The IAQG is a legally incorporated international not for profit association (INPA) with membership from the Americas, Europe and the Asia Pacific Region.
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9100 Revision 2016

Introduction

reason for revision, team and timeline
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9100 Series
International Aviation, Space and Defense Quality Requirements

**ADDITIONAL REQUIREMENTS**
- Operations Risk Management
- Product Safety
- Special Requirements
- Critical Items
- Configuration Management
- On Time Delivery
- Counterfeit Parts
- Expanded requirements for production and external providers

ISO 9001
Quality Management System
The “ISO 9001” needed to change, to:

– Adapt to a changing world
– Enhance an organization's ability to satisfy its customers
– Provide a consistent foundation for the future
– Reflect the increasingly complex environments in which organizations operate
– Ensure the new standard reflects the needs of all interested parties
– Integrate with other management systems
The “9100” needs to change, to:

- Incorporate changes made by ISO TC176 to the ISO 9001:2015 requirements
  (ISO liaison organized to collaborate with the IAQG 9100 team and to obtain consideration for IAQG requirements)

- Consider Aviation, Space and Defense stakeholders’ needs identified since the last revision
  (web survey performed in 2013)

- Consider clarifications to 9100 series requests issued by IAQG since the last revision
  (requirements clarified or notes added)
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**IAQG/Sector 9100 Team Structure**

- **IAQG 9100 Writing Team** collects sector and stakeholder input and creates a rough draft. (8)
- **IAQG 9100 Team** collects sector and stakeholder input and writes the revision (14)
- **Representatives of Sector 9100 Team** at International Meetings (9)
- **Sector 9100 Team Meetings** to gather Sector inputs and develop Sector positions. Operation managed at Sector Level (58)

**Stakeholder Team Representatives**

- **AAQG 9100 Team**
- **EAQG 9100 Team**
- **APAQG 9100 Team**

- **AAQSC Sector 9100 Team**
- **EAQG Sector 9100 Team**
- **APAQG Sector 9100 Team**

IAQG October 2016
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October 2016
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Quality Management Principles

9100 Revision 2016

Quality Management Principles
ISO 9000 Quality Management Principles

<table>
<thead>
<tr>
<th>There were 8 principles</th>
<th>There are now 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer focus</td>
<td>Customer focus</td>
</tr>
<tr>
<td>Leadership</td>
<td>Leadership</td>
</tr>
<tr>
<td>Involvement of people</td>
<td><strong>Engagement</strong> of people</td>
</tr>
<tr>
<td>Process approach</td>
<td>Process approach</td>
</tr>
<tr>
<td>System approach to management</td>
<td>(included in the process approach)</td>
</tr>
<tr>
<td>Continual improvement</td>
<td>Improvement</td>
</tr>
<tr>
<td>Factual approach to decision making</td>
<td><strong>Evidence based</strong> decision making</td>
</tr>
<tr>
<td>Mutually beneficial supplier relationships</td>
<td><strong>Relationship</strong> management</td>
</tr>
</tbody>
</table>
9100 Revision 2016

Key changes in the ISO 9001 Baseline content
Key Changes *(from ISO 9001:2015 baseline)*

- High level structure (HLS) & Terminology
- Risk-based thinking - Concept of preventive action now addressed throughout the standard by risk identification and mitigation
- Process approach strengthened with integration of the QMS into organization’s business processes
- Emphasis on change management
- Introduction of knowledge management
Key Changes *(from ISO 9001:2015 baseline)*

- Clearer understanding of the organization’s context
- Aligning QMS policy and objectives with the strategy of the organization
- Explicit performance evaluation requirements
- Greater flexibility with documentation
- More compatible with services
9100 Revision 2016

Terminology &
High Level Structure (HLS)
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**9100 revision 2016**

**Terminology Changes (from ISO 9001 baseline)**

<table>
<thead>
<tr>
<th>Previous version</th>
<th>New Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products</td>
<td>Products and services</td>
</tr>
<tr>
<td>Exclusions</td>
<td>Scope of the QMS to be formally defined and all requirements are applicable if they are in the scope</td>
</tr>
<tr>
<td>Documentation, records, documented procedures</td>
<td>Documented information</td>
</tr>
<tr>
<td></td>
<td>▪ maintained = documents or procedures</td>
</tr>
<tr>
<td></td>
<td>▪ retained = records</td>
</tr>
<tr>
<td>Purchased product</td>
<td>Externally provided products and services</td>
</tr>
<tr>
<td>Supplier</td>
<td>External provider</td>
</tr>
</tbody>
</table>

**Documented information does not need to be changed to incorporate new terminology**


Use of simplified language and writing styles to aid understanding and consistent interpretation of requirements.

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High Level Structure

- ISO is going from 8 clauses to 10 clauses

<table>
<thead>
<tr>
<th>Plan</th>
<th>Do</th>
<th>Check</th>
<th>Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Context of organization</td>
<td>8 Operation</td>
<td>9 Performance Evaluation</td>
<td>10 Improvement</td>
</tr>
<tr>
<td>5 Leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Support</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rationale

- Better alignment to business strategic direction
- PDCA approach
- All ISO management systems standards built on the same structure and same terminology, to facilitate the option of having one integrated management system
- This structure is intended to provide a coherent presentation of requirements rather than a model for documenting an organization’s policies, objectives and processes
HLS Table of Contents – ISO 9001 / 9100

7 Support
   7.1 Resources
   7.2 Competence
   7.3 Awareness
   7.4 Communication
   7.5 Documented information

8 Operation
   8.1 Operational planning and control
   8.2 Requirements for products and services
   8.3 Design and development of products and services
   8.4 Control of externally provided processes, products and services
   8.5 Production and service provision
   8.6 Release of products and services
   8.7 Control of nonconforming outputs
9100 revision 2016
HLS: High Level Structure (from ISO 9001 baseline)

HLS Table of Contents – ISO 9001 / 9100

9 Performance evaluation
  9.1 Monitoring, measurement, analysis and evaluation
  9.2 Internal audit
  9.3 Management review

10 Improvement
  10.1 General
  10.2 Nonconformity and corrective action
  10.3 Continual improvement
Implementation Considerations

There is no requirement for the QMS documentation to reflect the structure and terminology of the standard.

If you choose to change the QMS documentation consider structuring around the business processes of your company.

- A business process (value stream) based QMS allows you to customize your documentation to your unique business needs that makes sense to your leadership and associates – it describes what you do
- It supports compliance to the new requirement to integrate your QMS to your business processes
- It sets a foundation for the future. Change will be dictated by the business – not by a structure change of the standard on which it is based.

Benefits

- Common management systems (structure, terminology, definitions)
- Additional focus on PDCA (improvement/project management)
- Clearer and better organization of requirements
Implementation Considerations

Example of Process Based QMS
Business Management System around a Value Stream

Each organization has to determine their business processes

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October 2016
9100 Revision 2016

Risk-based thinking
What is risk-based thinking?

- Risk-based thinking is something we all do *automatically* and often sub-consciously to get the best result.

- The concept of risk has always been *implicit* in ISO 9001 - this edition makes it more explicit and builds it into the whole management system.

- Risk-based thinking ensures risk is considered *from the beginning* and throughout.

- Risk-based thinking makes “*prevention*” part of strategic and operational planning.
Implementation considerations

- Use a risk-driven approach throughout your organizational processes
- Identify and prioritize what the risks are in your organization (it depends on context: product or process complexity, organizational complexity)
  - what is acceptable?
  - what is unacceptable?
- Plan actions to address the risks
  - how can I avoid, eliminate or mitigate risks?
- Implement the plan; take action
- Check the effectiveness of the action; does it work?
- Learn from experience; improve
Benefits

- Change of culture and mindset to be proactive
- Focus on priorities and what adds value to the company
- Ensures alignment of resources to issues/risks
- Ensures greater knowledge of risks and improves preparedness
- Increases the probability of reaching objectives
- Reduces the probability of negative results

Summary…

- Is not new
- Is something many organizations already do already
- Is continuous
- Makes prevention a habit
9100 Revision 2016

Process approach
What is the process approach?

- The systematic management of processes and their interactions to achieve intended results

All organizations use processes to:

- set interrelated or interacting activities
- transform inputs into outputs
- build in checks to meet objectives and
- promote continuous improvement

The process approach integrates processes into a holistic system in order to achieve strategic and operational objectives.
Process approach & risk-based thinking

- the process approach incorporates risk-based thinking
- risk-based thinking ensures risk is considered when establishing, implementing and maintaining a management system, each process and each activity

Process approach & PDCA

- Processes can be managed using the PDCA cycle

<table>
<thead>
<tr>
<th>Plan</th>
<th>set objectives and build processes necessary to deliver results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do</td>
<td>implement what was planned</td>
</tr>
<tr>
<td>Check</td>
<td>monitor and measure processes and results against the objectives</td>
</tr>
<tr>
<td>Act</td>
<td>take actions to improve results</td>
</tr>
</tbody>
</table>
Benefits

- increases accountability
- increases ability to focus on key processes
- improves internal integration of processes
- more consistent business performance and results
- better use of resources
- improves customer confidence in the organization
What processes to define for my organization?

- Each organization is required to define key business processes
  - They must follow all the **4.4 requirements** (e.g. inputs, outputs, sequence and interaction, resources needed, responsibilities, risks and opportunities, and related performance indicators)
  
- Certified organizations will be **audited** for their effectiveness: a **PEAR sheet** (*Process Effectiveness Assessment Report*) will be established by the certification body auditor for all Operation Processes *(refer to 9101)*

- The organization must also maintain processes to manage functioning / working activities
  (e.g. risks, products configuration, critical items, product safety, internal audits, nonconformities and corrective actions)
  
- Determine whether **flowcharts, routines, maps or procedures** are needed to ensure effective implementation
9100 Revision 2016

Concept of “change”
The standard has become a dynamic framework which evolves to enable organizations to adapt to their changing environments or circumstances.

**Change is addressed in several clauses:**

- Planning/implementing changes to the **QMS** (6.3)
- Organizational **knowledge** - for addressing changing needs and trends, with respect to knowledge (7.1.6)
- Controlling **operational** changes, planned and unintended (8.1)
- Ensuring appropriate actions are taken about changes relating to **requirements** for products and services (8.2.4)
- Managing changes relating to **design and development** (8.3.6)
- Addressing changes affecting **production or service provision** (8.5.6)

**Benefits:**

- Business continuity when changes occur
- Consideration of potential consequences
- QMS integrity maintained
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9100 Revision 2016

Organizational knowledge
Knowledge specific to the organization is gained by experience.

Rationale:
- To safeguard the organization from loss of knowledge, (e.g., through staff turnover; failure to capture and share information)
- To encourage the organization to acquire (e.g., learning from experience, benchmarking ...) and share knowledge (e.g. mentoring of newcomers);

Implementation consideration
- Activities to benefit from lessons learned, e.g., database, communications, incorporation of lessons learned in processes and procedures
- Identification of experts able to transfer knowledge, on job training, tutorial sessions
- Implement succession planning activities

Benefits
- Continuity of business operations when personnel turnover
- Mitigates impact of losing personnel
9100 Revision 2016

Key changes in the 9100 additions
Key Changes *(aviation, space and defense requirements)*

As a consequence of the new ISO 9001 structure:

- 9100 additions have been *relocated* into appropriate ISO sections
- the requirements are better *organized* and *clarified*, with notes and examples to enhance understanding
Key Changes *(aviation, space and defense requirements)*

- **Product safety**  
  added in a separate clause and in selected areas
- **Counterfeit parts prevention**  
  added in a separate clause and in selected areas
- **Risk**  
  merged current 9100 requirements with the new ISO requirements and emphasis on risks in operational processes
- **Awareness**  
  reinforced requirements for awareness of individual contribution to quality
- **Human factors**  
  included as a consideration in nonconformity / corrective action
- **Configuration management**  
  clarified and improved to address stakeholder needs
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9100 Revision 2016

Product safety
Addition

- New clause (8.1.3) on Product Safety, including requirements to address product safety considerations throughout the product lifecycle (use the NOTE as guidance) + revision for consistency of other clauses related to safety – 7.3, 8.1, 8.4.3 & 8.5.4

- A full Safety Management System (SMS) as defined by ICAO (International Civil Aviation Organization) is not required by 9100, but the introduction of this new clause contributes to the SMS approach

Rationale

- Industry acknowledgement of the importance of increasing safety
- Recognition of the 9100 certifications by authorities is part of IAQG strategy

Definition

- “The state in which a product is able to perform to its designed or intended purpose without causing unacceptable risk of harm to persons or damage to property”
Examples of activities to consider:

- **Assessment of hazards and mitigation of associated risks:**
  - Implement FMEA relating to product (DFMEA) and process (PFMEA)
  - Perform safety analysis
  - Identify and mitigate risks relating to the organization and its personnel (human factors, management of responsibilities)

- **Management of safety critical items:**
  - Define and implement a monitoring control plan for critical items identified through FMEA and safety analysis

- **Analysis and reporting of occurred events affecting safety:**
  - Organize the collection of potential and occurred events, and analyze their impacts with specialists
  - Organize the internal escalation process and external reporting to interested parties
  - Analyze the adverse trends of products in service reliability and define appropriate actions
Examples of activities to consider (cont.)

- Communication of these events and training of personnel:
  - Promote safety culture and lessons learned from occurred events (impacts of the parts delivered by the organization on the final product safety)
  - Prevent occurrence of safety issues by taking into account industry experience (including occurrences on other products with similar functions or based on same technologies or components)

Benefits

- Increased awareness of how organization contribute to product safety
- Minimize safety risk
- Safety integrated and embedded with processes
- Ensures flowdown on product safety issues and criteria
9100 Revision 2016

Prevention of counterfeit parts
Addition

- New clause (8.1.4) including requirements for prevention of counterfeit parts and a note giving examples of the associated processes
  + revision of affected clauses: 8.4.2; 8.4.3 (external provisions) & 8.7 (nonconformities)

Rationale

- Mitigate effects of growing threat of counterfeit / fraudulent product
- Recognize the emerging counterfeit/fraudulent statutory/regulatory requirements on QMS processes

Definition

- “An unauthorized copy, imitation, substitute, or modified part (e.g., material, part, component), which is knowingly misrepresented as a specified genuine part of an original or authorized manufacturer.

  NOTE: Examples of a counterfeit part can include, but are not limited to, the false identification of marking or labeling, grade, serial number, date code, documentation, or performance characteristics.”
Processes to consider:

- **Training** in the awareness and prevention of counterfeit parts
  - Procurement personnel in trusted source selection and requirements
  - Inspection personnel for prevention of counterfeit items (visual/test)
  - Design personnel in obsolescence management

- **Obsolescence monitoring** → design decisions and parts selections to be appropriate for service life of product

- **Controls for acquiring parts** → from original manufacturers, authorized distributors, or other approved sources

- **Assuring traceability** of parts and components to their original manufacturers:
  - Original Equipment Manufacturer (OEM) or
  - Authorized manufacturer (e.g., in case of PMA, direct delivery authorizations)

- **Verification and test methodologies** to detect counterfeit parts:
  - Parts identification or marking
  - Tests or chemical analysis
Processes to consider:

- **Counterfeit parts reporting**
  - Monitoring reporting from external sources (access to databases, information letters from OEMs)
  - Quarantine and reporting of internal incidences in appropriate government and industry reporting systems (determine the responsibilities in the escalation process, the process to follow to report to authorities / customers)

- **Requirement regarding non conformance control:**
  - Segregate and control suspected or known counterfeit products
  - Ensure these products are not re-introduced into the supply chain

**Benefits**

- Minimize opportunity of counterfeit part deception
- Improve awareness regarding obsolescence to prevent counterfeit part risk
- Suppliers to evaluate and improve control of purchases to prevent fraud
- Control of counterfeit parts prevents re-entry into the supply chain
9100 Revision 2016
Risk management
Clause 6.1 is related to risks in “QMS of the organization”:
- Manage risks at organization / processes level
  (such as: new customers, new market, company partnerships, business localizations, …)

Clause 8.1.1 is related to the risks in “Operational Processes” defined in clause 8:
- Implement a formal process to manage risks
- Adapt the process to the organization and the product
  (e.g. quantitative requirements and probabilistic risk analysis may be required in some cases; determine people involved in this activity)
- Deploy the risks analysis within the operation activities
  (such as: contract review and signature, new technologies introduction, external providers selection, …)

Benefits: Addition of risk-based thinking across entire QMS for planning and achieving planned results
9100 Revision 2016

Awareness
The 9100:2016 requires the employees to be aware of:

- their contribution to **product or service conformity**
- their contribution to **product safety**,
- the importance of **ethical behavior**

**Awareness activities** can be performed in different ways:
- direct communication of expectations between managers and employees
- communication campaigns on dedicated topics, e.g., posters, pamphlets, fliers, newsletters, videos
- identification of **focals** with responsibility for communication and promotion,
- **formal training**

**What is expected:**
- individuals should be able to explain their own role, how they contribute to quality,
- quality basics (follow instructions, report events, maintain records ...),
- individuals know the use of the products and potential impact of failures

**Benefits:** Leadership flowdown and understanding to all employees
Importance of ethical behavior

- Organizations should make their own determination of what is important to communicate to their employees in regard to ethics

- Below are some items for consideration
  - Establishing a culture where employees understand their responsibilities
  - Managers listening to employees and effectively recognizing their work (in addition it can help boost productivity)
  - Reporting and not passing on defects or non conformances (e.g., line stoppage as appropriate, recalling delivered non conforming product, ..)
  - A culture allowing unethical behavior can breed all manner of damaging and even criminal activity
  - Respect the laws, regulations, internal rules, regarding e.g. : conflict of interests, export compliance regulations, intellectual property agreements, acceptance or proposals of gifts, invitations or favors with customers and suppliers
9100 Revision 2016

Human Factors
Addition

- Requirement to include the human factors considerations in the root causes analysis of nonconformities

Definition

- The understanding of the interactions between people, machines and each other and their impact on human performance.

- Example: Recognition that persons performing tasks are affected by physical fitness, physiological characteristics, personality, stress, fatigue, distraction, communication and attitude in order to ensure a safe interface between the persons and all other environmental elements such as other persons, equipment, facilities, procedures and data.
Rationale

- To reinforce the controls linked to clause 7.1.4 (environment for the operation of processes) and clause 8.5.1. g (prevention of human errors)
- Recognize the importance of human factor considerations in determining the causes of the nonconformity

Implementation considerations

- Determine the human factors to be considered according to the products, workplaces, equipment and people of the organization
- Include the elements to be reviewed during the root causes analysis of nonconformities
- Capitalize with lessons learned on occurred human errors

Benefits

- Enables root causes to get robust corrective actions so problems do not recur
9100 Revision 2016

High Level Summary of Changes
Implementations benefits
## 9100 Series Changes - High Level Summary

<table>
<thead>
<tr>
<th>Clause 1</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>- New process model</td>
<td></td>
</tr>
<tr>
<td>- Added a PDCA model</td>
<td></td>
</tr>
<tr>
<td>- Added “Risk-based thinking”</td>
<td></td>
</tr>
<tr>
<td>- Emphasis on defining the QMS and context of the organization</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 2</th>
<th>Normative ref</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 9000:2015 referenced</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 3</th>
<th>Terms and definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO 9001 terms and definitions moved to ISO 9000</td>
<td></td>
</tr>
<tr>
<td>Added 9100 “product safety”, “counterfeit part”</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 4</th>
<th>Context of the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintained documented information is required, <em>can be named Quality Manual</em></td>
<td></td>
</tr>
<tr>
<td>Justified exclusions not limited to Realization/Operations processes</td>
<td></td>
</tr>
<tr>
<td>QMS processes have performance indicators</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 5</th>
<th>Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>QMS compatible with strategic direction</td>
<td></td>
</tr>
<tr>
<td>QMS requirements integrated into business processes</td>
<td></td>
</tr>
<tr>
<td>Processes deliver their intended outputs</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 6</th>
<th>Planning for the QMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>When planning the QMS, determine the actions needed to address opportunities and risks (prevention)</td>
<td></td>
</tr>
<tr>
<td>Increases requirements for planning of changes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 7</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine knowledge management requirements</td>
<td></td>
</tr>
<tr>
<td>Awareness on product conformity, product safety, ethical behavior</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 8</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning for product obsolescence</td>
<td></td>
</tr>
<tr>
<td>Plan activities needed to assure product safety</td>
<td></td>
</tr>
<tr>
<td>Prevention of counterfeit parts</td>
<td></td>
</tr>
<tr>
<td>Process to validate test reports for raw material based on risks</td>
<td></td>
</tr>
<tr>
<td>Release of products and services</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 9</th>
<th>Performance evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess performance of QMS processes</td>
<td></td>
</tr>
<tr>
<td>Added Note to evaluate performance indicators on internal audits</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clause 10</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider human factors in nonconformity / corrective action</td>
<td></td>
</tr>
</tbody>
</table>

---

**All ISO MS standards will now have this common 10 clause structure**
Implementation Benefits

• When implemented and managed well:
  – Produce and continually improve safe and reliable products
  – Meet or exceed customer and regulatory requirements to ensure satisfaction
  – Processes necessary to conduct day-to-day business are defined where necessary and managed
  – Improved integration with business operations and strategy
  – Documentation accurately reflects the work to be performed and actions to be taken
  – Focus on the complete supply chain and stakeholders
  – Fewer customer specific documents
  – Recognized by Regulatory Authorities
9100 series Revision 2016

Transition summary
### Key Dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Major activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2015</td>
<td>ISO 9001:2015 Standard published and a 36 Month Certified Client ISO transition begins</td>
</tr>
<tr>
<td>October 2015</td>
<td>IAQG General Assembly approval of ICOP 9100/9110/9120:2016 Transition Plan</td>
</tr>
<tr>
<td>May 2016</td>
<td>9100 completes final approval and editing and is released for publication bodies</td>
</tr>
<tr>
<td>September 2016</td>
<td>9100 standard published in all 3 sectors</td>
</tr>
<tr>
<td>October 2016</td>
<td>9101, 9110 &amp; 9120 published in all 3 sectors</td>
</tr>
<tr>
<td>November 2016</td>
<td>Mandated Aerospace Auditor “transition” training available in IAQG languages.</td>
</tr>
<tr>
<td></td>
<td>OASIS Next Generation project phase 1 complete. Database available for entry of transition audit results</td>
</tr>
<tr>
<td>June 2017</td>
<td>All future audits must be to the 9100/9110/9120:2016 standard using 9101:2016 audit process.</td>
</tr>
<tr>
<td>September 2018</td>
<td>Transition complete all 9100/9110/9120:2009 certificates are no longer valid.</td>
</tr>
</tbody>
</table>

**AQMS transition timeline revised based upon change in key dependencies completion dates**
9100 Revision 2016
Deployment Support Material
Where to find it?
The IAQG is a legally incorporated international not for profit association (INPA) with membership from the Americas, Europe and the Asia Pacific Region.

The IAQG is a cooperative organization within the aerospace & defense companies on initiatives to improve quality performance and reductions in cost through activities and costs.

**Objectives**
- Establish and implement a process of continual improvement to life
- Establish methods to share best practices in the industry
- Coordinate initiatives and activities with regulatory and other industry Stakeholders

**Certification Scheme**

<table>
<thead>
<tr>
<th>QMS Standards</th>
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<tbody>
<tr>
<td>9102 First Article Inspection Requirement</td>
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<tr>
<td>9103 Variation Management of Key Characteristics</td>
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<td>9107 Direct Delivery Authorization Guidance</td>
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<tr>
<td>9114 Direct Ship Guidance for Aerospace Companies</td>
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<td>9116 Notice of Nonconformance</td>
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<td>9117 Report Matrix</td>
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<td>9131 Qualification</td>
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<td>9132 Delivered</td>
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<tr>
<th>Oversight of Certification Scheme</th>
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<tr>
<td>9104-1 Requirements for ASD QMS Certification Program</td>
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<td>9104-2 Oversight of ASD QMS Registration/Certification Programs</td>
</tr>
<tr>
<td>9104-3 ASD Auditor Competency and Training Courses</td>
</tr>
</tbody>
</table>

Path through the IAQG web site

1. Deployment Support
2. Events

www.iaqg.org
9100 Deployment Support Material

- 9100:2016 - Quality Management Systems: Aviation, Space and Defense Organizations
  - Executive Level Summary Presentation
  - Key Changes Presentation
  - Clause-by-Clause Presentation
  - Presentation Go-to-Webinar Recordings
    - Key Changes Presentation
    - Clause-by-Clause Presentation
  - FAQ
  - 2016 August Quality Progress: Prepare for Landing - How to get ready for the revised AS9100 series of standards
    (Reprinted with permission from Quality Progress © 2016 ASQ, www.asq.org No further distribution allowed without permission)
  - Gap Assessment Worksheet
  - 9100 Evaluation Guidance Material

- ISO 9001:2015 - The following have been prepared by ISO/TC 176/SC2 to inform and assist organizations in making the ISO 9001:2015 transition
  - News on the ISO 9001 revision
  - A summary of the changes, and on the revision of ISO 9001:2015
  - A paper on ISO 9001 and Risk
  - A presentation on ISO 9001 and Risk Based Thinking
  - Guidance on the requirements for Documented Information of ISO 9001:2015
  - How Change is addressed within ISO 9001:2015
  - Frequently Asked Questions (FAQs)
  - ISO Auditing Practices Group
Questions