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Cyber Terrorism and Australia's Terrorism Insurance Scheme

Physically Destructive Cyber
Terrorism as a Gap in Current
Insurance Coverage

Cyber Terrorism?

- 2013 cyber attacks on the websites of media companies such as the New York Times and Twitter were classed as cyber terrorism
- 2014 cyber attack on Sony Pictures was allegedly a form of state sponsored cyber terrorism
- Cyber terrorism can be classified into three distinct clusters, but perpetrated by a number of different actors



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Cyber Terrorism? (cont.)

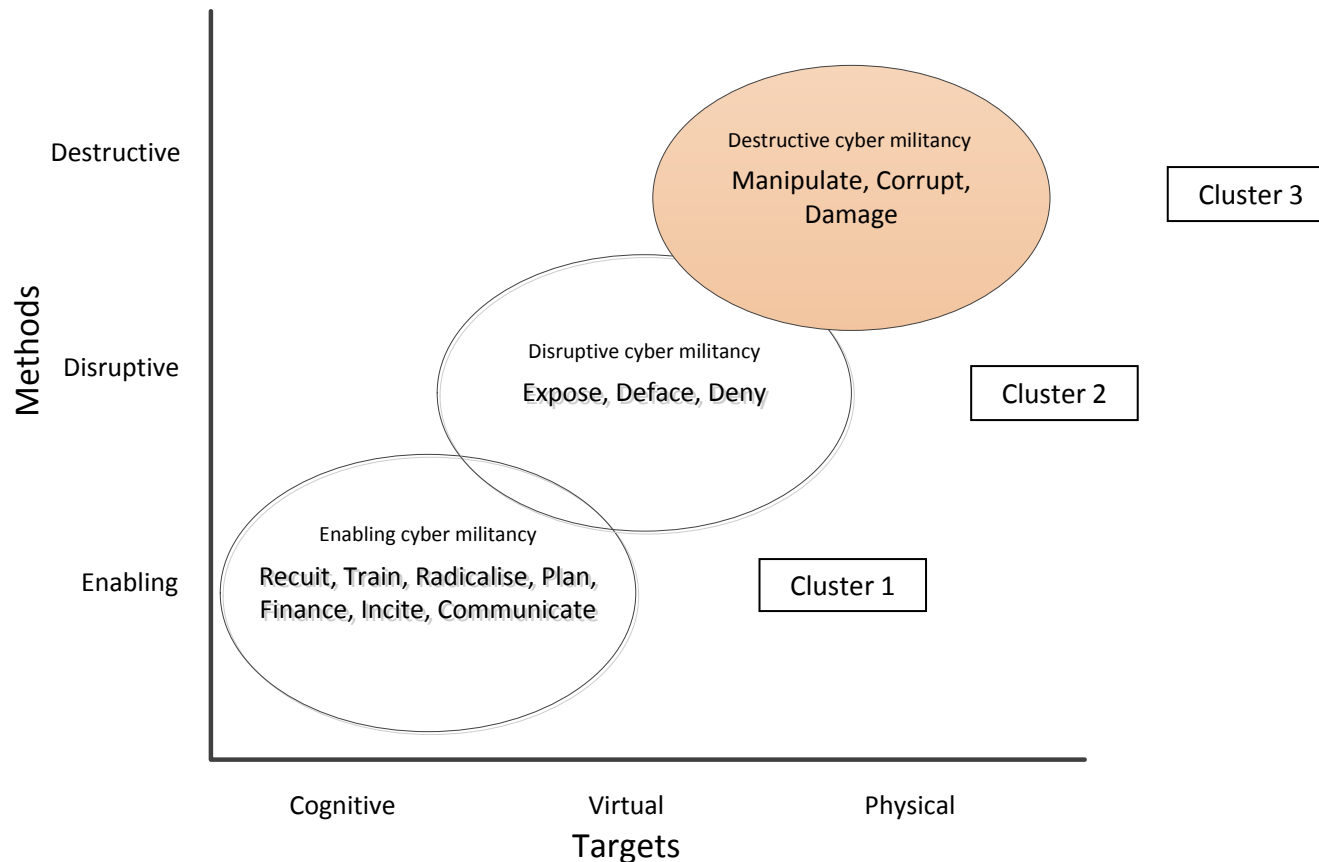


Figure 1: Clusters of cyber terrorism

(Defining Cyberterrorism: Capturing a broad range of Activities in Cyberspace, Jonalan Brickey, CTC Sentinel, August 2012, VOL 5, Issue 8)



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Cyber Terrorism? (cont.)

- Jonalan Brickey's definition of cyber terrorism is:
"the use of cyber capabilities to conduct enabling, disruptive, and destructive militant operations in cyberspace to create and exploit fear through violence or the threat of violence in the pursuit of political change"
- This covers all examples that have come to light but does not impact on the legal definition of terrorism



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Terrorism in Australian Law

- The action **must** cause harm/serious risk to people, or serious damage to property or serious interference, disruption or destruction
- There **must** be the intent of advancing a political, religious or ideological cause with an intent to coerce or influence by intimidation
- It **must not** be advocacy, protest or dissent and be unintended to cause harm/serious risk



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Terrorism in Australian Law (contd.)

- Obvious overlaps between Brickey's definition of cyber terrorism and the Australian Legal definition of terrorism exist
- Clusters 2 and 3 (disruptive and destructive) would generally fall into this definition; cluster 1 may not
- As not all clusters of cyber terrorism would be considered terrorism under Australian Law this may affect insurance coverage



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Australia's Growing Risk

- “Australia remains susceptible to the threat of cyber terrorist attacks”
- PwC survey:
 - Annual global cost of **US\$375-\$575 billion**
 - 2013-2014 saw a 41% increase in incidents in Europe, 11% in North America and 5% in Asia Pacific
- EY Global Information Security Survey 2014 shows similar trends



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Evolution: Cyber Turns Physical

- Cyber attacks with catastrophic physical property and infrastructure losses have increased
- Incidents:
 - 2008 Turkish crude oil pipeline explosion
 - 2014 German steel mill blast furnace
- Governments, businesses, criminals and terrorists are locked in a race to protect, damage or exploit resources in cyberspace



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General Property Insurance Market's Response

- Standard Mark IV and Mark V ISR policies contain the below section:

PERILS EXCLUSIONS

7. Physical loss, destruction or damage occasioned by or happening through:

*(a) (ii) Access by any person(s) **other than** the Insured or the Insured's employee(s) to the Insured's computer system via data communication media that terminate in the Insured's computer system.*

- This exclusion would likely prevent coverage for cyber-attack scenarios causing physical loss, such as the Turkish pipeline blast or German steel furnace shutdown
- If it was declared as a terrorism incident the TI Act would have no effect on the clause, as it is not a terrorism clause, and the scheme would not come into effect



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General Property Insurance Market's Response (contd.)

- Other industry examples:

EXAMPLE INSURER A - BUSINESS PACKAGE - EXCLUSIONS

We will not pay You under this section for physical loss, destruction or Damage caused by, or as a consequence of:

24. Computer access - The gaining of access by any person other than You or Your employees to Your computer system via data communication media.

EXAMPLE INSURER B - BUSINESS PROPERTY - Policy section exclusions

2. We will not cover You for loss or damage caused by:

r) the gaining of unauthorised access to Your computer via any communication system by any person other than You or Your directors, partners, Employees, officers or any other person who has an interest in the property.

- These exclusions would respond in much the same way as those in the standard Mark IV and Mark V ISR policies



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Terrorism Insurance Scheme's Response

- As it currently stands the response may be determined on a policy by policy basis, dependant on the exclusions in the individual policies
- The scheme and ARPC were set up in response to the perceived market failure following the September 11 terrorist attacks and were designed primarily to meet that market failure
- The coverage and operation of the ARPC scheme is limited primarily by the *Terrorism Insurance Act 2003* and the *Terrorism Insurance Regulations 2003* which contain 40 exclusions



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Exclusion of Computer Crime

- The ARPC scheme covers eligible policies on eligible property, if a terrorism incident is declared by the relevant government minister, by striking out terrorism exclusion clauses
- The regulations provide a number of exclusions to determine this eligibility (most notably wars, nuclear explosions, attacks on ships and aircraft)
- Exclusion 32 of Schedule 1 of the regulations states:

32

A contract of insurance to the extent that it provides cover for loss arising from computer crime.



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Computer Crime?

- Extract from Federal Attorney Generals' Department website:

"In Australia, the term 'cybercrime' is used to describe both:

- crimes directed at computers or other information communications technologies (such as hacking and denial of service attacks)*
- crimes where computers or ICTs are an integral part of an offence."*

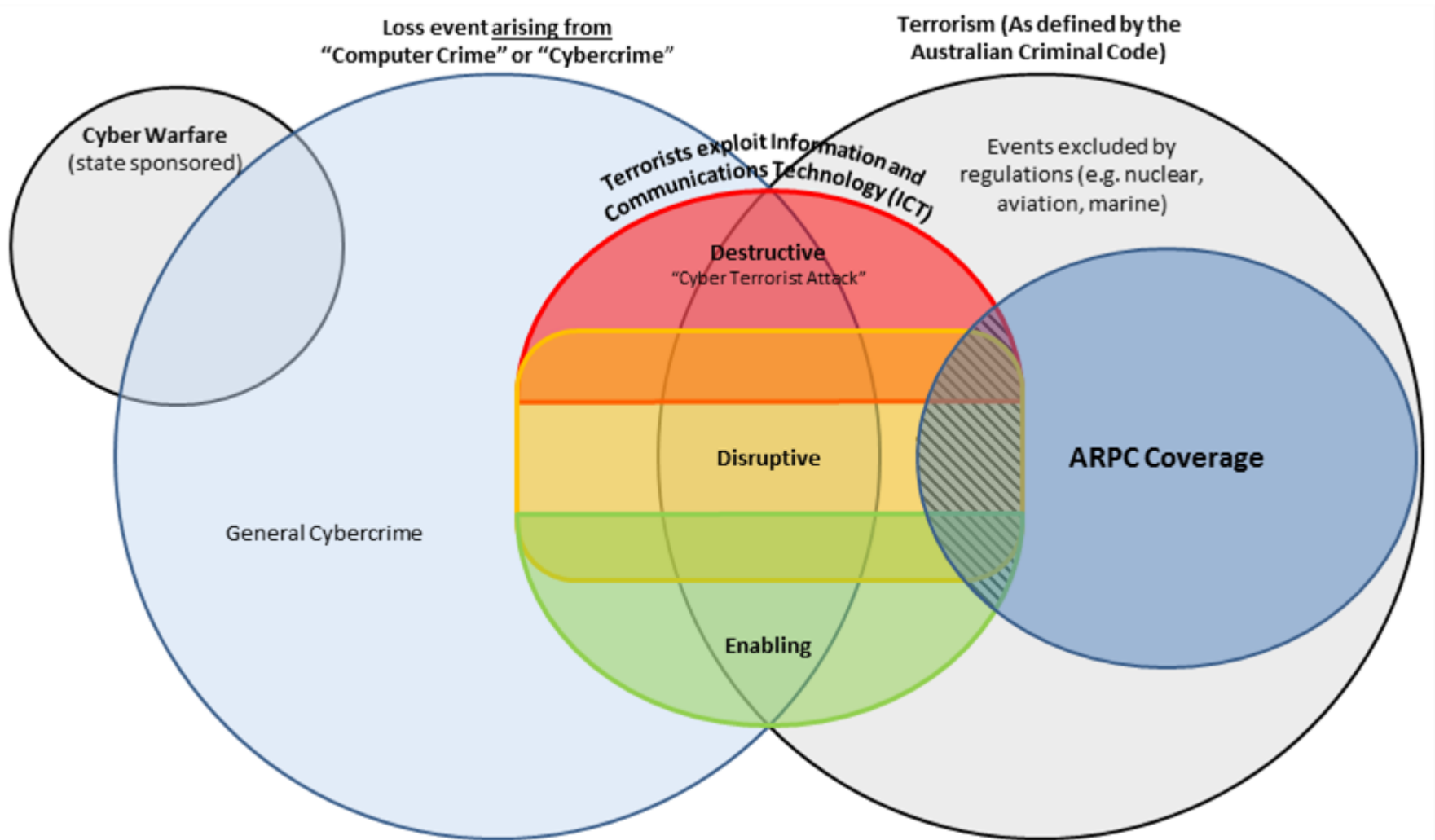
- *Cybercrime Act 2001* introduced parts 10.6 and 10.7 into the Australian Criminal Code to deal with telecommunications and computer offences
- Therefore any loss due to an act of Cyber Terrorism will likely be defined as a "computer crime" and be excluded from coverage under the scheme

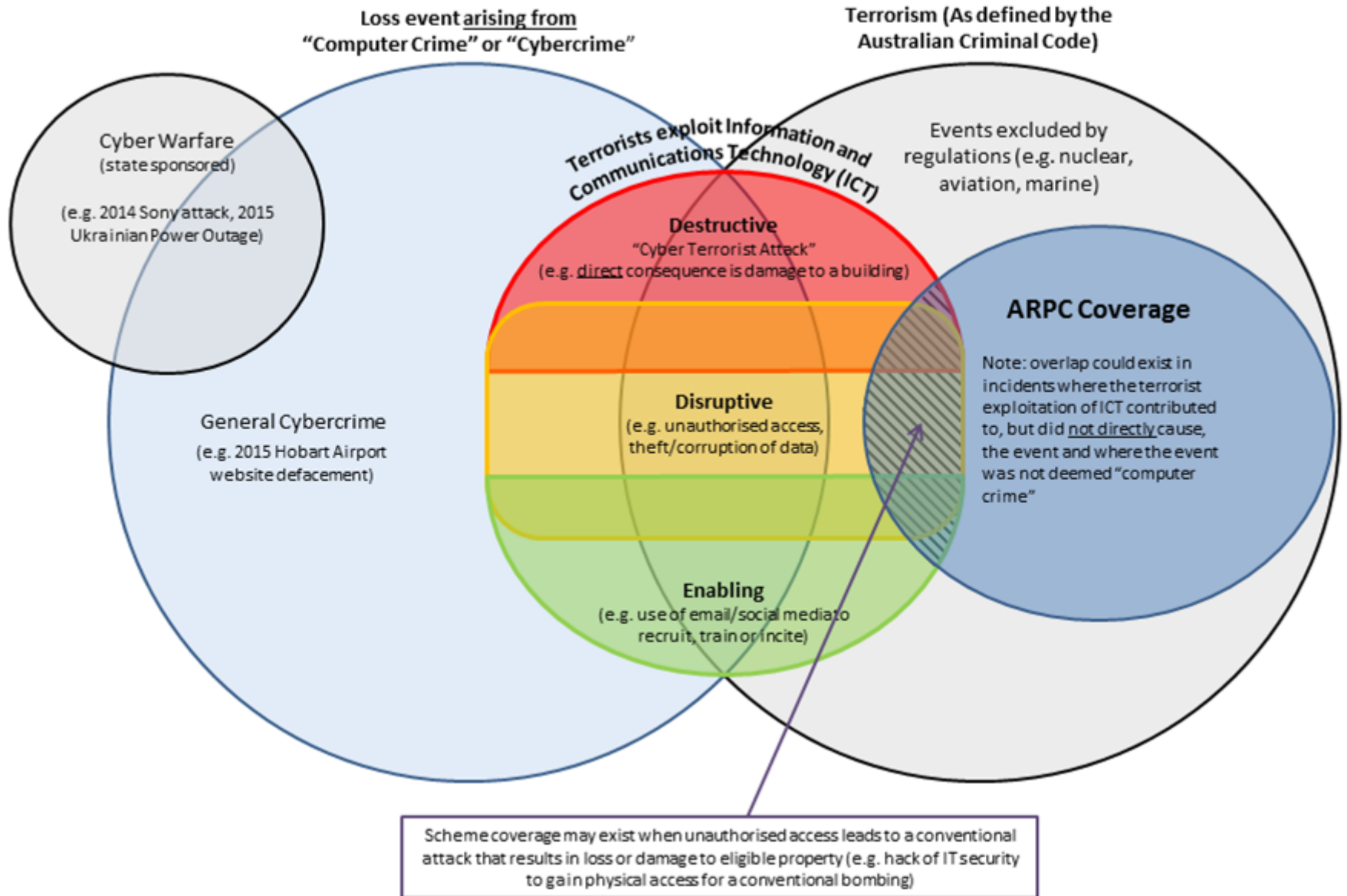


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Interactions: Cybercrime, ICT Use, Terrorism and Terrorism Scheme





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Cyber Insurance Policies

- Primarily aim to cover intangibles (such as electronic data), business interruption and response costs
- Coverage detail varies considerably and physical damage to tangible property isn't generally addressed
- 2014 Partner Re Article reported that:
“Despite the vulnerability and significant loss potential, cyber insurance cover is almost totally absent for physical damage and limited for business interruption”
- If a Cyber policy was deemed an eligible policy for the ARPC scheme (due to an eligible property and loss type combination) the computer crime exclusion would likely remove any claimable loss



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Global Terrorism Pool Responses

- Major global terrorism pools have yet to expand their coverage to include cyber terrorism
- Whilst cyber risk is an emerging market, no global terrorism pools expressly provide cover



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Conclusion

- Cyber-attacks are generally increasing globally
- ARPC terrorism reinsurance scheme does not respond to any terrorism loss arising from “computer crime” and, like other global schemes, no express cover for cyber terrorism exists
- There is a definitive gap in the property insurance market in situations where a cyber terrorist attack may inflict major physical damage by primarily cyber means



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Questions

Please direct questions or comments to:

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