



Elementen van de Belgische cyberdefense (military)

LtKol De Bruycker, Infosec & Cyber Defence,
Algemene dienst Inlichtingen en Veiligheid

Cyber Attack?



- A Cyber Attack is deliberate action
 - to **disturb the proper functioning** of an ICT System. (Denial Of Service)

Visible
System
Down

- to **intrude** into an ICT System and
 - read, change, inject or delete information (espionage)
 - misuse its abilities

Invisible





Cyberdefense

Protection of our “own”

Networks & systems

Against cyber attacks

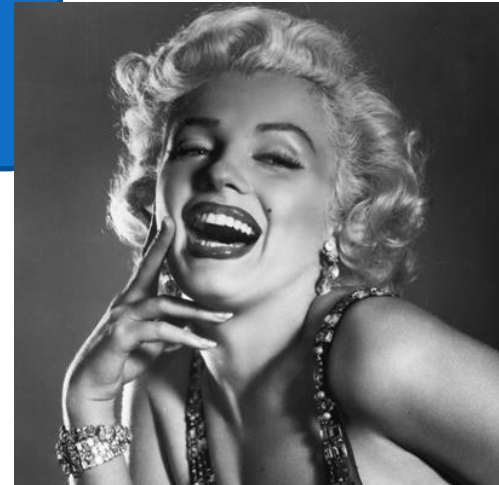
What do we need?

More rules or laws



- Probably yes, but..
 - Laws only help if you can enforce them
 - Laws hinder the defender and don't stop the attacker ...

*If I'd observed all the rules,
I'd never have got anywhere*



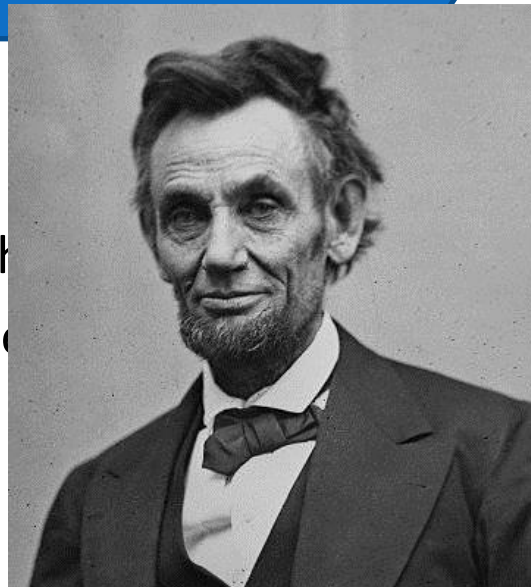
Cyber deterrence



The probability that we may fail in the struggle ought not to **deter** us from the support of a cause we believe to be just



- the retaliator must
 - Have the means to react
 - Convince the aggressor that
 - Prevent collateral damage





Collaboration

- It takes two to tango

- Trust
- Win-Win

- Exposure risk

- Knowledge proliferation
- If you know what I can detect, you also know what I can't
- Technology advantage (**single use** weapons & expiration date)

- You can own weapons, but what about people?

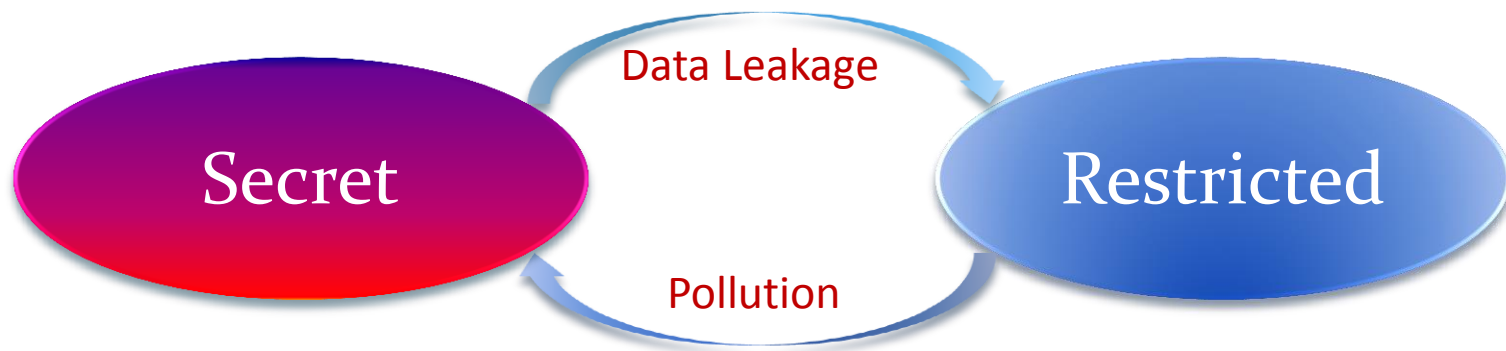
- It's hard to talk about incidents, detection technologies...

A launch a cyber attack against B
B have no cyber capabilities to respond
B retaliates with ...

Protect CIS



- Knowledge & Awareness
 - Users & management must be aware of the risks
- Secure systems
 - *Yes we can* seriously improve security with limited extra cost
 - Build-in security (by design)
 - Integrated security & vulnerability management (BYOD)
 - Military grade security networks!
 - Multi-domain & multi-level secure gateways



Detect



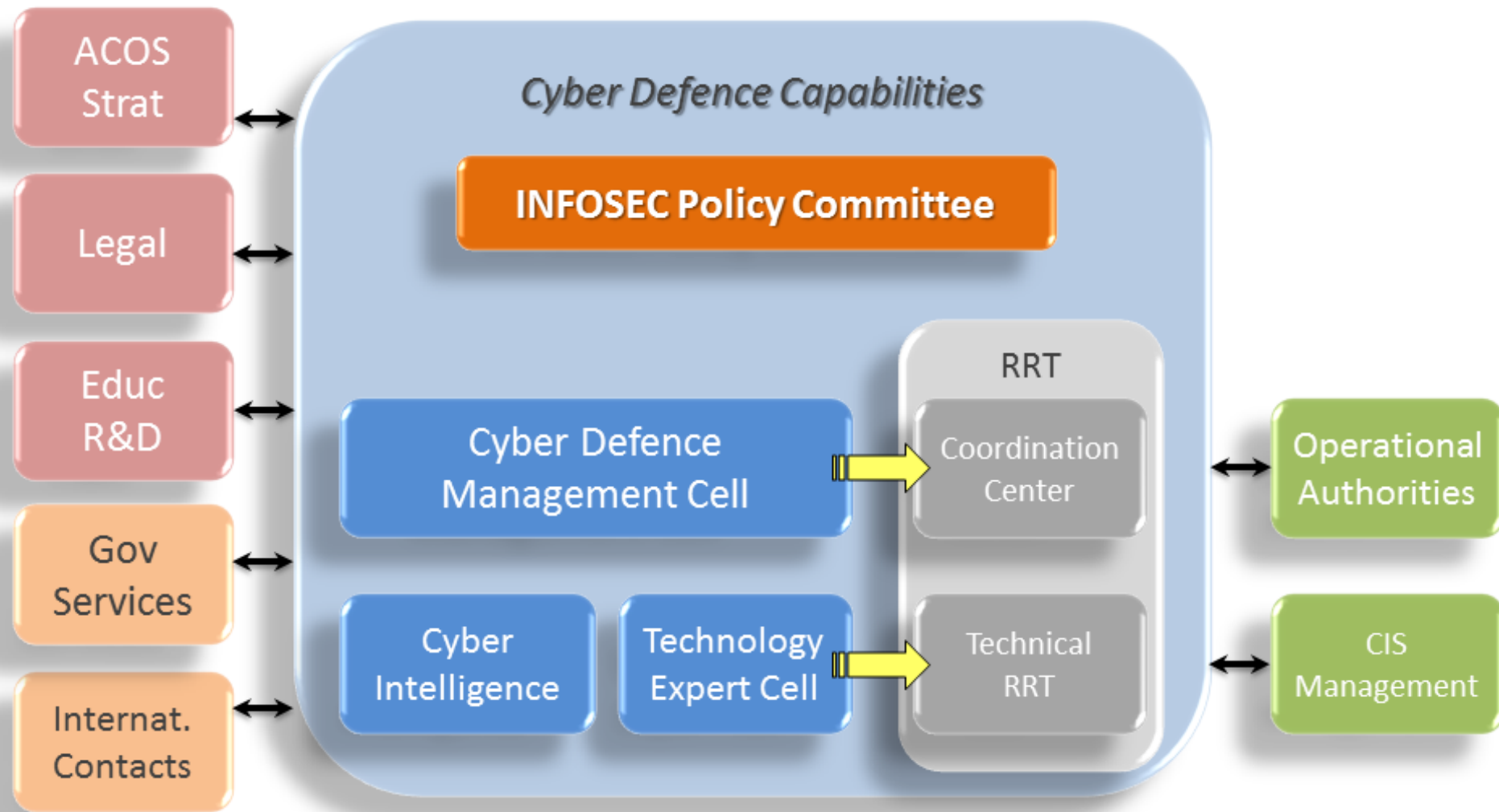
- Network monitoring
 - Intrusion Detection Systems
 - Cyber Security Operations Centres (SCOC)
- Advanced detection techniques
 - Non signature based
- Technical information exchange (intrusions)

Respond



- *Reach out to official services*
- Incident handling processes
- Malware analysis
 - Automated & through collaboration
- Digital forensics

Belgian Defence - Cyber Defence Architecture





Questions?