



# 9100 revision 2016

## Key changes presentation

IAQG 9100 Team  
February 2017

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# 9100 Revision 2016

## Introduction

reason for revision, team and timeline

# 9100 Series Relationship to ISO 9001:2015 as Baseline Text

## 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

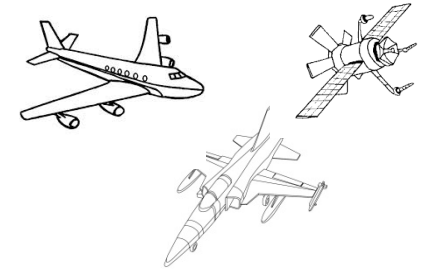
## The “ISO 9001” needed to change, to:

- 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)*



# IAQG 9100 Series Team



## IAQG 9100 Series Team

|                                  |   |
|----------------------------------|---|
| <b>Alan Daniels</b>              |  |
| 9100 IDR – Team Leader<br>Boeing |   |

|                                |   |
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| <b>Buddy Cressionnie</b>       |  |
| 9100 AAQG SDR<br>ASD Expertise |   |


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| 9100 EAQG SDR<br>Zodiac Aerospace |   |


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| <b>Hiroshi Shuto</b>                          |  |
| 9100 APAQG SDR<br>Mitsubishi Heavy Industries |   |

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| <b>Jim Clifford</b>   |  |
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| <b>Jinfeng Geng</b>   |  |
| 9100 APAQG Representative<br>Aviation Industry Corporation (AVIC) |   |


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| 9100 AAQG Representative<br>Triumph |   |

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| <b>Pete Cracknell</b>                   |  |
| 9100 EAQG Representative<br>BAE Systems |   |

|  |   |
|--|---|
| <b>Tatsuya Shirai</b>                                  |  |
| 9100 APAQG Representative<br>Kawasaki Heavy Industries |   |

## Integration of Standards

|                          |   |
|--------------------------|---|
| <b>Elizabeth Walters</b> |  |
| 9120 IDR<br>Boeing       |   |

|                    |   |
|--------------------|---|
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| 9115 IDR<br>Raytheon |   |

|                      |   |
|----------------------|---|
| <b>Wayne Johnson</b> |  |
| 9100 Scribe<br>IAQG  |   |

# 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)

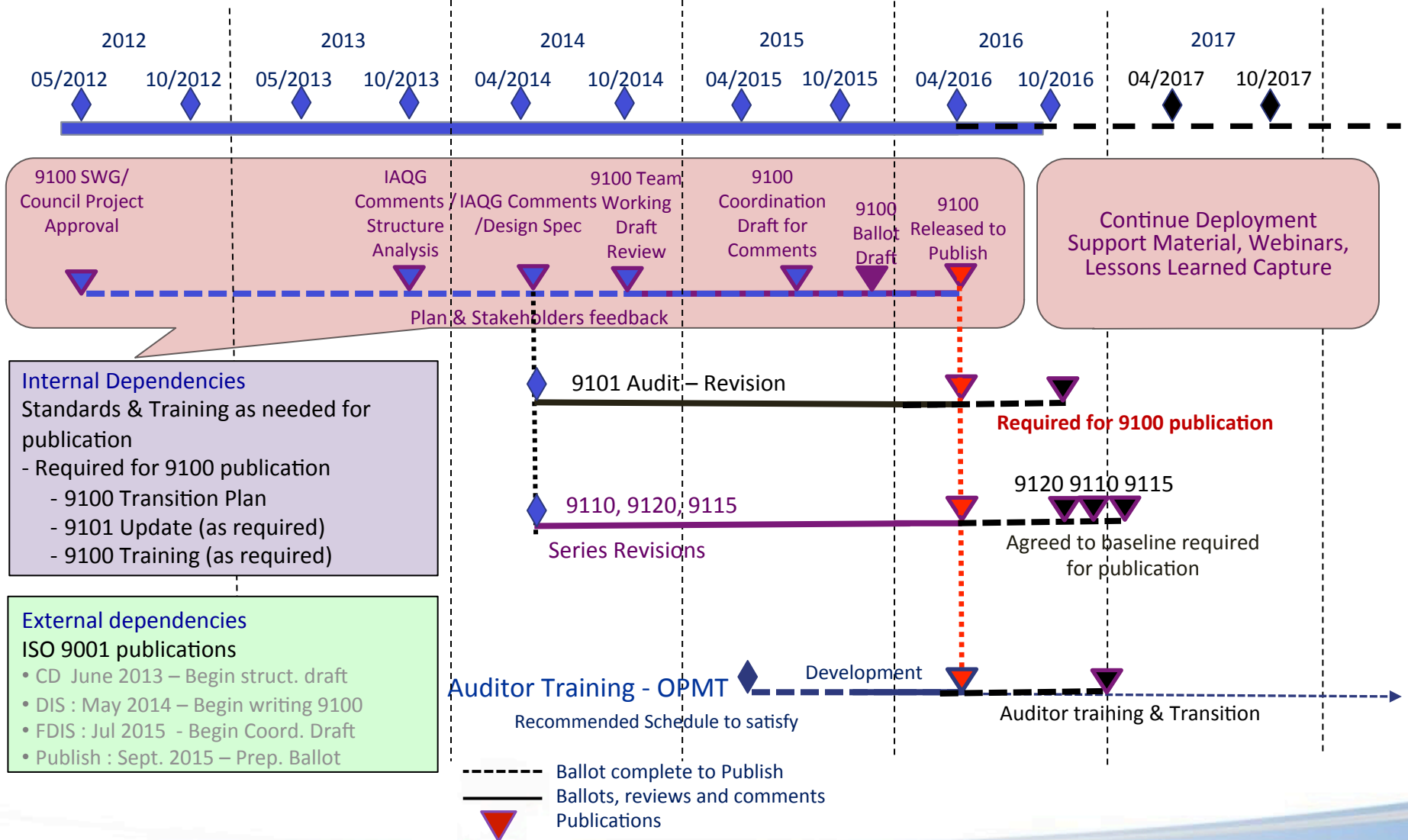


**Sector 9100 Team Meetings** to gather Sector inputs and develop Sector positions. Operation managed at Sector Level (58)





# 9100 Series Revision Integrated Schedule



# 9100 Revision 2016

## Quality Management Principles

## ISO 9000 Quality Management Principles

### There were 8 principles

Customer focus

Leadership

Involvement of people

Process approach

System approach to management

Continual improvement

Factual approach to decision making

Mutually beneficial supplier relationships

### There are now 7

Customer focus

Leadership

Engagement of people

Process approach

(included in the process approach)

Improvement

Evidence based decision making

Relationship management

# 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)*

# 9100 revision 2016

## Terminology Changes (from ISO 9001 baseline)

| Previous version                              | New Version  |
|---|--|
| Products                                      | Products and services  |
| Exclusions                                    | Scope of the QMS to be formally defined and all requirements are applicable if they are in the scope   |
| Documentation, records, documented procedures | Documented information <ul style="list-style-type: none"><li>• <b>maintained</b> = documents or procedures</li><li>• <b>retained</b> = records</li></ul> |
| Purchased product                             | Externally provided products and services  |
| Supplier                                      | External provider  |



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

Definition Hierarchy: IAQG Standards, ISO 9000:2015, IAQG Dictionary, Oxford Dictionary

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



## High Level Structure

- ISO is going from 8 clauses to 10 clauses



## 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

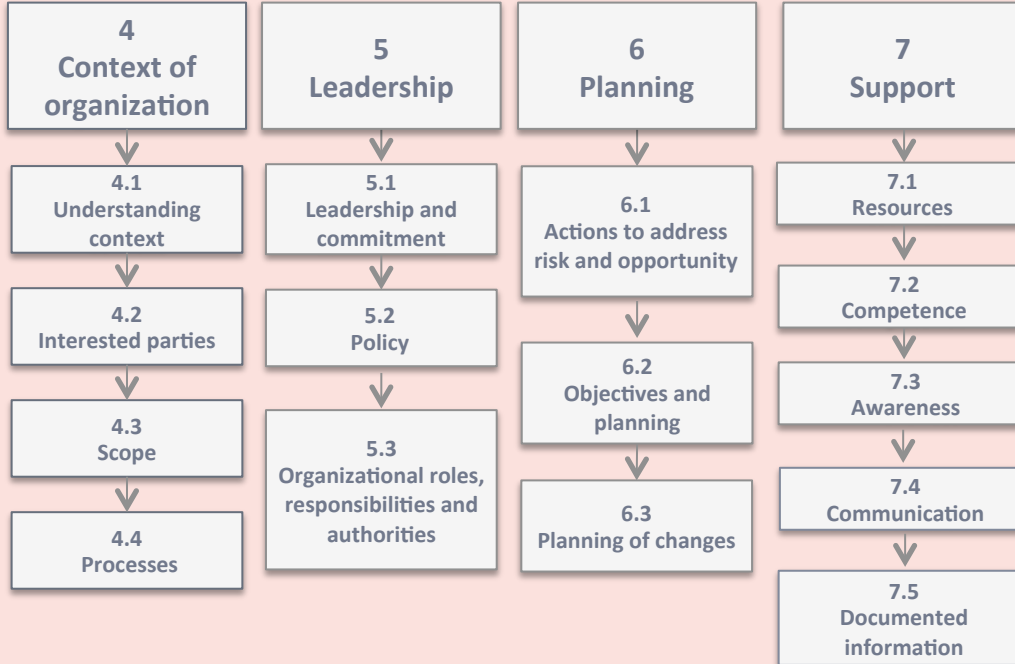


# 9100 revision 2016

HLS: High Level Structure (from ISO 9001 baseline)



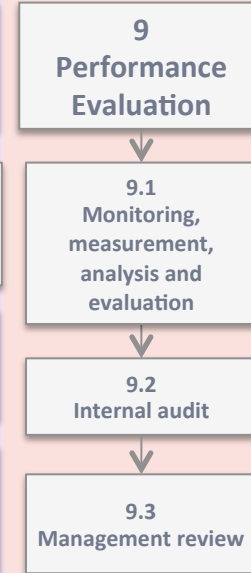
## Plan



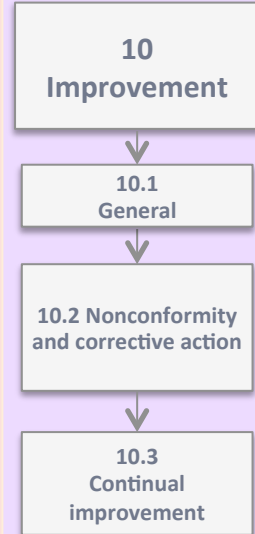
## Do



## Check



## Act



## HLS Table of Contents – ISO 9001 / 9100

- 1 Scope**
- 2 Normative references**
- 3 Terms and definitions**
- 4 Context of the organization**
  - 4.1 Understanding the organization and its context
  - 4.2 Understanding the needs and expectations of interested parties
  - 4.3 Determining the scope of the quality management system
  - 4.4 Quality management system and its processes
- 5 Leadership**
  - 5.1 Leadership and commitment
  - 5.2 Policy
  - 5.3 Organizational roles, responsibilities and authorities
- 6 Planning**
  - 6.1 Actions to address risks and opportunities
  - 6.2 Quality objectives and planning to achieve them
  - 6.3 Planning of changes



## **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

## **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.

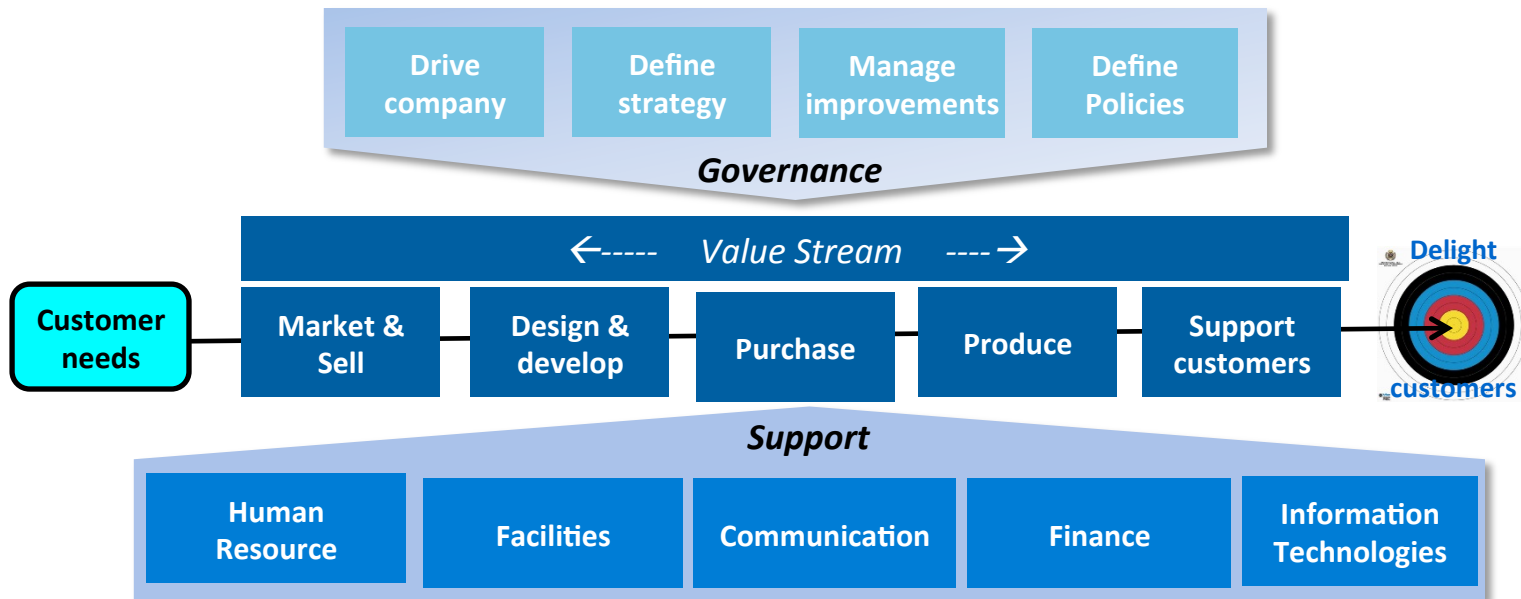
## Benefits

- 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**

# 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?

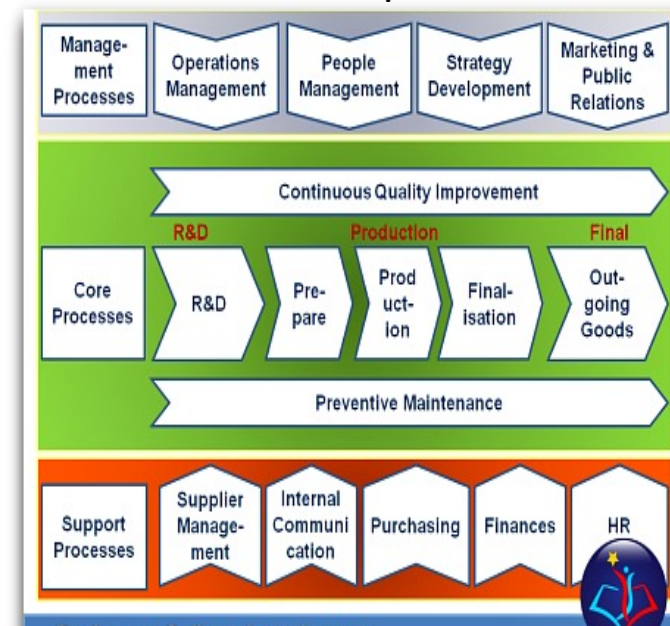
- The systematic management of processes and their interactions to achieve intended results

## 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**

### Example

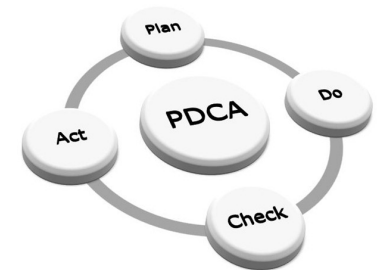


## Process approach & risk-based thinking

- 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



|              |  |
|--------------|--|
| <b>Plan</b>  | set objectives and build processes necessary to deliver results  |
| <b>Do</b>    | implement what was planned                                       |
| <b>Check</b> | monitor and measure processes and results against the objectives |
| <b>Act</b>   | take actions to improve results                                  |



## 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”*

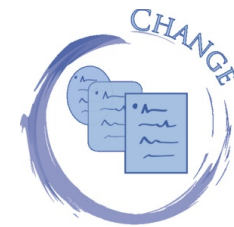
The standard has become a dynamic framework which evolves to enable organizations to adapt to their changing environments or circumstances

### 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



# 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

# 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”:

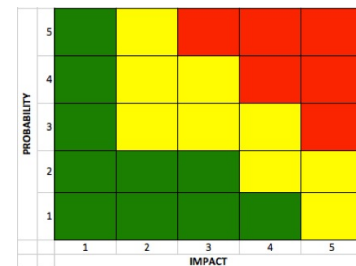
- Manage risks at organization / processes level  
*(such as: new customers, new market, company partnerships, business localizations, ...)*



### 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

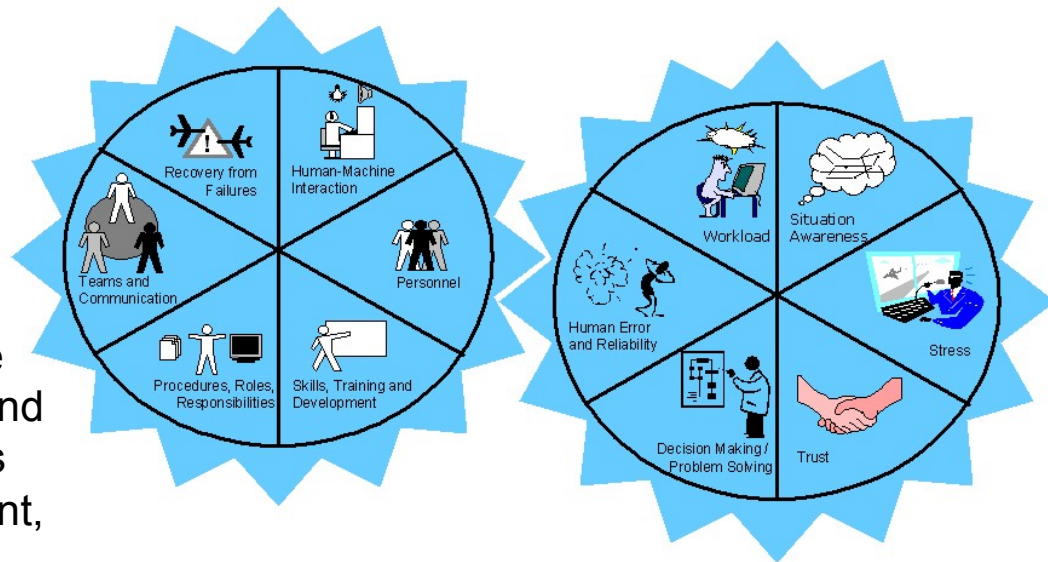
## *Human Factors*

### 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

October 2016



## 9100 Series Changes - High Level Summary

### No Requirements

|  |  |
|--|--|
| <b>Clause 1</b><br>Scope                       | <ul style="list-style-type: none"> <li>▪ New process model</li> <li>▪ Added a PDCA model</li> <li>▪ Added “Risk-based thinking”</li> <li>▪ Emphasis on defining the QMS and context of the organization</li> </ul>   |
| <b>Clause 2</b><br>Normative ref               | <ul style="list-style-type: none"> <li>▪ ISO 9000:2015 referenced</li> </ul>   |
| <b>Clause 3</b><br>Terms and definitions       | <ul style="list-style-type: none"> <li>▪ ISO 9001 terms and definitions moved to ISO 9000</li> <li>▪ <i>Added 9100 “product safety”, “counterfeit part”</i></li> </ul>   |
| <b>Clause 4</b><br>Context of the organization | <ul style="list-style-type: none"> <li>▪ Maintained documented information is required, <i>can be named Quality Manual</i></li> <li>▪ Justified exclusions not limited to Realization/Operations processes</li> <li>▪ QMS processes have performance indicators</li> </ul> |
| <b>Clause 5</b><br>Leadership                  | <ul style="list-style-type: none"> <li>▪ QMS compatible with strategic direction</li> <li>▪ QMS requirements integrated into business processes</li> <li>▪ Processes deliver their intended outputs</li> </ul>   |

|   |   |
|---|---|
| <b>Clause 6</b><br>Planning for the QMS   | <ul style="list-style-type: none"> <li>▪ When planning the QMS, determine the actions needed to address opportunities and risks (prevention)</li> <li>▪ Increases requirements for planning of changes</li> </ul>   |
| <b>Clause 7</b><br>Support                | <ul style="list-style-type: none"> <li>▪ Determine knowledge management requirements</li> <li>▪ <i>Awareness on product conformity, product safety, ethical behavior</i></li> </ul>   |
| <b>Clause 8</b><br>Operation              | <ul style="list-style-type: none"> <li>▪ <i>Planning for product obsolescence</i></li> <li>▪ <i>Plan activities needed to assure product safety</i></li> <li>▪ <i>Prevention of counterfeit parts</i></li> <li>▪ <i>Process to validate test reports for raw material based on risks</i></li> <li>▪ Release of products and services</li> </ul> |
| <b>Clause 9</b><br>Performance evaluation | <ul style="list-style-type: none"> <li>▪ Assess performance of QMS processes</li> <li>▪ <i>Added Note to evaluate performance indicators on internal audits</i></li> </ul>  |
| <b>Clause 10</b><br>Improvement           | <ul style="list-style-type: none"> <li>▪ <i>Consider human factors in nonconformity / corrective action</i></li> </ul>  |

**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

# 9100/9110/9120:2016 Transition Summary



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

**AQMS transition timeline revised based upon change in key dependencies completion dates**

# 9100 Revision 2016

## Deployment Support Material Where to find it ?

# Path through the IAQG web site



www.iaqg.org

- Home
- Organization
- Membership
- IAQG Dictionary
- IAQG Forms
- Supply Chain Management Handbook SCMH
- Publications
- Deployment Support Materials
- Events
- Contact Us

The IAQG is an international non-profit association under the Belgi registered in Brussels (Belgium).

The IAQG is a cooperative organization within the aerospa comprised of 3 sectors (Americas - AAQG, Asia/Pacific - A

### Purpose

- Establish and maintain a dynamic cooperation bas aerospace & defense companies on initiatives to r in quality performance and reductions in cost thro
- Initial focus is to continuously improve the process consistently deliver high quality products, thereby r activities and costs.

### Objectives

- Establish commonality of aviation, space and defe documented" and "as applied"
- Establish and implement a process of continual in to life
- Establish methods to share best practices in the a industry
- Coordinate initiatives and activities with regulatory/ other industry Stakeholders

### Mission

CLICK ON THE REQUIREMENT STANDARD BELOW FOR ADDITIONAL INFORMATION

| Oversight of Certification Scheme                                     |  |   |   |   |
|---|--|---|---|---|
| <a href="#">9104-1 Requirements for ASD QMS Certification Program</a> | 9104-2 Oversight of ASD QMS Registration/ Certification Programs               | 9104-3 ASD Auditor Competency and Training Courses                  |   |   |
| Certification Scheme QMS Standards                                    | <a href="#">9100 QMS - Requirements for ASD Organizations</a>                  | } <a href="#">9101 QMS Audit Requirements for ASD Organizations</a> |   |   |
|   | <a href="#">9110 QMS - Requirements for Aviation Maintenance Organizations</a> |   |   |   |
|   | <a href="#">9120 QMS - Requirements for ASD Distributors</a>                   |   |   |   |
| <a href="#">9102 First Article Inspection Requirement</a>             | 9103 Variation Management of Key Characteristics                               | 9107 Direct Delivery Authorization Guidance                         | 9114 Direct Ship Guidance for Aerospace Companies | 9115 QMS – Requirements for ASD Orgs – Deliverable Software |
| 9116 Notice of  | 9117 Delegated   | 9131 Nonperformance   | 9132 Data Matrix                                  | 9133 Qualification  |



# 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](#)
  - [Correlation matrices between 9100:2009 and 9100:2016](#)
  - [Matrix of 9100:2009 mapped against the 9100:2016](#)
  - [FAQ](#)
  - [2016 August Quality Progress: Prepare for Landing - How to get ready for the revised AS9100 series of standards](#)  
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  - [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](#)
  - [Transition Planning Guidance for ISO 9001:2015](#)
  - [Implementation Guidance for ISO 9001:2015](#)
  - [ISO 9001:2008 and ISO 9001:2015 Correlation matrices](#)
  - [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](#)
  - [A paper on the Process Approach in ISO 9001:2015](#)
  - [A presentation on the Process Approach in ISO 9001:2015](#)
  - [Frequently Asked Questions \(FAQs\)](#)
  - [ISO Auditing Practices Group](#)

# Questions

