In 2012, the President of Rolls-Royce Aerospace Supply Chain, and the Vice Presidents of Pratt & Whitney (Procurement), GE Aviation (Global Supply Chain), and Safran (Purchasing) tasked their respective senior quality executives to work collectively in driving rapid change throughout the aerospace engine supply base. The group subsequently formed the SAE G-22 Aerospace Engine Supplier Quality (AESQ) Technical Committee (2013) and the AESQ Strategy Group (2015) to collaboratively publish and deploy common quality supplier requirements.

VISION

To establish, deploy, and maintain a common set of Quality Requirements that enable the Global Aerospace Engine Supply Chain to be truly competitive through lean, capable processes, and a culture of Continuous Improvement.

In Detail

• Create common quality standards in the aerospace engine industry
• Deploy collectively the industry standards throughout the supply chain
• Establish capable quality processes and a culture of continuous improvement

Main Targets

• Improve quality within the supply chain
• Improve OTD and reduce costs through a reliable quality performance
• Gain efficiency with standardized processes

GUIDING PRINCIPLES

• Simplify & standardize supplier requirements
• Build on existing industry standards
• Create common language for Quality
• Ensure standards are simple, prescriptive and auditable
• Promote standardized 3rd party training and consultancy
• Deploy with ease within existing processes and systems

KEY MESSAGE

Work collaboratively to deploy the effective quality standards created by the AESQ Members throughout the entire aerospace engine supply chain

http://aesq.saeitc.org/
The SAE G-22 Aerospace Engine Supplier Quality (AESQ) Committee is established as a Technical Committee to develop, specify, maintain, and promote quality standards specific to the aerospace engine supply chain. This is intended to reduce customer specifics through a focused set of standards that integrate industry best practice and aerospace engine unique elements.

**Standards Development / Revision Activities**
- AS13000A – Problem Solving Requirements for Suppliers
- AS13005 – Quality Audit Requirements
- AS13007 – Supplier Management

**Published Documents**
- AS13000 – Problem Solving Requirements for Suppliers
- AS13001A – Delegated Product Release Verification Training Requirements
- AS13002 – Requirements for the Developing and Qualifying Alternate Inspection Frequency Plans
- AS13003 – Measurement Systems Analysis Requirements for the Aero-Engine Supply Chain
- AS13004 – Process Failure Mode and Effects Analysis (PFMEA) and Control Plans
- AS13006 – Process Control Methods

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**Product Life Cycle & Document Interaction**

**AS9145 (APQP/PPAP) & AESQ Standards**

<table>
<thead>
<tr>
<th>AS9145 (PDP)</th>
<th>Kick Off</th>
<th>End of Concept (EoC)</th>
<th>Design Release (DR)</th>
<th>Initial Prod. Approval</th>
<th>Production Launch</th>
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<tr>
<td><strong>1. Planning</strong></td>
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<td><strong>2. Product Design &amp; Development</strong></td>
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<td>Production Readiness Review</td>
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<td><strong>3. Process Design &amp; Development</strong></td>
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<td><strong>5. Ongoing Production, use and Post Delivery Service</strong></td>
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**AS9145 Key PPAP Events**
- Design Records & DRA
- Process Flow Diagram
- PPMEA
- Packaging
- Preservation
- Labelling
- MSA
- FAI

**AS9146 PPAP Element Timing**
- AS13004 – PFMEA & Control Plans
- AS13003 – Measurement Systems Analysis
- AS13006 – Process Control Methods
- AS13002 – Inspection Frequency

**AESS 2nd Level Documents**
- AS13000 – Problem Solving Requirements for Suppliers - B0
- AS13001 – Delegated Product Release Verification Training Requirements
- AS13005 – Quality Audit Requirements
- AS13007 – Supplier Management

**AESQ Systems Documents**

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The diagram illustrates the product life cycle and document interaction, showing the integration of AS9145 (APQP/PPAP) and AESQ standards throughout the process.