Ius in bello: recent trends in cyber

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ISRAEL – HAMAS

DDOS attacks

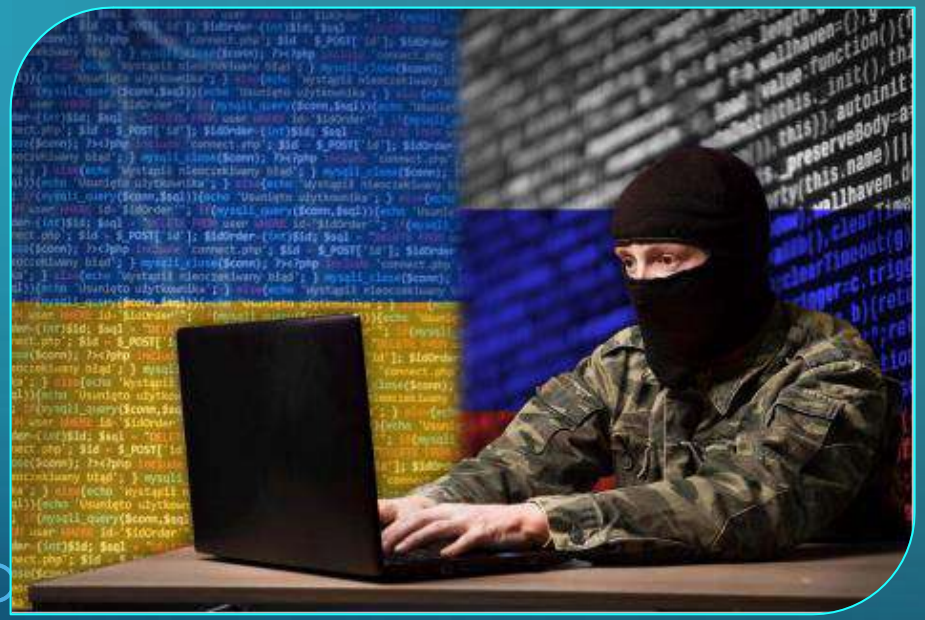
Wiper malware

Hack and release

Mass phishing campaigns

Mobile spyware

UKRAINE - RUSSIA



Attacks on critical infrastructure

DDOS Attacks

Data weaponization

Global IT-army

Private sector

CHALLENGES IN CYBERSPACE

1. Whether IHL applies

2. How IHL applies

1. WHETHER IHL APPLIES

- WWW: the World Wide Web or the Wild Wild West?
- 2021 Report UN Group of Governmental Experts (UN GGE)
  - "**international humanitarian law applies** only in situations of armed conflict. It recalls the established international legal principles including, where applicable, the principles of humanity, necessity, proportionality and distinction that were noted in the 2015 report. The Group recognised the need for further study on how and when these principles apply to the use of ICTs by States"

1. Whether IHL applies

1. Treaties on IHL
   - art. 36 AP I
2. Case law of the ICJ
   - Nuclear weapons AO
3. State practice
   - France, Netherlands, US, Norway, Chile, Peru, India, Italy....
   - UN GGE + UN OEWG
   - International organizations: EU, NATO, OAS
4. Legal Doctrine
   - Tallinn Manuals

1. Limited progress

- E.g. Draft 3rd Annual Progress Report OEWG

2. Backtracking on commitment: legitimizing cyber war

2. HOW IHL APPLIES

Dual-use objects and cyber?

Principle of Proportionality?

Cyber = attacks under IHL?

Hackers = Directly Participating in Hostilities?

Cyber and conflict qualification?

Principle of Distinction?

Civilian data = civilian object?

Attribution?

Principle of Precaution?

Role of private sector?

Specific protections?

Cyber and the weapons review obligation?

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2.1 CHALLENGE 1: CYBER AS AN 'ATTACK'?

- Application essential rules often depend on whether the cyber operation is an "attack":
  - The principle of distinction (AP I, Art. 51-52)
  - The principle of proportionality (AP I, Art. 51(5)(b))
  - The precautionary principle (AP I, Art. 57(1))

2.1 CHALLENGE 1: ATTACK?

- Art. 49 AP I - definition of attacks and application
  - "*'Attack' means: acts of violence directed against the opponent, whether offensive or defensive.*"

- Tallinn Manual, Rule 92:
  - "*A cyber attack is a cyber operation, offensive or defensive, that can reasonably be expected to cause injury or death to persons or damage or destruction to property.*"

2.1 CHALLENGE 1: ATTACK?

cyber operations that (may) cause death, injury or physical damage

cyber operations causing indirect damage

Cyber operations that result in a loss of function (object = unusable)

1. Functionality disrupted + replacement of physical components

2. Reinstallation of the operating system or certain data.

3. Loss of usability is sufficient

4. "Temporality" and "irreversibility"?

2.1 CHALLENGE 1: ATTACK?

- What if we adopt a strict definition of "attack"?
- Still certain protection?
    1) Some rules that apply to all "military operations"
    2) Specific protection afforded to certain categories of persons and objects
        - Objects indispensable to survival of civilian population
        - Medical services

2.2 CHALLENGE 2: DATA = CIVILIAN OBJECT?

- Do civilian data enjoy the same protection as civilian objects?
- Relevance:
  - Principles of distinction,
  - Principle of proportionality, and
  - Precaution principle.

2.2 CHALLENGE 2: DATA = CIVILIAN OBJECT?

Data belonging to certain special categories with specific protection

Manipulating/deleting data resulting in death, injury or physical damage

Do NOT result in death, injury or physical damage (e.g., delete or manipulate data)

Multiple views

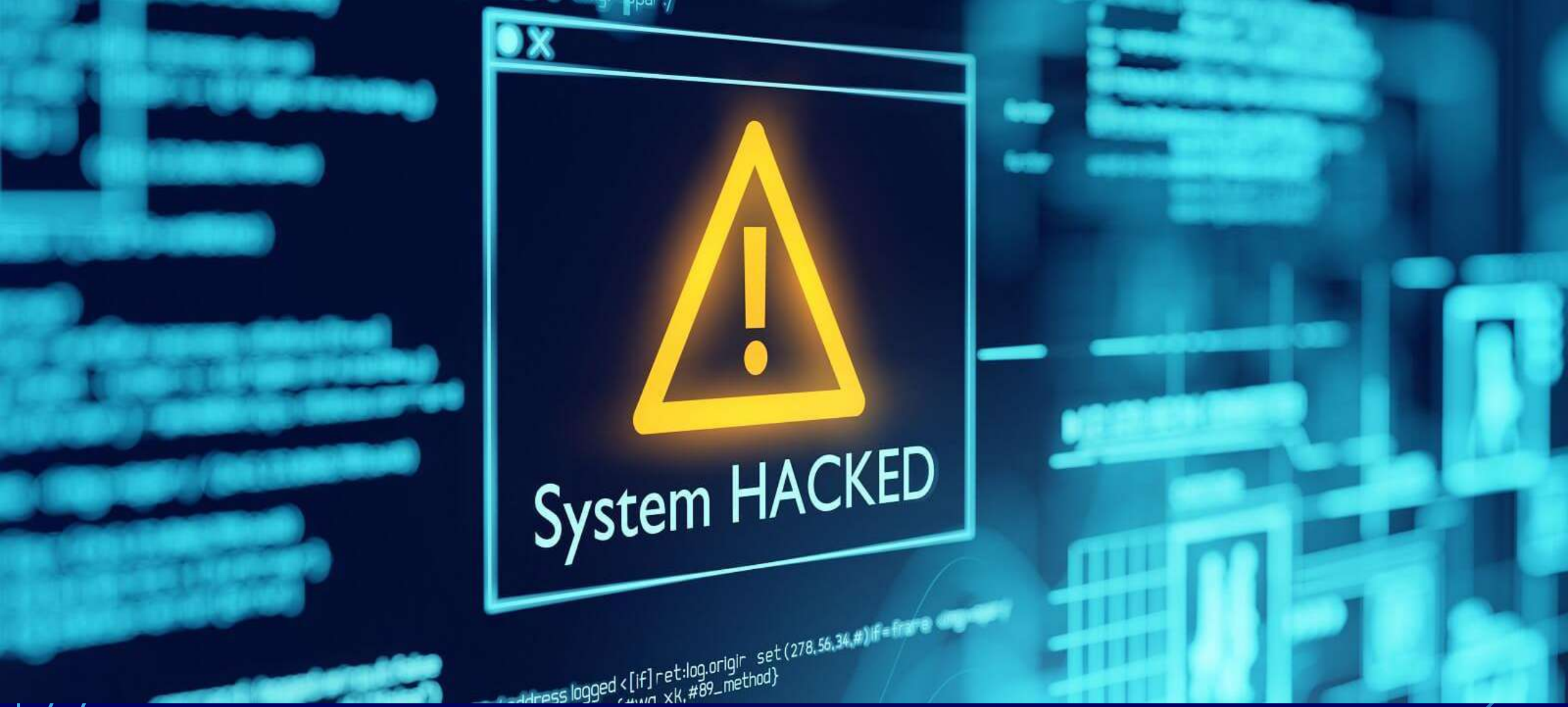
- Data = object
- Severity?
- Data ≠ object

Why?

- Ordinary meaning of 'object'
- Modern meaning of 'object'

2.3 CHALLENGE 3: DIRECTLY PARTICIPATING IN HOSTILITIES?

- Art. 51(3) AP I and Art. 13(3) AP II
- 3 cumulative conditions:
  - 1) Threshold of Harm
  - 2) Direct Causation
  - 3) Belligerent Nexus



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