



# Understand & prepare yourself to be part of the aerospace supply chain

# Outlines

#### **Dedicated to:**

#### • SMEs Executive level

This course will be a starting point for the executive of industries, in order to have a common understanding and same fundamentals about the global supply chain, its organization, structure and requirements as well as the aeronautical environment/culture.

#### **Objectives:**

- To get an insight in the aeronautic culture as well as its associated aeronautical value chain
- To provide an understanding of the global aeronautical supply chain organization and management
- To provide a clear Identification of all the main actors of the supply chain
- To present aeronautical supply chain general structure and explain OEM's requests
- To provide a clear view about the global aeronautical supply chain's requirements & standards (NADCAP, ISO

### 9001, AS 9100...)

- SCM: Tools and techniques for implementation
- To apply logistics strategies to support companies' objectives
- To build high performance business relationship
- To boost project management method to ease the SC performance
- To provide the best practices in terms of human resources management,
- To identify the required managerial skills

## Description of the contents (3 weeks duration):

#### Module 1: Aerospace and supply chain environment

- History and context of the aeronautic
  - Origins
  - Pioneers
  - Introduction to what's an engine
  - Aeronautic value chain
  - Current evolution, forecasts and the impact in the SCM
  - The challenge of the SCM
  - The European industrial organization



- A quality centric culture
  - Create a Quality culture
  - Develop a new strategic and operational leadership model of quality
  - Foster a more consistent motivation of human resources to support quality initiatives
  - Establishes and maintains Quality Management System standards
  - Collects and offers best practices, processes and harmonized requirements
  - Promotes and engage the employees within a communication plan
  - Develop and launch new products which will provide consistent customer value
  - Effective management of suppliers and purchasing activities

#### **Duration: 2 days**

#### Module 2: The supply chain from management up to performance measurement

- Why SCM?
- Defining supply chains
- Customer Orientation, service and satisfaction
- Defining supply chains Supply Chain Management in aeronautic:
  - The Supply Chain's Strategic Importance
    - The 2 main missions of Supply Chain
    - The integration
    - The coordination
  - o Supply chain management ensuring sustainable performances and continuous benefits
- Managing supply chains
  - Value of managing global supply chains
  - Coordination mechanisms in global supply chains
  - o Inter-organizational relationships in global supply chains
  - o Knowledge of stakeholders and global supply chain sustainability
  - o Guidelines for managing global supply chains
  - o Supply chain design and planning
    - Supply chain configuration
    - Extent of vertical integration
    - Outsourcing and offshoring
    - Local decisions
    - Capacity planning
    - Bullwhip effect (case study)
- Processes
  - o What a process is, its characteristics and its impact on the overall supply chain?
  - o How innovation and supply chain work together to provide products to consumers?
  - o Process inhibitors and their impact on supply chain performance





- SC and quality
  - o Supply chain standards
  - o Quality standards
  - Production and quality indicators
  - Synchronized Production and Delivery
  - o Performance Measurement
    - Assessment and analysis practices
    - specific measures providing insight into supply chain operations
- Supply Chain Risk Management
  - o Evolving responsibilities of supply chain professionals
  - Examples of security best practices
  - o Dimensions of a sustainable supply chain strategy
  - Changing dynamics of supply chain management
  - Tools critical to overall performance of the supply chain
- Introduction to global aeronautical supply chain organization and management:
  - o Analysis of transportation, communication, utilities and technology infrastructure
  - Supply chain security, risks and value
  - o Legal considerations, international contracts and insurance issues
  - Commercial documents and customs clearance
  - International commerce terms (incoterms)

#### **Duration: 5 days**

#### Module 3: Call for bid & supplier selection process

- From Requirements to First Article Inspection
  - Role of Purchasing
  - Evolution and trends of Purchasing in ASD
  - Steps of the purchasing process
  - Requirements Management
  - Request for Proposal
  - o Supplier Selection
  - o Negotiation / Contract Management
  - Managing the industrialization
- Managing Requirements
  - o Identifying requirements (focus on technical requirements but also commercial)
  - Purchasing strategy
  - o Multi-functional team
  - Building the Request for Proposal
  - o Identifying the tenders

Introduction of the case study (ex: avionics system) – Application on case study





- Analyzing Supplier quote & supplier selection
  - o Criteria for analysing supplier proposal : Order qualifying / Order winning criteria
  - o Risk Analysis
  - o RFP Analysis
  - o Supplier selection
  - o Preparation for Negotiation

Application on case study

- Managing the contract until FAI
  - Managing the development phase
  - Managing the industrialization phase
  - o Managing supplier relationship in multicultural environment

Application on case study

#### Duration: 5 days

#### Module 4: Effective methods for continuous performance of SC

- Lean supply chain management
  - Origins of the lean manufacturing
  - Lean supply principles
  - Focusing on cost to serve
  - o Drivers for lean supply chain
  - o Lean process tools
- AGILE supply chain
  - o Agile concept
  - o Agile supply chain concept
  - Agile supply chain structure
  - Competing on responsiveness
- Effective project management of SC programs
  - Leadership & teams motivation
  - o Requirements engineering
  - Priorities sequencing
  - Integrated project
  - Risk & opportunity management
  - Lean, control & monitoring
  - o Intercultural management

#### **Duration: 3 days**