

AEROSPACE RECOMMENDED PRACTICE

ARP9134

REV. A

Issued

2004-03

Stabilized

2014-02

Superseding ARP9134

Supply Chain Risk Management Guideline

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

STABILIZED NOTICE

SAEMORIN.COM. Click to view the full but the company of the control of the contro This document has been declared "Stabilized" by the SAE G-14 Americas Aerospace Quality Standards Committee (AAQSC) and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2014 SAE International

SAE WEB ADDRESS:

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: 877-606-7323 (inside USA and Canada) Tel:

+1 724-776-4970 (outside USA) Tel:

724-776-0790 Fax:

Email: CustomerService@sae.org

http://www.sae.org

SAE values your input. To provide feedback on this Technical Report, please visit

http://www.sae.org/technical/standards/ARP9134A

TABLE OF CONTENTS

1.	SCOPE	2
1.1 1.2	PurposeGuideline of the Document	
2.	RISK FACTOR DEFINITION	5
2.1 2.2	Supplier Risk Product Risk	6
3.	PROCESS STEPS TO APPLY THE GUIDELINE	6
4.	SUPPLIER RISK TABLES FOR GUIDANCE	7
5.	PRODUCT RISK TABLES FOR GUIDANCE	16
6.	MODEL FOR SUPPLIER/PRODUCT RISK MERGER	18
7.	RISK REDUCTION/CONTROL ACTIVITIES	18
APP	PENDIX A RISK ASSESSMENT TEMPLATE (EXAMPLE)	19
APP	PENDIX B RISK REGISTER TEMPLATE (EXAMPLE)	25

1. SCOPE:

Supply Chain Risk Management (SCRM), defined in this guideline, can be applied proactively for the protection of all procured products and services; both flying and non-flying through all levels of the supply chain.

The guideline focuses on Quality as a key risk assessment factor taking into account elements from all aspects of the business having a direct link to global quality management. This concept/model is shown in Figure 1.

While traditional "small q" Quality is a key element to be assessed, from a company business point of view, other elements play an important part in minimizing risk. This guideline defines such risk factors for consideration.

SCRM as a business protection tool will be most effective when used to identify, and reduce risks when generating new business with new and existing suppliers. However, the tools and techniques described hereafter can also be applied to evaluate the existing supply chain network and determine the level of control required.

The SCRM can be applied by merging identified risk factors associated with procured products or services and the supplier itself with the target for overall supplier quality risk management (see Section 6).

This guideline is recommended to be cascaded to sub-tier suppliers in the supply chain.

1.1 Purpose:

Aerospace businesses depend upon a complex network of suppliers, each one exposed to a different assortment of risks that could jeopardize supply businesses. Because supplier networks are becoming increasingly widespread as more suppliers across the world become available to the industry (some in countries that are not covered by recognized national and international aviation authorization), early identification and management of those supply chain risks that could affect product/service quality becomes increasingly necessary. The application of supply chain risk management provides business protection by ensuring the continued success of the customers supply base in delivering products/services in accordance with program and quality requirements.

Quality Risk Assessment Model

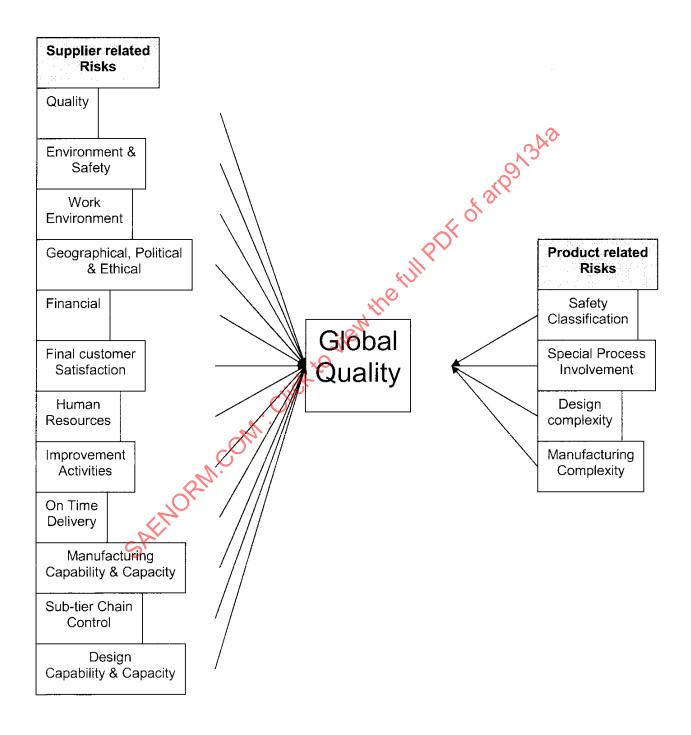


FIGURE 1 - Quality Risk Assessment Model

1.1 (Continued):

Supply chain risk awareness should be part of an integrated business culture.

This document may be used as an "aide memoire" to supplement the existing risk management philosophy of the user. As such, each user of the guideline is free to apply it to its own selected/categorized suppliers, and to select, according to their needs, the risk factors and associated elements to be assessed.

Documented risk factors and elements to be assessed are not exhaustive and may be enlarged by the respective risk factor owner.

The frequency of reassessment is the responsibility of each user of the guideline (e.g., 6 months; 12 months; 2 years, etc.).

1.2 Guideline of the Document:

Quality risk identification and recording is the responsibility of everybody associated with Customer procured products and services.

This may also include Purchasing, Contractual Logistics, Finance, Cost Estimating, Engineering (all design and manufacturing disciplines), Configuration Control, Project, Operations and Business Management, etc.

Having identified and recorded a risk that could affect quality, it is essential that the risk is managed effectively through a designated person/department.

As a means of managing the risk process it is recommended to use the "risk register form" (Appendix B) and the "risk assessment scoring chart" (Appendix A).

2. RISK FACTOR DEFINITION:

2.1 Supplier Risk:

The following table provides a list of factors, which if not met, lead to supplier related risks:

TABLE 1

Quality	Capability to deliver products and/or services to the
	Customers quality requirement
Environment & Safety	Capability to manage environmental, bealth and safety
	factors which may affect the project/program
Work Environment	Capability to manage work environment factors such as
	temperature, humidity, lighting cleanliness, protection
	from electrostatic discharge, etc. according to
	JISQ;EN/AS 9100:2001 that may affect the conformity
	of the product
Geographical, Political & Ethical	Capability to manage social, geographical, political,
3 1 ,	economical and ethical factors which may affect the
	project/program
Financial	Capability to manage financial factors which may affect
	the project/program
Final Customer Satisfaction	Factors that affect customers expectations
Human Resources	Human resources factors which affect the quality and
	confidence of the customer
Improvement Activities	Capability for continuous improvement
On Time Delivery	Capability to deliver products and/or services to the
	Customers scheduled requirement
Manufacturing Capability and Capacity	Capability to provide manufacturing services in
The state of the s	accordance with the contract requirements
Sub-tier Chain Control	Capability to manage and control all sub-tier suppliers
Sab as Shair Solid S	in the supply chain
Design Capability and Capacity	Capability to provide design services in accordance
200.g.: Supubmity and Supublity	with the contract requirements
	mar are someworrough or

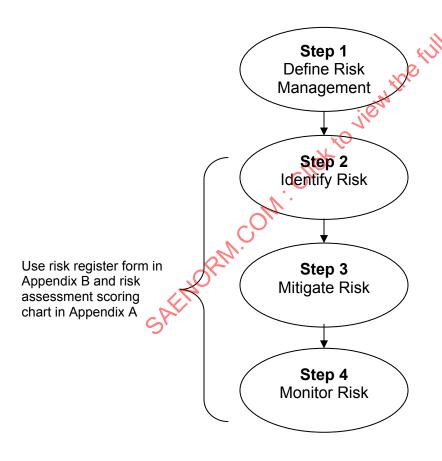
2.2 Product Risk:

The following table provides a list of factors, which if not met, lead to product related risks:

TABLE 2

Safety Classification	In accordance with regulatory authority requirements
Special Process Involvement	Those processes where the parameters are directly
	influenced by component, geometry and/or the results
	cannot be confirmed by inspection
Design Complexity	Capability to design innovative solutions that meet
	customer requirements
Manufacturing Complexity	Capability to manufacture components to meet the
	design intent
	· ALP
3. PROCESS STEPS TO APPLY THE	GUIDELINE:

3. PROCESS STEPS TO APPLY THE GUIDELINE:



- Define risk management process including risk factors and risk factor ownership
- Identify Functions involved
- Assess, identify and report the risks
- Evaluate the risk
- For risk identification it is recommended to use checklists
- Decide if the risks may be accepted without action
- Define action plan to reduce unacceptable risk
- Follow up the consequences of risks that were accepted without action
- Monitor the effectiveness of action plan
- Escalate or close out as required

4. SUPPLIER RISK TABLES FOR GUIDANCE:

TABLE 3

Element for	Dick Landification Tool	Risk Reduction
Assessment	NISA Identification 1001s	Control Tools
 Quality System Approvals/certification 	Checklists covering elements to	Continuous Improvement plan
Aerospace (JISQ, AS/EN9100 series, regu-	assess risk e.g.:	agreed by suppliers with suppliers
latory authority requirements etc.	Ā	mandatory indicators and correc-
 Non Aerospace Customer 	SJAC, AS/EN9101 with scoring re-	tive action request
 Special processes approval/certification 		 Quality Assurance Plan
(customers, NADCAP, etc.)	Supplemental checklist for other	 Specific training on identified
 Previous supplier experiences on similar 	Celements	weaknesses and specific require-
products to be identified	X	ments
 Current Aerospace Customers references 	Ç	 Selection of relevant parts
 Contract review process 	i	 Increased products receiving in-
 Quality performance indicators (e.g. scrap, 	Ø	spection
concession rate, quality system scoring re-	7	 Identify frozen process parameters
sult, Customers audit results, etc.)	S.	 Assistance on site (including peo-
		ple on site for a limited time)
	()	 Mandatory FAI per SJAC, AS/EN
		9102
		 Management of process variation
		(SPC)
	>	 Unscheduled requirements delivery
		versus MRP
		Dual source
		Spuffer stock

TABLE 3 (Continued)

	3		
Risk	Element for	Risk Identification Tools	Risk Reduction
Factors	Assessment		Control Tools
	Political regime	Specific checklist covering element	Mitigation plan
	 Restriction on government funded design 	to assess	 Dual source
Geographical,	and manufacturing technology transfer to	 Various web and government 	Buffer Stock
Political &	specific nations	sonrces	 On Site surveillance assistance
5	 Government export and import restrictions 		 Translator for Prime's language
Etnical	 Export credits, support & guarantees gov- 	<i>*</i>	 Specific clauses on the purchase
	ernment handling		contract for child care
	 Tax & customs rules 		 Supplier stoppage with recovery
	 Government policy for counter trade and off 	10	plan (child care)
	set	1	
	 Potential for natural disasters 	***	
	 Country economical aspects (inflation, gross 		
	national product per habitant, average	(()	
	wages, economical growth, export level, im-		
	port level, external debt, interest rate, En-		
	ergy cost, etc.) in relation to developed		
	countries.	>	
	 Visit of plant for ethic aspect in compliance 		
	with ILO 182 clauses (child employment)	5	

TABLE 3 (Continued)

-			- 1
KISK	Element for	Rick Identification Tools	Risk Reduction
Factors	Assessment		Control Tools
	Date of foundation & history Major shareholder	Checklist taking into account all all assessment	Mitigation plan Died Service
Financial	Contract connection (Holding, merging)	Various external database (e.g.	Dual source Buffer stock
	Capital evolution/breakdown	Internet, Financial Intelligence	
	Turnover	Agencies)	
	Ratio of Capital/Turnover	 Annual report 	
	Results		
	 Earning before interest & tax 		
	• Investment		
	Self financing capacity		
	% of turnover for the research and		
	development	* *	
	Financial debt	0	
	 Dependence rate with customers 	ï	
	enal company structure	.0	
		N	
		×	
Risk	Element for	100 T 2001	Risk Reduction
Factors	Assessment	Nisk identification 1001s	Control Tools
	 JISQ AS/EN 9100 with additional investiga- 	 Checklists covering elements to 	 Continuous Improvement plan
i	tion such as :	assess risk e.g.:	agreed by suppliers with suppliers
Final	Number of Quality escapes	Quality System assessment per	mandatory indicators (e.g. cus-
Customer	Number of Customers Quality complaints	SJAC AS/EN9101 with scoring re-	tomer perception)
	affecting supplied product	sults	 Increasing surveillance & inspec-
Satistaction	 General communication between all 	Supplemental checklist for other	tions (product, process, product
	Functions	elements	receiving inspection)
		 Identification/review of current indi- 	Supplier stoppage with recovery
		cators	plan
	after quality escape		N.
	Concession rate		<u>-</u>

TABLE 3 (Continued)

Factors Assessment - JISQ, AS/EN 9100 with additional investiga- tion such as: Human Supplier staff ratio of management and operational level through all Functions.e.g.: - Commercial (sales & after sales - Studies/Engineering - Production (Management, process engineering, production assembly)	Element for Assessment JISO, AS/EN 9100 with additional investiga- tion such as:	Risk Identification Tools Checklists covering elements to	Risk Reduction
	Assessment S/EN 9100 with additional investiga-	Checklists covering elements to	Control Tools
• 4	S/EN 9100 with additional investiga-	Checklists covering elements to	6001 01100
		assess risk e.g.:	Improvement plan agreed by suppliers
	Supplier staff ratio of management and op-		Resource planning
Studios	level through all Functions e.g. : marrial (salas & after salas	SJAC, AS/EN9101 with scoring re-	On site surveillance assistance
Prodice gine	ies/Engineering		 Buffer stock Dual source
) -	uction (Management, process entering production assembly	elements Review of organization charts	
- Purct	hasing	×	
- Infor	mation system	Ç	
- Quali	ity (Quality assurance, methods, in-	i	
Spec	spection, laboratories, investiga-	0	
/uoii	tion/inquiry,)	,,	
Other pe	Other performance metrics e.g. sickness,	£	
accident,	accident, strike, training plan, competence	e	
matrices		S. S	
Staff evol	Staff evolution during the last three years		
(tempora	(temporary or fixed duration contract person-	Q	
nel, depa	artures, number of recruited persons,	Č	
average	average seniority, average age)	%	
Skill and	education level of employees	°C C	
through	through all functions		
Percenta	Percentage of relevant employees speaking	ar	
the langu	the language of the customer or English	7	C

TABLE 3 (Continued)

Risk		Element for O	Diek Identification Teele	Risk Reduction
Factors		Assessment 16	NISA Identification 1001s	Control Tools
	•	, AS/EN 9100 with additional investiga-	Checklists covering elements to	 Specific training on identified
		tion:	assess risk e.g.	weaknesses (e.g. root cause
Improvement		Review of existing internal supplier key per-	 Quality System assessment per 	analysis)
Activities		formance indicators	SAJC, AS/EN9101 with scoring	 Assistance to put in place con-
	•	Existence of a continuous improvement plan	results	tinuous improvement plans when
		and policy on all processes identified (lead	Supplemental checklist for other	necessary
		time, quality, cost reduction, customer satis-	elements	 Mandatory strategy plan
		faction, etc.)	 Assessment of continuous im- 	 Oversight of the effectiveness of
	•	Existence of Quality models such as	provement plan results from the	improvement plan
		EFQM,TQM (European Foundation for	last 3 years and future objectives	
		Quality Management, Total Quality Man-	 Process capability measures 	
	<u>-</u>	agement, six sigma, AQS etc.)		
	•	Existence of business efficiency activities		
		(e.g. lean tools and techniques, continu-		
		ously being used, 5S, cost reduction,)	5	

TABLE 3 (Continued)

Risk	Elements for	Dick Identification Teal	Risk Reduction
Factors	Assessment	RISK Identification 1001s	Control Tools
•	Current delivery performances	Specific checklist for production	Specific training on identified
i	Current action to reduce lead-time through	control	weaknesses
On Time	lean techniques	 Identify and check Supplier proce- 	Buffer stock
Delivery .	Infrastructure & transport availability •	dures covering elements assessed	Recovery plan
•	Supplier Internal delivery indicators	 Delivery performance measures 	Lead-time taking into account in-
•	System in place for internal production		frastructure & transport
	management (manual, computerized) in-	<u></u>	 Assistance on site (including peo-
	cluding	×	ple on site for a limited time)
<u>A</u>	 Management of change 	Ş	 Free-issue material (provided by
	· Priority system	ii	customer)
<u>A</u>	 Capacity planning (per operation, per P/N, 	0	Continuous Improvement plan
	per machine, per job, etc.)	,,	agreed by suppliers with suppliers
<u>A</u>	 Alert process 	ŝ.	mandatory indicators and Correc-
<u> </u>	 Recovery plan process with procedures 	0	tive Action request
•	Sub-tiers and sourcing management system		Dual source
	including sourcing alert process		
•	Manufacturing Review Planning (MRP2)	Ŕ	
	system		
•	Customers alert process	ý.	
•	Logistics audit results performed by other	Ç	
	Customers		
•	Resource for new product introduction	di	
		2	C
			64

TABLE 3 (Continued)

Risk	Element for	Diet Identification Toole	Risk Reduction
Factors	Assessment	Nisk identification 1001s	Control Tools
Manufacturing	Key processes identified and under control for each part number.	Application of SAJC, AS/EN9103 Control charts charting regults	Specific training on identified weaknesses
Capability and	Process capability known through Statistical Process Control (SPC)		Continuous Improvement plan agreed by suppliers with suppliers
Capacity	Type equipment & facilities Special process capability		mandatory indicators and Corrective Action request
		KI	 Supplier sampling inspection relevant to process capability
		i	Customer specific inspection plan on site for capability concern or
		NSW	increased receiving inspection
		Ne	Dual source
	:	الناز	
	 Capacity: Sufficient equipment, facilities & processes 	i Pri	Orders in compliance with agreed capacity
	available relevant to products being pur-	Specific checklist covering all ele-	Mandatory action plans for bottle-
	 classed lead time identified with critical path for 	Interior to assess Inst of processes facilities and seconds.	necks and critical path failures
	each part number	equipment available	Assistance to reduce lead time Dual source
	 Bottleneck identification process 		

TABLE 3 (Continued)

Risk	Element for	Olor Taratition in Tarati	Risk Reduction
Factors	Assessment	RISK Identification Tools	Control Tools
	 JISQ, AS/EN 9100 with additional/investiga- 	Checklists covering elements to	Specific training on identified
	tion:	assess risk e.g.	weaknesses and specific re-
Sub-tier Chain .	 Documentation management within the 	A	quirements
Control	supply base	SJAC, AS/EN9101 with scoring	Quality Assurance Plan required
5	 FAI acceptance process 	results	by direct supplier of sub-tiers
	 Sub-tier monitoring process (receiving in- 	À	 JISQ, AS/EN9100 requirements
	spection, audits on site, frequency, risk	O elements	flow-down with appropriate audits
	management, indicators, etc.) with an identi-	i	performed by suppliers
	fied program/plan	0	 Audits on site with direct supplier
	 Supply chain cascade process and activities 	,	(system, process & product)
	covered during audits performed by direct	ŝ.	 Mandatory sub-tiers
	supplier (system, process, product)	0	 Continuous Improvement plan
	 Corrective Action process & follow-up to 		agreed by suppliers with suppliers
	sub-tiers		mandatory indicators and correc-
	 Traceability of record process 	Ŕ	tive action request
	 Continuous improvement plan focused on 		
	quality sourcing	Ŕ	
		SC	

a1991348

TABLE 3 (Continued)

	 JISQ, AS/EN 9100 with additional investigation JISQ, AS/EN 9100 with additional investigation Validation by corresponding expert of various reviews at each major milestone. Classification of design capabilities Classification of design capabilities Classification of design capabilities Electronic Data Process (EDP) tools in use and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identified with critical path for each design activity (identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process 	Risk	Elementfor	Dick Identification Teals	Risk Reduction
USQ, AS/EN 9100 with additional investiga- tion Validation by corresponding expert of various reviews at each major milestone Classification of design capabilities Classification of design capabilities Electronic Data Process (EDP) tools in use and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process	Use of cross functional development team of concessor learned process learned	Factors	Assessment	Nisk identification 1001s	Control Tools
validation by corresponding expert of various reviews at each major milestone. Classification of design capabilities Classification of design capabilities Classification of design capabilities Electronic Data Process (EDP) tools in used and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Indentification of bottlenecks Implementation Corrective action process Lesson learned process	validation by corresponding expert of various reviews at each major milestone ous reviews at each major milestone ous reviews at each major milestone. Classification of design capabilities Classification of design capabilities Electronic Data Process (EDP) tools in use and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process	•	JISQ, AS/EN 9100 with additional investiga-	 Quality System assessment per 	Continuous Improvement plan
 Validation by corresponding expert of various reviews at each major milestone. Classification of design capabilities Classification of design capabilities Electronic Data Process (EDP) tools in usend data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process 	 Validation by corresponding expert of various reviews at each major milestone. Classification of design capabilities Classification of design capabilities Electronic Data Process (EDP) tools in useen and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identified with critical path for each design activity (identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process 		tion	JISQ, AS/EN 9101 with scoring re-	agreed by suppliers with suppliers
 Classification of design capabilities Classification of design capabilities Electronic Data Process (EDP) tools in use and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process 	• Specific checklist covering all elements reviews at each major milestone. • Classification of design capabilities • Classification of design capabilities • Electronic Data Process (EDP) tools in used and data exchange between customer, supplier and supply chain • Capability of current tools • Existence of procedures and tools for validation / qualification in connection with Customers requirements • Use of cross functional development team (Concurrent Engineering) • Lead time identification of milestones, reviews,) • Identification of bottlenecks • Implementation Corrective action process • Lesson learned process	Design	Validation by corresponding expert of vari-	sults	mandatory indicators and correc-
Classification of design capabilities Electronic Data Process (EDP) tools in used and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Implementation Corrective action process Implementation Corrective action process Lesson learned process	Classification of design capabilities Electronic Data Process (EDP) tools in used and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews,) Identification of bottlenecks Implementation Corrective action process Implementation Corrective action process Lesson learned process	Canability	ous reviews at each major milestone	 Specific checklist covering all ele- 	tive action request
Electronic Data Process (EDP) tools in used and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process	Electronic Data Process (EDP) tools in used and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identified with critical path for each design activity (identification of milestones, reviews,) Identification of bottlenecks Implementation Corrective action process Lesson learned process	Capability .	Classification of design capabilities	ments to assess	Specific training on identified
and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process	and data exchange between customer, supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identified with critical path for each design activity (identification of milestones, reviews,) Identification of bottlenecks Implementation Corrective action process Lesson learned process	and	Electronic Data Process (EDP) tools in use		weaknesses
supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identified with critical path for each design activity (identification of milestones, reviews) Identification of bottlenecks Implementation Corrective action process Lesson learned process	supplier and supply chain Capability of current tools Existence of procedures and tools for validation / qualification in connection with Customers requirements Use of cross functional development team (Concurrent Engineering) Lead time identified with critical path for each design activity (identification of milestones, reviews,) Identification of bottlenecks Implementation Corrective action process Implementation Corrective action process Lesson learned process	Capacity	and data exchange between customer,		Assistance on site
view the full PDF of ar	view the full PDF of axp		supplier and supply chain		Customer participation to certain
new the full PDF of ar	new the full PDF of axp	•	Capability of current tools		reviews organized by suppliers
withe full PDF of ar	· · · · · · · · · · · · · · · · · · ·	•	Existence of procedures and tools for vali-		Selection of relevant design ac-
the full PDF of ar	the full POF of a Po		dation / qualification in connection with Cus-		tivities
ne full PDF of ar	ne full POF of a Po		tomers requirements	×	 Cross-checking of qualification
Full POF OF ax	Full POF of all	•	Use of cross functional development team	ne ne	tests versus requirements
· Of all	· Jill POF of all of		(Concurrent Engineering)	\$\footnote{\chi_0}	Quality Assurance Plan
ROFOFOE	ROK of alo	•	Lead time identified with critical path for		Design resource back-up plan
sks ve action process	ks ve action process		each design activity (identification of mile-		
ve action process	ks ve action process		stones, reviews,)		
ve action process	ve action process	•	Identification of bottlenecks	>	
		•	Implementation Corrective action process		
	SQ C	•	Lesson learned process	_	
	Q				

5. PRODUCT RISK TABLES FOR GUIDANCE:

TABLE 4

Risk	Element for	Dick Identification Teels	Risk Reduction
Factors	Assessment: O	KISK Identification 10018	Control Tools
Sofoto	Safety classification ProcessClassified part manufacturingControl of classified parts to Customers requirements	Checklist for Process assessment	Improvement of safety classification process Recovery planLife Limited
Classification	Customer approval status (e.g. agreement to manufacture certain parts classification)	Circk	 Overhaul inspection Retrofit Classification planLimitation for procurement
		·70,	
Risk	Element for	Risk Identification Tools	Risk Reduction
Factors	Assessment	N	Control Tools
Special Proc-	 Each special process Employee skills, experience and certification Documentation for special processes, in- 	•	 Training On site assistance Limitation for procurement
ess	 cluding qualification file Evidence of control parameters 	hey process indicators	Kecovery plan Quality inspection plan Ctatistical Property
Involvement	Special Process approval documentation issued by other customers (e.g. certificate, report)	\$	Statistical Process Control Frozen process parameters
			aton

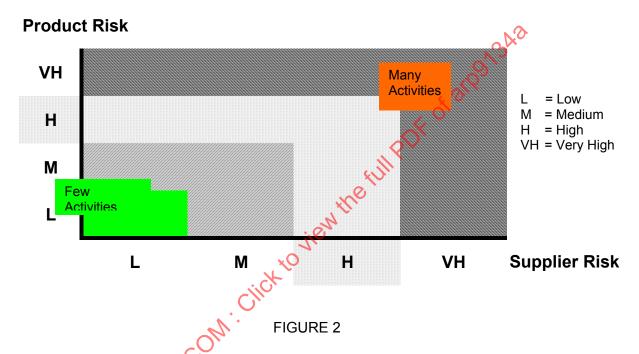
TABLE 4 (Continued)

Rick	Flament for	Rick Identification Tools	Dick Boduction
Factors	Assessment		Control Tools
Design Complexity	Design & Development Plan Technologies involved Material selection/resources Design maturity level Previous experience Number of Sub-components Similarity of existing designed product Feasibility to manufacture the design	 Design process audit FMEA (Failure Modes and Effect Analysis) Lesson learned Design of Experiments Review of current development plan Tolerance analysis Updated Design and Development plan including tests Concurrent engineering Requirements review with Custor Technology to be adopted Performances required including cost & timeframeDesign for six sigma 	Updated Design and Development plan including tests Concurrent engineering Requirements review with Customer Technology to be adopted Performances required including cost & timeframeDesign for six sigma

Risk	Element for	Clock Chartification	Risk Reduction
Factors	Assessment	NISA INTERIOR TOOLS	Control Tools
	Equipment	 Checklist covering all element to be 	 Sealed Manufacturing Plan
	 Documentation for processes, including 	assessed	 Manufacturing Plan
Manufacturing	 qualification file 	 Process Indicators on capability & 	improvement
	 Control parameters 	stability	 SPC, six sigma
Complexity	 Existing & specialist Experience 		 New process development
	 EquipmentProduction Control System 	\$	 Dual source
	 Knowledge material used 		 Training on exotic material
	 Design complexity 	55.	 Concurrent Engineering
		2	 investment for new equipment
			Cotimics material/product flow

6. MODEL FOR SUPPLIER/PRODUCT RISK MERGER

This chart may be used as an indicator of the criticality of a particular supplier. Based on the merger of the supplier/product risk assessment scoring charts (Appendix A) the final risk can be made visible. It may be used as an indicator for determining the frequency of reviews carried out by respective risk factor owners as defined in Figure 2.



7. RISK REDUCTION/CONTROL ACTIVITIES:

Based on the identified supplier/product risk the user should define the necessary activities to mitigate the related risk (see the previous tables for guidance).

APPENDIX A

RISK ASSESSMENT SCORING CHARTS

SUPPLIER RISK ASSESSMENT PRODUCT RISK ASSESSMENT

SAEMORM.COM. Click to view the full PDF of arron 34.8

SUPPLIE	UPPLIER:				I					
	Supplier Risk Assessment (SRA)	1	2	3	4	weighting	Result	Max, possible. Result	Risk register Yes No	
N° A	On time delivery				1		-			
N° A.1	Delivery performance						_			
N° A.2	Action to reduce lead time					1				
N° A.3	Infrastructure & transport	-	l —						NO	
N° A.4	Supplier internal delivery indicator								100 × 100 ×	
N° A.5	System in place for internal production management	†				1			0	
N° A.6	Sub-tiers & Sourcing					İ		7)	
N° A.7	Manufacturing Review planning						ķ	D)		
N° A.8	Customer alert						0,			
N° A.9	Logistic audit results performed by other customer					DX				
N° A.10	Resource for new product introduction						ackslash			
	Total Risk					h				
N° B	Quality			\ X\) 	\cup				
N° B.1	Quality System Approval/Certification	I	30				<u> </u>			
N° B.2	Aerospace		V	\sqcap						
N° B.3	Non Aerospa¢e	0	"	-	<u> </u>					
N° B.4	Special Processes approval/certification									
N° B.5	Previous supplier experience on similar products		\rightarrow							
N° B.6	Current Aerospace Customer reference									
N° B.7	Contract review process									
N° B.8	Quality performance indicator Total Risk									
N. C	Financial		-							
N° C.1	Date of foundation & history									
N° C.2	Major shareholders		-							
N° C.3	Contract connection									
N° C.4	Capital Evolution / breakdown					1				
N° C.5	Turnover									
N° C.6	Ratio Capital / Turnover									
N° C.7	Results									
N° C.8	Earning before interest & tax									
N° C.9	investment									
N° C.10	Self financing capacity				<u> </u>					
N° C.11	Percentage of turnover for research & development									
N° C.12	Financial debt									
N° C.13	Dependence rate with customers									
N° C.14	Legal company structure									
	Total Risk									

FIGURE A1

SUPPLIER:			Risk	Leve	1				
	Supplier Risk Assessment (SRA)	1	2	3	4	weighting	Result	Max. possible Re-	Risk register Yes No
N° D.	Improvement Activities		ļ						
N° D.1	EN 9100 with additional investigation	·						i –	
N° D.1	Review of internal KPI's	†							
N° D.2	Existence of continuous improvement plan	1		_					
N° D.3	Existence of Quality models								N.O
N° D.4	Existence of business efficiency activities								, 07/x
	Total Risk				<u> </u>			 	0
N° E	Environment & Safety	1							.03
N° E.1	ISO 14 001 certification							. (
N° E.2	Hazardous products involved						(グ	
N° E.3	Plant Safety classification		•				V		
N° E.4	Accident rating in the past years & trend				†	$\sqrt{}$),	_	
N° E.5	Safety policy				1.	<u> </u>			
N° E.6	Training on health and safety	1		(\top		
	Total Risk		ſſ	0	1	γ	\top		
N° F.	Human Resources		X	M			T		
N° F.1	EN9100 with additional investigation		MI					<u> </u>	
N° F.2	Performance metrics e.g. sidkness, strike, training	O	V	П					
N° F.3	Staff evolution during last 3 years		11	Ħ					
N° F.4	Skill and education level of employees through all functions	11		丁					
N° F.5	Percentage of employees speaking language of customer and English.		7						
	Total Risk				<u> </u>				
N° G.1	Final Customer Satisfaction	ļ							
N° G.2	EN9100								
N° G.3	Number of quality escapes	_							
№ G.4	Number of customer complaints		L.,						
N° G.5	Communication between all functions	ļ	L						
N° G.6	Concession rate								
N° G.7	Responsiveness level and effectiveness							ļ	
	Total Risk								
N° H.	Geographical, Political, Ethic								
N° H.1	Political Regime	ļ							
N° H.2	Restriction on government funded design & manufacturing	<u> </u>							
√ ° H.3	Government export and import restriction	ļ							
√ H.4	Export credits support & guarantees	<u> </u>							
№ H.5	Tax & custom rules	ļ							
N° H.6	Government policy for counter-trade and off set								
N° H.7	Potential for natural desasters	<u> </u>			<u> </u>				
N° H.8	Country economical aspects	 							
¶° H.9	Visit of plant for ethic aspects ILO 182 (children employment)	<u> </u>							
N° H.10	Language used								
	Total Risk								

FIGURE A1 (Continued)

Supplier Risk Assessment (SRA) 1 2 3 4 4 6 6 6 7 6 7 6 6 No N° I. Design Capability and Capacity N° I.1 EN 3100 with additional investigation N° I.2 Validation by corresponding expert of various reviews and early and capacity various reviews and early and capacity various reviews and early capability of capability of capabilities N° I.3 Classification of easign capabilities N° I.5 Capability of caracterisms, supplier supply claim various reviews and early clarge between customers supplier supply claim various reviews and early clarge devices and color of capability and capacity various reviews and early capability of capability and capacity various reviews and early various reviews and e	SUPPLIER:			Risk Level									
N° L1 EN 9100 with additional investigation N° L2 Validation by corresponding expert of various reviews and september of the process of the process of the process (EDP) tools in use and data exchange between customer supplier, supply chain N° L4 Clearonic data process (EDP) tools in use and data exchange between customer supplier, supply chain N° L5 Capability of current tools N° L6 Extence of procedures and tools for validation, qualification in connection with sustomer requirements N° L7 Use of cross third or each design activity N° L8 Lead time with critical path for each design activity N° L9 Edentification of bottlenecks N° L10 Implementation connective action process N° L11 Lesson learned process N° L11 Exeson learned process N° L11 Key process identified and under control N° J2 Manufacturing Capability and Capacity N° J3 Various capabilities (SPC) N° J3 Synthesis of the products being purchased N° J4 Lead time identified with critical path for each gan number N° J4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional invasional normal path of each gan number N° K.1 Sub tier chain control N° K.2 Document management empty supplier bases N° K.3 FAI acceptance process N° K.4 Sub termonitizing process N° K.5 Subply chain capability of record process N° K.6 Correging existion process and follow-up N° K.7 Transchillty of record process N° K.8 Centinuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) M M	S	Supplier Risk	1	2	3	4	weighting	Result	eldissod				
N° 1.2 Validation by corresponding expert of various reviews and seed" najor inflactorie seed" najor inflactorie seed" najor inflactorie seed" najor inflactorie seed najor inflactorie seed no classification of design capabilities N° 1.4 Clicerronic data process (EDP) tools in use and data exchange between catsorner, suppliers supply chain change between catsorner, suppliers supply chain change to the catsorner of procedures and color for validation, qualification in connection with customer requirements. N° 1.5 Capability of current tools N° 1.6 Existence of procedures and color for validation, qualification in connection with customer requirements. N° 1.7 Use of crass functional development team (concurrent engineering). N° 1.8 Lead time with critical path for each design activity. N° 1.9 Implementation corrective action process. N° 1.11 Lesson learned process. N° 1.11 Lesson learned process. N° 1.12 Machine capability and Capacity. N° 1.2 Machine capabilities (SPC). N° 1.3 Sufficient equipment, facilities & processes available rolls. N° 1.4 Lead time identified with critical path for each gart nümber. N° 1.4 Bottleneck identification process. N° 1.4 Bottleneck identification process. N° 1.5 Sub tier chain control. N° 1.6 Condition with additional investigation. N° 1.7 FAI acceptance process. N° 1.8 Sub tier chain control. N° 1.9 Supply chain capacity process. N° 1.4 Sub tier monitoring bobbes. N° 1.5 Supply chain capacity process. N° 1.6 Corrective status process. N° 1.7 Tracebulty of record process. N° 1.8 Capiturous improvement plan. Total risk Supplier Risk Assessment Scoring (SRAS). M A. Supplier Risk Assessment Scoring (SRAS). M A.	N° I	Design Capability	y and Capacity										
**************************************	N° 1.1	EN 9100 with addi	itionai investigation			<u> </u>							
N° 1.4 classe between customer, supplier, supply chain N° 1.5 Capability of urront tools N° 1.6 Existence of procedures and sools for validation, qualification in connection with sustainer requirements N° 1.7 Use of cross functional development floers (concurrent engineering) N° 1.8 Lead time with critical path for each design activity N° 1.9 Identification of bottlenecks N° 1.10 Implementation corrective action process Total risk N° 3 Manufacturing Capability and Capacity N° 3.1 Key process identified and under control N° 3.2 Machine capabilities (SPC) N° 3.3 Sufficient equipment, facilities & processes available relia N° 3.4 Lead time identified with critical path for each get number N° 3.4 Lead time identified with critical path for each get number N° 3.4 Bottleneck identified atto index path for each get number N° 3.4 Bottleneck identified with critical path for each get number N° 4.7 Lead time identified with critical path for each get number N° 4.8 Sub-tier chain control N° K.1 En 9100 with additional inviguilation N° K.2 Document management finding supplier bases N° K.3 Sub-glive manifolity process N° K.4 Sub-tier manifolity process N° K.5 Supply chain getsade process N° K.6 Corrective action process and follow-up N° K.7 Trapability of record process N° K.8 Centinuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) *** **Example** **Supplier Risk Assessment Scoring (SRAS) *** *** **Example** **Supplier Risk Assessment Scoring (SRAS) *** *** **Example** **Supplier Risk Assessment Scoring (SRAS) *** **Example** **Ex	N° 1.2	each major milestone											
change between customer, supplier, supply chain N° 1.5 Capability of current tools Existence of procedures and tools for validation, qualification in connection with customer requirements N° 1.6 Existence of procedures and tools for validation, qualification in connection with customer requirements N° 1.7 Uses of cross functional development losm (concurrent engineering) N° 1.8 Lead time with critical path for each design activity N° 1.9 Identification of bottlenecks N° 1.10 Implementation currective action process Total risk N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes available relationship and the capacity of th	N° 1.3											. 7	
N° 1.6 Existence of procedures and tools for validation, qualification in connection with customer requirements N° 1.7 Use of cross functional development (can (concurrent engineering)) N° 1.8 Lead time with critical path for each design activity N° 1.9 identification of bottlenecks N° 1.10 Implementation corrective action process Total risk N° 1.11 Lesson learned process Total risk N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment (califies & processes a validable rolls) N° J.4 Lead time identified with critical path for each gart number N° J.4 Bottleneck identified with critical path for each gart number N° J.4 Bottleneck identified into critical path for each gart number N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 Sub iter chain control N° K.4 Sub iter monitoring brocess N° K.5 Supply chair capitale process N° K.6 Corrective each on process and follow -up N° K.7 Traccapility of record process N° K.8 Captinious improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) =	N° 1.4	change between customer, supplier, supply chain										13 X	
In 1.6 ticn in connection with customer requirements N° 1.7 Use of cross functional development loam (concurrent engineering) N° 1.8 Leas time with critical path for each design activity N° 1.9 Identification of bottlenecks N° 1.9 Implementation corrective action process N° 1.11 Lesson learned process Total risk N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° 1.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities 8 processes available relevant to products being purchased N° 1.4 Bottleneck identification process Total risk N° K.1 En 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 Sub tier monitoring process N° K.4 Sub tier monitoring process N° K.5 Supply chain castade process N° K.6 Correcting eaction process N° K.7 Tropositify of record process N° K.8 Correcting eaction process N° K.8 Correcting eaction process N° K.6 Correcting eaction process N° K.7 Tropositify of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = M	N° 1.5	Capability of current tools										0)	
N° 1.8 Lead time with critical path for each design activity N° 1.9 Identification of bottlenecks N° 1.10 Implementation corrective action process N° 1.11 Lesson learned process Total risk N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes a valiable relevant to products being purchased N° J.4 Lead time identified with critical path for each get number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional invasition on N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring indicess N° K.5 Supply chain cabade process N° K.6 Corrective aidlin process and follow-up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk D C B A	N° I.6	Existence of procedures and tools for validation, qualifica- tion in connection with customer requirements									N'	2	
N° L9 Identification of bottlenecks Implementation corrective action process N° L11 Lesson learned process Total risk N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes available relievant to products being purchased vant to product identification process Vant Under Vant Additional invastigation Value Va	N° 1.7	Use of crass functional development team (concurrent en-								Ó			
N° I.10 Implementation corrective action process N° I.11 Lesson learned process Total risk N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities 8 processes available relative variety opposite being purchased N° J.4 Lead time Identified with critical path for each part number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 Sub tier monitoring process N° K.4 Sub tier monitoring process N° K.5 Supply chain castade process N° K.6 Corrective abilion process and follow-up N° K.7 Tracability of record process N° K.8 Controllous improvement plan Total risk D C B A	N° I.8	Lead time with crit	ical path for each de	esign activity					<				
N° L11 Lesson learned process Total risk N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes available releavant to products being purchased N° J.4 Lead time identified with critical path for each part number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional invastigation N° K.2 Document management smort supplier bases N° K.3 Sub tier monitoring process N° K.4 Sub tier monitoring process N° K.5 Supply chain capabade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Caplinuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) R × 20 R M M	N° 1.9	Identification of bo	ttlenecks			<u> </u>		0	V i				
Total risk N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes available release vant to products being purchased N° J.4 Lead time identified with critical path for each part number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain capacide process N° K.6 Corrective nation process and follow-up N° K.7 Tracability of record process N° K.8 Captinuous improvement plan Total risk A Supplier Risk Assessment Scoring (SRAS) = R × 20 R × 2	Nº 1.10	Implementation co	prective action proc	ess				X					
N° J Manufacturing Capability and Capacity N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes available reference with to products being purchased N° J.4 Lead time identified with critical path for each part number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoging process N° K.5 Supply chain Cabade process N° K.6 Corrective nation process and follow-up N° K.7 Tracability of record process N° K.8 Captinuous improvement plan Total risk D C B A	N° 1.11	<u>'</u>	ocess				W	`					
N° J.1 Key process identified and under control N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes available relationary to products being purchased N° J.4 Lead time Identified with critical path for each get number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional invastication N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow-up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = R × 20 R × 20 Supplier Risk Assessment Scoring (SRAS) = A		Total risk		2	,								
N° J.2 Machine capabilities (SPC) N° J.3 Sufficient equipment, facilities & processes available relationary vant to products being purchased N° J.4 Lead time identified with critical path for each get number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain castade process N° K.6 Corrective aution process and follow-up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) R × 20 R × 20 M M A					\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7,	ļ				_		
N° J.3 Sufficient equipment, facilities & processes available relationary vant to products being purchased N° J.4 Lead time identified with critical path for each gart number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain castade process N° K.6 Corrective aution process and follow-up N° K.7 Traccability of record process N° K.8 Coptinuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) =				rol	N				<u> </u>		_		
N° J.4 Lead time identified with critical path for each part number N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional invastication N° K.2 Document management mond supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = Supplier Risk Assessment Scoring (SRAS) = A	N° J.2	<u> </u>			Ψ								
N° J.4 Bottleneck identification process Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = M Supplier Risk Assessment Scoring (SRAS) = M		vant to products be	eing purchased										
Total risk N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective abtion process and follow -up N° K.7 Traccability of record process N° K.8 Centinuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = M M Supplier Risk Assessment Scoring (SRAS) = M M		Lead time identified with critical path for each part number											
N° K. Sub tier chain control N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) N° K.2 Supplier Risk Assessment Scoring (SRAS) N° K.2 Supplier Risk Assessment Scoring (SRAS) N° K.8 Continuous improvement plan N° K.9 N°	N° J.4												
N° K.1 EN 9100 with additional investigation N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = =													
N° K.2 Document management among supplier bases N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = =				•		<u> </u>							
N° K.3 FAI acceptance process N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) R M M Supplier Risk Assessment Scoring (SRAS) D C B A								-					
N° K.4 Sub tier monitoring process N° K.5 Supply chain cascade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = =													
N° K.5 Supply chain case ade process N° K.6 Corrective action process and follow -up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) N° K.8 Coptinuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) N° K.8 Coptinuous improvement plan													
N° K.6 Corrective action process and follow-up N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = =			_										
N° K.7 Traceability of record process N° K.8 Continuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = = = = = = = A		\	•		-								
N° K.8 Centinuous improvement plan Total risk Supplier Risk Assessment Scoring (SRAS) = = D C B A				up.	+								
Total risk R x 20 Supplier Risk Assessment Scoring (SRAS) = = D C B A			•										
Supplier Risk Assessment Scoring (SRAS) = = = M		"	Torright plant		+								
Supplier Risk Assessment Scoring (SRAS) = = M								ı			4	La	
Supplier Risk Assessment Scoring (SRAS) = =					ĸ				. IVI				
	Supplier Risk Assessment Scoring (SRAS) = =												
VERY HIGH HIGH MEDIUM LOW		D	C				В			\vdash	A		
inter interior	VER	Y HIGH	Hig	H_		ME	DIUM					LOW	
The responsible risk leader agrees on the risk scoring			The respon	sible risk leeder e	nrees o	n the	rigk o	corine	٠			- ·	
Representative : Signature : Date :	Representative	e :	тис теары		910000	.7 (10)	.151. 5		a	Da	ate :		

Product:												
	Product Risk A	ssessment (F	PRA)	1	2	3	4	weighting	Result	Max possible. Re- sult	Risk register Yes No	
N°A	Safety Classification	·			1	ļ	1					
Nº A.1	Safety classification pro	cess responsibility				 	†	†				
N° A.1	Classified part manufac			†							-	
N° A.2	Control of classified par		uirements	!								
N° A.3	Customer Approval stat					1	\dagger	1			NO	
	Total Risk						i	t			- OXX	
N° B												
N° B.1	Each special process				_		1	1				
		ience and certificat	lican		 	1				d	(
	N° B.2 Employees skills, experience and certification N° B.3 Documentation for special processes incl. Qualification file.						 	<u> </u>		0	·	
N° B.4	N° B.3 Documentation for special processes incl. Qualification file N° B.4 Evidence of control parameters) .		
N° B.5	Equipment					-	-		\	$\neg \vdash \mid$		
N° B.6	Special processes approcustomer	oval documentation	n issued by other		,	1		₹	\downarrow			
	Total Risk					9						
N° C							1		/			
Nº C.1	Design & Development	Plan	7 /		1							
Nº C.2								Ĺ				
Nº C.3	Material selection proce	ss resources	///	O	1		+	T				
N° C.4	Design maturity leve:			7			11	,	1			
N° C.5	Previous experience	1 /	Px		IJ							
N° C.6	Number of subcompose	nts / A				-	 					
N° C.7	Similarity of existing des	signed product	V.									
Nº C.8	Feasabill ty to manufact	1 / /	\bigcirc									
	Total Risk		+	 								
N° D		exity										
N° D.1												
N° D.2	Documentation for proce											
N° D.3	Control parameters	The manufiller										
N° D.4	Existing and specialist e	experience		<u> </u>						_		
N° D.5	Equipment Production C						 					
N° D.6							_					
N° D.7	Knowledge about mater	rial used										
- D.7	Design complexity											
	Total Risk											
 							R ¹	=>			M	
R x 20 Supplier Risk Assessment Scoring (SRAS) = M												
	D VERY HIGH		C GH				B DIUM			A Low		
		The	 	es on	the r	isk so	coring					
The Risk leader agrees on Representative : Signature :							e : 					

FIGURE A1 (Continued)