

Cyber Security for Industrial Sector

Chambre de Commerce Luxembourg (CC)

28 Oktober 2020 12h15 - 13h00

Detlef Hösterey & Frank Trenz

1. Your Referent Today



Detlef Hösterey

Principal Consultant- Team Leader ISM Germany

Certifications

PECB certified ISO 27001 Master

PECB certified Trainer

KRITIS Auditor

DEKRA Data Protection Specialist

PRINCE II Practitioner

Competencies & Organisations

ISMS, BCM, Riskmanagement, Data Protection, BSI IT-Grundschutz

#TISAX#MARISK#KRITIS#NIST#IDW#CIS#PECB#ISACA

Branches

Federal Authorities, Finance, Assurance, Automotive, Critical Infrastructures

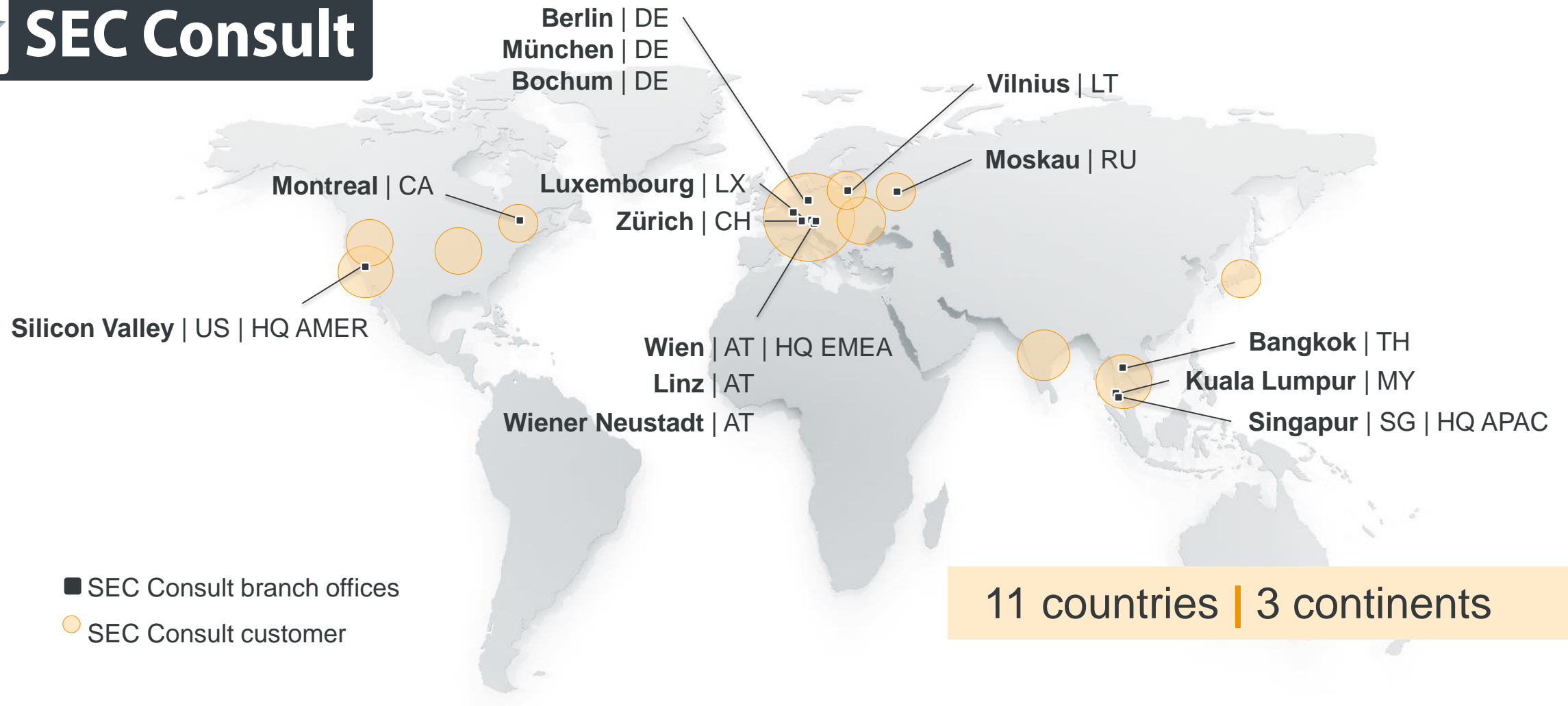
Production

15+ Years Professional Experience

2. Our sites



SEC Consult



11 countries | 3 continents



SEC Consult

3. What makes us special

IN-DEPTH EXPERT KNOWLEDGE

~200 employees

140+ white-hat hacker

80+ certificates

Vulnerability Lab

numerous
publications

LONG-LASTING EXPERIENCE

700+ projects / year

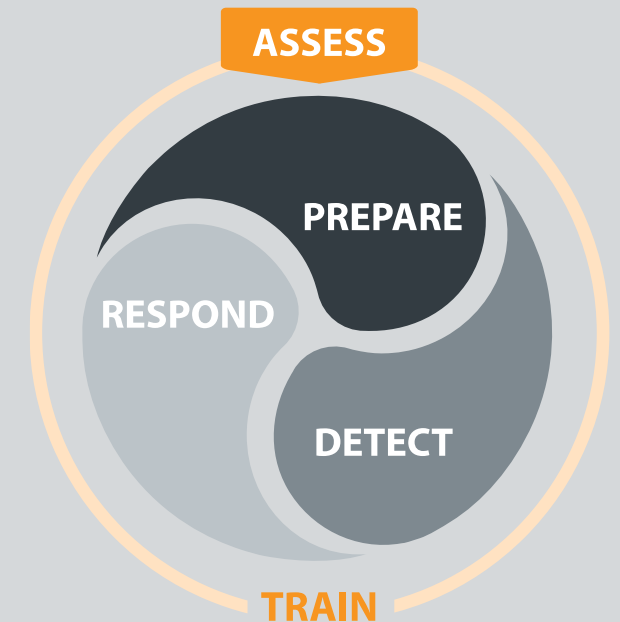
15 years of consulting

10+ years ISO 27001
certified

CREST certified



FULL RANGE OF SERVICES



4. The Most Important Business Risk In Europe 2020



⬇️ 2019: 2 (38%)

Cyber incidents
(e.g. cyber crime, IT failure/
outage, data breaches,
fines and penalties)



⬆️ 2019: 1 (38%)

**Business
interruption**
(incl. supply chain
disruption)



⬇️ 2019: 3 (36%)

**Changes in
legislation and
regulation**
(e.g. trade wars and tariffs,
economic sanctions,
protectionism, Brexit, Euro-
zone disintegration)



⬇️ 2019: 5 (22%)

**Market
developments**
(e.g. volatility, intensified
competition/new entrants,
M&A, market stagnation,
market fluctuation)



⬇️ 2019: 6 (20%)

Fire, explosion



⬆️ 2019: 4 (26%)

**Natural
catastrophes**
(e.g. storm, flood,
earthquake)



⬇️ 2019: 8 (12%)

**Loss of reputation or
brand value**



⬆️ 2019: 7 (18%)

New technologies
(e.g. impact of artificial
intelligence, autonomous
vehicles, 3D printing,
Internet of Things,
nanotechnology,
blockchain)



⬇️ 2019: 10 (11%)

**Climate change/
increasing volatility
of weather¹**



⬆️ 2019: 9 (12%)

**Macroeconomic
developments**
(e.g. monetary policies,
austerity programs,
commodity price increase,
deflation, inflation)

Source: Allianz Insurance

5. Most Important Business Risk by Company Size (excerpt) 2020



TOP 5 RISKS IN AVIATION, AEROSPACE, DEFENSE

Source: Allianz Global Corporate & Specialty.
Figures represent how often a risk was selected as a percentage of all responses for that industry sector.
Respondents: 95
Figures don't add up to 100% as up to three risks could be selected.

Rank		Percent	2019 rank	Trend
1	Cyber incidents (e.g. cyber crime, IT failure/outage, data breaches, fines and penalties)	40%	1 (43%)	=
2	Business interruption (incl. supply chain disruption)	36%	2 (37%)	=
3	Changes in legislation and regulation (e.g. trade wars and tariffs, economic sanctions, protectionism, Brexit, Euro-zone disintegration)	27%	3 (36%)	=
4	Market developments (e.g. volatility, intensified competition/new entrants, M&A, market stagnation, market fluctuation)	25%	4 (33%)	=
5	Loss of reputation or brand value	17%	NEW	+

Rank		Percent	2019 rank	Trend
1	Cyber incidents (e.g. cyber crime, IT failure/outage, data breaches, fines and penalties)	46%	1 (46%)	=
2	Changes in legislation and regulation (e.g. trade wars and tariffs, economic sanctions, protectionism, Brexit, Euro-zone disintegration)	33%	2 (31%)	=
3	Market developments (e.g. volatility, intensified competition/new entrants, M&A, market stagnation, market fluctuation)	25%	3 (28%)	=
4	Business interruption (incl. supply chain disruption)	24%	5 (24%)	+
5	Climate change/increasing volatility of weather	20%	NEW	+



TOP 5 RISKS IN MANUFACTURING (INCL. AUTOMOTIVE)

Source: Allianz Global Corporate & Specialty.
Figures represent how often a risk was selected as a percentage of all responses for that industry sector.
Respondents: 167
Figures don't add up to 100% as up to three risks could be selected.

Rank		Percent	2019 rank	Trend
1	Business interruption (incl. supply chain disruption)	60%	1 (63%)	=
2	Cyber incidents (e.g. cyber crime, IT failure/outage, data breaches, fines and penalties)	34%	3 (29%)	+
3	Fire, explosion	29%	4 (26%)	+
4	Changes in legislation and regulation (e.g. trade wars and tariffs, economic sanctions, protectionism, Brexit, Euro-zone disintegration)	28%	NEW	+
5	Product recall, quality management, serial defects	24%	5 (24%)	=



TOP 5 RISKS IN TRANSPORTATION

Source: Allianz Global Corporate & Specialty.
Figures represent how often a risk was selected as a percentage of all responses for that industry sector.
Respondents: 47
Figures don't add up to 100% as up to three risks could be selected.

Rank		Percent	2019 rank	Trend
1	Business interruption (incl. supply chain disruption)	32%	2 (28%)	+
2	Cyber incidents (e.g. cyber crime, IT failure/outage, data breaches, fines and penalties)	30%	NEW	+
3	Natural catastrophes (e.g. storm, flood, earthquake)	28%	NEW	+
4	Changes in legislation and regulation (e.g. trade wars and tariffs, economic sanctions, protectionism, Brexit, Euro-zone disintegration)	26%	3 (26%)	-
4	Market developments (e.g. volatility, intensified competition/new entrants, M&A, market stagnation, market fluctuation)	26%	4 (22%)	=

TOP 2: Cyber Incidents Business Interruption

Source: Allianz Insurance

6. Real Life

Cyber Attacks Worldwide Real Time



Source: Kaspersky Lab.

7. Why are attacker successful



They are professionals finding vulnerabilities !

They are professionals exploit vulnerabilities !

They are professionally organized !

8. Cyber Attacks in Germany 2020

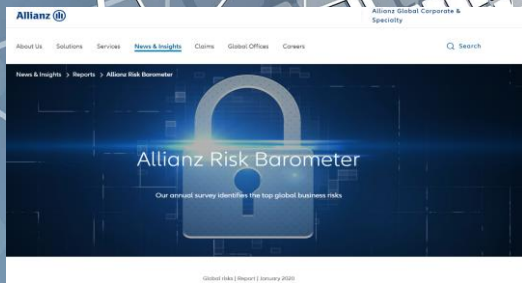
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Date	Company	Attack - Impact
2020-10-14	Software AG	Malware - Data Breach
2020-09-19	UKD	Encryption - Business Interruption
2020-08-18	KME	Malware – Business Interruption
2020-07-20	Netzsch	Encryption – Business Interruption
2020-07-02	X-Fab	Unknown – Business Interruption
2020-06-18	Honda	Encryption – Business Interruption
2020-02-28	GEDIA	Ransomware - Business Interruption

Source: Unternehmen Cybersicherheit

9. How can I defend

Be informed!



Be prepared!

Analyse Threats & Vulnerabilities

Analyse Potential Cyber Risks

Implement Your Risk Treatment Plan

Plan-Do-Check-Act

Repeat

Be organized!

Implement Security Processes

Manage Security Challenges

Sensitize Your Organisation

Stay Alert

Stay Tuned

10. What helps me to be successful

Standards for IT and OT

ISO 27001 & Associated (Organisation&IT)
BSI IT-Grundschutz (Organisation&IT&OT)
CRSC NIST SP 800 Series (Organisation&IT&OT)
CIS Cybersecurity Control Framework (Only IT)
IEC 62443 & Associate (Only OT)

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Best Practise Guides

MITRE ATT&CK IT & OT

<https://attack.mitre.org/>

https://collaborate.mitre.org/attackics/index.php/Main_Page

GITHUB

<https://github.com/>

SOC Prime

<https://tdm.socprime.com/login/>

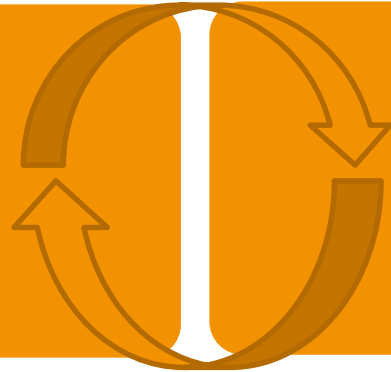
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11. Never Forget The Dependencies

Best Goods Inc.

Product

OT



IT

ICS

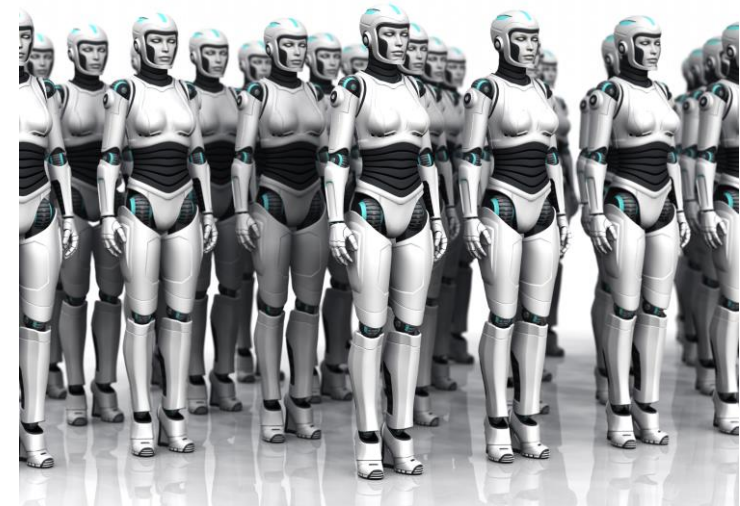
SCADA

DCS

Office

Construction

SAP



We are looking forward to a good co-operation!



LUXEMBOURG - Luxembourg

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With pleasure we are at your disposal for further questions!

www.sec-consult.com

CYBER INCIDENT? CALL +49 30 398 202 777