



Simply in good hands

Marcel Zumbühl,
Group CISO Post
Board Member SPCS
Co-President ISSS

15/12/2025

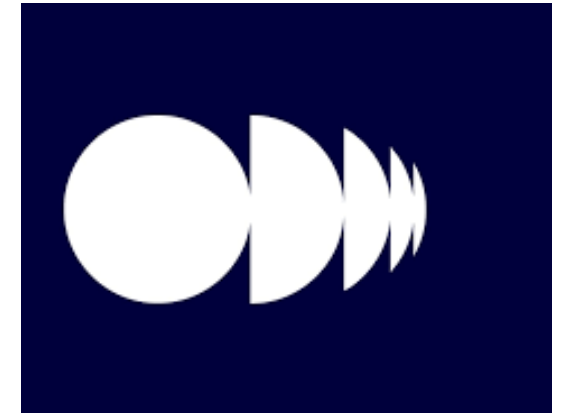


Overview

- **Who we are and why**
- Customer Centricity – Digital Trust
- Resilience – Participatory Security
- Cyber Riskmgmt - Beyond



Swiss Post Group and Cybersecurity



Swiss Post Group and Cybersecurity

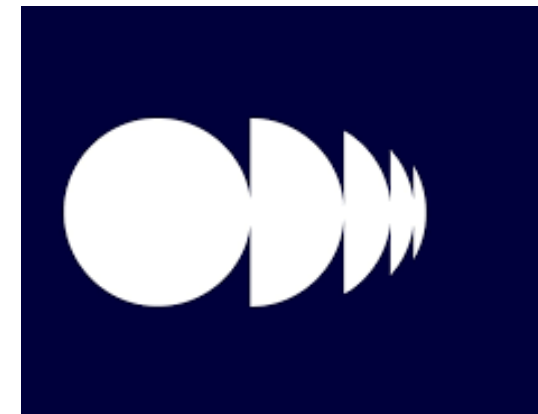
Swiss Post Group – 60'000 employees, 4 markets: Banking, Logistics, Public Transport, Communication Services, 100% stocks held by Swiss Confoederation.

Figures – 7'626MCHF operating turn-over, 324MCHF group profit, 86BCHF assets under mgmt, 183M passengers in Postbus, 76/100 customer satisfaction, 180M parcels

Customer Expectations – Confidence/Trust, Reliability, Speed, Digital Services

Norms and Standards - ISO 27001, ISO 22301, ISO 20000, PCI-DSS, SWIFT, eVoting Certificate, Digital Health Certification

Regulations – Post Regulation, Critical Infrastructure, Swiss Monetary Authority, ISG, Swiss GDPR, Swiss Health Authority



Marcel Zumbühl

Group CISO
Board of Directors

Co-President
Lecturer HSG, UZH, HSLU, Bocconi
Lecturer Uni of Rochester/Bern
Bug Bounty Switzerland
DigitalSwitzerland

Credit Suisse

Swisscom Schweiz
Accenture

Uni Rochester-Bern, IMD, London Business School, Uni Bern

Swiss CISO Award Winner

Married, adult son, CH/ITA dual citizen
Languages, sports, saxophone, carpenter

Swiss Post
Swiss Post Cybersecurity AG

ISSS Information Security Society
Risk Communication, CISO Module
Cybersecurity for Boards
Advisory Board
Cyber Security Committee

CISO Digital Private Banking
Head Security Controls Steering
Chief Security Officer
Mgr Communications & Hightech



Our Vision - Information Security

Freedom for our customers needs trust.

Trust requires secure solutions in the physical and digital world of tomorrow.

Safety is the DNA of our products.
Today for the future.

"Simply in good hands"



Mission

What do we do and what goals do we pursue



Information Security Post

More than 100 employees in 7 teams – Diversity opens perspectives



Security Management

- 1400 Employees in I/T
- >100 Employees in InfoSecurity nationally/internationally connected
- 7x24h Cybersecurity Operations Centres
- 100 Penetration Tests per Year
- 1 One of Europe's largest BugBounty Certified Security



Deferred Attacks per Month

- 20 Directed Attacks
- 200 Attackwaves against Customers
- 8 000 Virus Infection Attempts
- 13 Mio Spam/Phishing

Attack Trends

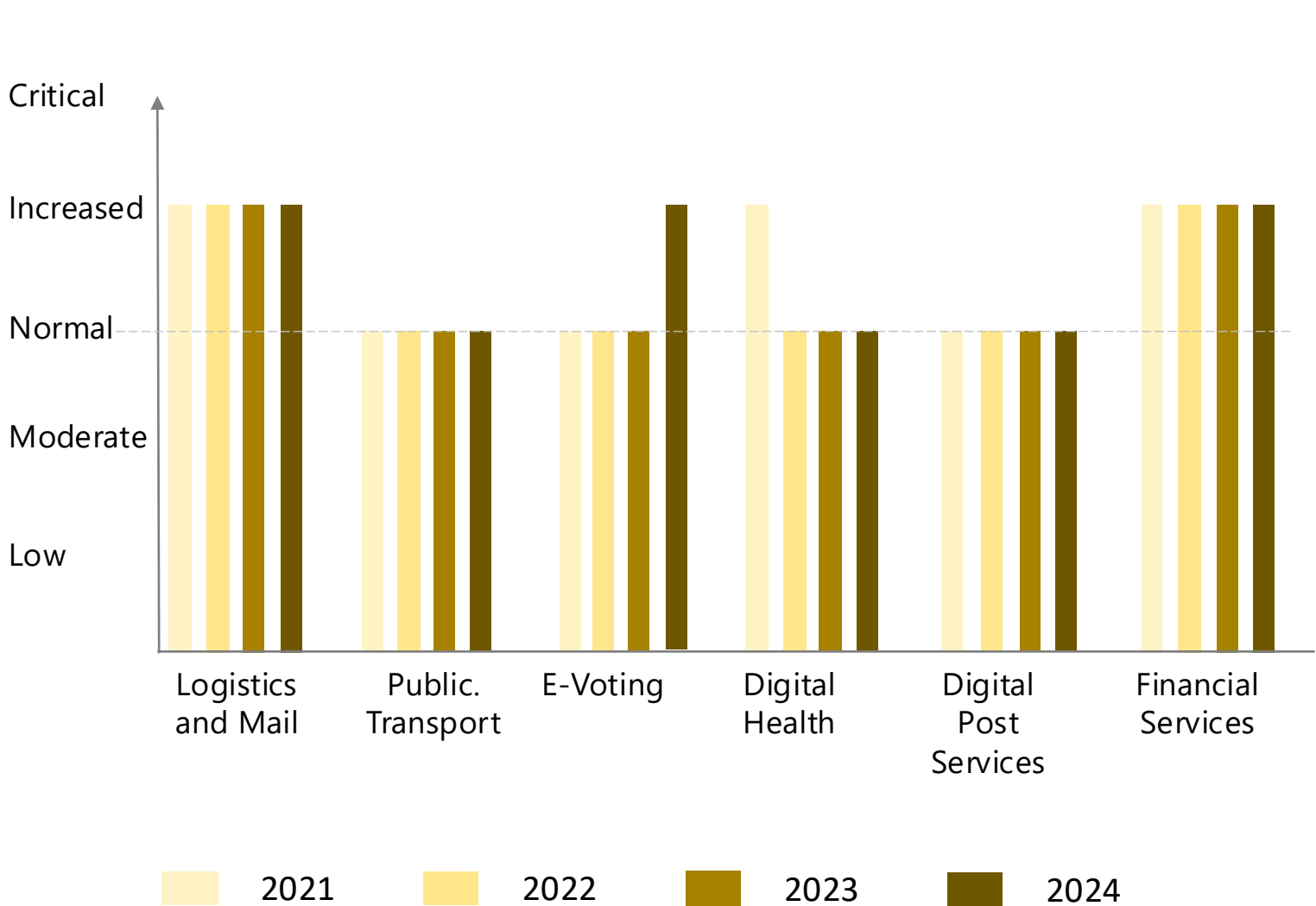
- Identity Fraud
- Online Fraud
- Ransom Attacks

Industries in Target

- Finance and Payment
- Mail/Logistics
- Electronic Voting

Cyber Threat Global View by Market

Attackers worldwide continue to focus on logistics and financial services



Sector	Trend since last report
Logistics and Mail	Attacks on logistics companies and suppliers. New additional focus on maritime logistics
Public transport	Carpools, mobility companies and the automotive industry are the target of data thefts. Acts of sabotage at railway companies EU
E-Voting	Increase in the threat of geopolitical tensions, manipulation/disruption worldwide
Digital Health	Attacks against hospitals, doctors' surgeries and pharmacies remain high. Extortion on impending fines
Digital Post Services	Phishing/spoofing attacks against postal companies remain high
Financial Services	In addition to attacks on financial institutions and credit cards, mobile payment is also incr. being targeted

Information Security Strategy Post

Participatory Security

Spatial Computing

Artificial Intelligence

Operational Tech Security

Machines as Customers

Quantum Computing

Information Security Strategy 2025-2028

Area of Action

Secure Digital Ecosystems
Increase Security Focus with Partners, Fostering Security Culture

Trustworthy Identities
Consolidated, simplified and secure Identity Spaces

New Technologies and Methods
Products and Services at Security State of the Art

Focus 2025

- Embedded Security
- Security in Supply Chains
- Info Leak Prevention
- **Customer Centric FraudMgt**

- Passwordless Self Service
- Seamless Collaboration
- **Identity First Security**
- Mgmt Priviledged Access

- Firewall Management
- **Secure AI**
- **Zero Trust**
- **Quantumproof Cryptography**

Overview

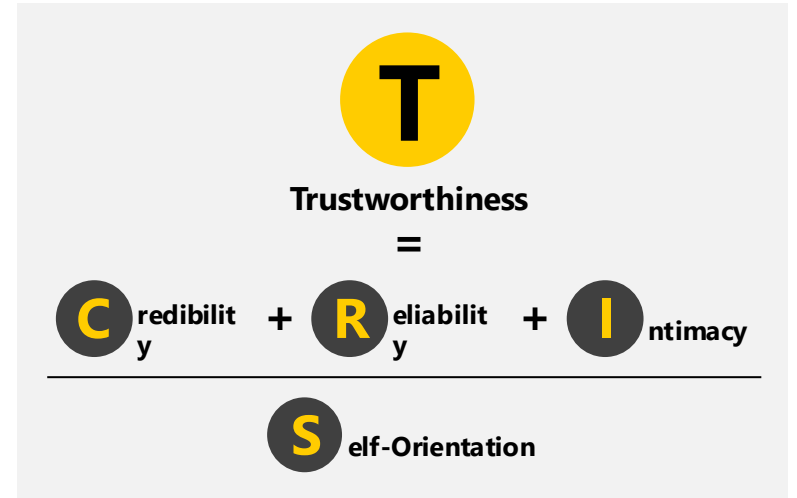
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Challenges of digital trust

Usefulness and perceived personal risk

Trust	Asymmetrical relationship based on perception and experience
Perception is reality	Reasons for trust; who will take care of the case if something goes wrong, and how will I be treated then?
Complexity	Digital systems are very complex and difficult to capture and expand.
Digital trust	Non-experts are supposed to trust systems without being able to look behind the scenes. The perceived personal risk depends on the experience and must correspond to the benefit.
Security is a process	Information security is the key to our customers' success. Safety is based on the interaction between man and machine. Transparent communication helps to weigh up risks and build trust.



Trust in the security of digital products and services

Survey results – Despite efforts the indecisiveness of our customers has increased. Majority positive

2023

Swiss Post is very trustworthy when it comes to the security of digital services.



■ Agree with the statement ■ Rejection of the statement
■ Neutral ■ Don't know

2025

Swiss Post cares for Information Security and Data Privacy



Case Study – Ticket Control

Cyber incidents can build trust. When communication is prompt and transparent.

Starting situation Investigative security researcher finds a gap in the portal of the fare dodger database "ticketcontrol.ch" in November 21 and informs Swiss Post on January 22, shortly before a media report on Swiss television – on a Friday evening.

Reaction Information Security Immediate in-depth analysis of vulnerabilities with the goal of having a whole picture. Information to the Data Protection Authorities. Close the security gap immediately.

Communication Talk about the whole case via PostBus media spokesperson, not just about the points that Swiss television already knows. Show responsibility and show what we learned from it. The resulting media report was smaller than expected.

Opportunity Security incidents are opportunities to show that the company acts responsibly and customer-oriented. If they are mastered well, trust and customer loyalty increases.

Case Study - Ransom Attack

Schweizer Post kämpft gegen Cyberangriff in Deutschland

Von Keystone-sda / cwi, 28. April 2025 um 12:03

SECURITY DIE POST CYBERANGRIFF CYBERCRIME BREACH DEUTSCHLAND



Foto: Die Schweizerische Post

Ein Cyberangriff hat den Betrieb von Swiss Post Cargo Deutschland beeinträchtigt. Dabei sollen auch Kundendaten abgeflossen sein, schreibt die Post

Situation Criminals provoke IT outage

Reaction Taskforce. Damage assessment and containment. Establish emergency operations. In depth analysis and rebuild

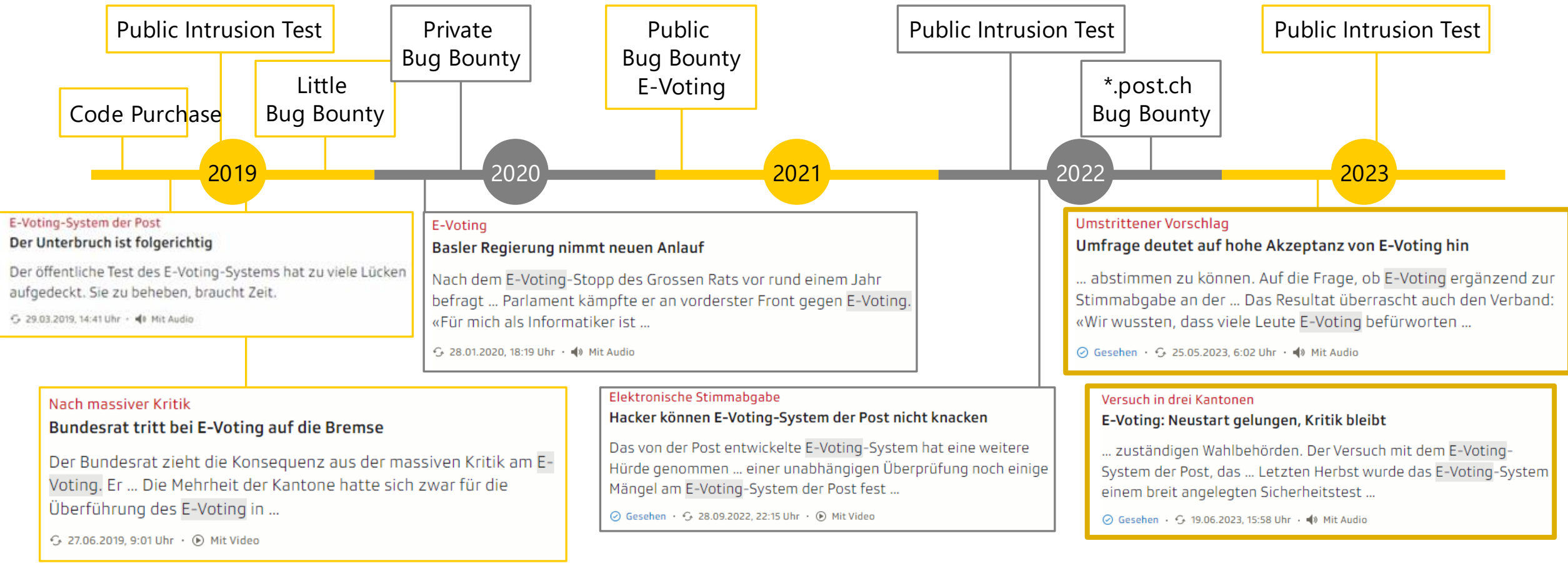
Proactive Comm Proactive. Authorities, customers and media. Media coverage was

Benefit Demonstrate customer focus and responsibility

Learned Don't forget employees. Safe copies of financial data. Call in the pros. No blame game. Blame is on attackers

Case Study – Media Echo E-Voting

Participatory security and transparency lead to positive reporting.



E-Voting-System der Post
Der Unterbruch ist folgerichtig
 Der öffentliche Test des E-Voting-Systems hat zu viele Lücken aufgedeckt. Sie zu beheben, braucht Zeit.
 29.03.2019, 14:41 Uhr · Mit Audio

E-Voting
Basler Regierung nimmt neuen Anlauf
 Nach dem E-Voting-Stopp des Grossen Rats vor rund einem Jahr befragt ... Parlament kämpfte er an vorderster Front gegen E-Voting.
 «Für mich als Informatiker ist ...
 28.01.2020, 18:19 Uhr · Mit Audio

Umstrittener Vorschlag
Umfrage deutet auf hohe Akzeptanz von E-Voting hin
 ... abstimmen zu können. Auf die Frage, ob E-Voting ergänzend zur Stimmabgabe an der ... Das Resultat überrascht auch den Verband:
 «Wir wussten, dass viele Leute E-Voting befürworten ...
 Gesehen · 25.05.2023, 6:02 Uhr · Mit Audio

Nach massiver Kritik
Bundesrat tritt bei E-Voting auf die Bremse
 Der Bundesrat zieht die Konsequenz aus der massiven Kritik am E-Voting. Er ... Die Mehrheit der Kantone hatte sich zwar für die Überführung des E-Voting in ...
 27.06.2019, 9:01 Uhr · Mit Video

Elektronische Stimmabgabe
Hacker können E-Voting-System der Post nicht knacken
 Das von der Post entwickelte E-Voting-System hat eine weitere Hürde genommen ... einer unabhängigen Überprüfung noch einige Mängel am E-Voting-System der Post fest ...
 Gesehen · 28.09.2022, 22:15 Uhr · Mit Video

Versuch in drei Kantonen
E-Voting: Neustart gelungen, Kritik bleibt
 ... zuständigen Wahlbehörden. Der Versuch mit dem E-Voting-System der Post, das ... Letzten Herbst wurde das E-Voting-System einem breit angelegten Sicherheitstest ...
 Gesehen · 19.06.2023, 15:58 Uhr · Mit Audio

What: Headlines – srf.ch

Cyberincidents are not the end of the world

ISSS Courage Award Winner 2025

Underpin customer trust

Be Courageous

Be Proactive

Reach out

Do not become a hostage



Data Sport AG

Overview

- Who we are
- Customer Centricity – Digital Trust
- **Resilience – Participatory Security**
 - > People are the strongest link
 - > Bug Bounty Programme
 - > Security Collaboration with suppliers
 - > Security Champions Programme
- Cyber Riskmgmt - Beyond



People are the Strongest Link

Thanks to courageous employees we detected and stopped a ransomware attack



Attacks – Most attacks target either employees at the periphery of the organisation or top mgmt.

Weak Signals – Attacks are camouflaged and not easily detectable. Watch-out for things that just don't look right.

Speak-Up Culture – Encouraging employees to speak-up allows for early detection of weak signals.

Bug Bounty in a nutshell

Security is a continuous process that Swiss Post takes very seriously as a progressive company.

That's why we work with a global community of ethical hackers to continuously improve our information security.

Interested hunters can apply to participate in the private bug bounty program here:

- **post.ch/bug-bounty**
- **bugbounty@post.ch**



Finding vulnerabilities
(Bugs)



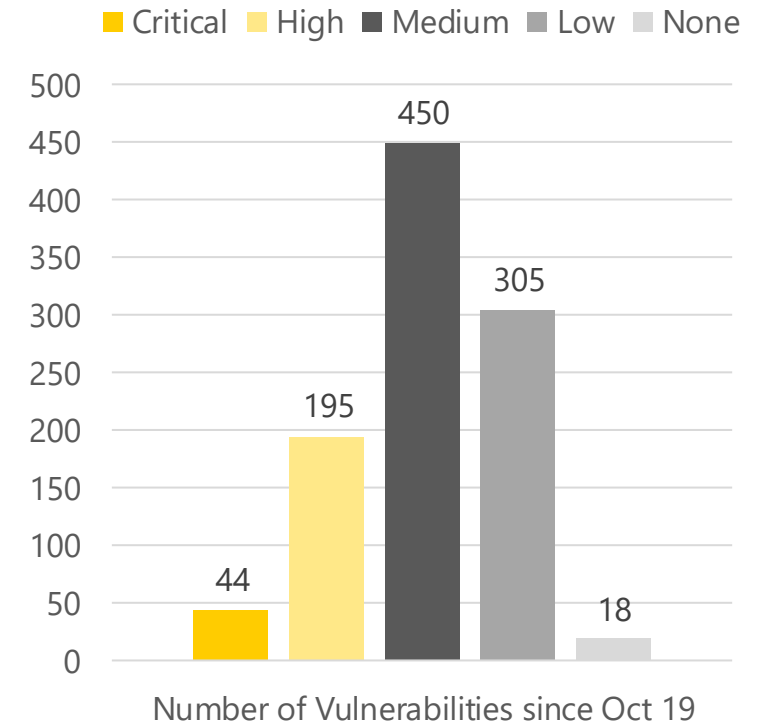
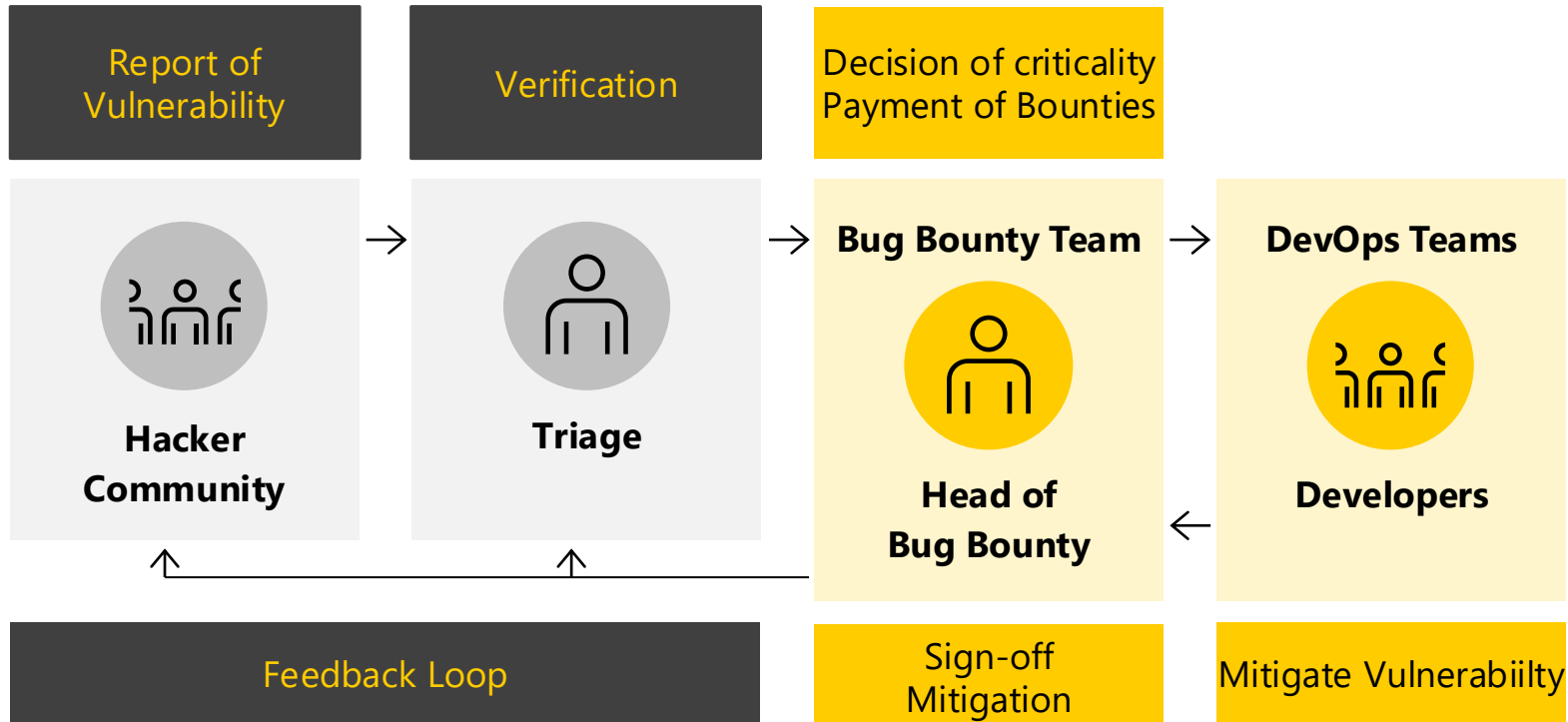
by ethical hackers
(Hunter)



for a reward.
(Bounty)

Bug Bounty Post

Swiss Post is pioneering Bug Bounty in Europe in collaboration with ethical hackers. Post uses the crowd know-how to increase security of all services



Step-by-step improvement of the security maturity

Systematic development of bug bounty programs

Security Challenger



- ✓ Maturity check passed
- ✓ Bugs fixed
- ✓ Transition to public prog



Security Excellence

- ✓ Public Exposure
- ✓ Continuous Improvement

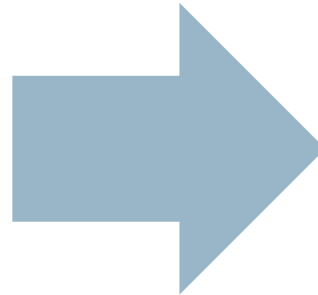
Privates Bug Bounty

Goal - Continuous Testing & Security Transformation

Duration depends on maturity

Bounties max. 5k CHF

Hunters ca. 50



Public Bug Bounty

Goal - Full Insight & Digital Trust Gain

Duration continuous

Bounties max. 10k CHF

Hunters > 1000

Security Champion Community

Developing security with committed people

Contact person – For security-related challenges and questions

Motivator – High security maturity in projects

Promoters – Security is an integral part

Coach – Know-how sharing, security awareness

Technician – Vulnerability Assessment, Threat Modeling, Choice of Analysis Tools, Best Practice



Embedded InfoSec in the Cluster

Cluster Level

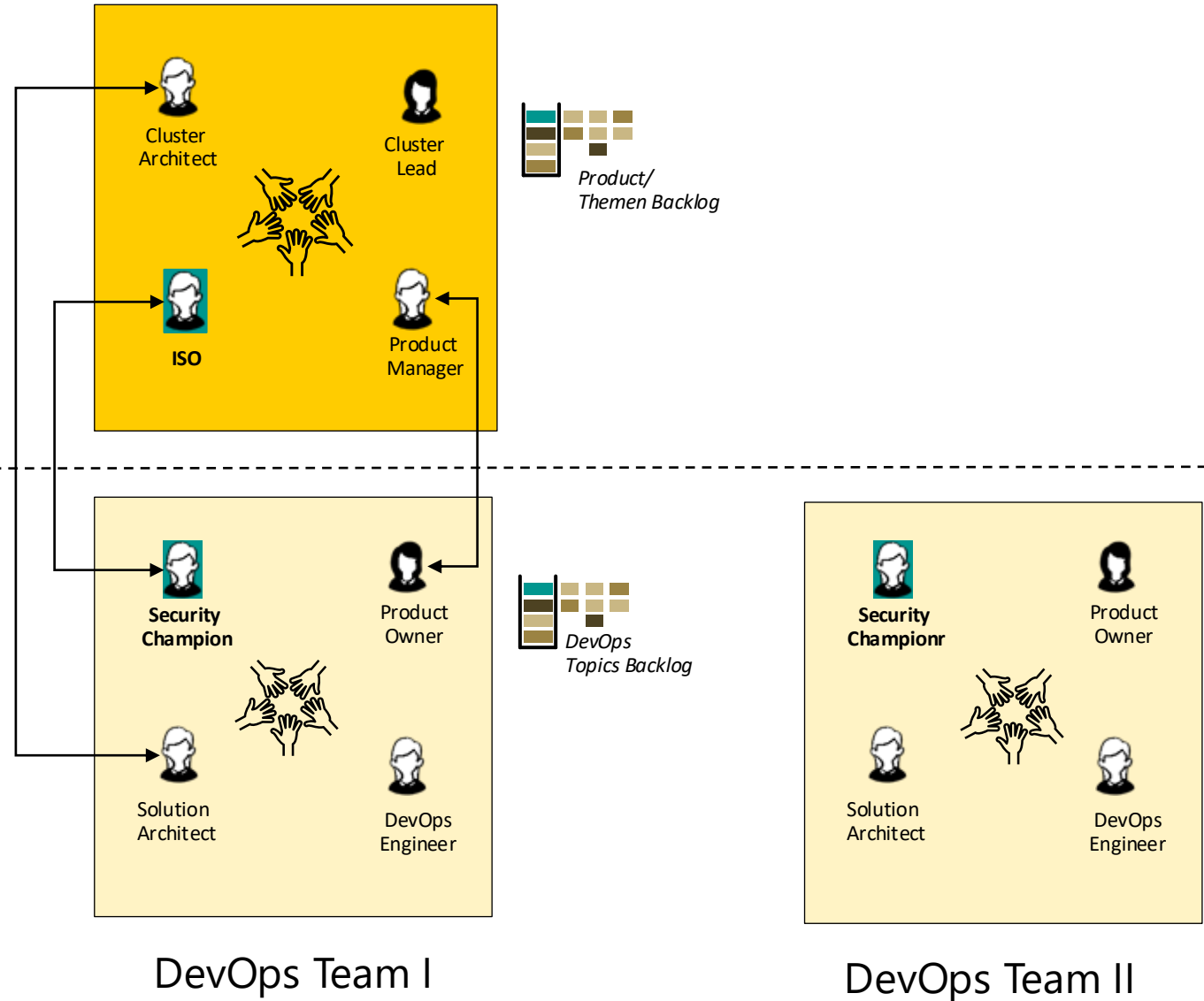
ISO

- Defines the inclusion of necessary security roles
- are informed about developments and risks
- Controls and prioritizes sec requests in the backlog
- is responsible for security documentation
- is an escalation point for the security champions
- Etc

DevOps Team Level

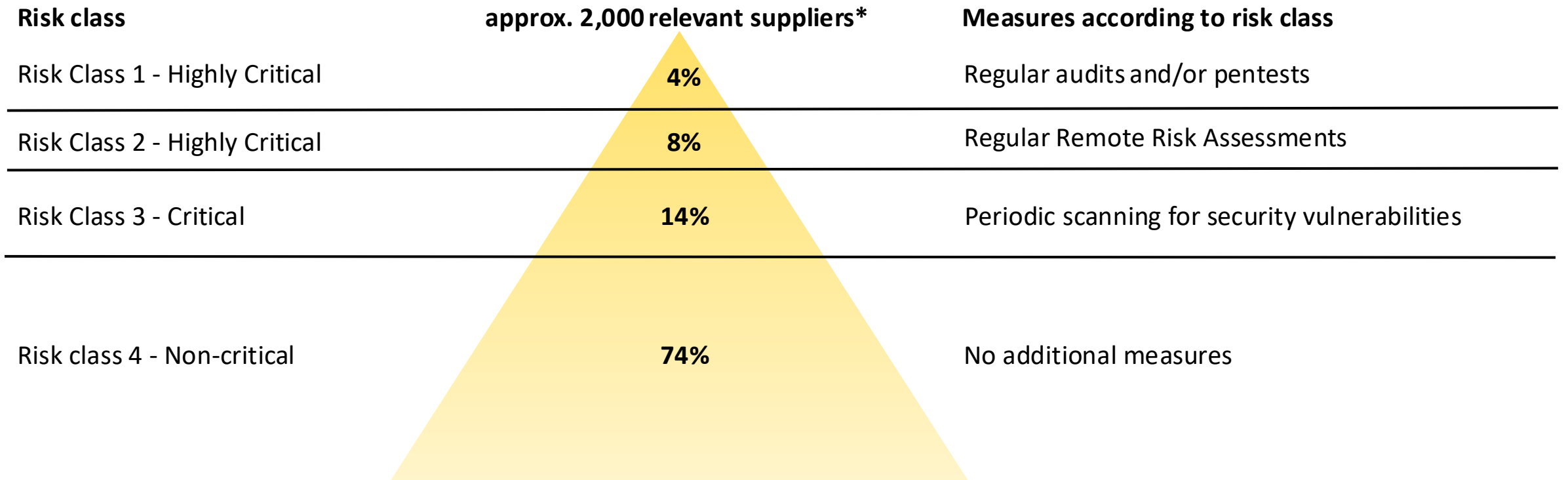
Security Champion

- Controls secure development in Dev with Sec Health Checks, Threat Modeling, etc.
- prioritizes sec requests in the backlog
- escalates to the ISO if necessary
- controls the processing of security documentation
- accompanies findings from audits and test procedures
- Among others



Deep Dive 2: Supplier Security

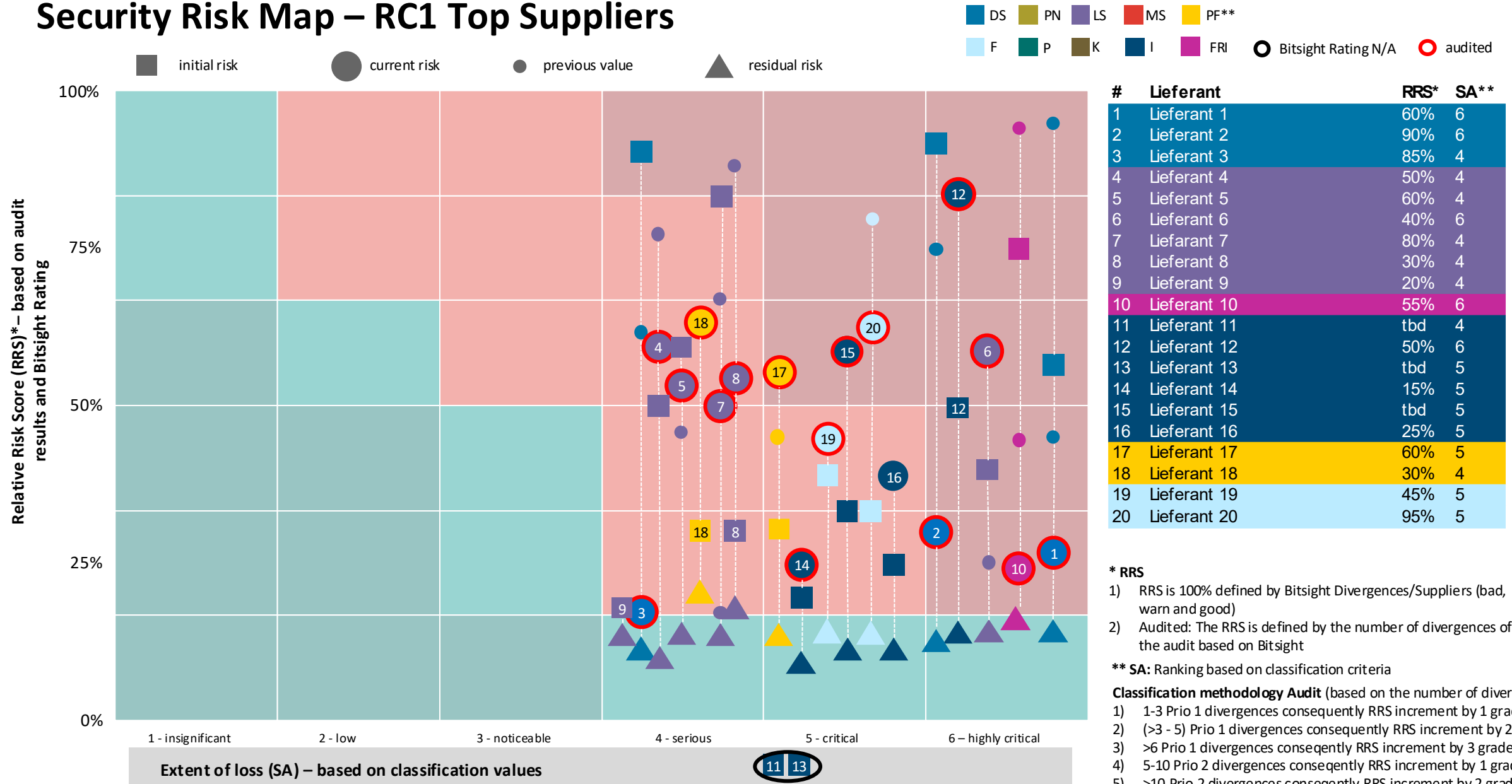
We concentrate on the suppliers that are relevant from an information security point of view and apply different measures for each risk class



Legend

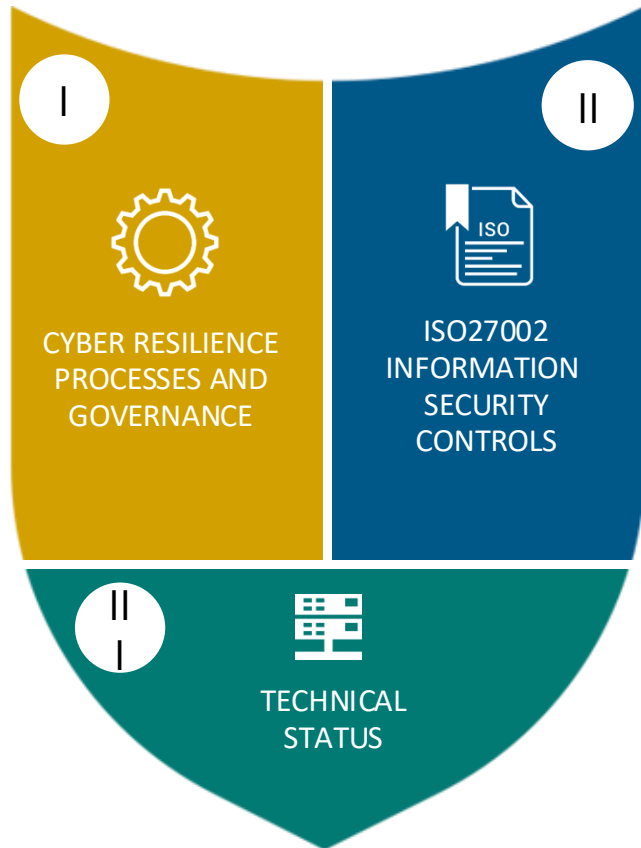
*Estimate at the current time of the project. **Audit** - On-site verification of security - control of contracts etc. **Pentest** – testing of technical protective measures by specialists **Remote Risk Assessment** – supplier is checked using a questionnaire

Security Risk Map – RC1 Top Suppliers



Methodology

Three aspects of the Cybersecurity Matura



Cyber Resilience Maintenance Lifecycle

The CRML is a good practice from practice and enables a holistic view of the maturity in terms of processes and governance.



ISO27002 IT Grundschutz der Post

Swiss Post's IT baseline protection was analysed and simplified to meet the needs of SMEs.



Technical Status Highway Tool

In order to assess the current technical status of the SMEs, the "Autobahn" tool of the post office was used.



A 360-degree view

By applying three different methodologies, it was possible to create a holistic assessment of the maturity with regard to cybersecurity.

Assessment: I. Processes and Governance



General organization

Identification of hazards

Risk assessment

Definition of measures

Implementation of solutions

Testing Effectiveness

Target
backlog create

1. Basis

Details

Processes, activities or internal controls are carried out on an ad hoc basis, are person-dependent, undocumented, incomprehensible and not very reliable.

Effect

High potential for errors, higher costs due to inefficiencies, not sustainable.

2. Informal

Details

Processes, activities or internal controls are in place, but not standardised and only partially documented and therefore not traceable. Specifications are partly available, but not up-to-date and updated.

Effect

Processes, activities or internal controls as well as the updating of specifications are highly dependent on individuals.

3. Standardized

Details

The process landscape and business processes, including controls, are documented.

Specifications are up-to-date, but are not systematically improved and may therefore have shortcomings.

Processes, activities or internal controls carried out are traceable.

Effect

Compliance, efficiency and effectiveness of processes, activities or internal controls are not monitored by the line.

4. Monitored

Details

The principles of how processes, activities or internal controls are to be operated are described in detail.

Specification documents are improved and updated annually.

Effect

Compliance, efficiency and effectiveness of processes, activities or internal controls are monitored by the line by means of key figures.

5. Optimized

Details

Specification documents, processes, activities or internal controls correspond to "best practice" and are constantly improved through benchmark comparisons.

Effect

Compliance, efficiency and effectiveness of processes, activities or internal controls are monitored in real time and with key figures, ensuring a competitive advantage.

Maturity

Evaluation: II. Information security controls

35 checks in 12 categories

Information Security Policies	Organization of Information Security	Human Resources Security	Asset Management
Access Controls	Physical and Environmental Security	Operations Security	Communications Security
Systems Acquisition, Development and Maintenance	Supplier Relationships	Information Security Incident Management	Compliance

Scale



Fulfilled

The requirements according to ISO27002 are currently met.



Partially fulfilled

The requirements according to ISO27002 have been partially met.



Not fulfilled

The requirements according to ISO27002 are not met.



The audited controls are a selection of controls. Thus, this audit does not cover 100% of all controls according to ISO27002.



Organizational

Infrastructure

Environment



Evaluation: III. Technical Weaknesses

- Autobahn is a vulnerability scanner developed and maintained by globally recognized ethical hackers and security experts from Security Research Labs.
- Swiss Post is actively using this tool and is also reviewing its own infrastructure

Relevant aspects of information security	Unnecessary Exposure - Unnötiges Risikopotential	Missing Patches – Fehlende Patches	Insufficient Hardening – Insufficient Configurations, Hardening	Definition: <ul style="list-style-type: none"> • The Hackability Score is the sum of the problems exposed via the Internet, multiplied by their severity class • If a problem type is present multiple times, each additional occurrence will be weighted less to account for the decreasing return from the hacker
Best-Practice	Provide minimal services to hackers	Install security updates regularly	Configure assets securely	
Probability of a cyber security attack	x8	Critical A fix must be done immediately		
	x4	Striking: The correction should be carried out as soon as possible		
	x1	Note: The specifications should be checked and corrected according to ISO27002		

Overview

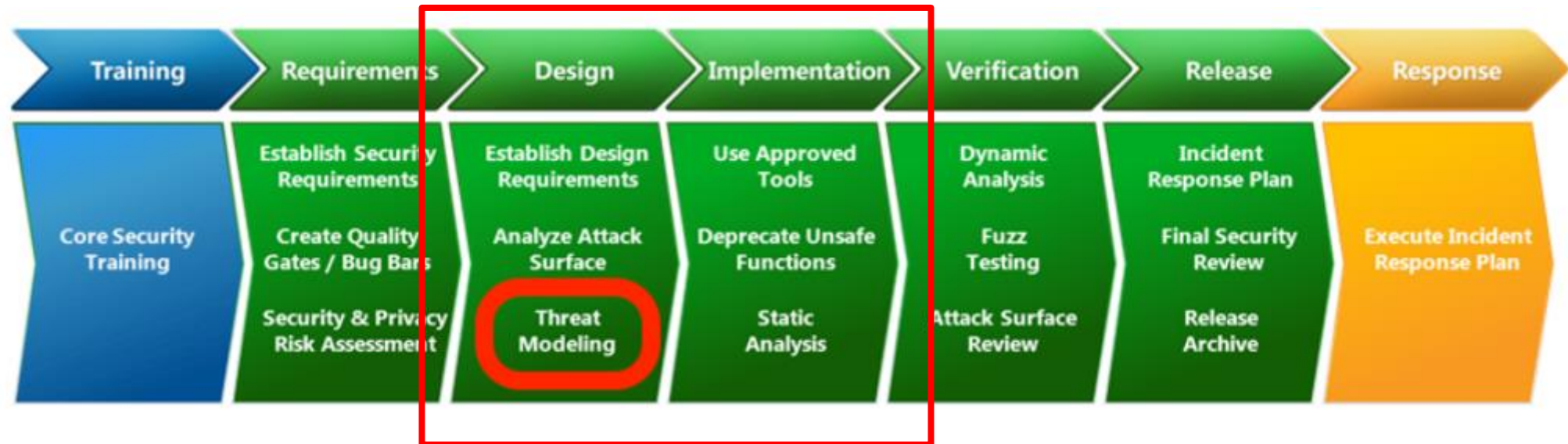
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 - > Threat Modelling and Fair
 - > What lies beyond



Case Study – Threat Modelling (1/3)

Method for risk treatment/communication in development

Threat modeling is best placed in the design phase



Case Study – Threat Modelling (2/3)

General Approach



Case Study – Threat Modelling (3/3)

STRIDE - Spoofing, Tampering, Repudiation, Info Disclosure, Denial of Service, Escalation of Priviledge

Give every threat a priority by rating the risk

Can be as easy as Low/Medium/High based on your gut feeling

Models help to rate more consistently



SPOOFED IDENTITY

Can someone spoof an identity and then abuse its authority?
Spoofing identity allows attackers to do things they are not supposed to do.

KEY CONCEPTS:

- Identity
- Authentication



TAMPERING WITH INPUT

How hard is it for an attacker to modify the data they submit to your system?
Can they break a trust boundary and modify the code which runs as part of your system?

KEY CONCEPTS:

- Validation
- Integrity
- Injection



REPUDIATION OF ACTION

How hard is it for users to deny performing an action? What evidence does the system collect to help you to prove otherwise?
Non-repudiation refers to the ability of a system to ensure people are accountable for their actions.

KEY CONCEPTS:

- Non-Repudiation
- Logging
- Audit



INFORMATION DISCLOSURE

Can someone view information they are not supposed to have access to?

Information disclosure threats involve the exposure or interception of information to unauthorised individuals.

KEY CONCEPTS:

- Confidentiality
- Encryption
- Leakage
- Man-in-the-middle



DENIAL OF SERVICE

Can someone break a system so valid users are unable to use it?

Denial of service attacks work by flooding, wiping or otherwise breaking a particular service or system.

KEY CONCEPTS:

- Availability
- Botnets
- DDoS / DDoSaaS



ESCALATION OF PRIVILEGE

Can an unprivileged user gain more access to the system than they should have?

Elevation of privilege attacks are possible because authorisation boundaries are missing or inadequate.

KEY CONCEPTS:

- Authorisation
- Isolation
- Blind radius
- Remote Code Execution

BoD Example - Cybersecurity Risk Exposure

Effectiveness of measures and transparent communication

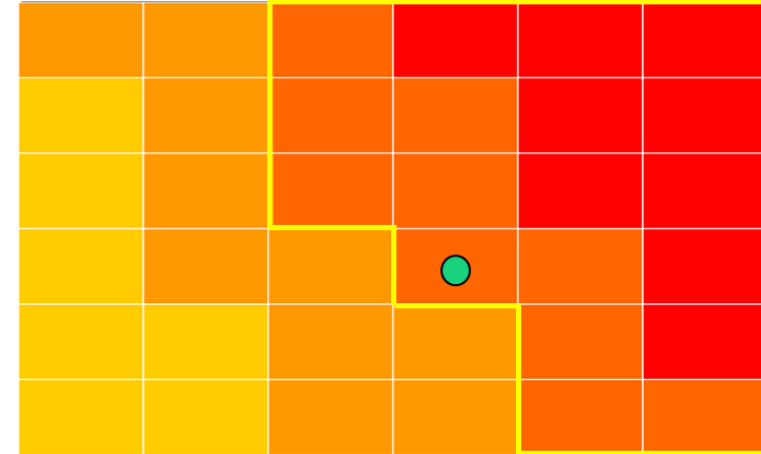
Cyber Risk Post – Calculated using credible worst case method. Scenarios including various topics, e.g. ransom attacks

Ransom Attacks – becoming complex and aggressive. Victims no longer willing to pay and aggressors publish data more frequently. Targets are office IT and increasingly production lines

Swiss Post has a solid defense dispo and a no-pay policy. We focus on recovery and proactive communication

Effective measures – ao offline backup, anomaly detection for OT, security for SMEs and bug bounty programme

Outlook – Increasing complexity of management of ecosystems, cloud, SME, carve outs, artificial intelligence





FAIR – Factor Analysis of Information Risk

Example of Impact of complex attack scenario

	Market 1	Market 2	Market 3	Market 4
Productivity / impact on turnover <i>[KCHF]</i>	0	15'884	13'500	22'917
Reaction, Expenses in IT <i>[KCHF]</i>			8'553	
Replacement and reinvestment IT			1'152	
Cost on reputation <i>[KCHF]</i>	2'679	0	6'500	9'199
Juristic and regulatory related cost <i>[KCHF]</i>	0	500	5'000	0
Loss of competitive advantage <i>[KCHF]</i>	15'418	7'942	10'000	0
Total per market <i>[KCHF]</i>	18'097	24'326	35'000	32'116

Rule of Thumb

Cost of an incident 10 times higher than investment in protection

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Technological Edge

Cryptographic Agility

Identity-Centric Security

Attack Surface Morphing

Agent Based Defence

Virtual Citizenship / Personhood



Welcome to the Mirror Dimension

The Magic has begun

