



Procurement Guidelines Aeronautics Airframe



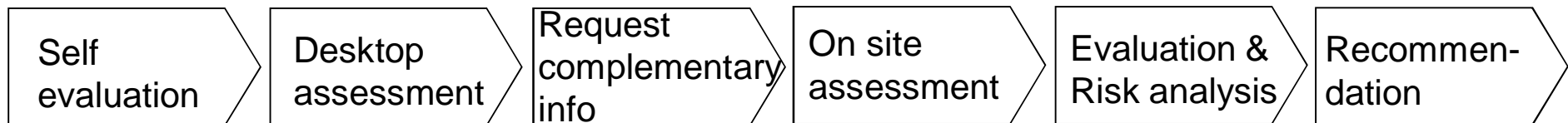
Commercial requirements

- ▶ Procurement major part of product value i.e. cost efficient manufacturing is vital. LEAN approach is a necessity
- ▶ Recurring Cost (RC) must be competitive “all the time”
- ▶ Normal business terms for aerospace industry will apply. As stipulated in:
 - Saab's General Conditions of Purchase
 - Frame Purchase Agreement or Company Group Frame Purchase Agreement
 - Full Gripen Business Agreement (Dev. and/or major industrialization effort)



Saab supplier assessment process

- To systematically investigate and assess a proposed supplier's ability to accomplish a delivery commitment
- Scope of the assessment is determined by the planned scope of the supplier's delivery commitment



Typical Areas for assessment:

Company Information / Financial / Human Resources / Procurement / Logistics & Communications / Planning & Capacity / Quality and Environment / Information and Communication Technology / Export Control Compliance / Site Security / Information and Communication Technology Security / Digital Product Definition and Model Base Definition / Production / Industrialization Painting / Surface Treatment / Tooling / Industrialization / Record Retention

QMS/EMS requirements for Saab AER ASL

- ▶ QMS: Aerospace series i.a.w. EN9100
- ▶ EMS: Environmental management i.a.w. ISO14001

Main differences between EN9100 and ISO9001 with focus on production organizations:

4 Quality Management System

4.2.4 Control of Records:

- Added focus on control of supplier related records

5 Management Responsibility

5.2 Customer Focus

- Extended customer focus: "Top mgmt shall ensure that product conformity and on-time delivery performance are measured and that appropriate action is taken if planned results are not, or will not be, achieved."

7 Product Realization

7.1 Planning of Product Realization:

- Extended scope with subchapters focusing on Project mgmt, Risk mgmt, Configuration mgmt and Control of Work Transfers

7 Product Realization

7.4 Purchasing

- Extended scope of responsibility: "The organization shall be responsible for the conformity of all products purchased from suppliers, including product from sources defined by the customer.
- "Detailed requirements on approval, monitoring and control of suppliers and purchased products

7 Product Realization

7.6 Control of Monitoring and Measurement Equipment

- Extended requirements regarding systematic handling (processes for calibration/ verification) of Monitoring and Measurement equipment

7 Product Realization

7.5 Production and Service Provision:

- Detailed requirements regarding control of: traceability, resources, processes verification (FAI), process changes, configuration mgmt.
- Extended requirements on Post-Delivery Support
- Extended requirements on Preservation of Product

8 Measurement, Analysis and Improvement

8.2 Monitoring and Measurement

- Detailed additions on monitoring and measurement of customer satisfaction, fulfillment of customer requirements, process and product data.

8.3 Control of Nonconforming product

- Extended focus on authorization of dispositions and containment of defect products.

Note 1: This presentation should in no way of form be interpreted as showcasing the complete difference between ISO9001 and EN9100.
Note 2: Requirements solely aimed at design and development has been left out of this presentation.



Technical requirements for manufacturing. Model Based Definition (MBD)

- Product definition will only be provided in digital format i.e.no paper drawings will be available
- The supplier is responsible to have the capability for receiving and managing product data
- Full MBD definition in CATIA V5 R23. A translation from CATIA to 3DVIA format is available for visualization of the requirements

Performance in a LEAN supply chain

- Optimized Lead times & Batch sizes
- Productivity
- Delivery (Perfect Order Fulfillment, POF)
 - On time
 - Correct Quantity
 - Perfect Condition Quality
 - Documentation Accuracy
- Flexibility to adapt to changes in production rate
- Response time
- Communicate deviations & corrective actions early
- KPI & scorecard

