

Gemeinsames Arbeiten mit Lieferanten bezüglich Risiken und Potentialen im Liefernetzwerk

- Risk Clusters in der Beschaffung bei EADS
- Klassische End Market Risiken in der Aerospace Industrie
- Wie identifiziere ich die wichtigsten Risiken?
- Vertragliche Klauseln

Dr.-Ing Anfried Sauerborn

EADS Corporate Sourcing Strategy and Management

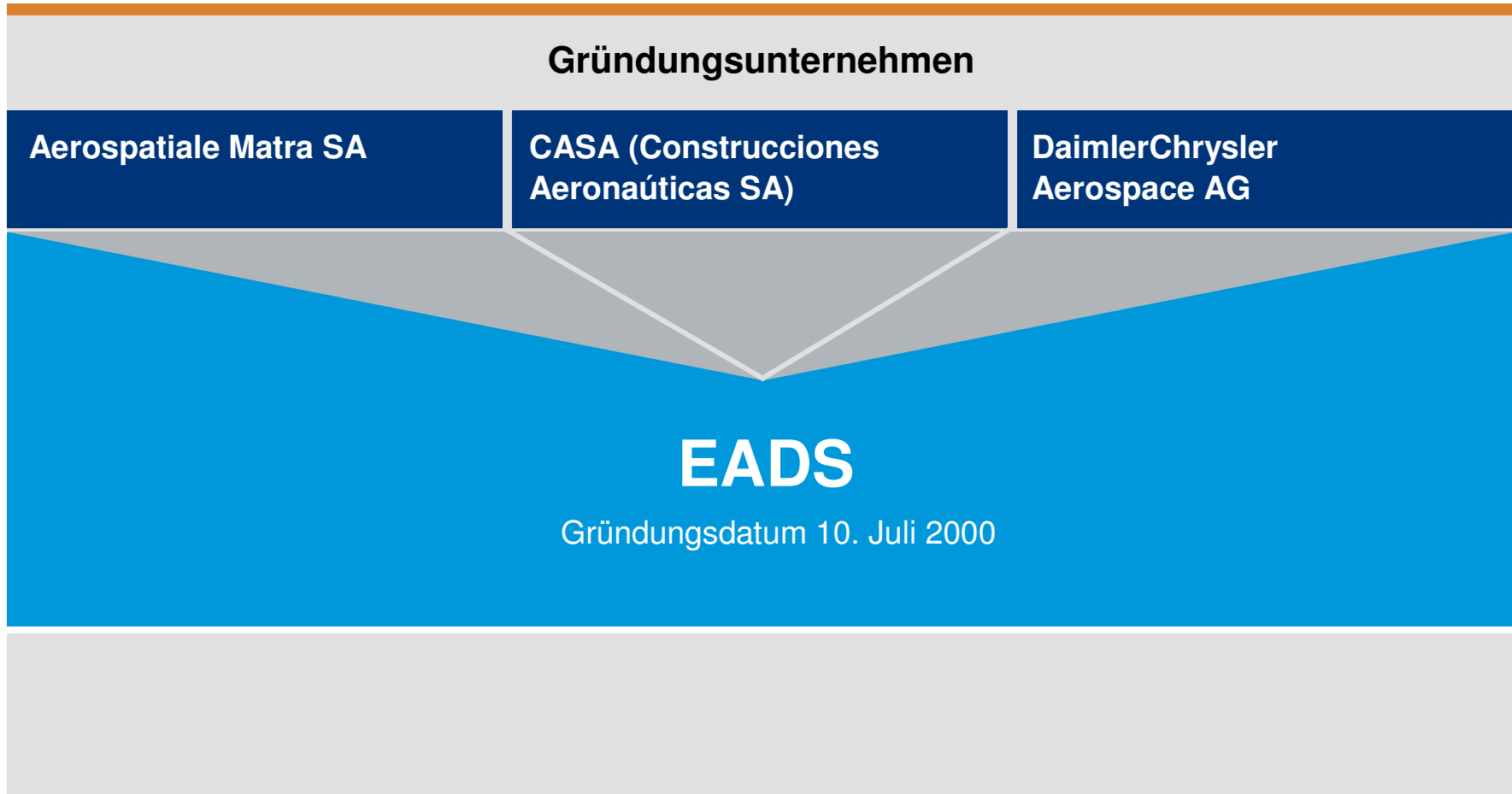
Marcus Evans Risikomanagementtagung, Köln 12.April 2011

EADS auf einen Blick



Das Unternehmen

Gründungspartner



Vision 2020 (I)



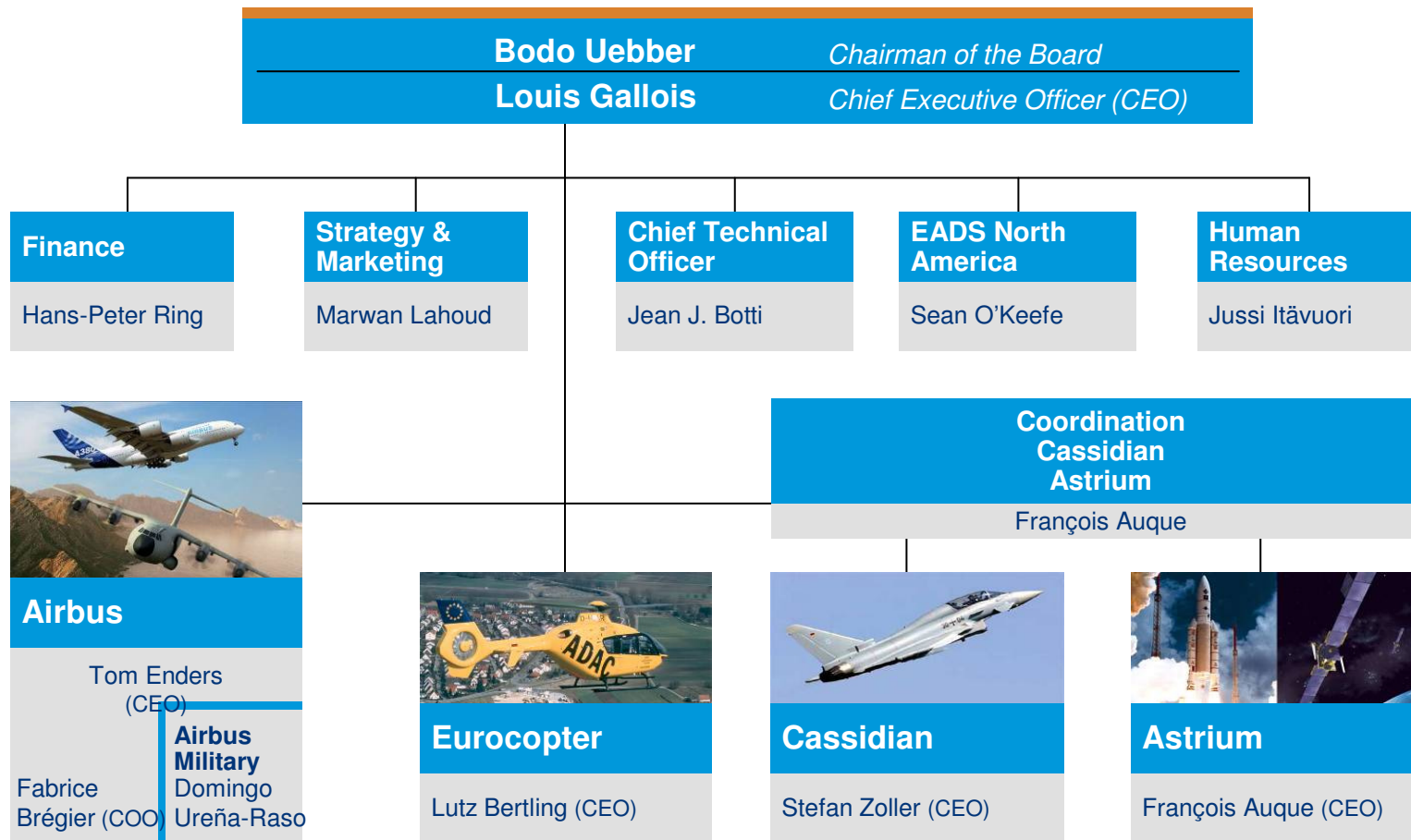
- ☑ **Weltweit führender Anbieter luft- und raumfahrt-technischer Plattformen und Systeme**
(insbesondere plattformspezifische Architekturen und Systemintegration)
- ☑ **10% EBIT** bis 2015
- ☑ **Konzentration auf das Kerngeschäft**
- ☑ **Ausgeglichenes Umsatzverhältnis – Erlöse von € 80 Mrd.** und 50% Umsatzanteil ausserhalb Airbus bis 2020
- ☑ **Servicevolumen von € 20 Mrd. bis 2020**
– missionskritischer Servicepartner unserer Kunden
- ☑ **Globalisierung – 40% des Einkaufs und 20% der Mitarbeiter** außerhalb Europas sowie \$ 10 Mrd. Umsatz außerhalb Airbus in den USA
- ☑ Entwicklung zum umwelteffizienten Unternehmen

Vision 2020 (II)



- ☑ **Langfristige Parität** mit Boeing (Marktanteil 40%-60%)
- ☑ **Ausgewogenes Portfolio** – erfordert externes Wachstum
- ☑ Ausbau des Service-Geschäfts in direkter oder indirekter Verknüpfung mit unseren **Plattformen**; Entwicklung plattformbezogener Systeme
- ☑ **Reduzierung der Abhängigkeit** vom Wechselkurs des Euro gegenüber dem Dollar
- ☑ **Ausbau der Marktpräsenz in den USA** und hervorragende Beziehung zur US-Regierung
- ☑ Sicherung der künftigen **Profitabilität**
- ☑ **Neue Talente gewinnen und halten**: v.a. im Bereich Engineering und Program-Management; Interdisziplinäre Vielfalt sicherstellen; Klare Führung zeigen.

EADS Managementstruktur (I)



EADS

In Mill. €



* Umsatz aus dem Verteidigungsgeschäft in Millionen €

** EADS ist 2009 der weltweit größte Unternehmer für Luft und Raumfahrt

EADS Divisionen

Die vier Säulen von EADS



- Weltweit führender Flugzeughersteller
- Seit 2000 Anstieg der Auslieferungen bei Airbus Commercial um 60 %
- Auftragsbestand in 10 Jahren mehr als verdoppelt (entspricht 6 Produktionsjahren)



- Europas führendes Raumfahrtunternehmen
- Größter Arbeitgeber im Raumfahrt-bereich in Frankreich, Deutschland, Spanien und Großbritannien
- Anstieg der Umsätze ~ 2x und des EBIT ~ 4x seit 2000



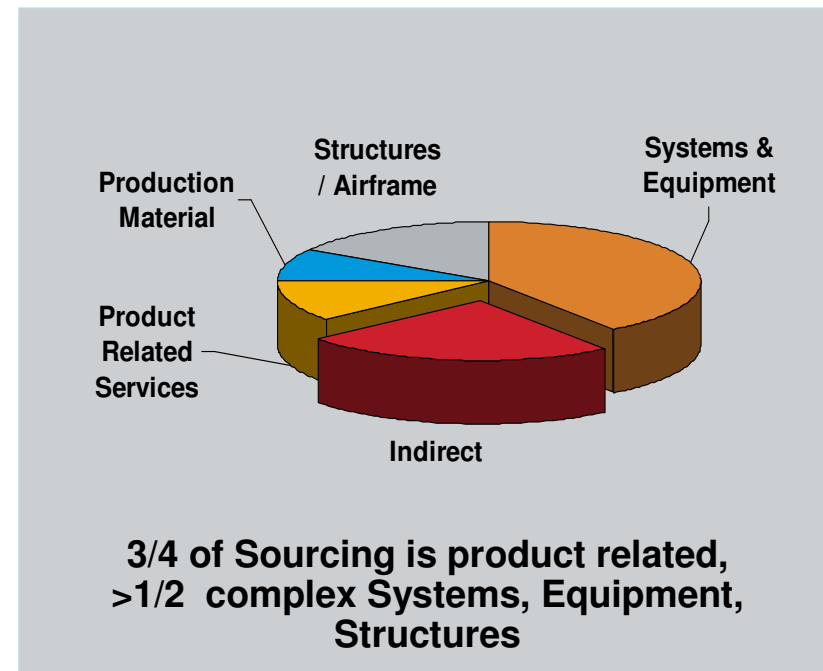
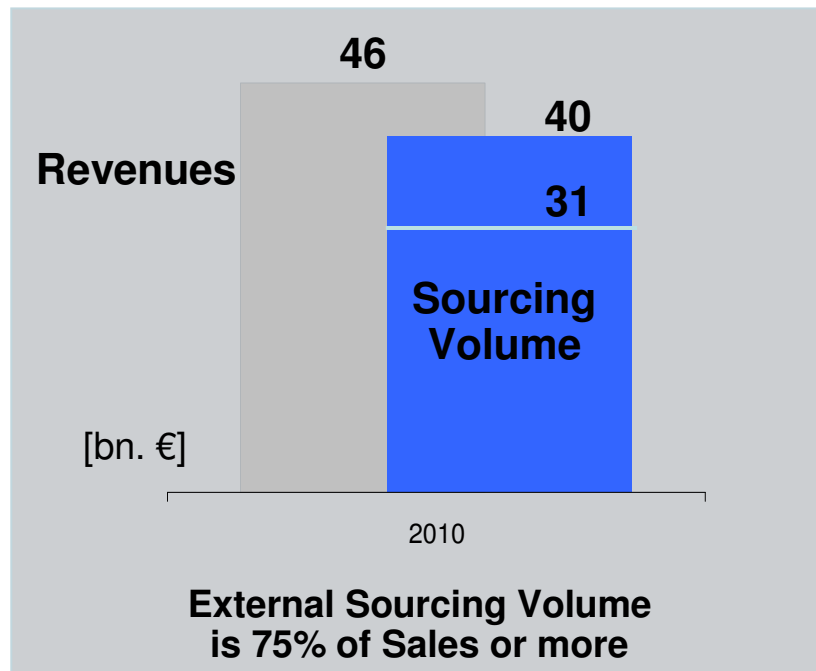
- Führender Helikopter-Hersteller
- Stellt 1/3 aller Helikopter weltweit
- Rund 4.000 ausgelieferte Helikopter in den letzten 10 Jahren



- Weltweit führend in Sicherheitssystemen und europaweit im Bereich UAV
- Über 234 Eurofighter ausgeliefert (Stand: Sept. 2010)
- EBIT & Gewinnspanne in den letzten 5 Jahren mehr als verdoppelt

EADS Sourcing Volume

Divisions developed to high level integrators with strong sourcing content

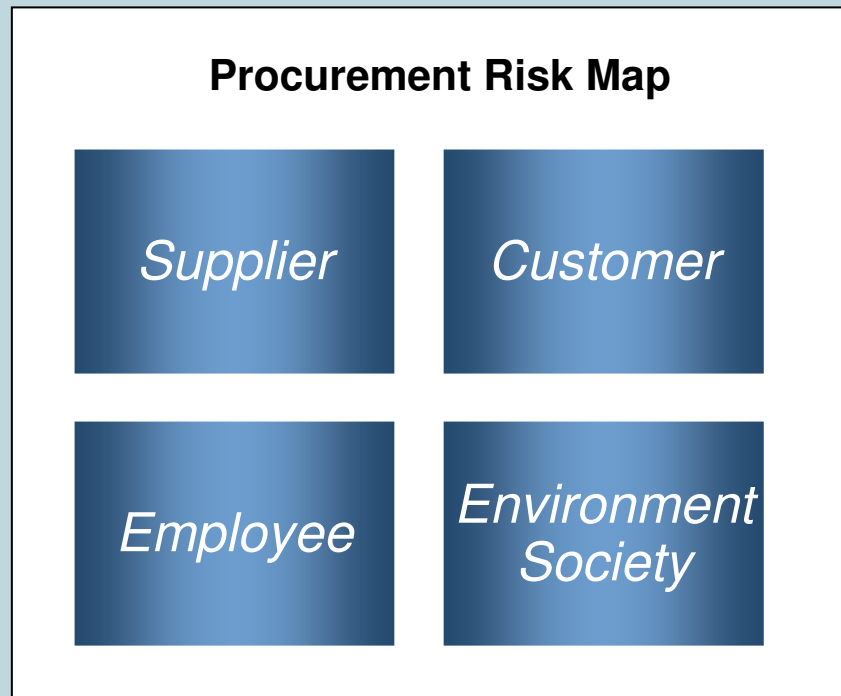


Performance is to a large extent determined in the Supply Chain, Sourcing is a key lever for EADS success

High expectations on Procurement



EADS Procurement risk map: 4 Clusters



Procurement Risk Management is part of Enterprise Risk Management

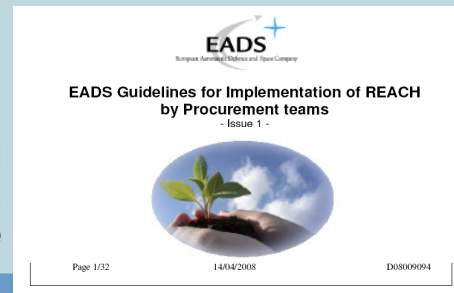
Cluster 1: Environment / Society

Supplier

Customer

Employee

REACH
Implementation
Guideline



Environment / Society

Risk

- Reputation
- Regulations, e.g. REACH
- Sustainability



Mitigation

- „Eco-efficient enterprise“ embedded in Vision 2020
- Updated / enriched Procurement Processes, e.g. CSR, REACH, Code of Ethics, Carbon Footprint, ...

Cluster 2: Employee



Compliance Organisation

Suppliers

Customers

Employees

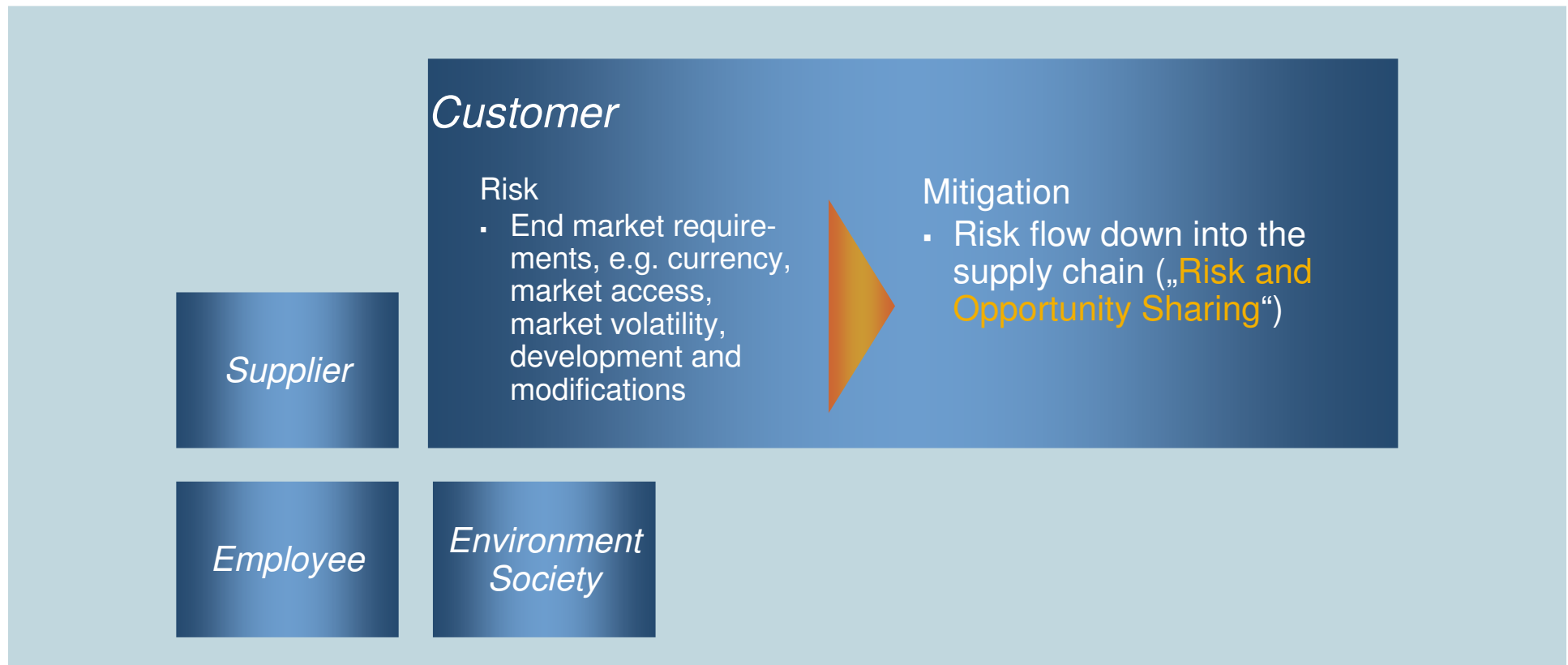
<p>Risk</p> <ul style="list-style-type: none"> ▪ Resources ▪ Capabilities ▪ Misbehavior ▪ Processes ▪ Organisation 		<p>Mitigation</p> <ul style="list-style-type: none"> ▪ Procurement Performance Management ▪ Procurement Staff Qualification ▪ Procurement Processes, Enterprise Risk Management ▪ Compliance Organisation
--	--	--

*Environment
Society*

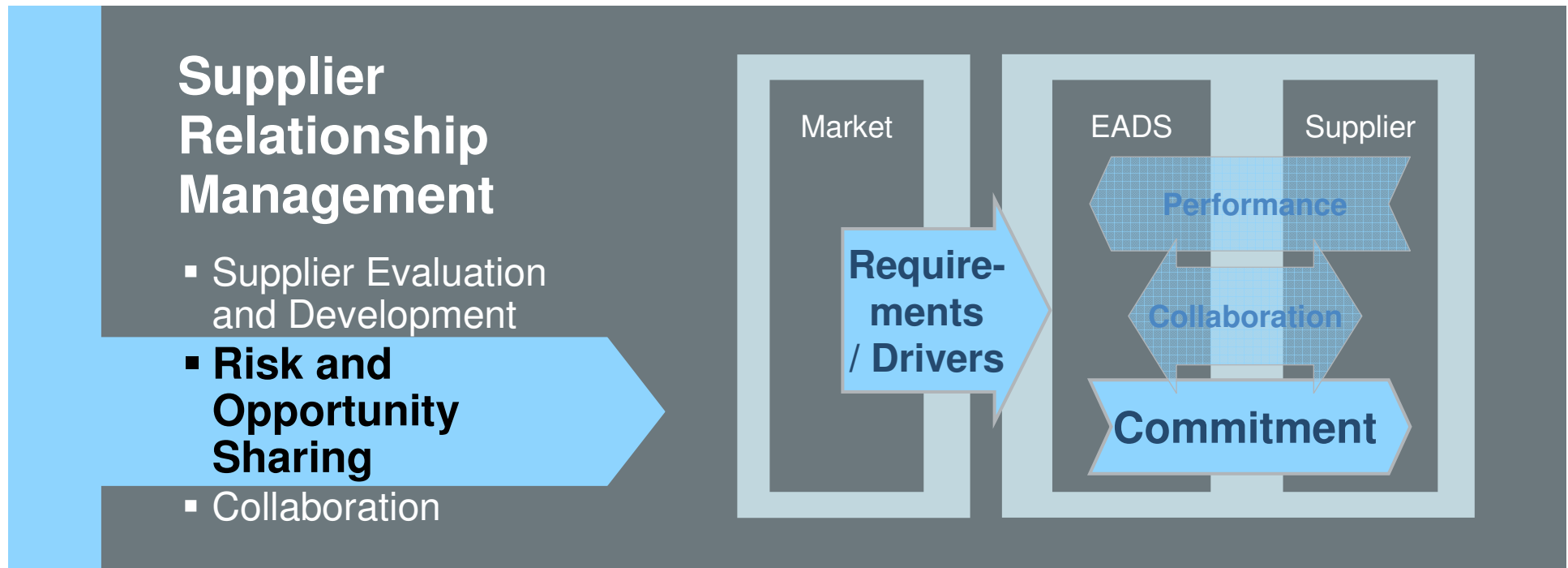
Cluster 3: Supplier



Cluster 4: Customer

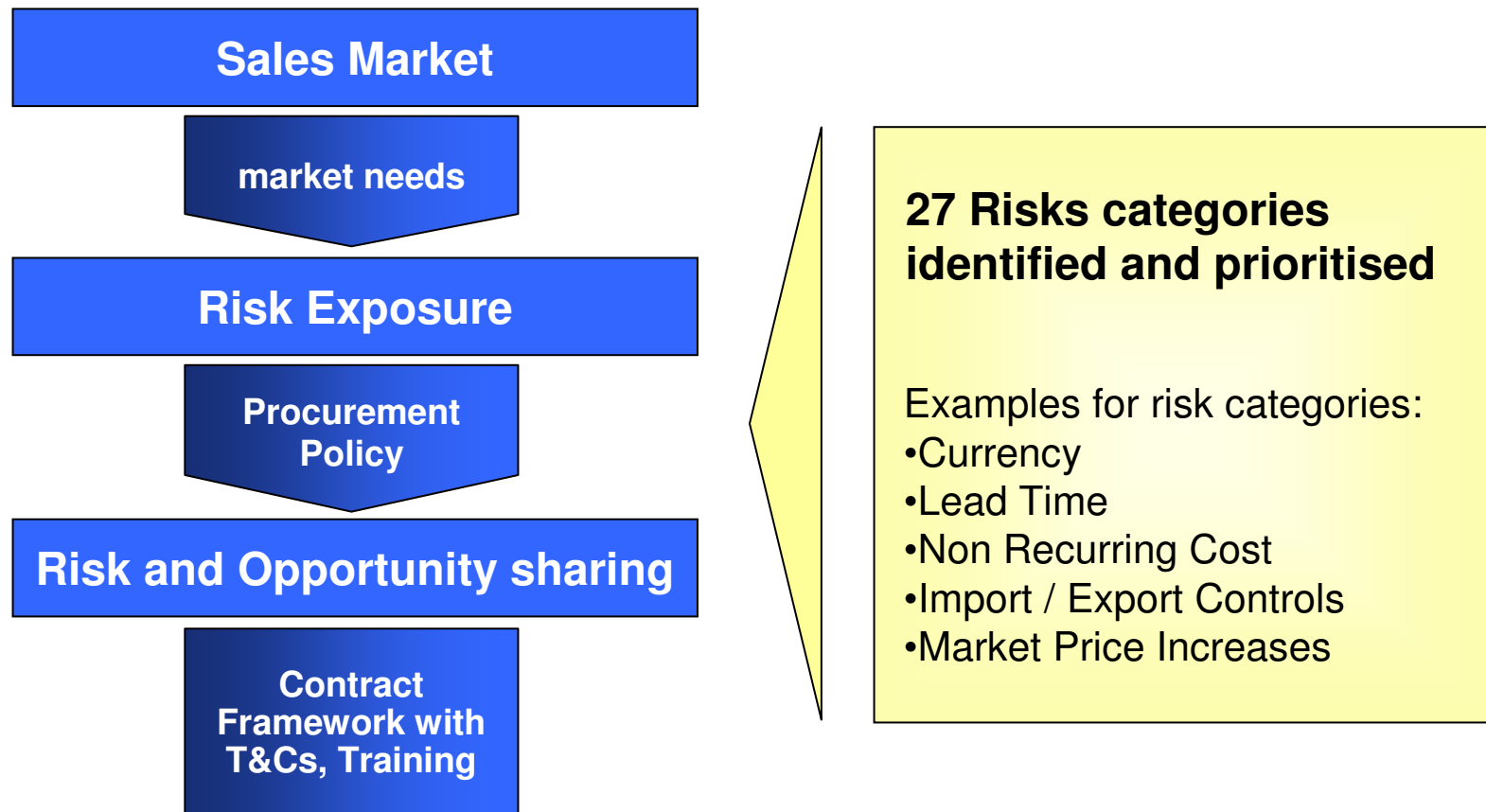


Risk and Opportunity sharing is part of Supplier relationship management:



EADS global business perspectives require sharing of end-customer market opportunities and risks with suppliers

Risk and Opportunity Sharing: -Strategy development process-



EADS global business perspectives require sharing of end-customer market opportunities and risks with suppliers

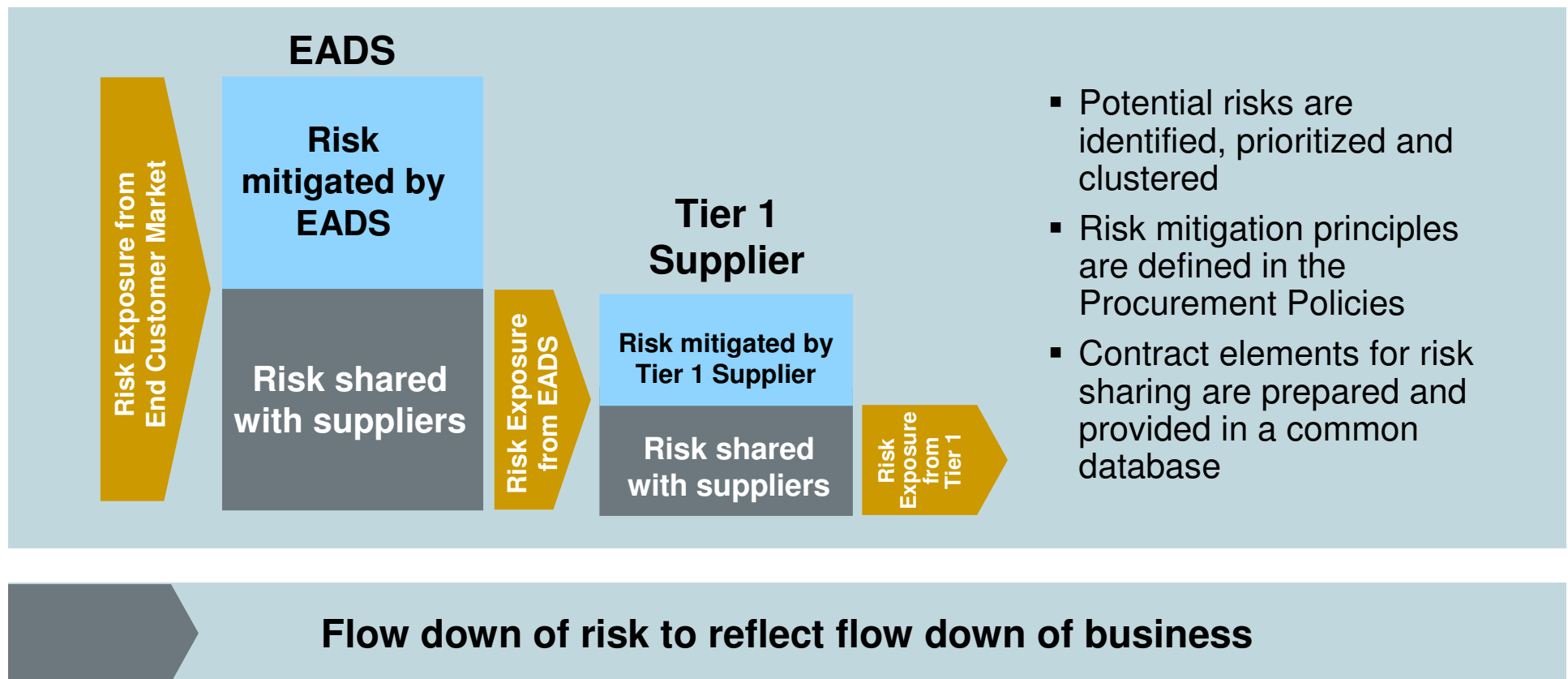
Risk & Opportunity Sharing

Examples of risk sharing with suppliers

Flow down	Non Recurring Costs	Order Volume and Mix	Currency	Global Sourcing
Sales Market	Development efforts for new programs	Volatility of demand	Exchange rates	Market access
Risk Exposure	NRC risk for development and modifications	Stock over- or under run	Currency risks	Loss of opportunities, obligations
Risk Prevention, Risk & Opportunity Management	Suppliers bear their NRC investments	Flexible delivery schedules	Natural Hedging	Local supplier engagement

Risk & Opportunity Sharing

Common system for flow down of risk and opportunity to suppliers implemented across EADS



Risk and Opportunity Sharing: Risk elements

27 EADS Risk Sharing Elements cover a wide range of topics:

- 1) Compliance with commercial requirmts.
- 2) Risk Management capability
- 3) Repair capabilities customer support
- 4) Non Recurring Cost
- 5) Lead time
- 6) Order volume and -mix requirmt. changes
- 7) Termination of contract
- 8) Management vision
- 9) Import /export control
- 10) Technological competitiveness
- 11) Design price competitiveness
- 12) Competition and manufacturing cost
- 13) Currency risk
- 14) Market price increases
- 15) Offset
- 16) Obsolescence
- 17) Environmental responsibility
- 18) Warranty and liability
- 19) Modification cost
- 20) Market orientation
- 21) Intellectual Property Rights
- 22) Liquidated damages
- 23) Delay in development
- 24) Product liability insurance
- 25) Parent company guarantee
- 26) Social Regulation Risk
- 27) Applicable Law

How to identify most significant risks:

- Process steps:**
- 1: Identify potential risk elements
 - 2: Estimate Probability and Severity
 - 3: Select most important risks
 - 4: Brainstorm on root causes
 - 5: Identify mitigation actions
 - 6: Recheck complete assessment
 - 7: Reassess regularly and monitor progress on mitigation actions

- P (Probability)**
- 1: Very Unlikely
 - 2: Unlikely
 - 3: May happen
 - 4: Likely
 - 5: Very likely
 - 6: Almost Certain
 - 7: Certain

- S (Severity)**
- 1: No relevance
 - 2: Insignificant
 - 3: Minor
 - 4: Serious
 - 5: Very serious
 - 6: Almost Catastrophic
 - 7: Catastrophic

Probability x Severity = Risk Importance

Risk	P	S	Root causes	Potential actions for mitigations
Non Recurring Cost The risk of a supplier not being committed to bear Non Recurring Cost (NRC)	6	6	<ul style="list-style-type: none"> •Not enough market opportunities/forecasts accuracy to amortize NRC; •Suppliers not educated to bear NRC 	<ul style="list-style-type: none"> •Risk to be shared contractually; to be negotiated very early in the Sourcing •Get the Supplier early involved in the design phase and negotiate shared risks/opportunities

Risk assessment: Example

Type	Nb	Title	Prob. (1-7)	Severity (1-7)	Root causes	Potential actions for mitigations
COMMERCIAL	1	Compliance with commercial requirements The risk that a supplier is not committed to reduce its costs in order to deliver a product/service at the market price.	4	5	Lack of precise specs.; monopolistic situation ...	Contractual : fix prices, limit "modification" clauses Precise functional specifications
	2	Non Recurring Cost The risk of a supplier not being committed to bear Non Recurring Cost (NRC)	6	6	Not enough market opportunities/forecasts accuracy to amortize NRC; Suppliers not educated to bear NRC	Risk to be shared contractually; to be negotiated very early in the Sourcing; Get the Supplier early involved in the design phase and negotiate shared risks/opportunities
	3	Design price competitiveness The risk of a supplier is not committed to be price competitive in regard to design techniques	6	7	Monopolistic situation	Contractual obligation + annual benchmark ; negotiate fix unit elements prices and % (overhead, project management, logistic...)
	4	Competition and manufacturing cost The risk of a supplier is not committed to be price competitive in regard to manufacturing techniques	2	3	Supplier using manufacturing process/equipments not up to date	Contractual obligation + annual benchmark Audit regularly Supply Chain management
	5	Market price increases The risk of trends, events or developments that may increase market prices in the supply market	7	4	High severity on SW; high potential risk on manpower & components (+/- 10%)	Contractual : negotiate fix prices or limit application of price increase based on they right index (using a max. or a shreshold level)
	6	The risk of modification The risk that a supplier is not committed to bear the cost of modification demanded by the end customer certification authorities and the BU design departments	7	6	Changes of specs & funct. that occur during the life cycle (high in bid & contract phase with Mol who wants changes for free!); lack of precise specs at the beginning of the project	Contractual : negotiate fix price incl. margin for customer/end-user changes/modifications (to be precised); Involve the supplier early in design phase; Internal: precise analysis of current and future certification needs
	7	Price evolution risk The risk that the supplier is not committed to comply with the customer requirements in terms of price index evolution (long term contracts)	6	5	Very important in Defence market; the sales accepts customer clauses in terms of price indexation not fitting with reality (internal problem)	Contractual : negotiate fix prices or limit application of price increase based on the right index (using ceiling or or threshold for applicability) to be first checked with Customer requirements
TRACT	8	Termination of contract The risk that a termination cases are not covered according to end-customer requirements.	5	6	Equipments, stock ... couldn't be re-used or re-sold	Contractual : flowdown of the termination clauses; share costs recovery

Contract clause database:

20 October 2011

EADS has developed a contract clause database structured along the risk sharing elements

EADS ROM Input Vers. 1.3 (Last change: 14.01.2011)

Risk Sharing Elements:

Material categories:

Copy to Contract | Copy to Contract all | Reset copied elements | Export Contracts

Risk Sharing Elements	Copy to C...	Link	Material ...	Comment
00. How to use/word of caution	✓			No
01. Compliance with commercial require	✓			Yes
02. Risk Management capability	✓			Yes
03. Repair capabilities customer suppor	✓			Yes
04. Non Recurring Cost	✓			Yes
05. Lead time	✓			Yes
06. Order volume and -mix requirements	✓			Yes
07. Termination	✓			Yes
08. Management vision	✓			Yes
09. Licenses Import/Export controls	✓			No
10. Continuous improvement to ensure t	✓			Yes
11. Design price competitiveness	✓			Yes
12. Competition and manufacturing cost	✓			Yes
13. Currency Risk				Yes
14. Market price increases	✓			No
15. Offset and sales promotion	✓			Yes
16. Obsolescence	✓			Yes

Summary/conclusion:

- The Aerospace Industry is exposed to typical and specific risks generated by customer contracts
- EADS has a process in place to share these risks (but also opportunities) with suppliers
- This process is managed by Corporate Sourcing (Tools and training)
- As business situations and challenges vary significantly, there are no standard EADS risk sharing contracts but recommended clauses available
- The system is flexible but builds on expertise and common tools

Dr. Anfried Sauerborn

Tel.: +49 (89) 607-34741

E-Mail: anfried.sauerborn@eads.net

