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NKF Breakfast Workshop

Cyber Attacks in Switzerland and Lessons Learnt in 2019

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INTRODUCTION

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Overview of Cyber Attacks in Switzerland

- Offix-Group
- Meier Tobler
- Crealogix
- Omya
- Auto AG Group in Rothenburg
- Digitec-Galaxus
- Hospital in Wetzikon
- Etc.

Note: only a tiny fraction of Cyber Attacks become publicly known

Possible Explanations

- Change of cybercriminals' focus away from B2C to B2B (=deeper pockets)
- Switzerland popular location for datacenters
- Switzerland has many EMEA headquarters
- Swiss companies massively underestimate the treat of cyber attacks and are not prepared
- Employee awareness training is not sufficient attacks are 99% Spear-Phishing E-mails which employees open accidently
- No interest in implementing IT standards (e.g. ISO)
- Lack of effectiveness of law enforcement

Different Phases of Incident Management

Mainly Ransomeware Attacks in 2019



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Different Phases



During Incident

Signs of Cyber Attack



Phases of Management during Incident



Response Level depends on Impact



Four Classes of Incident Responses



Stakeholders

Primary Stakeholders

- Internal stakeholders (response team)
- DPO
- Customers/Clie nts/vendors/ suppliers
- Employees
- Group entities
- Affected Individuals
- Insurer

Secondary Stakeholders

- Specialized security organizations (NCSC, FedPol)
- Regulatory/ Supervisory Authorities
- Privacy Commissions

Other Stakeholders

- The Media
- Federal/regional law enforcement
- Voluntary information sharing organizations

Checklist During Incident

- ✓ Record the issues and open an incident report
- ✓ Convene the Incident Response Team
- Convene a teleconference with the appropriate internal stakeholders to discuss what must be done in order to restore operations
- Convene a management teleconference with the appropriate internal stakeholders in order to provide situational awareness to executive management
- ✓ Triage the current issues and communicate to executive management
- Identify the initial cause of the incident, and activate the specialists to respond to the current issues to restore operations
- Retain any evidence and follow a strict chain of evidence to support any needed or anticipated legal action
- Communicate to affected third parties, regulators, and media (if appropriate)

Example of Event and Incident Flow Chart



Template for Incident Report

- Incident Current Assessment
- Background
- Summary Conclusion
- Breach Factor Assessment
- Legal Notification Requirements
- Communication Plan
- Remediation
- Incident Response Activities
- Takeaways/Lessons
- Open items

Lessons Learnt During Incident Management

- Time is of essecense in the first 24 hours
- Go offline
- Cooperate with police and other cybersecurity organizations
- If forensic teams are not delivering, do not be afraid to exchange
- Holistic approach: communication is key, but has legal impact on many areas:
 - Force major clauses in customer/client contracts
 - Insurance coverage
 - Litigation
- Divide forensic report in two parts: forensic analysis and recommendations
- Talk to other impacted companies

Precautionary Measures

How does Ransomware get installed?

Attacker sends malicious e-mail



E-mail contains link to malicious website or infected attachment

Examples for malicious software: Emotet or TrickBot Access to infected computers are "offered for sale" in internet forums

How does Ransomware get installed?, cont.







Criminals request ransom

Laws and Standards



Organizational Measures

Assess effects of IT	Identify IT assets	Define work around
failure on your	critical for ongoing	solutions in case of
business	business	IT failure
Create incident response team including relevant points of contact	Create incident response plan including reporting process	Implement and test incident response plan

Organizational Measures, cont.

Train employees on breach awarness, employee responsibility and reporting process Keep knowledge base on security threats updated (e.g. MELANI cyberincident releases) Assess risk associated with company information publicly made available on website

Ensure security throughout entire life cycle of IT assets up to disposal Define appropriate password policy, use two factor authentication

Technical Measures

Use appropriate Virus protection

Protect corporate network with firewalls

Ensure regular data backups, ensure back-ups are stored offline

Ensure log files are kept for every critical system. Review log files for suspicious entries

Separate networks where possible/ appropriate

Technical Measures, cont.

Ensure all system/security updates are regularly installed Use appropriate spam filters to block harmful e-mails/ attachement/ macros

Limit usage rights to what is required for relevant tasks

Ensure encryption of sensitive data, in particular on mobile devices Ensure proper authentication in case of remote access

Notification of Authorities

Does Ransomware Attack trigger «Data Breach» that is to be notified?

Usually ransomware "only" encrypts data/system

causes loss of availability of data and business interruption

does not causes access to (personal) data and/or misuse of (personal) data

but one cannot definitely conclude that incident is unlikely to result in a risk to the rights of data subjects

therefore notification recommended on a precautionary basis

Notification Duties

Be prepared duties before cyber attacks hot something goes limited to data wrong breach	Be prepared		
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Distinguish between notification duties under data protection and other laws

Distinguish between notification duties in CH and abroad

Notification Duties in Switzerland



- No mandatory notification duty
- Voluntary notification to MELANI (Reporting and Analysis Centre for information Assurance)
- Current legal system under review

- Mandatory reporting obligations in various sectors
- Not cyber specific
- e.g. Art. 11/22 KEG (Kernenergiegesetz)
 - Art. 23 LFG(Luftfahrzeuggesetz)
 - Art. 8 StromVG (Stromversorgungsgesetz)
 - Àrt. 29 FINMĂG

Notification Duties in the EU



- Mandatory notification duties
- Duty to notify supervisory authority Art. 33 GDPR
- Duty to notify data subjects Art. 34 GDPR



- Mandatory reporting obligations
- Not necessarty cyber-specific

Notification Duties in other Jurisdictions

Data protection

- Possibly mandatory notification duties including:
- Duty to notify authorities, e.g. Canada
- Duty to notify data subjects, e.g. Canada

Sector specific

- Possibly mandatory notification duties
- Not necessarily sector specific
- e.g. tax authorities in Brazil

Do Swiss Companies have to notify in the EU?

What about GDPR?

- Yes, in two cases:
 - Establishment in Union Art. 3 (1) GDPR "processing of personal in the context of the activities of an establishment in the Union"
 - Targeting data subjects in Union Art. 3

 (2) GDPR
 "processing of personal data of data subjects in the Union by controller/processor not in the Union, where processing activities are related to (i) offering of goods/services to data subjects in the Union or (ii) monitoring of their behaviour in the Union"

Specific Issues for Group of Companies headquartered in Switzerland

Which would be the "lead supervisory authority" according to Art. 56 GDPR?

Can group benefit from one-stop-shop principle under Art. 56 GDPR

Lead supervisory authority is the authority of "main establishment" Main establishment is "place of central administration in the Union, unless decisions on data processing are taken in another establishment in the Union" Art. 4 (16) GDPR Specific Issues for Group of Companies headquarterd in Switzerland, cont.

On 21 January 2019 CNIL imposed financial penalty of EUR 50 m against Google LLC

Google's European headquarters are located in Ireland

CNIL did not consider such headquarters as "main establishment" in Union under GDPR

CNIL did not consider European headquarters to have decisionmaking power on processing operations

CNIL thus denied the Irish DPA to be the lead authority and imposed fine on Google LLC (U.S.)

Conclusions for Group of Companies headquartered in Switzerland

If Swiss headquarter has decision making power for processing operations one-stop-shop principle not applicable

Nofifications to be made in each EU jurisdiction where data breach occured

Exposes group to risk of accumulation of fines

CNIL decision critized, but still to be considered

Does appointment of representative according to Art. 27 GDPR change assessment?



THANK YOU

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