



# THE IAQG SUPPLY CHAIN MANAGEMENT HANDBOOK - SCMh

What is it? and  
How can you access it?

Last update: 21AUG2024

# Content

- IAQG Products
- What is the SCMh?
- Available SCMh Topics
- Some examples of current SCMh guidance material
- How to Access the SCMh
- SCMh Webinars

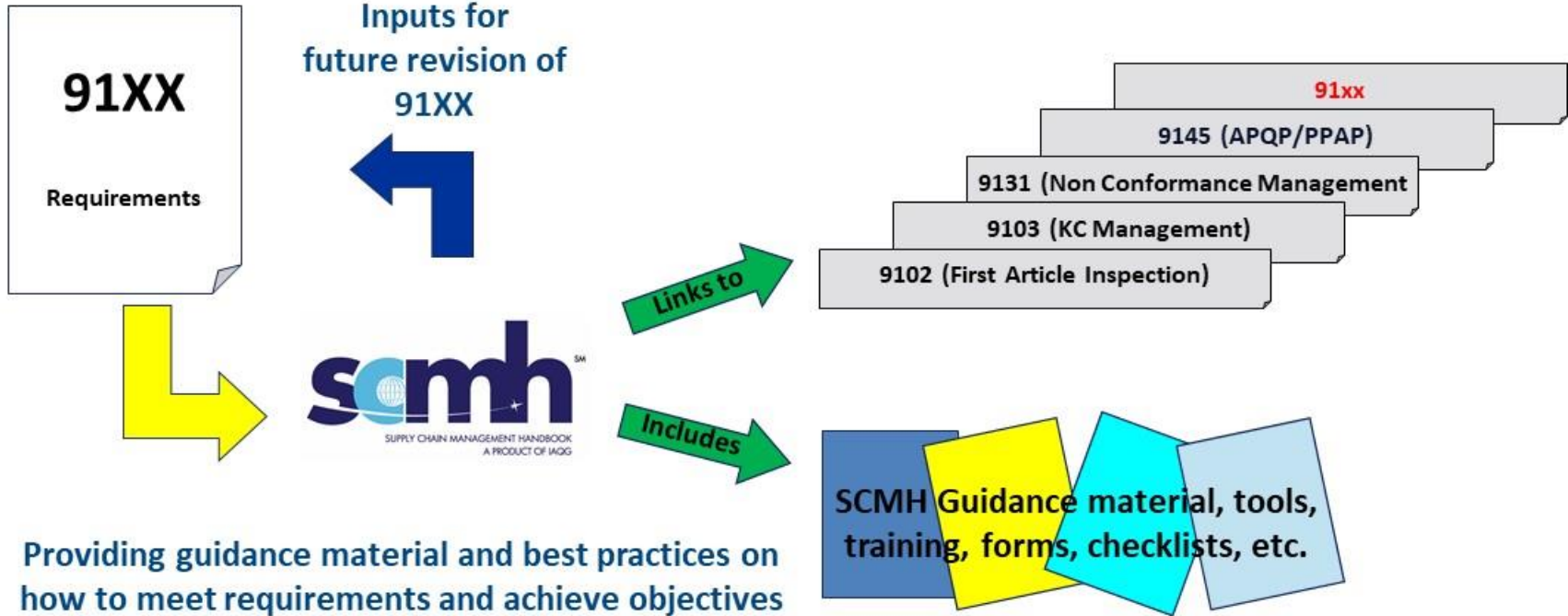
# IAQG Products include;

- IAQG Standards
  - QMS related requirements e.g., AS/EN/JIS 9100/9110/9120
  - Product and Process related Standards, e.g.; AS/EN/SJAC 9102 Requirements for First Article Inspection, 9103 Variation Management of Key Characteristics
- Deployment Support Material (for some IAQG standards)
- OASIS A Recognized Accreditation System allowing any organization to be certified to IAQG Standards 9100/9110/9120
- AIMM The Aerospace Improvement Maturity Model (AIMM) to help organizations improve the maturity of their QMS
- SCMH Supplier Improvement Guidance Materials → The SCMH

The SCMh is a set of guidance materials and tools developed by IAQG subject matter experts to help improve “On Time and On Quality” performance throughout the entire supply chain:

- It is intended to assist organizations with an understanding of IAQG members’ requirements and how to apply them.
- It is not intended to be requirements and, therefore is not auditable (unless its use is specifically required by a customer).
- The SCMh sections are structured around standard supply chain processes.
- Use of SCMh guidance material does not ensure compliance with any referenced QMS Standards... but it helps!

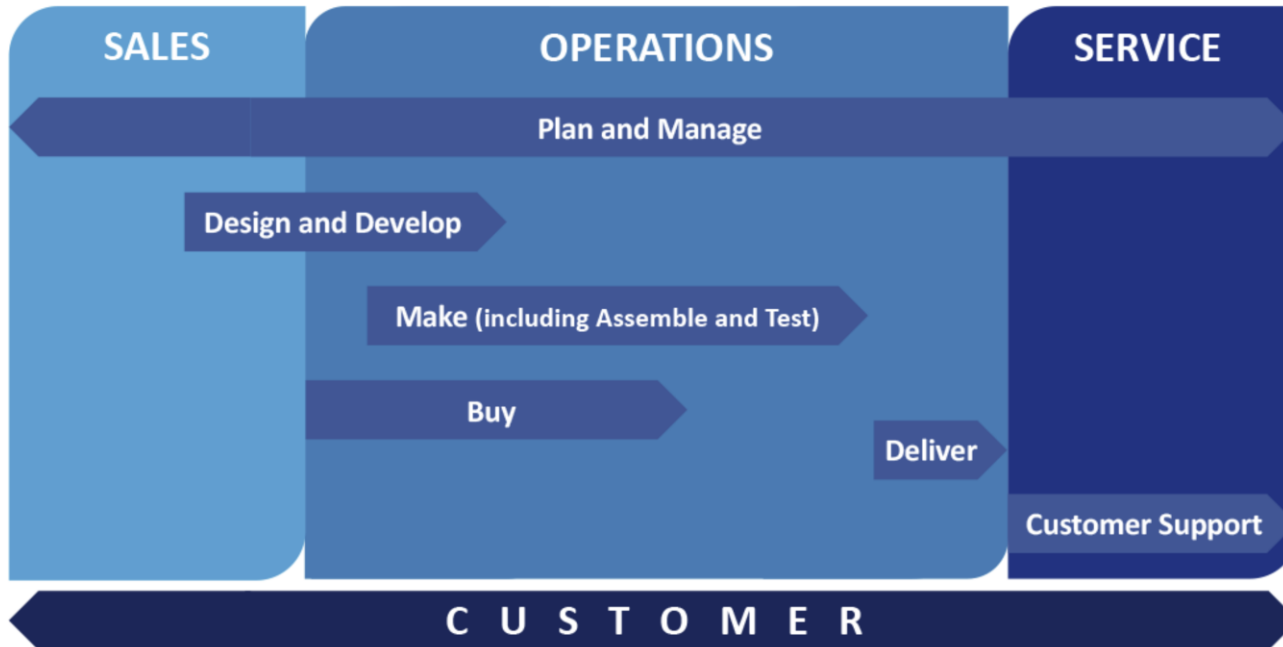
# Focus on “How” through SCM<sup>H</sup>



- The SCMh is provided at no cost and is available on the IAQG Website to all levels of the supply chain
- Registering is simple and downloading the guidance is free
- The SCMh is continuously updated as changes and improvements are identified
- The SCMh is written in English and is generally not translated into other languages, but some national initiatives, Japanese, Italian, and Chinese are available. The English version always remains the reference.

# The SCMh is structured around standard supply chain processes

## Supply Chain Process Life Cycle



# SCMH structure and content



## Plan & Manage

- Cross-functional business activities required to ensure that product and services achieve the expected level of product performance (on quality / on time / on cost) and customer expectations. This includes program and project management, balancing and forecasting medium-long term customer demand with operational & resource capabilities, overall planning of activities, identification and mitigation of risks and issues, stakeholders' relationship and communication.

*Overall management  
of the company and  
projects management  
(transversal)*

## Design and Develop:

- Product specification and design, technical development and qualification, definition of product key characteristics, support to manufacturing and process design, technical changes and obsolescence management, technical operational documentation and manuals, instructions for continued airworthiness when applicable.

*I design right first time,  
and support final  
operators on engineering  
aspects*



# SCMH structure and content (Cont'd)



## Make:

- Establishment of the production organization, new product industrialization, industrial qualification, manufacturing, and verification activities in serial production phase, as well as management of industrial changes.

## Buy

- Selection, contracting and monitoring of suppliers and sub-tiers to ensure purchased products and services meet final customer requirements and suppliers continually raise their performance levels.

*I always produce on quality, on time, from the beginning and I control internal changes*

*I have the right suppliers and adequately manage them*

# SCMH structure and content (Cont'd)



## Deliver

- Pre-delivery and delivery operations, product preservation and delivery documentation, delivery performance monitoring to ensure on quality / on time delivery. This may include management of activities performed at the customers' production sites before delivery of the final product to the end customer or operator.

*Deliveries operations (incl. Documents) and activities performed at customer site protect my products and my customers*

## Customer Support

- Supporting the final customer / operator of the product to ensure smooth product entry into service and end user satisfaction during in-service phase. This includes maintenance, repair and overhaul of products, provision of spares, technical assistance, training and operational documentation, product monitoring including in-service data feedback and analysis, and management of off-site activities.

*Operators of the final product are well supported, and feedback loop exists*

• Green items are currently in work

# Current SCMh Content:



Plan & Manage

## Plan & Manage

- Work Transfer Management
- Root Cause Analysis & Problem Solving
- Data Science & Artificial Intelligence
- **Data Management for Quality and Cost Improvement NEW**
- Advanced Product Quality Planning – APQP 9145 **REV**
- Contractual Requirements Review & Management **REV**
- Competency Management
- Capacity Management, Ordering & Logistics
- Configuration management
- Project Management
- Sales, Master Scheduling & Sequencing
- Cybersecurity **REV**
- Process Mapping
- Integrated Management Systems IMS
- Compliance Education
- Space Applications
- **Special Characteristics Definitions NEW**
- Risk Management
- Key Performance Indicators KPI
- Applying Remote Technologies
- Business Continuity Management
- Ethics & Compliance **REV**

## Design & Develop

- Special Requirements & Critical Items
- Deployment and Support Material 9115
- Notice of Change (NOC tool)
- Design Risk Analysis Rev
- Engineering Tolerancing Analysis
- Variation Sensitivity Analysis
- KPI Detailed Definitions
- Procurement Engagement

## Make (incl. Assemble & test)

- Managing Product & Process Variation 9103
- First Article Inspection 9102
- Counterfeit Parts Prevention
- Control of Nonconforming Outputs
- Foreign Object Damage
- Human Factors in New Manufacturing
- Authority Acceptance Media /Stamping (AAM)
- **Safety Management Systems SMS NEW**
- Collection & Use of Shop Floor Gemba Input
- MFG. Work Instructions
- Product Safety Awareness
- Operator Self-Verification 9162
- Measurement Systems Analysis MSA **REV**
- Statistical Product Acceptance 9138
- Unsalvageable Items 9147
- KPI Detailed Definitions

### About SCMh:

- Alphabetical Index
- 9100 Mapping to SCMh
- SCMh Communication Pack
- IAQG Assessment Tools

## Buy

- Supplier Capability Assessment
- Sub-tier Supplier Control
- Procurement Engagement
- Supplier Quality Management Basics **REV**
- KPI Detailed Definitions
- Common Language

## Deliver

- Certificate of Conformance
- KPI Detailed Definitions
- **PAPP Approval Delegation Process NEW**

## Customer Support

- Product Entry Into Service
- KPI Detailed Definitions

Customer

# Available SCMH Topics (as of August 2024)

## Plan & Manage

- SCMH 7.1 Work Transfer Management
- SCMH 7.2 Advanced Product Quality Planning (APQP)
- SCMH 7.3 Risk Management
- SCMH 7.4 Root Cause Analysis and Problem Solving
- SCMH 7.5 Configuration Management
- SCMH 7.6 Process Mapping Guidance Material
- SCMH 7.7 Capacity Management, Ordering, and Logistics
- SCMH 7.8 Compliance Education
- SCMH 7.9 Project Management
- SCMH 7.10 Contractual Requirements Review and Management
- SCMH 7.11 Key Performance Indicators KPI Metrics and Definitions
- SCMH 7.12 Integrated Management System
- SCMH 7.13 Competency Management
- SCMH 7.14 Business Continuity Management
- SCMH 7.15 Applying Remote Technologies to Audits and Product Acceptance
- SCMH 7.16 Sales, Master Scheduling & Sequencing
- SCMH 7.17 Space Applications
- SCMH 7.18 Data Science & Artificial Intelligence
- SCMH 7.19 Cybersecurity
- SCMH 7.20 Ethics and Compliance

## Design & Develop

- SCMH 2.2 Deployment & Support Material for Software 9115
- SCMH 2.3 Notice of Change NOC Tool
- SCMH 2.4 Special Requirements and Critical Items Control
- SCMH 2.5 Engineering Tolerance Analysis
- SCMH 2.6 Design/ Engineering and Product Development KPI Detailed Definitions
- SCMH 2.7 Variation Sensitivity Analysis
- SCMH 2.8 Design Risk Analysis

## Make

- SCMH 3.1 Managing Product and Process Variation 9103
- SCMH 3.2 First Article Inspection (FAI)
- SCMH 3.3 Control of Nonconforming Outputs
- SCMH 3.4 Foreign Object Debris (FOD)
- SCMH 3.5 Counterfeit Parts Prevention
- SCMH 3.6 Human Factors in New Manufacturing
- SCMH 3.7 Statistical Product Acceptance
- SCMH 3.8 Manufacturing Work Instructions
- SCMH 3.9 Product Safety Awareness
- SCMH 3.10 Collection and Use of Shop Floor Gemba Input and Feedback
- SCMH 3.11 Measurement Systems Analysis MSA
- SCMH 3.12 Acceptance Authority Media Introduction
- SCMH 3.13 Unsalvageable Item Management
- SCMH 3.14 Manufacturing and Production (Make) Key Performance Indicator Detailed Definitions
- SCMH 3.15 Operator Self-Verification

## Buy

- SCMH 4.1 Supplier Capability Assessment (SCA)
- SCMH 4.3 Supplier Quality Management Basics (SQMB)
- SCMH 4.4 Sub-tier Supplier Control
- SCMH 4.6 Supplier Management (Buy) Key Performance Indicator Detailed Definitions
- SCMH 4.7 Procurement Engagement
- SCMH 4.8 Common Language

## Deliver

- SCMH 5.1 Delivery Key Performance Indicators Detailed Definitions
- SCMH 5.2 Certificate of Conformance (CofC)

## Customer Support

- SCMH 6.1 Product Entry Into Service (EIS)
- SCMH 6.2 Customer Support Key Performance Indicator Detailed Definitions

# Some Examples of existing SCMH Topics

# SCMH 3.4 Foreign Object Debris (FOD)






SCMH 3.4.2  
FOREIGN OBJECT DAMAGE (FOD)  
PREVENTION PROGRAM –  
GUIDANCE IN SUPPORT OF IAQG STANDARD 9146

- FOD Program Prevention Program –Guidance in support of AS/EN/JSAC 9146
- FOD Assessment Tool – three level of robustness
- Printable and fillable on-line check sheets and forms

## FOD Prevention Program Requirements

- Program Management
- Operations
- Area Designation
- Training and Personal Access
- Product Protection
- Housekeeping and Clean-As-You-Go
- Consumables, Hardware, and Personal Items - Accountability and Control
- Tool Accountability and Control

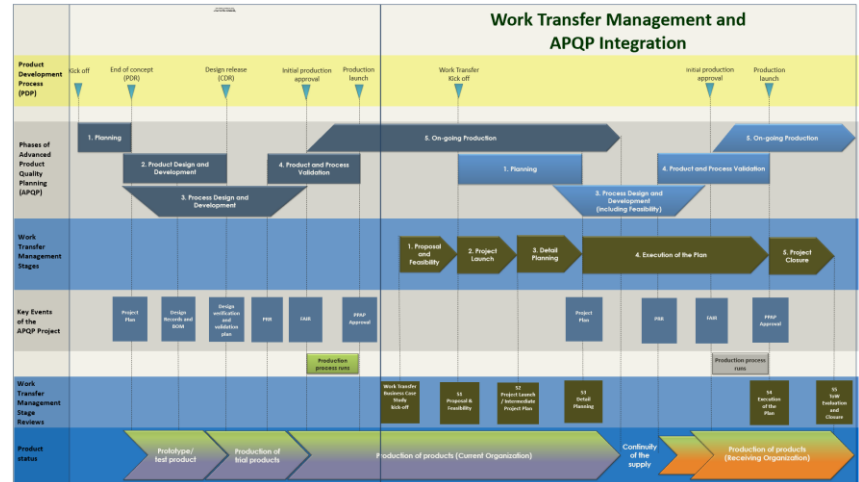
Foreign Object Damage (FOD) Prevention Assessment Exam	
FOD Prevention Assessment -Reference IAQG 9146	Date: _____
Assessor: _____	Results: _____
(Yes/No/NA)	
<b>9100 4.1 Program Management</b>	
1) Does the organization's top management demonstrate leadership and commitment to the FOD Prevention Program? Ref. par. 4.1.1	
2) Does the organization designate a FOD Prevention Program management representative with the responsibility and authority for establishment, implementation, maintenance of the Program? Ref. par. 4.1.2	
3) Does the organization establish, implement, and maintain documented information of a FOD Prevention Program commensurate with a FOD risk assessment for product characteristics and operations? Does the FOD Prevention Program include consideration of the following elements for applicability? <ul style="list-style-type: none"> <li>a. Operations (see 4.2).</li> <li>b. Area designation (see 4.3).</li> <li>c. Training and personnel access (see 4.4).</li> <li>d. Product protection (see 4.5).</li> <li>e. Housekeeping and clean-as-you-go (see 4.6).</li> <li>f. Consumables, hardware, personal items accountability, and control (see 4.7).</li> <li>g. Tool accountability and control (see 4.8).</li> </ul> Ref. par. 4.1.3	
4) Does the organization maintain documented information of FOD Prevention Program nonconformities and FOD/FOD product nonconformities in accordance with its "control of nonconforming outputs" processes?	

PART FAMILY FOD RISK ASSESSMENT																			
Product Characteristics	Product Characteristics						Operations Characteristics						Detectability Characteristics		FOD Prevention Program				
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4			
<p><b>Product Characteristics</b></p> <p>1) Does the product have a high degree of complexity?</p> <p>2) Does the product have a high degree of variability?</p> <p>3) Does the product have a high degree of variability in its assembly process?</p> <p>4) Does the product have a high degree of variability in its assembly process?</p> <p>5) Does the product have a high degree of variability in its assembly process?</p> <p>6) Does the product have a high degree of variability in its assembly process?</p>							<p><b>Operations Characteristics</b></p> <p>1) Does the organization have a high degree of variability in its assembly process?</p> <p>2) Does the organization have a high degree of variability in its assembly process?</p> <p>3) Does the organization have a high degree of variability in its assembly process?</p> <p>4) Does the organization have a high degree of variability in its assembly process?</p> <p>5) Does the organization have a high degree of variability in its assembly process?</p> <p>6) Does the organization have a high degree of variability in its assembly process?</p>							<p><b>Detectability Characteristics</b></p> <p>1) Does the organization have a high degree of variability in its assembly process?</p> <p>2) Does the organization have a high degree of variability in its assembly process?</p> <p>3) Does the organization have a high degree of variability in its assembly process?</p> <p>4) Does the organization have a high degree of variability in its assembly process?</p> <p>5) Does the organization have a high degree of variability in its assembly process?</p> <p>6) Does the organization have a high degree of variability in its assembly process?</p>			<p><b>FOD Prevention Program</b></p> <p>1) Does the organization have a high degree of variability in its assembly process?</p> <p>2) Does the organization have a high degree of variability in its assembly process?</p> <p>3) Does the organization have a high degree of variability in its assembly process?</p> <p>4) Does the organization have a high degree of variability in its assembly process?</p> <p>5) Does the organization have a high degree of variability in its assembly process?</p> <p>6) Does the organization have a high degree of variability in its assembly process?</p>		

# SCMH 7.1 Work Transfer Management

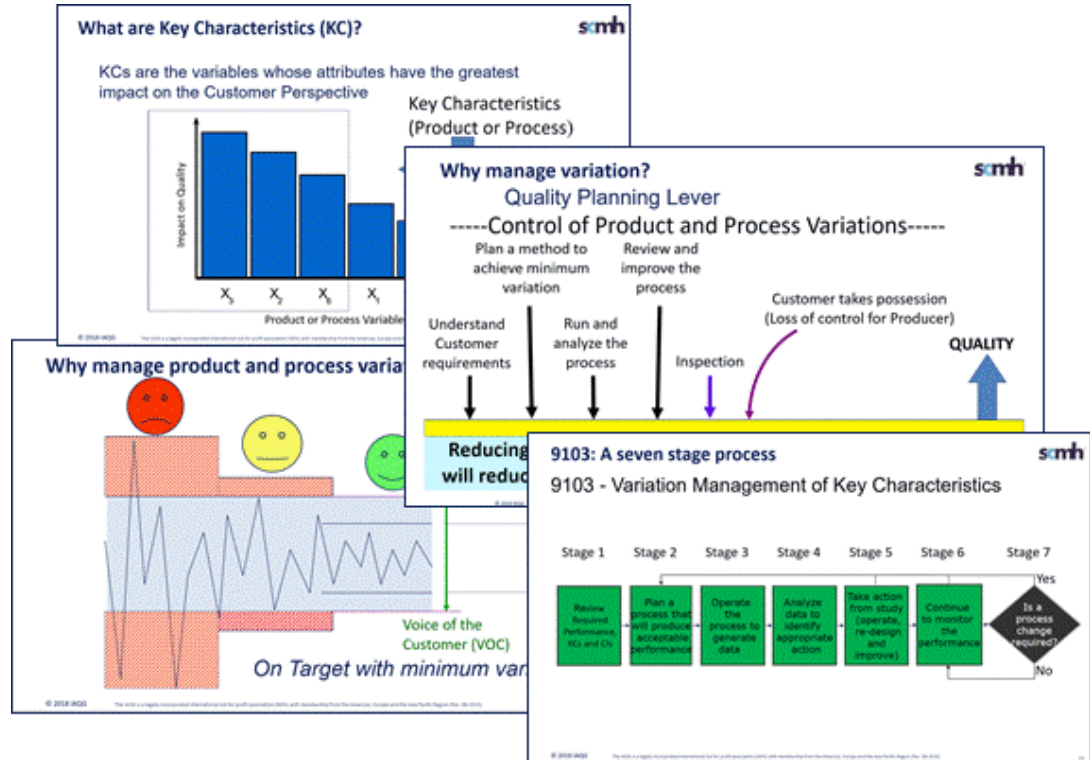


- Work Transfer Management procedure integrating APQP
- 5 steps - 4 gate review process
- Fillable forms for:
  - Each gate review
  - Project Proposal
  - Risk Assessment & Business Case
  - Product Readiness Review



# SCMH 3.1 Variation Management of Key Characteristics (9103)

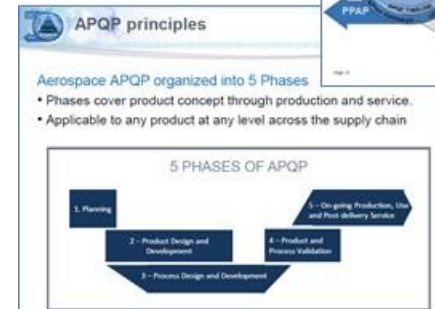
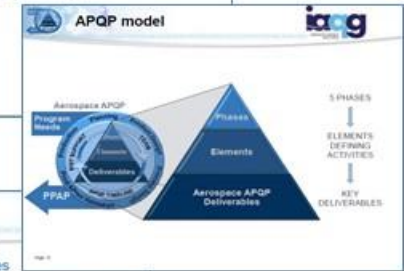
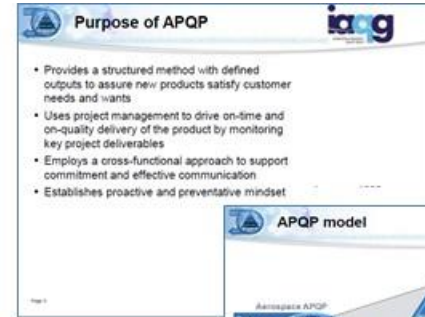
- Provides basic knowledge about Key Characteristics
- Explains the value of managing variations
- Details how to deploy the Seven Stage process of 9103
- Guidance material will be aligned when 9103 is revised





# SCMH 7.2 Advanced Product Quality Planning (APQP) Supports deployment of IAQG standard 9145

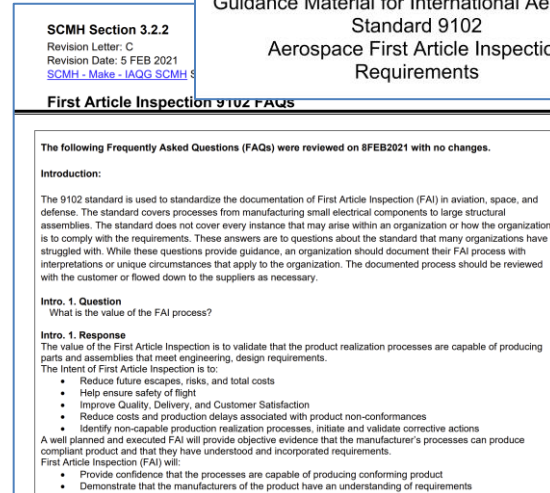
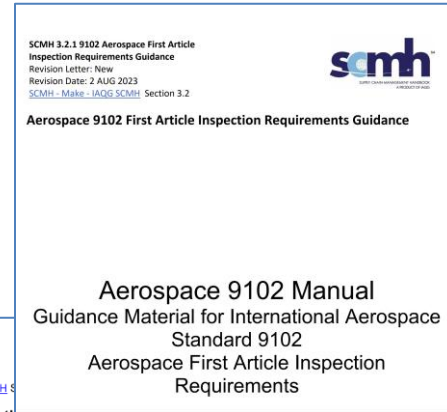
- Explains the purpose of the APQP and its benefits
- Describes
  - The main Pillars of the APQP
    - 1. Organizational commitment & Management support
    - 2. Cross functional team
    - 3. Effective project planning
  - APQP Principles
    - 5 Phases of APQP
    - APQP Elements and their deliverables
- Guides the user about how to manage the APQP Process and reports progress during deployment on a new product introduction
- Proposes some checklists, templates, etc.



# SCMH 3.2 First Article Inspection (FAI)



- Guidance material aligned to 9102
- Includes:
  - FAI FAQ
  - Step-by-step instruction and examples for filling out 9102 FAI reporting forms
    - Form 1 - Part Number Accountability
    - Form 2 - Product Accountability
    - Form 3 - Characteristic Accountability, Verification, and Compatibility Evaluation



# Accessing SCM<sup>H</sup> on the IAQG web-site

# IAQG Link to SCMH



IAQG.org



Home About IAQG Membership Sectors **IAQG Tools** Standards Certification Events News

OASIS AIMM **SCMH** DICTIONARY IAQG Participant Portal

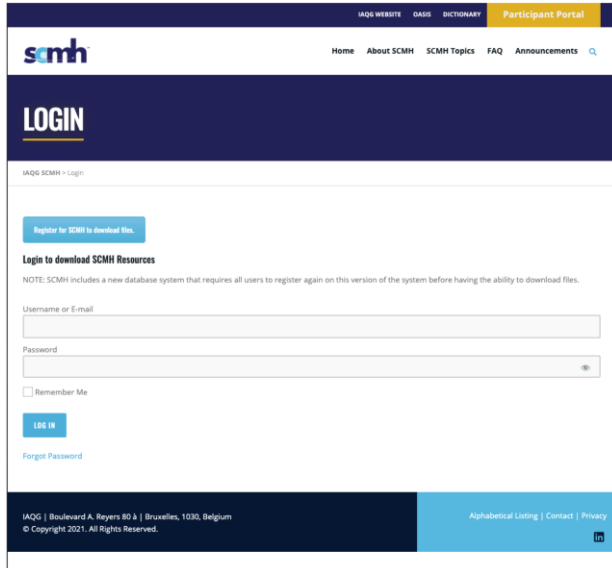
## SUPPLY CHAIN MANAGEMENT HANDBOOK (SCMH)

Materials to assist with achieving best practices within the Aviation Space and Defense Industries (AS&D).

**LEARN MORE**

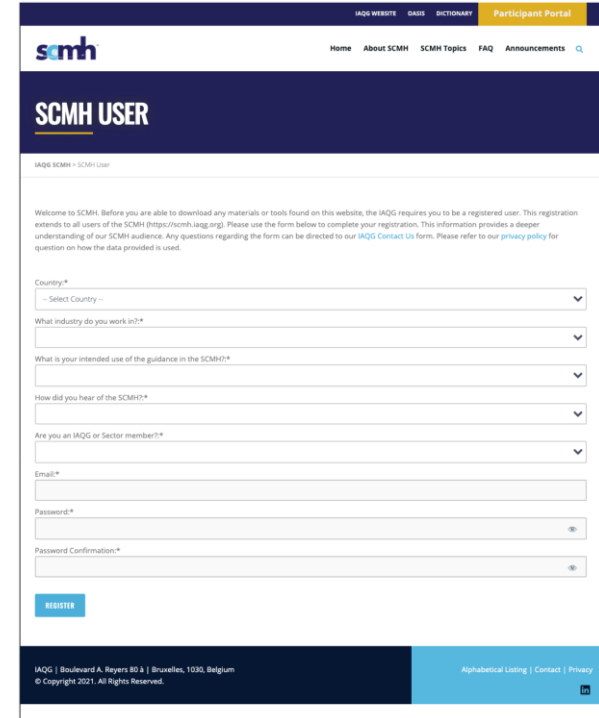
Click "SCMH" or "IAQG tools – SCM" or "LEARN MORE" on Supply Chain Management Handbook (SCMH) page

# SCMH Registration



The screenshot shows the SCMH LOGIN page. At the top, there is a navigation bar with links for IAQG WEBSITE, GDSI, DICTIONARY, and Participant Portal. Below the navigation bar is the SCMH logo and a menu with links for Home, About SCMH, SCMH Topics, FAQ, and Announcements. The main heading is "LOGIN". Below the heading, there is a "Register to SCMH to download files." button. A note states: "Login to download SCMH Resources. NOTE: SCMH includes a new database system that requires all users to register again on this version of the system before having the ability to download files." The login form includes fields for Username or E-mail, Password, and a Remember Me checkbox. There is a "LOG IN" button and a "Forgot Password" link. At the bottom, there is a footer with contact information and a copyright notice.

Registration is **free**, just a few questions to gauge its use, and the global reach of the SCMH.



The screenshot shows the SCMH USER registration form. At the top, there is a navigation bar with links for IAQG WEBSITE, GDSI, DICTIONARY, and Participant Portal. Below the navigation bar is the SCMH logo and a menu with links for Home, About SCMH, SCMH Topics, FAQ, and Announcements. The main heading is "SCMH USER". Below the heading, there is a "REGISTER" button. A note states: "Welcome to SCMH. Before you are able to download any materials or tools found on this website, the IAQG requires you to be a registered user. This registration extends to all users of the SCMH (https://scmh.iaqg.org). Please use the form below to complete your registration. This information provides a deeper understanding of our SCMH audience. Any questions regarding the form can be directed to our IAQG Contact Us form. Please refer to our privacy policy for question on how the data provided is used." The registration form includes fields for Country\*, -- Select Country --, What industry do you work in?\*, What is your intended use of the guidance in the SCMH?\*, How did you hear of the SCMH?\*, Are you an IAQG or Sector member?\*, Email\*, Password\*, and Password Confirmation\*. There is a "REGISTER" button at the bottom. At the bottom, there is a footer with contact information and a copyright notice.

The registration popup occurs when you download/view materials or toolbox items. It is required to register on this new platform before using the “forgot password” function.

# SCMH Access



Home About SCM **SCMH Topics** FAQ Announcements

## Welcome to the Supply Chain Management Handbook

The Supply Chain Management Handbook (SCMH) provides guidance materials to continuously improve On Quality Delivery and On Time Delivery (OQD/OTD) throughout the entire value stream. Its objective is to help the supply chain improve their quality performance through a better understanding of aviation, space and defense industry quality management system requirements and expectations.

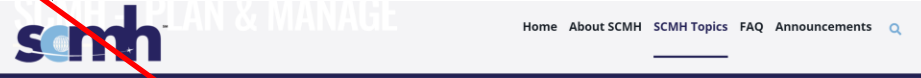
New to SCM?  
REGISTER NOW

## Supply Chain Process Life Cycle



Links to SCM Topics

SCMH Topics are divided by Supply Chain Process. SCM Topics are listed and expand to show a description, available webinars, Core and Toolbox guidance.



IAQG SCM > SCM - Plan & Manage

### SCMH Guidance Topics

PLAN & MANAGE DESIGN & DEVELOP MAKE BUY DELIVER CUSTOMER SUPPORT

#### Plan and Manage

Cross-functional business activities required to ensure that products and services achieve the expected level of product performance (on quality / on time / on cost) and customer expectations. This includes program and project management, balancing and forecasting medium-long term customer demand with operational & resource capabilities, overall planning of activities, identification, and mitigation of risks and issues, stakeholders relationship, and communication.

Contact SCM

- + SCM 7.1 Work Transfer Management
- + SCM 7.2 Advanced Product Quality Planning (APQP) 9145
- + SCM 7.3 Risk Management
- + SCM 7.4 Root Cause Analysis and Problem Solving
- + SCM 7.5 Configuration Management
- + SCM 7.6 Process Mapping Guidance Material

# SCMH Access



A quick look at the  
SCMH.

Get there fast;

[scmh.iaqg.org](https://scmh.iaqg.org)

The screenshot shows the homepage of the Supply Chain Management Handbook (SCMH). At the top, there is a navigation menu with links for Home, About SCM, SCM Topics, FAQ, and Announcements, along with a search icon. Below the navigation is a welcome message: "Welcome to the Supply Chain Management Handbook". A paragraph follows, stating: "The Supply Chain Management Handbook (SCMH) provides guidance materials to continuously improve On Quality Delivery and On Time Delivery (OOD/OTD) throughout the entire value stream. Its objective is to help the supply chain improve their quality performance through a better understanding of aviation, space and defense industry quality management system requirements and expectations."

The main content area features a diagram titled "Supply Chain Process Life Cycle". The diagram is structured as follows:

- SALES** (left column)
- OPERATIONS** (middle column)
- SERVICE** (right column)

Horizontal arrows represent processes across these stages:

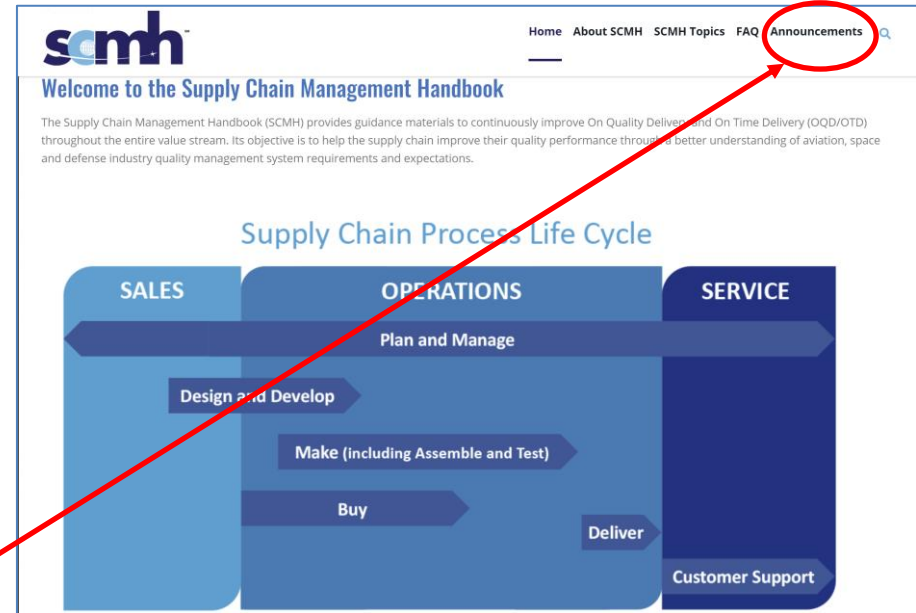
- Plan and Manage**: spans across SALES, OPERATIONS, and SERVICE.
- Design and Develop**: spans across SALES and OPERATIONS.
- Make (including Assemble and Test)**: spans across OPERATIONS.
- Buy**: spans across OPERATIONS.
- Deliver**: spans across OPERATIONS and SERVICE.
- Customer Support**: spans across SERVICE.

# SCMH Webinars



# SCMH Webinars

- The IAQG has introduced SCMH Awareness Webinars with a different SCMH guidance topic addressed in each webinar.
  - The first part of the webinar introduces the SCMH, the content and how to access the guidance. The second part is lead by one of the authors of the specific SCMH guidance as the attendee is taken thru the high points.
  - To attend an upcoming webinar, become a registered user of the SCMH <https://scmh.iaqg.org>
  - You will see the next schedule webinar “FREE to Attend” by going to the “Announcement” page.



The screenshot shows the SCMh website interface. At the top, there is a navigation bar with the SCMh logo and links for Home, About SCMh, SCMh Topics, FAQ, and Announcements. Below the navigation bar, the breadcrumb path reads 'IAQG SCMh > SCMh - Plan & Manage'. The main content area is titled 'SCMh Guidance Topics' and features a horizontal menu with categories: PLAN & MANAGE, DESIGN & DEVELOP, MAKE, BUY, DELIVER, and CUSTOMER SUPPORT. The 'PLAN & MANAGE' category is selected. Under this category, there is a sub-section titled 'Plan and Manage' with a descriptive paragraph. To the right of this text is a dark blue button labeled 'Contact SCMh', which is circled in red. A red arrow points from this button down towards the large text below. Below the 'Plan and Manage' section is a list of sub-topics, each preceded by a plus sign: SCMh 7.1 Work Transfer Management, SCMh 7.2 Advanced Product Quality Planning (APQP) 9145, SCMh 7.3 Risk Management, SCMh 7.4 Root Cause Analysis and Problem Solving, SCMh 7.5 Configuration Management, and SCMh 7.6 Process Mapping Guidance Material.

Questions? “Contact SCMh”



# IAQG 2024 SUPPLY CHAIN MANAGEMENT HANDBOOK

