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International Aerospace Quality Group Semi Annual Requirements Team Newsletter



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From the Chairman

Alan Daniels – International Aerospace Quality Group Requirements Committee Chairman



On behalf of the International Aerospace Quality Group (IAQG) Requirements Team and our Communications Chair Buddy Cressionnie, I am pleased to send you the Fall 2015 Edition of the IAQG Requirements Newsletter. We are committed to improved communication with our many stakeholders and therefore have decided to start publishing a semi-annual newsletter. This newsletter and other communication content are available on the www.iaqg.org website. The purpose of this newsletter is to communicate information to aviation, space and defense industry stakeholders regarding IAQG Requirements Strategy Stream activities and provide reference our website resources.

For those of you not familiar with IAQG...the goal of the IAQG is to improve product quality and on-time delivery of products. IAQG does this through the cooperative implementation of initiatives intended to make significant improvements in quality, on-time delivery and reductions in cost throughout the supply stream. The Requirements Strategy Stream Team is responsible for managing all of the published requirements standards of the IAQG.

Note that though we use the term 91XX to describe each internationally harmonized standard – the sector published versions of each will carry the prefix of the standards publishing organization (e.g. AS for Aerospace Standard published in the America’s Sector, EN for European Standard published in the European Sector or JIS-Q for Japanese International Standard – Quality published under the auspices of the Asia-Pacific Sector of the IAQG, etc). Care is made in the publication process to ensure global harmonization and that each sector’s publication(s) are identical in technical content, and may therefore be used interchangeably as deemed appropriate by the using organization.

The 9100:2016-Series Standards Revision Updates

The 9100:2016-series of standards is ahead of published schedule for submittal to publication bodies in April 2016. The reason for the revision is that 9100-series is based on ISO9001 which was published in September 2015 and is thus affected by the ISO TC176 revision activity. The goal of the 9100-series revision is to add clarity, enhance ease of use, while addressing industry and stakeholder needs.

The IAQG has agreed to align transition to the forthcoming revised 91XX:2016 series standards with the International Accreditation Forum’s (IAF) Resolution 2013-15, which requires transition to the ISO 9001:2015 quality management system (QMS) standard no later than 15 September 2018.

The term “9100-series standards” includes the following IAQG standards, with 9100 being the series baseline standard:

- 9100: QMS - Requirements for Aviation, Space and Defense Organizations
- 9110: QMS - Requirements for Aviation Maintenance Organizations
- 9115: QMS - Requirements for Aviation, Space and Defense Organizations - Deliverable Software
- 9120: QMS - Requirements for Aviation, Space and Defense Distributors

New and revised areas in the 9100:2016-series include, as applicable:

Product Safety	Added in carefully selected areas with consideration of current 9110 requirements to assure product safety during the entire life cycle.
Human Factors	Added as a consideration in the Nonconformity and Corrective Action clause to ensure true root cause is identified and to ensure nonconformities do not recur.
Risk	Merged current 9100-series (operation) risk management requirements with the new ISO requirements on risk based thinking which permeates the entire management system.
Counterfeit Parts	Introduced in carefully selected areas to establish basic requirements appropriate to the product.
Configuration Management	Clause clarified and improved considerably to address stakeholder needs to specify requirements in more simplified terms.
Awareness	Reinforced requirements for awareness of individual contribution to product or service conformity, contribution to product safety, and importance of ethical behavior.

The 9100:2016-Series Standards Revision Update (continued)

The following 9100-series standards are being revised to harmonize with 9100 and to address stakeholder inputs:

- 9110 revisions include updated content to be more MRO-centric and to improve consistency with civil and military aviation regulatory requirements. The applicability to this standard is extended to Airlines performing continuing airworthiness management activities in addition to existing stakeholders such as MRO and OEM that provide maintenance services.
- 9115 revisions include content to enhance cyber security protections for the software QMS as well as recognize cloud based services and mobile applications.
- 9120 revisions include improved coverage of quality requirements for prevention of counterfeit and unapproved parts.

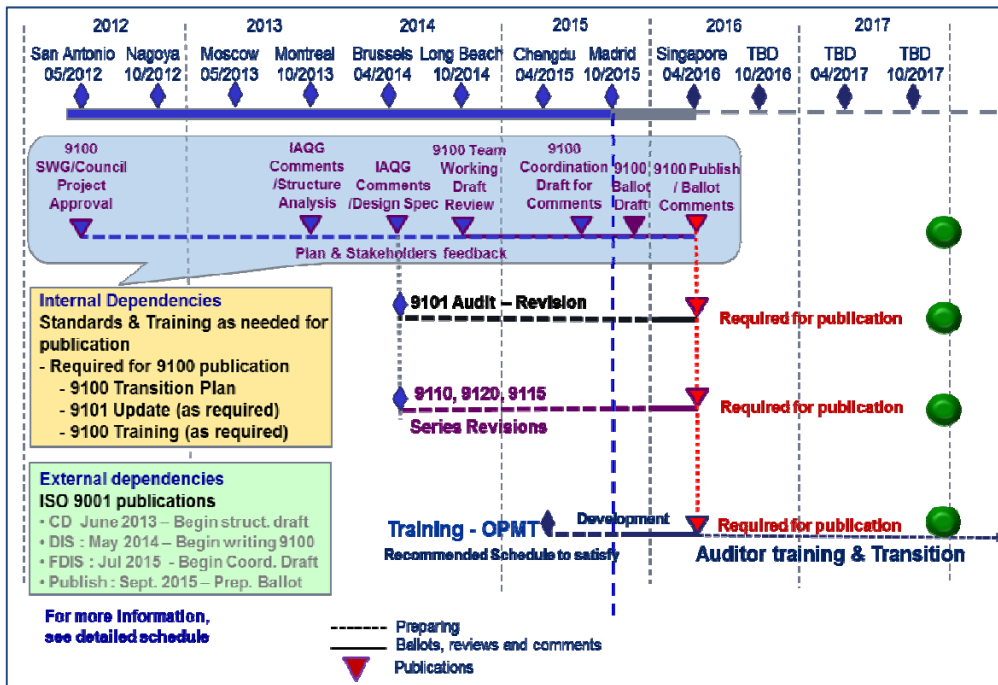


Table 1 illustrates the schedule for the release of the 9100-series. This schedule is highlighted with major milestones and includes the following key dates:

- November 2015 – IAQG ballot of the 9100-series standards
- April 2016 - 9100-series standards sent for publication

Recent activities by the team includes distribution of a coordination draft to key stakeholders, dispositioning comments from these stakeholders, and incorporating accepted comments into the 9100-series ballot drafts. These additions also generated updates to support materials. The IAQG also publishes support materials on the www.iaqg.org website to aid users in understanding standards. A significant amount of information is currently available for IAQG standards including frequently asked questions, summary presentations, articles, specific topic discussions on new or enhanced requirements, and posted clarifications.

Table 1 - Milestone Schedule for the Release of the 9100-Series

The 9100-series Team is being proactive by providing update information related to the 9100:2016-series standards to aid stakeholders in preparations and communications. New additions and changes to the IAQG website include:

- 9100-Series Revision Preview – This presentation includes information on IAQG, ISO 9001 revision activity, 9100-series revision activity, benefits and application, communications, summary, and resource links. 9100:2016-Series Revision Preview available at www.iaqg.org.
- Key Changes Presentation – This presentation highlights significant changes from published standards to the proposed standards to aid stakeholders. Key Changes is available on the deployment support material webpage on www.iaqg.org.
- FAQs – Frequently asked questions have been developed to answer anticipated user questions which include ISO 9001:2015 FAQs. 9100:2016 FAQs is available on the deployment support material webpage on www.iaqg.org.
- Comparison Table – The comparison table shows the alignment between published standards to the proposed standards. Comparison Table is available on the deployment support material webpage on www.iaqg.org.
- Clarifications – Clarifications are summarized and communicated when it is believed that confusion regarding certain requirements exists within the industry and that industry would benefit from common understanding. The 9100:2009 clarifications have been revised

9101:2016 QMS Audit

This standard is being revised to align to the 9100:2016-series revision; incorporate the ISO/IEC 17021-1:2015 baseline; and to add clarity, enhance ease of use, and address industry and stakeholder needs.

Recent activities included development of a 9101:2016/9101F Coordination Draft which was sent out to key stakeholders for comments, comments were dispositioned, and incorporation of accepted comments into the ballot draft version. Standard 9101:2016 is planned for release for publication in May 2016.

New Standard in Development: 9138 Statistical Product Acceptance Standard

The Americas ARP9013-series standards on Statistical Product Acceptance are being updated and combined into a single standard. Leveraging on lessons learned, the content has been improved and this new standard is being processed through the IAQG international harmonization scheme and released as an IAQG-level standard. The benefit of this project is better statistical product acceptance to provide stated levels of consumer protection and reduced oversight cost and complexity.

Guidance and tables will be available in the [Supply Chain Management Handbook](#).

New Standard in Development: 9145 APQP and PPAP

The 9145 standard establishes a subset of requirements and a structure to ensure the effectiveness of the Aerospace Product Development Process is focused on early timing planning, an expanded integrated planning process, and improved product and process verification & validation. The team has dispositioned comments from the ballot review and the document is being prepared for 14-day affirmation ballot. The planned release for publication is January 2016.

New Standard in Development: 9147 Management of Unsalvageable Items

The 9147 standard will define the requirements for scrapping, rejection and disposal activities of airworthy parts and material, complementing the existing regulations on the topic and achieving some cost avoidance opportunities. Appropriate best practices will be proposed for inclusion in the SCMH.

The initiative was launched in October 2014 and the schedule for release of 9147 includes the following major milestones:

- May through September 2015 – Collect and summarize the “as-is” considering current regulations, procedures and practices.
- October 2015 – Writing session of the working draft during IAQG meeting.
- November 2015 through April 2016 - Circulate working draft to the stakeholders for feedbacks and prepare the coordination draft.
- April 2016 – during Singapore meeting, writing session of the SCMH and of the coordination draft.

IAQG Standards in the Ballot Process

Standards in the ballot process represent either new standards or revisions to meet the five-year review and update requirement:

- 9100 QMS - Requirements for Aviation, Space and Defense Organizations
- 9104/3 Requirements for Aerospace Auditor Competency and Training Courses
- 9107 Direct Delivery Authorization Guidance for Aerospace Companies
- 9110 QMS - Requirements for Aviation Maintenance Organizations
- 9115 QMS - Requirements for Aviation, Space and Defense Organizations - Deliverable Software
- 9117 Delegated Product Release Verification (DPRV)
- 9120 QMS - Requirements for Aviation, Space and Defense Distributors
- 9133 Qualification Procedure for Aerospace Standard Parts
- 9136 Root Cause Analysis and Problem Solving
- 9162 Aerospace Operator Self-Verification Programs

New Standard in Development: 9146 Foreign Object Debris (FOD)

Foreign Object Debris/Damage (FOD) is a major concern in the aviation, space and defense industry. While there is a large amount of information and guidance available about the prevention of FOD, no requirements standard currently exists.

This document will standardize FOD prevention program requirements to the greatest extent possible and can be used at all levels of the supply chain by organizations around the world to mitigate FOD risk to aviation, space and defense through all stages of product realization, including delivery.



Recent activities by the team includes distribution of a coordination draft to key stakeholders, dispositioning comments from these stakeholders, and incorporated accepted comments into the 9146. 9146 is planned for publication release in June 2017.

9104-3 Requirements for Aerospace Quality Management System Auditor Training

The 9104-3 standard is in the process of being revised to address lessons learned, align with the 9104 series of standards, and improve the criteria associated with auditor competence and authentication. The ballot draft has been updated to address all comments received and a re-ballot is scheduled for November 2015.

The 9104-3 describes the requirements for:

- Training organizations (Training Providers)
- The AQMS Auditor Training Courses (to be provided by the TP's)
- Auditors (to conduct AQMS Certification audit activities)
- The AQMS Auditor Authentication process by which trained and qualified auditors become recognised by our industry and eligible to conduct Industry Controlled Other Party (ICOP) AQMS certification audits. The AQMS Auditor Authentication process

Recently Approved & Published Standards

The following standard was recently approved by the IAQG. Please see all published standards at: www.sae.org/iagg/publications/standards.htm.

9132 Data Matrix Quality Requirements for Parts Marking

This document standardizes data matrix quality requirements for parts marking for the industry. The establishment of common requirements, for use at all levels of the supply-chain by organizations, should result in improved quality and safety, and decreased costs, due to the elimination or reduction of organization-unique requirements and the resultant variation inherent in these multiple expectations.



The IAQG Requirements Team encourages further communication of this newsletter, please feel free to forward it on to other interested parties and let the IAQG Requirements Team know if you have any questions by using the [OASIS Feedback process](#).

Coordinated by Buddy Cressionnie
IAQG Requirements Team

About the International Aerospace Quality Group

The International Aerospace Quality Group (IAQG) is a legally incorporated international not for profit association (INPA) with aerospace industry membership from the Americas, Europe and the Asia Pacific Region. Its processes are established in a set of agreed, documented, operational procedures.

To learn more about the IAQG, please visit www.iagg.org