments. The formal ballot draft was released in May, and the official release was on January 15, 2009.

The IAQG 9100 team consists of eighteen members representing Americas, Europe, and Asia-Pacific IAQG Sectors. Among the various stakeholders are: Civil aviation authorities, defense and space industry and authorities, certification/registration bodies, trade associations and IAQG member companies.

Transitioning to AS9100C

Transition details are still being finalized. We expect that both revisions will remain current for over 2½ years. IAQG has proposed a maximum thirty month implementation schedule from date of publication. Unfortunately, it's not quite that simple. The reason is because AS9101D, the Quality Management Systems Assessment Standard, has not yet been approved.

This Assessment Standard is currently being revised in order to simplify it, and to make it easier to facilitate a value-added, process-based audit. Changes are expected to be rather significant. And it isn't until this sister Standard is approved, that the approximate six-month development period (for sanctioned courseware to train third-party auditors on the revised standards) can even begin.

If the AS9101 Standard is released in the next several months (Q1 or Q2)—and if it takes about six-months to develop sanctioned training materials—it probably will be Q4-2009 or Q1-2010 before any certification body can audit to the AS9100C Standard. So, *third-party auditors can't do anything until the AS9101 Standard is also launched, and the sanctioned training materials are released to the certification bodies.*

Once the Assessment Standard has been released, the primary thrust of the first six months will be to develop auditor training materials. The challenge for the next twelve months will be to train the certification bodies and auditors. This suggests that the earliest opportunity for organizations to be registered to the new Standard (early adopters) will be about six months from publication of AS9101D.

During the next twelve months, all organizations that have not opted for early adoption will need to upgrade to the new Standard at their next surveillance audit or recertification. So, it appears that the maximum allowed time to upgrade will be thirty months from publication of AS9101D, and any certifications that are still to AS9100B will no longer be valid. Detailed transitioning requirements will be available at or around the time AS9101 is officially released.

Overview of the Changes

Revision C changes include expansion of the scope to include "Aviation, Space and Defense," changes to the design specification, greater focus on planning and project management, and additional emphasis on risk management and mitigation. Keep in mind that ISO 9001:2008 changes have also been incorporated.

Additionally, two new terms were introduced—special requirements, and critical items. Special requirements are those identified by the customer, or determined by the organization, that have high risks to being achieved. Critical items (e.g. processes, characteristics, parts, software, etc.) are those that have a significant effect on product realization and use of the product.

These changes present new challenges to those working to the AS9100 Standard. For example, emphasis on risk management serves to reduce liability and costs associated with "escapes," as well as to obviate costs associated with remediation (that might also include litigation). Essentially it requires organizations to establish a process for managing risks to achieve customer, statutory and regulatory requirements.

Other implementation benefits include measuring, analyzing and improving product quality and on-time delivery performance, and the formal monitoring of customer satisfaction data

and trends. Also, improvement plans will be needed to ensure continual improvement. Understanding and embracing these changes will better position your organization for growth and profitability.

The Path Forward

This is a good time to evaluate the overall effectiveness of your current quality (business) management system. If you are not measuring on-time delivery performance and customer satisfaction trends—do so, and don't wait. This is no time to procrastinate—it just makes good business sense.

If you want to brush-up on project management and be better prepared to address the new clause (7.1.1), ISO 10006:2003 QMS—Guidelines for Quality Management in Projects can be used as an information resource on how to apply project management, using ISO 9001's principles and structure.

In addition, we encourage you to visit the official IAQG website www.iaqq.org, for additional information. And if you come across any articles by L.L. "Buddy" Cressionnie, read these. He is the Americas lead for the IAQG 9100 Team. Visit the SAE International website as well at www.sae.org for related useful information. Just click on "aerospace."

Also, obtain a copy of the AS9100C Standard. Copies can be purchased from your national standards body, ANSI, in the United States, SAE International, or from the American Society for Quality. *Remember, this standard includes ISO 9001:2008 QMS requirements and specifies additional aerospace, aviation, and defense QMS requirements—shown in bold, italic text.*

One last thought. AS9100C provides the framework for a fundamental business model. It is the foundation from which to build a competitive, customer-centric enterprise. If you think it's just another standard that can be taken lightly—think again. It makes a strong business case. And that translates to improved business results, and a sustainable competitive advantage. It's a matter of survival!

About the Author



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About Change Management Consulting, Inc. (CMC)

Founded in 1993, Change Management Consulting is a global management consulting and training company, dedicated to helping organizations of all sizes improve performance, achieve goals and advance leadership capability. As a full-service organizational improvement firm, CMC focuses on organizational and leadership development, compliance management (ISO 9001 and its derivatives), strategic planning and Lean Six Sigma initiatives.

Headquartered in Wayne, NJ with offices in San Diego, Dallas and Detroit, CMC has a proven track record in helping public and private sector clients implement pragmatic continual improvement initiatives that drive financially measurable results. CMC also has extensive experience in obtaining grants and funding assistance for its clients. Learn more at www.cmc-changemanagement.com or contact CMC at (877) 268-2440 or (973) 696-7878.