

AEROSPACE STANDARD

SAE AS9101
Technically equivalent to
ASD-STAN prEN 9101

REV.
C

Issued 2000-09
Revised 2006-07

Superseding AS9101B

Quality Management Systems Assessment

RATIONALE

This document, AS9101C, has been revised to correct a problem with the scoring formula on page 10, and to include an Appendix B that provides guidance information on audit scoring.

The original formula contained '/ 100' on page 10 which was misinterpreted in North America to mean 'divide by 100', whereas in Europe and Asia it was correctly interpreted to mean 'shown as a percentage'. The revised formula provides the correct interpretation, globally.

Appendix B "Quality Management System Audit Scoring" was added to provide guidance on the correct scoring of the AS9101 check sheets. There had been some confusion related to scoring single vs multiple findings, scoring with exclusions to the standard, scoring with multiple instances of the same finding, and multi-site scoring. Guidance on these subjects has been added to this document by adding an Appendix B.

Finally, some minor formatting, typo, and gramatical changes were made to correct issues noted after the previous release. These changes did not affect the content or interpretation of the standard.

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FOREWORD

To assure customer satisfaction, aerospace industry organizations must produce, and continually improve, safe, reliable products that meet or exceed customer and regulatory authority requirements. The globalization of the aerospace industry, and the resulting diversity of regional/national requirements and expectations, has complicated this objective. End-product organizations face the challenge of assuring the quality of, and integrating, product purchased from suppliers throughout the world and at all levels within the supply chain. Aerospace suppliers and processors face the challenge of delivering product to multiple customers having varying quality expectations and requirements.

The aerospace industry has established the International Aerospace Quality Group (IAQG) for the purpose of achieving significant improvements in quality and safety, and reductions in cost, throughout the value stream. This organization includes representatives from aerospace companies in the Americas, Asia/Pacific, and Europe. This international standard has been prepared by the IAQG.

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1. PURPOSE

The purpose of this document is to define the content and the presentation of the Assessment Report for the 9100 standard.

2. QUALITY MANAGEMENT SYSTEM ASSESSMENT REPORT CONTENT

The Assessment Report is made up of:

- Page 6 (*required*)
General Assessment Information
- Page 7 (*required*)
Assessment Conclusions
- Page 8 (*optional*)
General Organization Information
- Page 9 (*required*)
Assessment Result Summary
- Page 10 (*required*)
Assessment Scoring
- Page 11 (*required when nonconformities are identified during assessment*)
Corrective Action Request
- Page 12 (*required when observations/comments are identified during assessment*)
List of Observations/Comments
- Appendix A
Quality System Questionnaire

PREPARED BY SAE COMMITTEE G-14,
AMERICAS AEROSPACE QUALITY GROUP (AAQG)

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Audit Report No.:	ASSESSMENT REPORT		<i>Assessing company logo</i>
GENERAL ASSESSMENT INFORMATION			
1 Organization & Work Address			
Company Name:	Tel Number:		
Subsidiary of:	Fax Number:		
Organization Identification:	e-mail:		
Assessed Site Address:	CAGE code:		
	Assessment Representative & Title:		
	Management Representative & Title:		
Main activities:	Product Types or Codes:		
	No. of employees at assessed site:		
2 QMS Registration			
[] ISO Standard / Revision:		[] Aerospace Standard / Revision:	
Expiration Date (if applicable):		Expiration Date (if applicable):	
Registrar Name:		Registrar Name:	
3 Assessment Team			
Lead Assessor Name:		Other Assessment Team Members:	
[] Certified Auditor – Type & No.			
[] Qualified Auditor			
4 Assessment Dates:			
5 Assessment Scope			
[] Total facility assessed		[] Initial assessment	
[] Partial facility assessed		[] Re-assessment	
[] Other:		[] All 9100 clauses assessed	
[] Activity assessed:		[] Partial 9100 clauses assessed	
		Clauses not assessed:	
6 Assessment Disposition		7 Scoring	
[] Conforming		Scoring result:	
[] Conforming with minor (mi) corrective action			
[] Nonconforming with Major (Ma) corrective action			
8 Assessment Approval			
9100 standard version assessed to:			
Assessing Company	Date	Lead Assessor Name	Signature

Distribution Agreement

This Assessment Report is the property of the Assessed Organization and the Assessing Company. Distribution to other companies or individuals is authorized only after written agreement of the assessed Organization and of the Assessing Company.

To that end, a signature below by an Authorized Representative of the Assessing Company indicates that this report may be copied by the Organization for other customers.

If copied, the report must be disclosed in full including findings and any corrective actions.

Authorized Representative

Assessing Company Name _____ Signature _____

Audit Report No.:	ASSESSMENT REPORT	<i>Assessing company logo</i>
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ASSESSMENT CONCLUSIONS

General comments about the organization and the quality management system of the assessed organization:

Strong points:

Improvement Opportunities:

Audit Report No.:	ASSESSMENT REPORT	Assessing company logo
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GENERAL ORGANIZATION INFORMATION

1 Legal and Financial Aspects

- ☐ Date of Formation:
- ☐ Legal Status:
- ☐ Capital:
- ☐ Other Data:

	Third Prior Financial Year ()	Second Prior Financial Year ()	First Prior Financial Year ()	Current Financial Year ()
Sales				
Earnings				
Earnings used for Re-Investment				
Workforce				

2 Turnover breakdown and main Customers

Activities	Main Customers	Sales Percentage
Aviation, Space, and Defense Industry		
Other Activity (be specific)		

3 Clearances or Approvals granted by Authorities

Name of the Authority	Types and References	End of Validity (date)

Audit Report No.:	ASSESSMENT REPORT	Assessing company logo
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ASSESSMENT RESULT SUMMARY**Organization:**

Clauses*	Result					Observation/Corrective Action Request Number (Ma/mi)
	S	Ma	mi	N/A	N/E	
4 - Quality Management System						
4.1 General requirements						
4.2 Documentation requirements						
4.3 Configuration management						
5 - Management responsibility						
5.1 Management commitment						
5.2 Customer focus						
5.3 Quality policy						
5.4 Planning						
5.5 Responsibility, authority and communication						
5.6 Management review						
6 - Resource management						
6.1 Provision of resources						
6.2 Human resources						
6.3 Infrastructure						
6.4 Work environment						
7 - Product realization						
7.1 Planning of product realization						
7.2 Customer-related processes						
7.3 Design and development						
7.4 Purchasing						
7.5 Production and service						
7.6 Control of monitoring and measuring devices						
8 - Measurement, analysis and improvement						
8.1 General						
8.2 Monitoring and measurement						
8.3 Control of nonconforming product						
8.4 Analysis of data						
8.5 Improvement						
Assessed Organization Management Rep. name:						Assessing Company Lead Assessor Name:
Signature:	Results				Signature:	

* For each clause, indicate with an "X" the results of assessment: "S" for Satisfactory, "Ma" for major corrective action, "mi" for minor, "N/A" for not applicable, or N/E for not evaluated.

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Audit Report No.:		ASSESSMENT SCORING				Assessing company logo	
Organization:		Result					
	SCORING CHART	Major CAR or minor CAR on Key requirement		Minor CAR on <u>non</u> Key requirement		NO CAR	RESULT
		(Col. A)	(Col. B)	(Col. C)	(Col. D)		
		Multiple findings	Single finding	Multiple findings	Single finding		
4	Quality management system					(100)	
4.1	General requirements	0	10	25	40	50	
4.2 & 4.3	Documentation requirements & Configuration management	0	10	25	40	50	
5	Management responsibility					(150)	
5.1	Management commitment	0	5	15	20	30	
5.2	Customer focus						
5.3	Quality policy						
5.4	Planning	0	10	20	30	40	
5.5	Responsibility, authority and communication	0	5	15	20	30	
5.6	Management review	0	10	25	40	50	
6	Resource Management					(100)	
6.1	Provision of resources	0	10	25	40	50	
6.2	Human resources						
6.3	Infrastructure						
6.4	Work environment	0	10	25	40	50	
7	Product realization					(450)	
7.1	Planning of product realization	0	5	15	20	30	
7.2	Customer-related processes	0	10	30	50	60	
7.3	Design and development						
7.3.1	Design and development Planning	0	5	15	20	30	
7.3.2-3-4	Inputs, outputs & review	0	5	15	20	30	
7.3.5-6	Design and development verification & validation	0	5	15	20	30	
7.3.7	Control of design and development changes	0	5	15	20	30	
7.4	Purchasing	0	10	30	50	60	
7.5	Production and service provision						
7.5.1	Control of production and service provision	0	10	25	40	50	
7.5.2	Validation of processes for production and service provision	0	10	20	30	40	
7.5.3	Identification and traceability	0	10	20	30	40	
7.5.4-5	Customer property & Preservation of product	0	5	15	20	30	
7.6	Control of monitoring and measuring devices	0	5	10	15	20	
8	Measurement, analysis and improvement					(200)	
8.1	General	0	5	10	15	20	
8.2	Monitoring and measurement						
8.2.1	Customer satisfaction	0	5	10	15	20	
8.2.2	Internal audit	0	5	15	20	30	
8.2.3	Monitoring and measurement of processes	0	5	15	20	30	
8.2.4	Monitoring and measurement of product	0	5	15	20	30	
8.3	Control of nonconforming product	0	5	15	20	30	
8.4	Analysis of data	0	5	10	15	20	
8.5	Improvement	0	5	10	15	20	

The assessed organization agrees on the quality management system scoring and corrective action requests			Total Points Possible		
			Total Points Achieved		
			Score (pts achieved/pts possible) X 100		
Name of Representative:	Signature:	Date:			

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Audit Report No.:		CORRECTIVE ACTION REQUEST (CAR)		Assessing company logo	
Organization:			Identification CAR No.:		
Site:			Date issued:		
Reference Standard:			Referenced Standard Clause concerned:		
Criticality Ma / mi		Nonconformance Description			
Assessor Name:			Assessor Signature:		
Assessed Organization to complete the CAR with root cause analysis, corrective action, and planned completion date of corrective action, and return to the Assessing Company by due date.					Due date:
Action No.:	Root Cause:				
Action No.:	Corrective Action:				Planned completion date of corrective action:
Organization Representative Name:		Signature:		Current date:	
Verification of the implementation of the completed Corrective Action by the Assessed Organization					
Organization Representative Name:		Signature:		Current date:	
Verification of the implementation of the completed Corrective Action to be filled out by the Assessing Company					
Verification date:	Accepted:		Assessor Name:		Assessor Signature:
	Yes ☐ No ☐				

S: Satisfactory - CAR: Corrective action request – Ma: Major corrective action – mi: Minor corrective action
N/A: Not applicable - N/E: Not evaluated - P: Product - M: Management

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Audit Report No.:	OBSERVATIONS/COMMENTS		Assessing company logo
Organization:			
Site:		Issued date:	
Item Number	Section	Observation/Comment	
Lead Assessor Name:		Signature:	

*S: Satisfactory - CAR: Corrective action request – Ma: Major corrective action – mi: Minor corrective action
N/A: Not applicable - N/E: Not evaluated - P: Product - M: Management*



Documents
Document Sharing Hub

APPENDIX A

* * *

QUALITY MANAGEMENT SYSTEM QUESTIONNAIRE

1. PURPOSE

The purpose of this appendix is to present the questionnaire to be used during the “on-site” quality management system assessment of Organizations in order to ensure common practices for these assessments.

2. USE OF THE QUESTIONNAIRE

The use of this questionnaire is mandatory and will be a part of the Assessment Report. The audit is undertaken by review of the organization’s QMS against the requirements of the 9100 standard, using the questionnaire as a guide. Findings are recorded as appropriate by the following annotations in the respective columns of the questionnaire:

- Satisfactory (S)
- Not applicable (N/A) the reason shall be documented at the bottom of the page
- Not evaluated (N/E)
- Corrective Action Request (CAR) Major (Ma) or Minor (mi) nonconformity:

The CAR number shall be referenced in the “CAR number” column. The category Ma for Major CAR or mi for Minor CAR shall also be included.

Additional information on questionnaire

Key Requirements: Some requirements are deemed to be very significant and are so identified by the presence of “P” or “M” against the specific section or question within the questionnaire:

- “P” – direct link with Product
- “M” – direct link with Management

The extent of Key Requirement applicability is determined by the location of the “M” or “P”. In the example below all of question 14 is considered as a Key Requirement.

14	Does the output from the management review include any decisions and actions related to:	M				
	a) Improvement of the effectiveness of the quality management system and its processes?					
	b) Improvement of product related to customer requirements? and					
	c) Resource needs?					

In the second example below, only part of question 03, item d), is considered a Key Requirement.

03	In planning product realization, does the organization determine the following, as appropriate:					
	a) Quality objectives and requirements for the product?					
	b) The need to establish processes, documents, and provide resources specific to the product?					
	c) Required verification, validation, monitoring, inspection and test activities specific to the product and the criteria for product acceptance?					
	d) Records needed to provide evidence that the realization processes and resulting product meet requirements (see 4.2.4)?	P				
	e) <i>The identification of resources to support operation and maintenance of the product?</i>					

Guidance Notes: Certain questions will have a numeric reference to additional guidance located in the “Guidance Notes” section located after the questions on each page. The guidance notes provide the auditor with further insight on type of objective evidence and/or review expectations, etc. In the example below, note (1) provides the auditor with additional guidance pertaining to question 48 part a).

48 Does the analysis of data provide information relating to: a) Customer satisfaction (see 8.2.1)? (1) b) Conformity to product requirements (see 7.2.1)? c) Characteristics and trends of processes and products including opportunities for preventive action? and d) Organizations?					
--	--	--	--	--	--

Guidance Note

(1) Give examples and check how the organization measures the effectiveness.

References: When a reference (e.g., 4.1) is added to a question, it is linked to the appropriate clause (e.g., 4.1) of the 9100 standard.

Objective evidence assessed / Observations / Comments / N/A explanation

Record the objective evidence reviewed during the assessment or reason for not applicable.

Nonconformities:

Major: The absence of, or total breakdown of, a management clause specified in the 9100 standard or any nonconformities where the effect is judged to be detrimental to the integrity of the product or service.

Minor: A single system failure or lapse in conformance with a procedure relating to the 9100 standard.

Note: A number of minor nonconformities against one requirement can represent a total breakdown of the system and this can be considered as a major nonconformity

3. USE OF THE ASSESSMENT SCORING CHART

Refer to Appendix B for instructions and guidance on how to score the 9100 audit.

Summary

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