Federal IT Steering Unit (FITSU) Federal Intelligence Service (FIS)

Reporting and Analysis Centre for Information Assurance (IA)
MELANI

National Strategy for the Protection of Switzerland against Cyber Risks

ITU Cybersecuirty Workshop: Cybersecurity and Cyber Risk Assessment in Practice Geneva, 26 January 2017

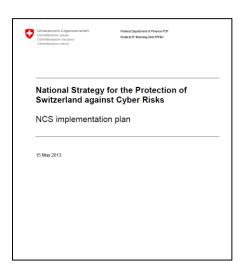
Stefanie Frey, Coordinator National Cyber Strategy (NCS), MELANI IA/FITSU, Federal Department of Finance (FDF)



NCS and Cyber Risk Assessment



National Strategy for Switzerland's protection against Cyber Risks (NCS) 7 Spheres of Action (16 Measures)



Research and Development

Risk and Vulnerability
Analysis

Competence Building

Continuity and Crisis
Analysis

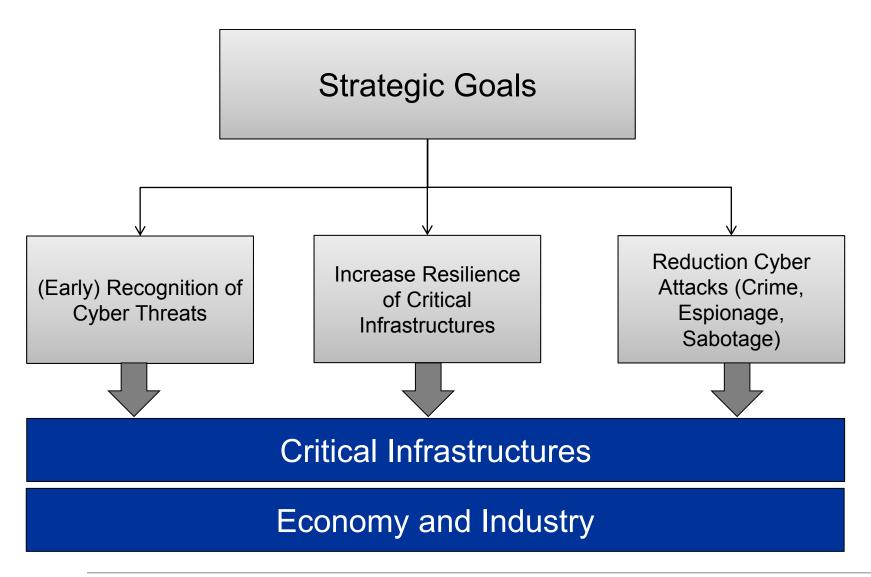
Legal Basis



- Identification of ICT-Vulnerabilities
- Strenghten Resilience against Cyber Risks



Strategic Goals





28 Critical Sectors and Sub-Sectors

	Public Administration	Parlament, government, justice and administration	
		Diplomatic Missions	
		Research institutions	
		Cultural properties	
	Energy	Oil supply	
		Natural gas supply	
		Power supply	
	Waste disposal	Waste	
	•	Waste water	
	Finances	Banks	
		Insurances	rs
rs			to
to	Health	Medical care and hospitals	ec
Critical Sectors		Laboratories	9-c
	Industry	Chemistry and alternative medicine] Ins
<u>8</u>	industry		= =
1		Machine, electro industry	<u>::</u>
J	Information and	Information technology	Critical Sub-sectors
	communication technology	Media	0
	· ·	Postal services	
		Telecommunication	
		refeccionitation	
	Food	Food supply	
		Water supply	
		I	
	Public safety	Armed forces	
		Civil protection	
		First responders (police, firse services)	
	Transport	Road transport	
		Rail transport	
		Air transport	
		Navigation	

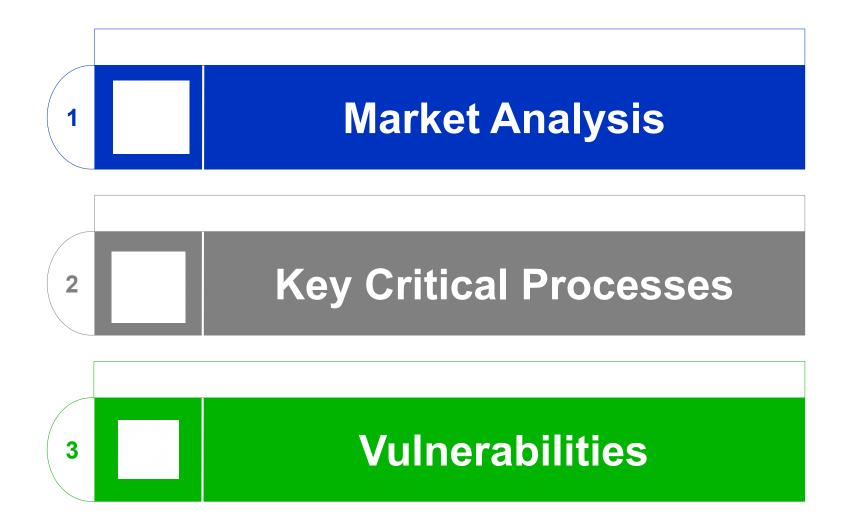
Source: National Strategy for the protection of critical infrastructures, FOPP



Cyber Risk Assessment of CIIP

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Methodology





Point of Departure

Focus on Vulnerability Assessment AND NOT Risk Assessment



Classical Approach



Likelihood of Occurence



Extent of Damage



Problem



- Insufficient Information on likelihood of occurence and extent of damage
- Unknown vulnerabilities and a lack of information
- Estimation of likelihood and extent of damage difficult
- → Quantitative approach not effective



Solution

Qualitative Approach

Qualititative Analysis of Vulnerabilities and definition of suitable measures to improve security and resilience

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Swiss Aviation



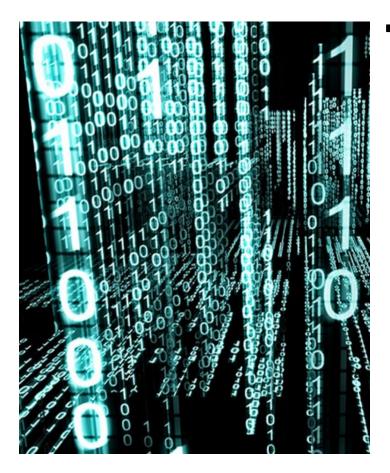
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Vulnerability of processes

The vulnerability of processes and sub-processes was determined using the following weighted criteria:







Thank You for Your Attention

Dr. Stefanie Frey
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