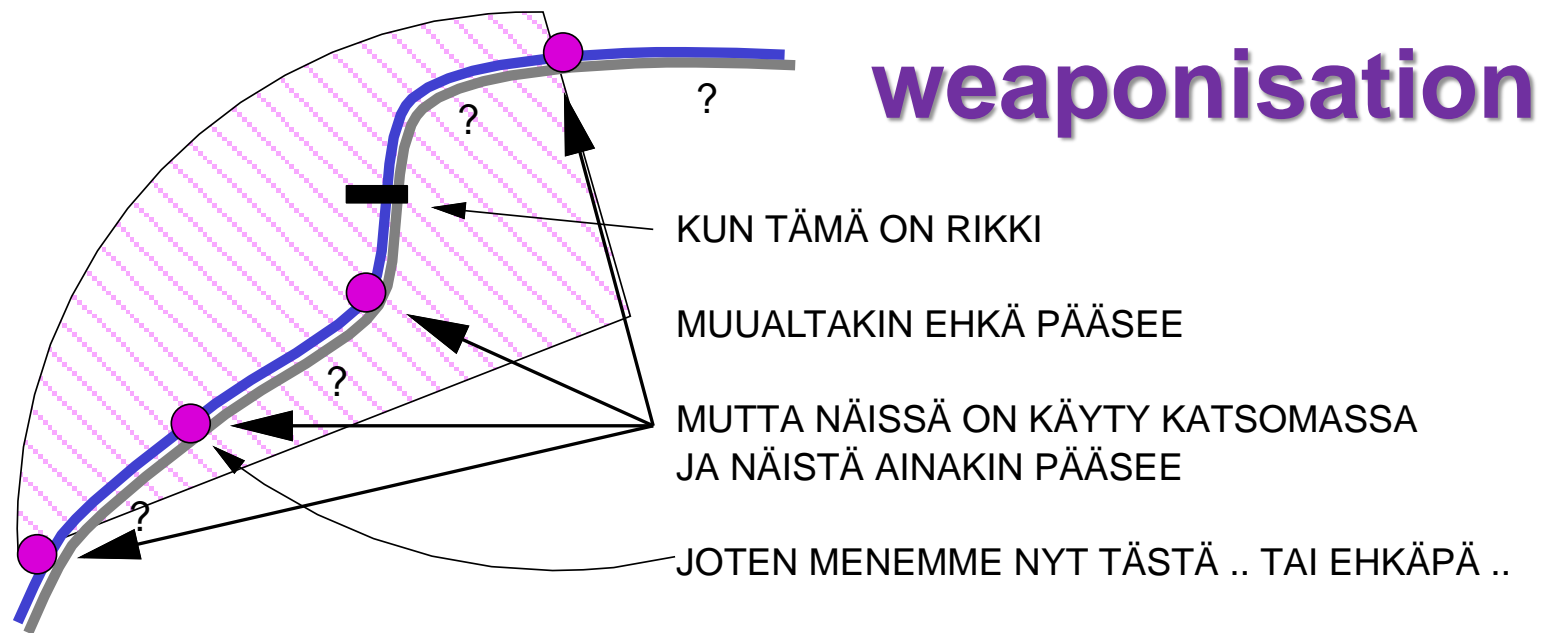




Cyber as keys to other hybrid weapons – and vice versa





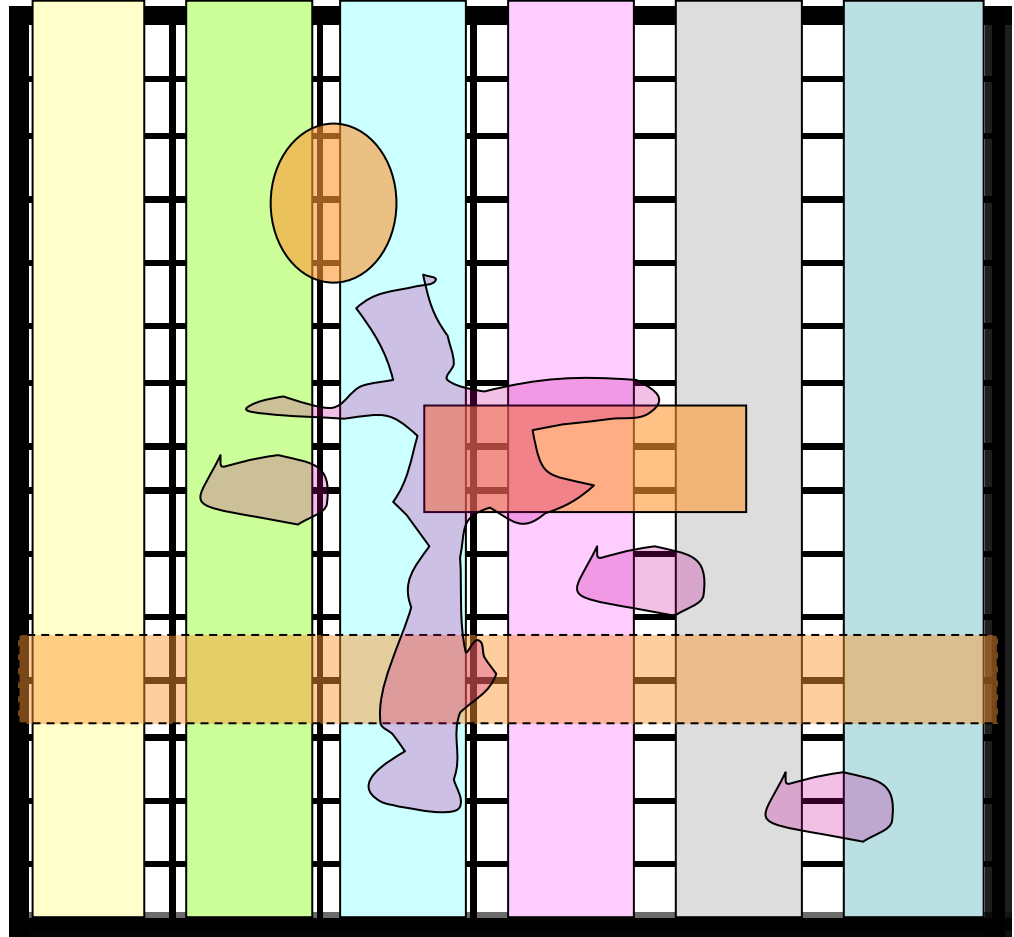
Security strategy vs cyber strategy

Annex 3

Serious disturbances in the telecommunications and information systems – cyber threats

POSSIBLE DISTURBANCES AND THEIR CONNECTION TO THREAT SCENARIOS IN THE STRATEGY

Disturbance	Threat Scenario						
	1	2	3	4	5	6	7
Disruption in the availability, transmission and distribution of electricity	x	x	x	x	x	x	x
Disruptions in the functioning of telecommunications and information systems	x	x	x	x	x	x	x
Damage in the ICT infrastructure	x	x	x	x	x	x	x





Cybers and other fields of hybrid

1 Block the use .. public service, lock computer, hijack mower fear everything smart

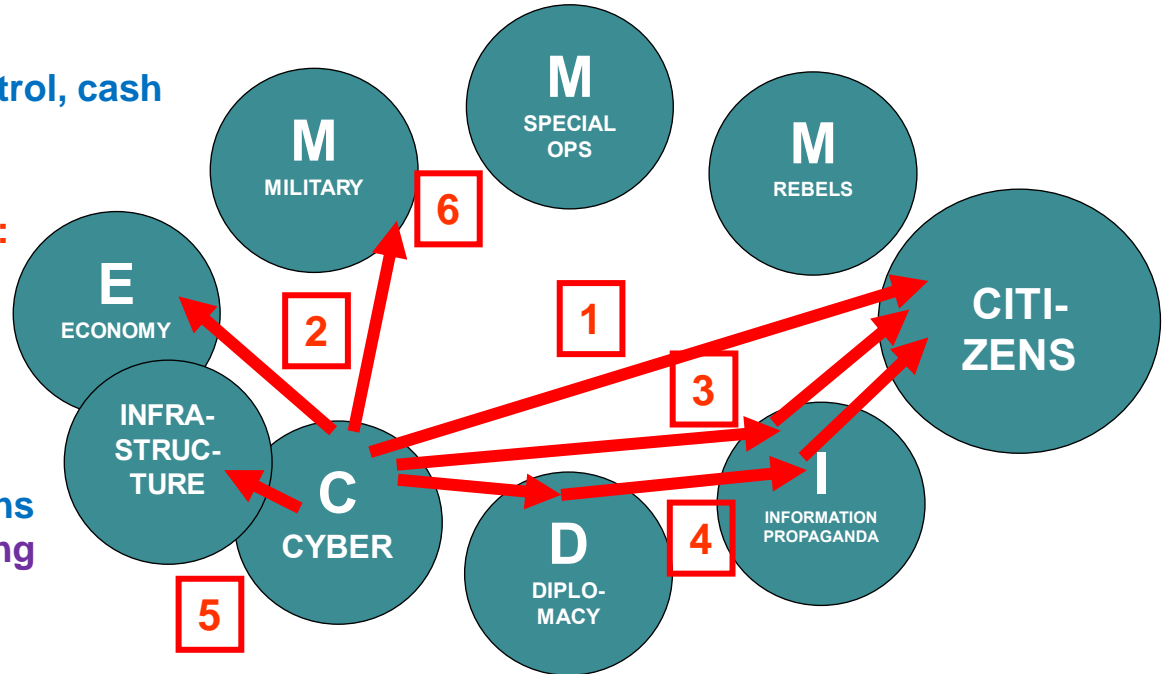
2 Stop invoices food, petrol, cash "hoard while you can"

3 Robotized information: quantity&speed vs quality

4 Steal, use and publish "secrets" to use = decisions, plans publish = timing, altering

5 Block and break the system ... paper mill, water station (IIoT)

6 Inside and offside of weapon systems .. GNSS, EW, HPM, EMP .. intel & targeting



Kyber ja informaatio – hybridin parivaljakko – Pimeyden professori | Apu





Ease of use

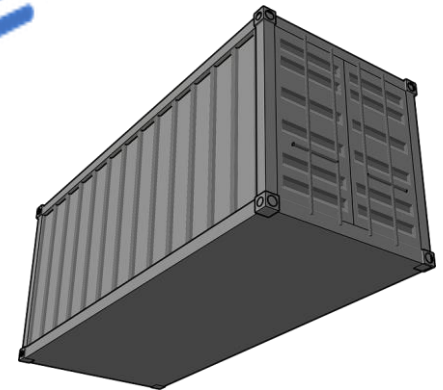
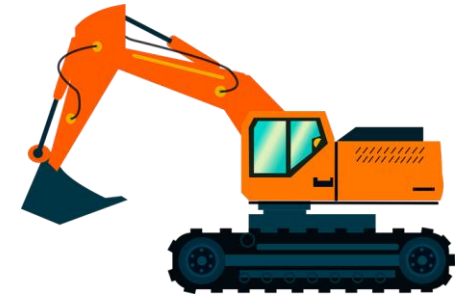
- DDOS ... (buy) load and use
- mass intel ... use "fools" ... take ransom
- crowdsource and direct
- 0-day attack ... until the next day
- APT important targets & long time & resources
- "we are in"
 - are we?
 - where are we?
 - are we still in?
 - is that the red button?
 - will it stop or even break?
 - can we get out without a trace?





Physical aspects

- Datacentre
- Fibre-optic cables
- GPS jamming (EW)
- HPM pulse
- EMP pulse



Verkkotaistelu 2020 (2004)
Kybertaistelu 2020 (2015)

