

# The Tallinn Manual and the Law(s) of Cyber Conflict

Ben Goldsworthy, Consultant

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# Introduction

1. Who am I?
2. You may remember me from...
3. Why is this relevant and/or interesting?
4. Questions policy
5. Recording policy



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2. What does the Tallinn Manual say about law in cyber space?
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3. What does the Tallinn Manual say about cyber operations?
  - a) What are 'operations'?

# What is the Tallinn Manual?



Source: Jorge Franganillo, Flickr (CC BY 2.0)

# What is the Tallinn Manual?



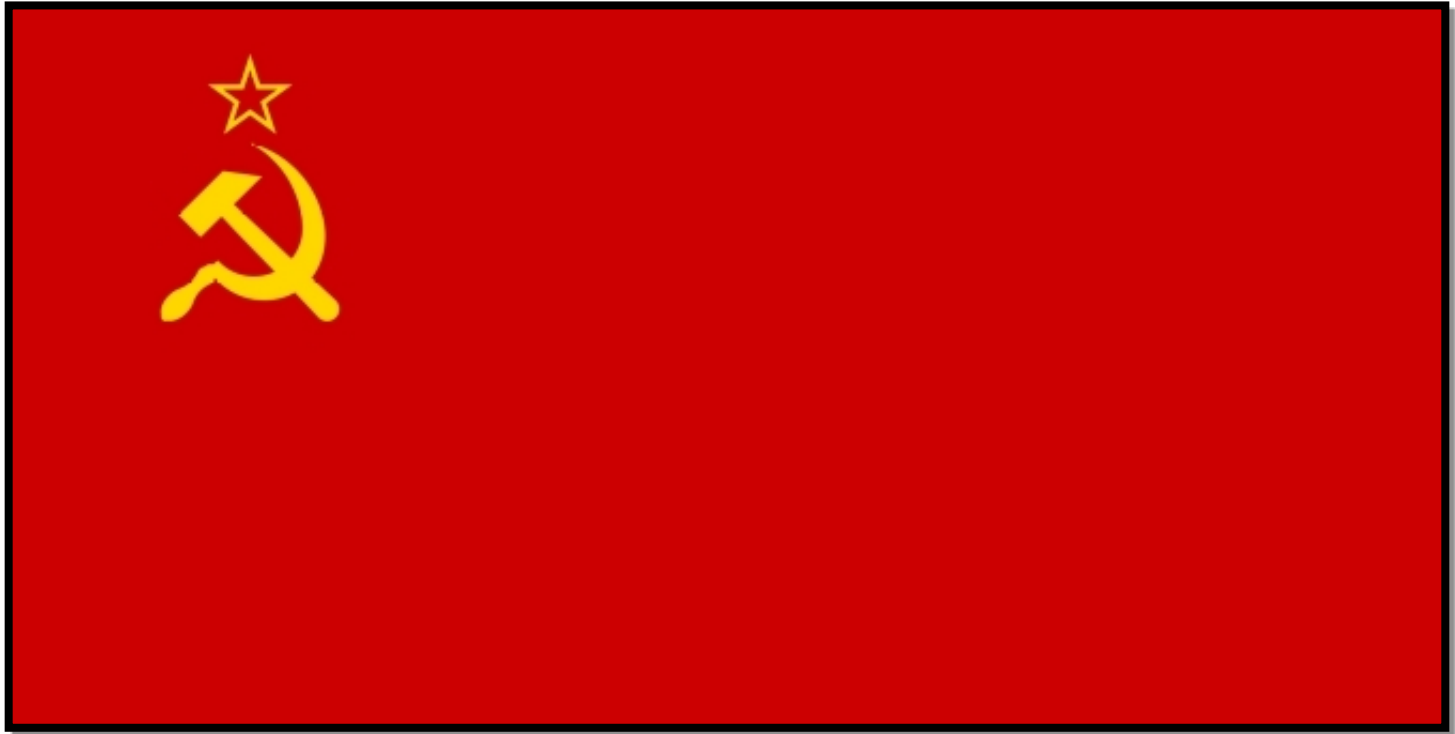
# What is the Tallinn Manual?



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# What is the Tallinn Manual?

**20 Aug 1991**



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# What is the Tallinn Manual?

2004



# What is the Tallinn Manual?

2007



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# What is the Tallinn Manual?

‘The episode has since been dubbed the world’s first cyber war, or “**Cyber War I**”, because it was the **first time that a sustained, wholesale and politically motivated e-assault was launched** to wreak havoc on a country’s entire digital infrastructure...This wave of attacks on Estonia... **targeted the entire civil and economic infrastructure with the aim of paralyzing the society in a country**, whose high reliance on computerized networks has given it the nickname “E-stonia.”’

— “Cyber War I: Estonia Attacked from Russia” ( (European Affairs)

See also this 2007 Black Hat talk: <https://www.blackhat.com/html/bh-usa-07/bh-usa-07-speakers.html#Evron>

# What is the Tallinn Manual?

2008



## CCDCOE

Cooperative Cyber Defence  
Centre of Excellence  
Tallinn, Estonia



# What is the Tallinn Manual?



Source: StrangelyBrown, Wikimedia Commons (CC BY-SA 4.0)



# What is the Tallinn Manual?

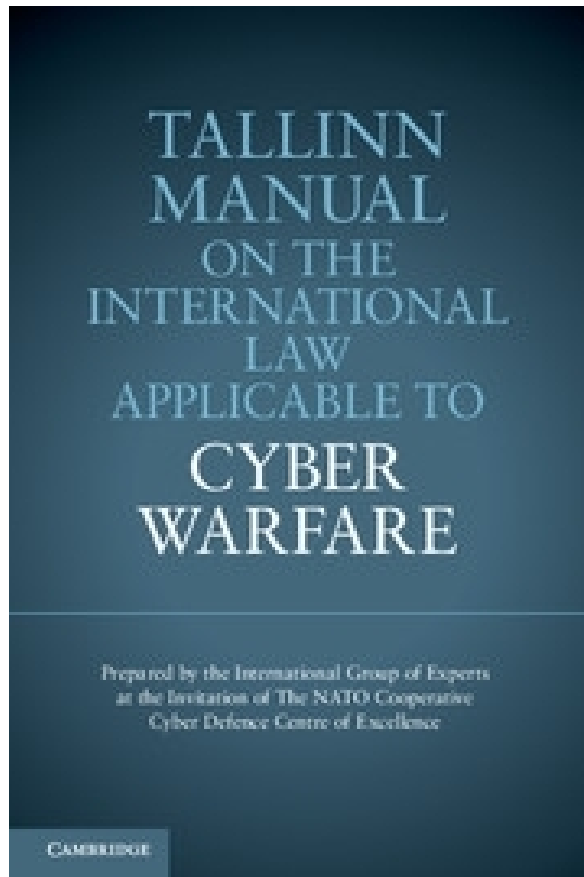
**Late 2009**



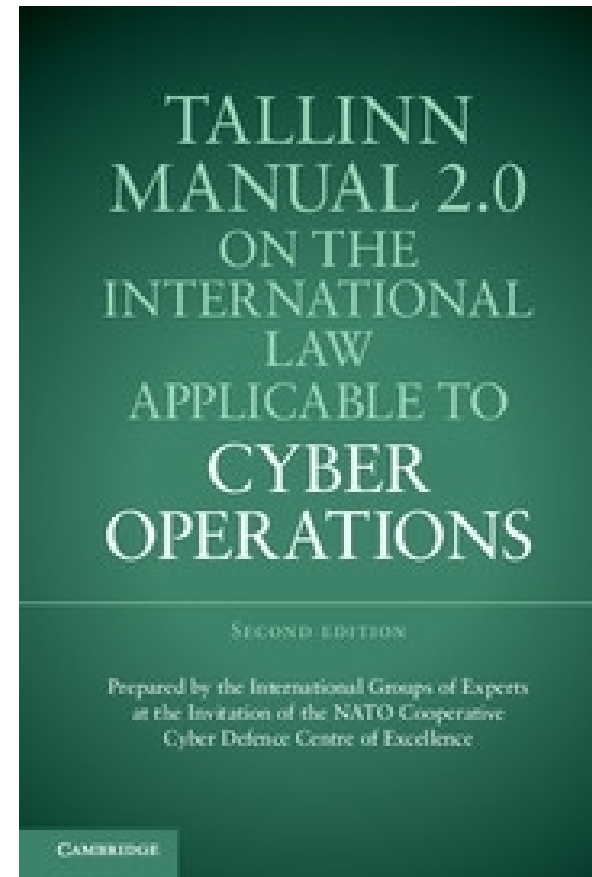
Source: Atlantic Council

# What is the Tallinn Manual?

**April 2013**



**February 2017**



# What is the Tallinn Manual?

<https://ccdcoe.org/research/tallinn-manual/>

**Tallinn Manual 3.0**  
**ETA 2026**

# What is the Tallinn Manual?

- *Lex lata* ('the law as it exists')
- 154 'black letter' rules
- Extensive commentary for each
- Split into 4 parts:
  - I. General international law and cyberspace
  - II. Specialised regimes and cyberspace
  - III. International peace and security and cyber operations
  - IV. The law of cyber armed conflict\*

\* Incorporates Tallinn Manual 1.0 into 2.0

# What Does the Tallinn Manual Say About Law in Cyber Space?



# What Does the Tallinn Manual Say About Law in Cyber Space?

## Part I: General international law and cyber space

### 1. Sovereignty

### 2. Due diligence

- Rule 6: ‘A State must exercise due diligence in not allowing its territory...or cyber infrastructure...to be used for cyber operations that affect the rights of, and produce **serious adverse consequences** for, other States’
- Only required to remedy transboundary harm resulting in ‘serious adverse consequences’ – ‘physical damage to objects or injuries to individuals’ are **not** required
- Environmental example [source, p 746]
- See UK Online Safety Bill’s ‘duty of care’

# What Does the Tallinn Manual Say About Law in Cyber Space?

## **Part I: General international law and cyber space**

### 3. Jurisdiction

- Rule 10: ‘A State may exercise extraterritorial prescriptive [legislative] jurisdiction with regard to cyber activities: (a) conducted by its nationals; ... (d) conducted by foreign nationals against its nationals, with certain limitations; ...’
- Rule 11 – Extraterritorial enforcement jurisdiction

### 4. Law of international responsibility

- Rules 15-17: Cyber operation attribution
- Countermeasures

### 5. Cyber operations not *per se* regulated by international law

- Peacetime cyber espionage (see RIPA 2000)
- Non-state actors



# What Does the Tallinn Manual Say About Law in Cyber Space?

## **Part II: Specialised regimes of international law and cyber space**

### 6. International human rights law

- Rule 34: 'International human rights law **is applicable** to cyber-related activities'

# What is Human Rights Law?



Source: FDR Presidential Library & Museum, Wikimedia Commons (CC BY 2.0)

# What is Human Rights Law?

The Human Rights Act 1998 sets out the fundamental rights and freedoms that everyone in the UK is entitled to. It incorporates the rights set out in the European Convention on Human Rights (ECHR) into domestic British law. The Human Rights Act came into force in the UK in October 2000.

## What human rights are covered by the Act?

The Act sets out your human rights in a series of 'Articles'. Each Article deals with a different right. These are all taken from the ECHR and are commonly known as 'the Convention Rights':

- 
- Article 2: Right to life
  - Article 3: Freedom from torture and inhuman or degrading treatment
  - Article 4: Freedom from slavery and forced labour
  - Article 5: Right to liberty and security
  - Article 6: Right to a fair trial
  - Article 7: No punishment without law
  - Article 8: Respect for your private and family life, home and correspondence
  - Article 9: Freedom of thought, belief and religion
  - Article 10: Freedom of expression
  - Article 11: Freedom of assembly and association
  - Article 12: Right to marry and start a family
  - Article 14: Protection from discrimination in respect of these rights and freedoms
  - Protocol 1, Article 1: Right to peaceful enjoyment of your property
  - Protocol 1, Article 2: Right to education
  - Protocol 1, Article 3: Right to participate in free elections
  - Protocol 13, Article 1: Abolition of the death penalty

**Absolute  
Rights**

**Limited  
Rights**

**Qualified  
Rights**

Source: Equality & Human Rights Commission

# What is Human Rights Law?

- Proposed additional rights?
  - Right not to kill (i.e., right to conscientious objection)
  - Right to Internet access
    - RIPE
    - Internet Society
  - Right to be forgotten (see GDPR, art. 7)
  -
- Varying interpretations of each right
- 
- Boatloads of conflicting case law
- 
- Largely implemented via treaties – hard to tell what, if anything, counts as customary law

# What is Human Rights Law?

**Some treaties are universally ratified and then ignored by certain parties**


- Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict (OPAC) & the UK

This article is more than 11 years old

## Britain's child soldiers

*Michael Bartlett*


Denying those under the age of 18 the right to leave the army is outdated, immoral and in breach of UN guidelines



This article is more than 2 years old

## British army 'leaning on' under-18s to help fill its ranks

Army turning to younger, poorer, teenagers to fill riskiest roles, say critics of enlistment strategy



the guardian

# What is Human Rights Law?

**Some treaties are not ratified by relevant parties**

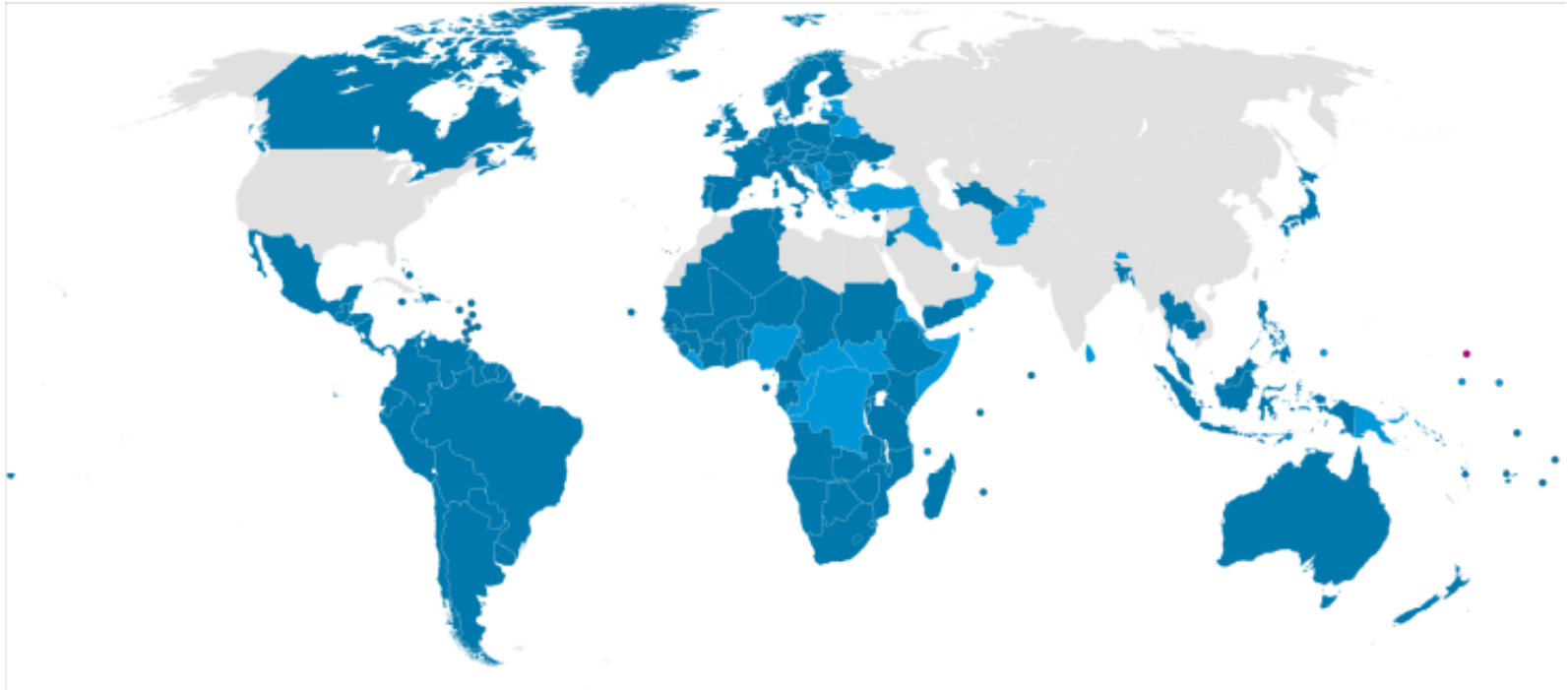
- Treaty on the Prohibition of Nuclear Weapons (TPNW)

[Photo of Trident submarine]

# What is Human Rights Law?

## **Some treaties are not ratified universally**

- Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (Mine Ban Treaty)



# What is Human Rights Law?

## Some treaties are (optionally) enforceable

- Convention on the Rights of Persons with Disabilities
- Optional Protocol to the Convention on the Rights of Persons with Disabilities





# What is Human Rights Law?

## Some lack an enforcement mechanism

- Convention Relating to the Status of Refugees
  - Article 31: Refugees unlawfully in the country of refuge



# What Does the Tallinn Manual Say About Law in Cyber Space?

## Part II: Specialised regimes of international law and cyber space

### 6. International human rights law

- Rule 34: 'International human rights law **is applicable** to cyber-related activities'
- Rule 36: 'With respect to cyber activities, a State must: (a) **respect** the international human rights of **individuals**; and (b) **protect** the human rights of individuals **from abuse by third parties**'

# What Does the Tallinn Manual Say About Law in Cyber Space?

## **Part II: Specialised regimes of international law and cyber space**

- 6. Diplomatic and consular law
- 7. Law of the sea
- 8. Air law
- 9. Space law



Source: Frederic Auerbach,  
Wikimedia Commons (CC BY-SA 3.0)

# What Does the Tallinn Manual Say About Law in Cyber Space?

## **Part II: Specialised regimes of international law and cyber space**

### 10. International telecommunications law

- Based on International Telecommunications Union treaty regime
- Rule 61: Duty to establish, maintain, and **safeguard** international telecommunications infrastructure
- Rule 62: ‘(a) A State may suspend, either in part or in full, international cyber communication services within its territory...  
(b) A State may stop the transmission of a private cyber communication that appears contrary to its national laws, public order, or decency, or that is dangerous to its national security.’

# What Are 'Operations'?



<https://www.gov.uk/government/publications/the-integrated-operating-concept-2025>

Published Sept 2020

Last updated Sept 2021

‘The Integrated Operating Concept... updates our thinking on deterrence, recognising that our rivals are **seeking to win without eliciting a warfighting response**. Hence it establishes the need to **compete below the threshold of war** and it distinguishes between “operating” and “warfighting”.’

# What Are 'Operations'?

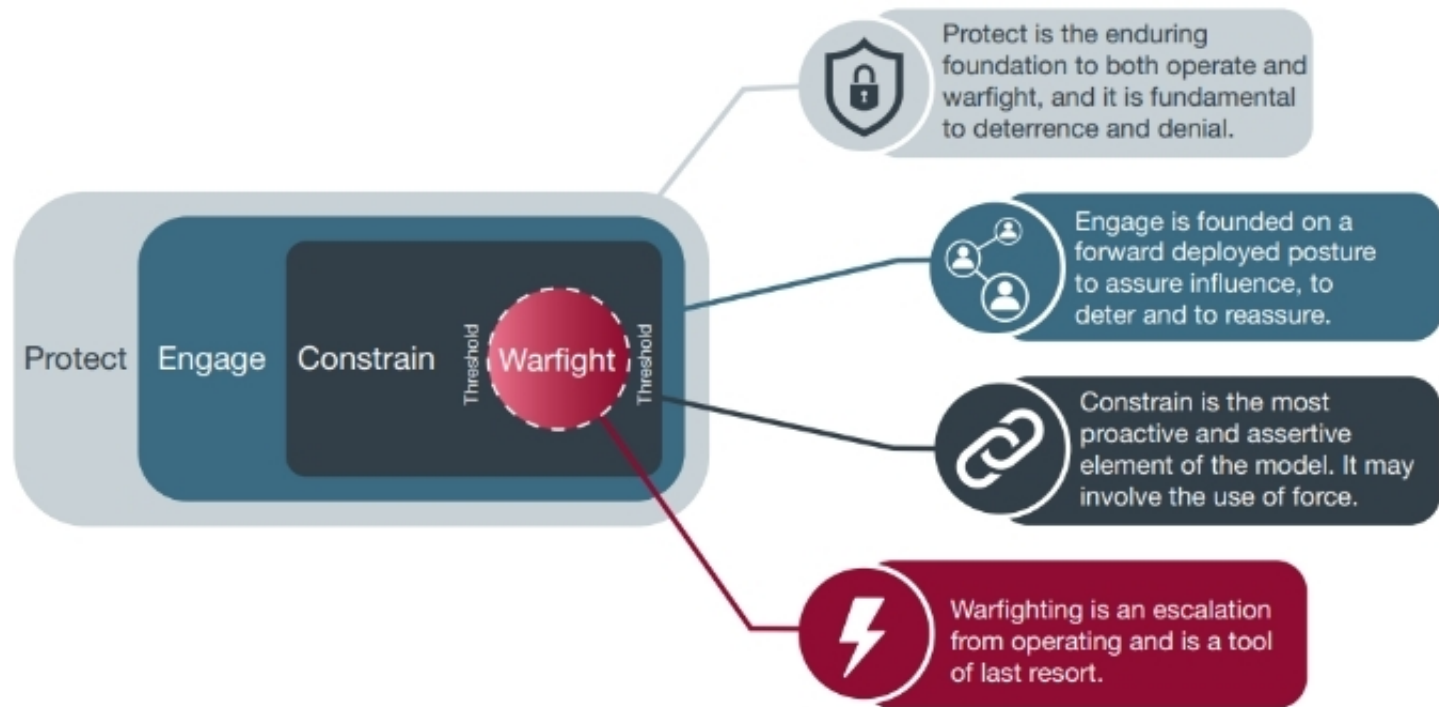


Figure 4 – The Integrated Operating Framework

# What Does the Tallinn Manual Say About Cyber Operations?

## Part III: International peace and security and cyber activities

### 12. Peaceful settlement

### 13. Prohibition of intervention

- Rule 66: 'A State may not intervene, including by cyber means, in the internal or external affairs of another State'
- '...the scope of *domaine réservé* may shrink as States commit issues related to cyberspace to international law regulation'

### 14. The use of force (incl. self-defence)

- Rule 72: **Necessity** and **proportionality**
- Passive defence > sub-force active defence > forceful active defence
- Rule 73: 'The right to use force in self-defence arises if a cyber armed attack occurs or is **imminent** [anticipatory self-defence]. It is further subject to a requirement of **immediacy**.'
- 'Armed attack' – presence of weapons or results analogous to kinetic attack?

### 15. Collective security

# Conclusion

The Tallinn Manual is a valuable resource for understanding the international legal environment in which we live and operate

3.0 of the Manual will reflect changes made since 2017, particularly the GDPR and (potentially) the Online Safety Act

## **Further Reading**

- “Strange Jurisdictions: The Development of Control Systems Outside of Meatspace” [source]
- The Tallinn Manual (now part of our ‘library’)