

GEODE Spring Seminar 2018

Grid Operators protecting the Systems

Best Practice in Cyber Security

Armin Selhofer



**Digital
Transformation**

**Internet
of
Everything**

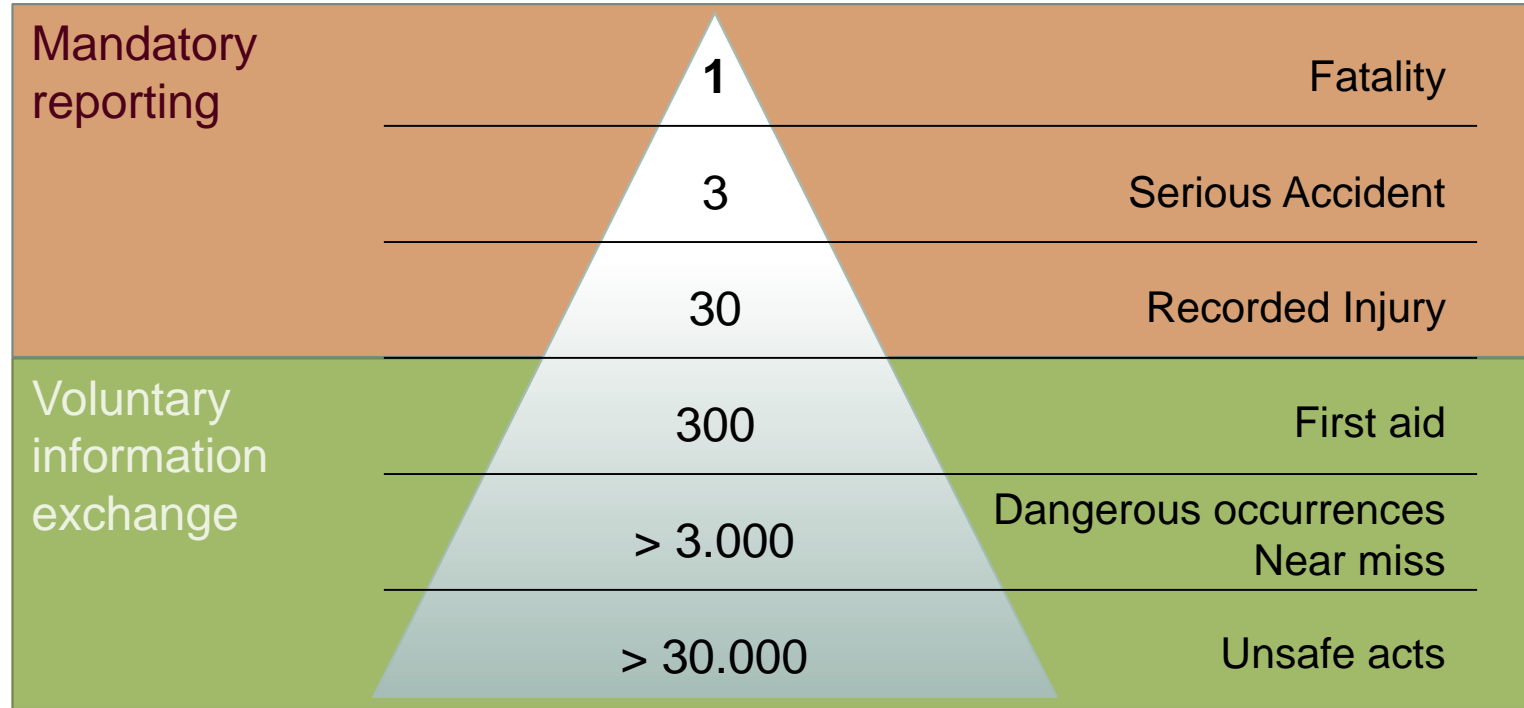




**CYBER
ATTACKS
AHEAD**



Accident Pyramid – towards prevention and resilience



e oesterreichs
energie.



black out

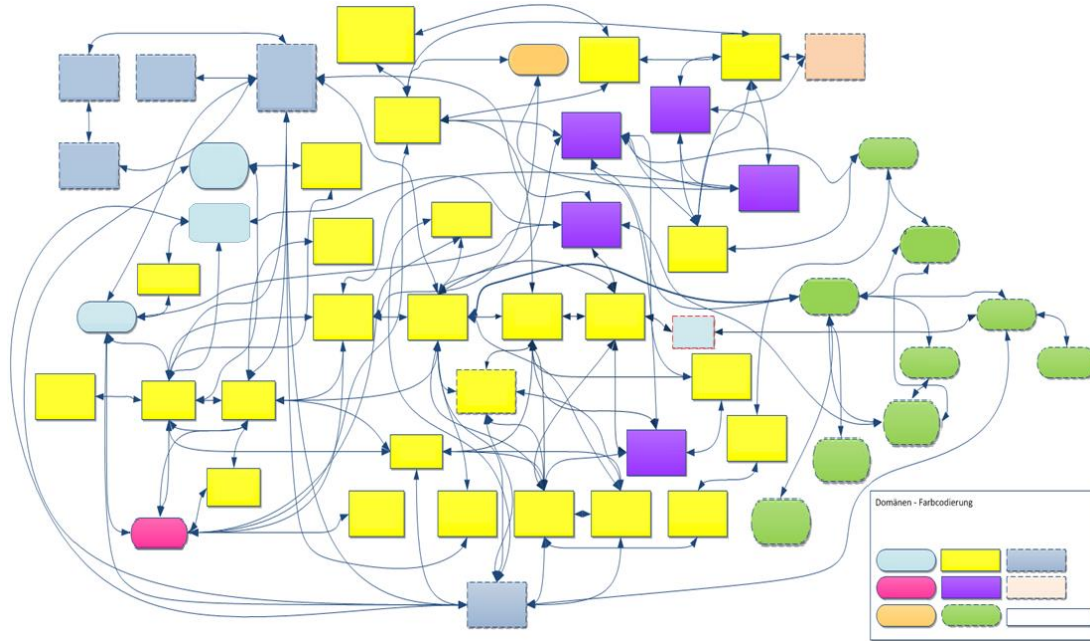
Risk Assessment

a **long-lasting** and
large-area black out
caused by **ICT-issues**



Not considered: commercial threats

ICT-Risk Assessment Energy



Project Partners, besides Energy Utilities

 Federal Chancellery

 Bundesministerium
Inneres
Federal Ministry
of the Interior



Ministry of Defence

Governmental CERT
GovCERT  AUSTRIA

 Federal Ministry
Sustainability and Tourism



Energy Regulator

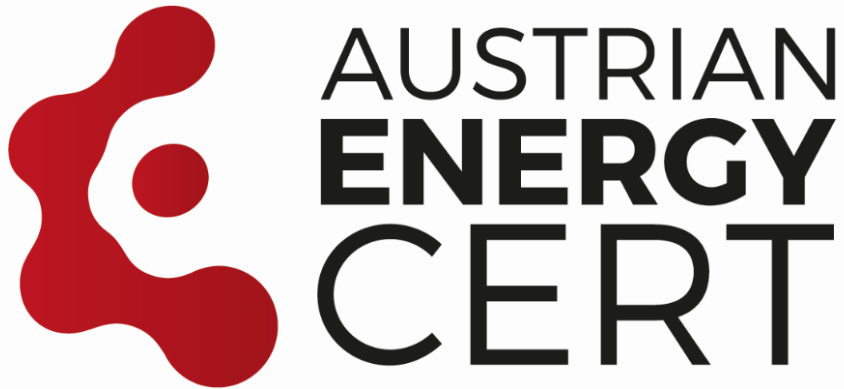
E-CONTROL

Output

- ~70 common individual risks
+ ~20 specifically related to Electricity (Smart Metering)
- ~16 aggregated risks
- ~ 40 aggregated measures

		Risiken				
Ereignishäufigkeit	häufig			12, 13	14	
	öfters	8	1, 3, 10, 11, 12	5	7	
	gelegentlich	4, 10	2, 3, 4, 11	5, 11, 13, 14, 15	9	
	seltener	15, 16	3			
	unwahrscheinlich					
		5	4	3	2	1
		katastrophal	sehr hoch	hoch	mittel	gering
		Schwere der Auswirkungen				

Sectoral CSIRT



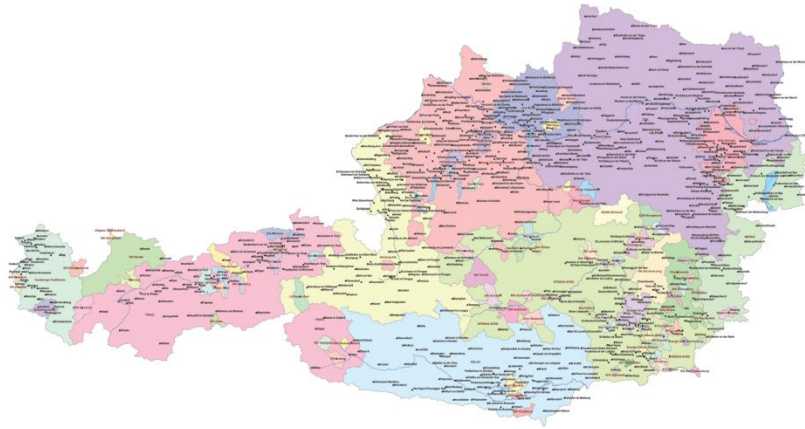
- One for all
- Harness synergies
- Use resources efficiently
- Focus knowledge and expertise
- Merge situation report
- Linked with Government and National CERTs

Austrian Energy CERT integrates the Energy Industry of the Country

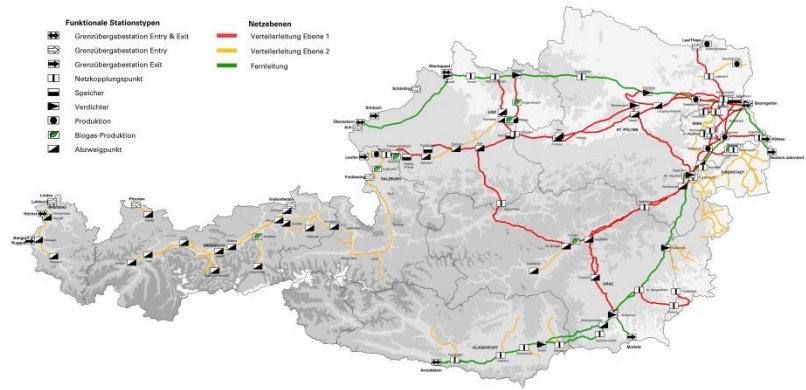


100% Coverage

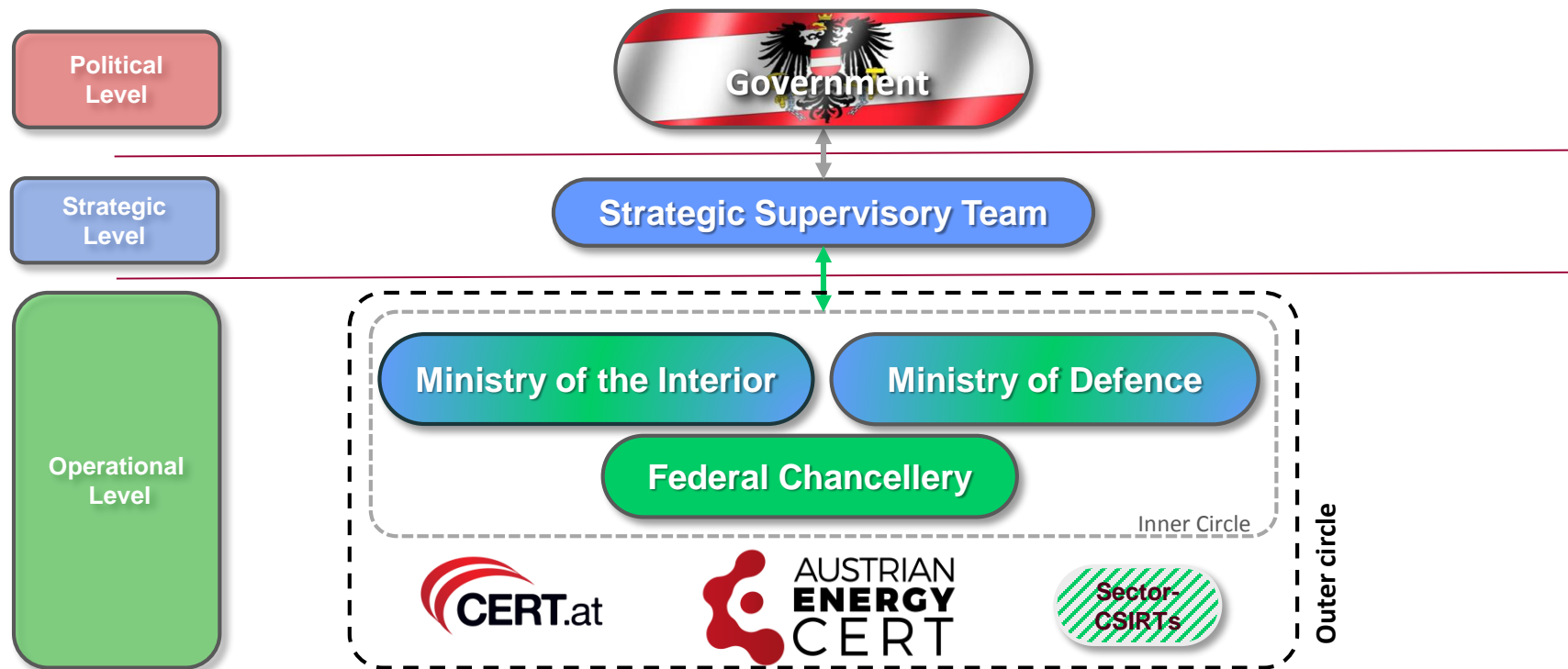
Electricity



Gas / Oil

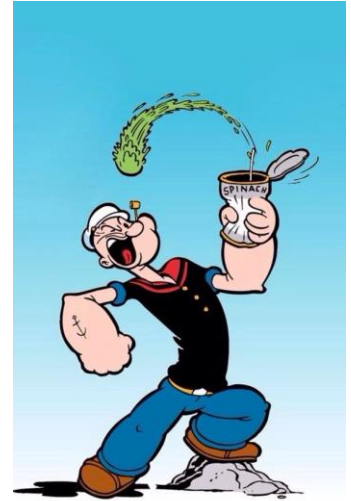


National Framework in Austria for NIS-Reporting



Summary

- Trust, trust, trust
- Collaborate
- Form Public-Private-Partnerships
- Take the initiative!
- Share information early!
- Find like-minded ones
- Think out of the box
- Capacity building
- Be prepared!



That's all folks!

Association of Austrian Electricity Companies

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