Offensive cyber operations

operations to

manipulate, deny, disrupt, degrade, or destroy

targeted computers, information systems or networks.
Cyber weapons: a narrow definition

software and IT systems that, through ICT networks, cause destructive effects and have no other possible uses
Software that could be used to destroy

Software that can only destroy

Software that could only destroy
Recommendation 1

• Affect vulnerability and exploit markets
  • Vulnerability Equities Process
  • Encourage patching
Recommendation 2

• Promote focussed operations
  • Eg Stuxnet, Sony Pictures, Islamic State
  • Due diligence in containing effects

• Measure damage
  • Mostly based on public companies
  • Enables and justifies proportionate responses, encourages specific operations
Recommendation 3

Invest in transparency and confidence building

- Internal to state and likely hidden
- Strategic intent developed
- Resources committed
- Offensive capabilities developed
- Offensive cyber operation launched
- External and potentially visible
  - Intelligence gathering
  - Operational preparation of environment
  - Offensive cyber effects observed
Summary

Offensive cyber operations manipulate, deny, disrupt, degrade, or destroy

Talking about cyber weapons is pointless

Affect the offensive cyber environment