



Fusion or Fantasy

Is Cyber Fusion living up to the dream?

Anne Coull

Flinders University

anne.coull@proton.me

Anne Coull

Anne is a strategic leader who delivers value through transformative cyber security, technology, and cultural change. She builds genuine partnerships with stakeholders at all levels to create an inclusive, collaborative culture with clear vision, purpose, and accountabilities.

Pragmatic, data-driven, and calm under pressure, with deep experience delivering strategies, roadmaps and program portfolios in cyber security, technology, financial crime, fraud & insider threat. Anne is adept at translating complex technical and cyber concepts into plain English.

Committed to continuous learning. Anne is an active researcher and contributor for the International Academy, Research, and Industry Association (IARIA).



Cyber Fusion Centre

Collaboration between:

- threat intelligence,
- incident response,
- threat hunting, and
- vulnerability management

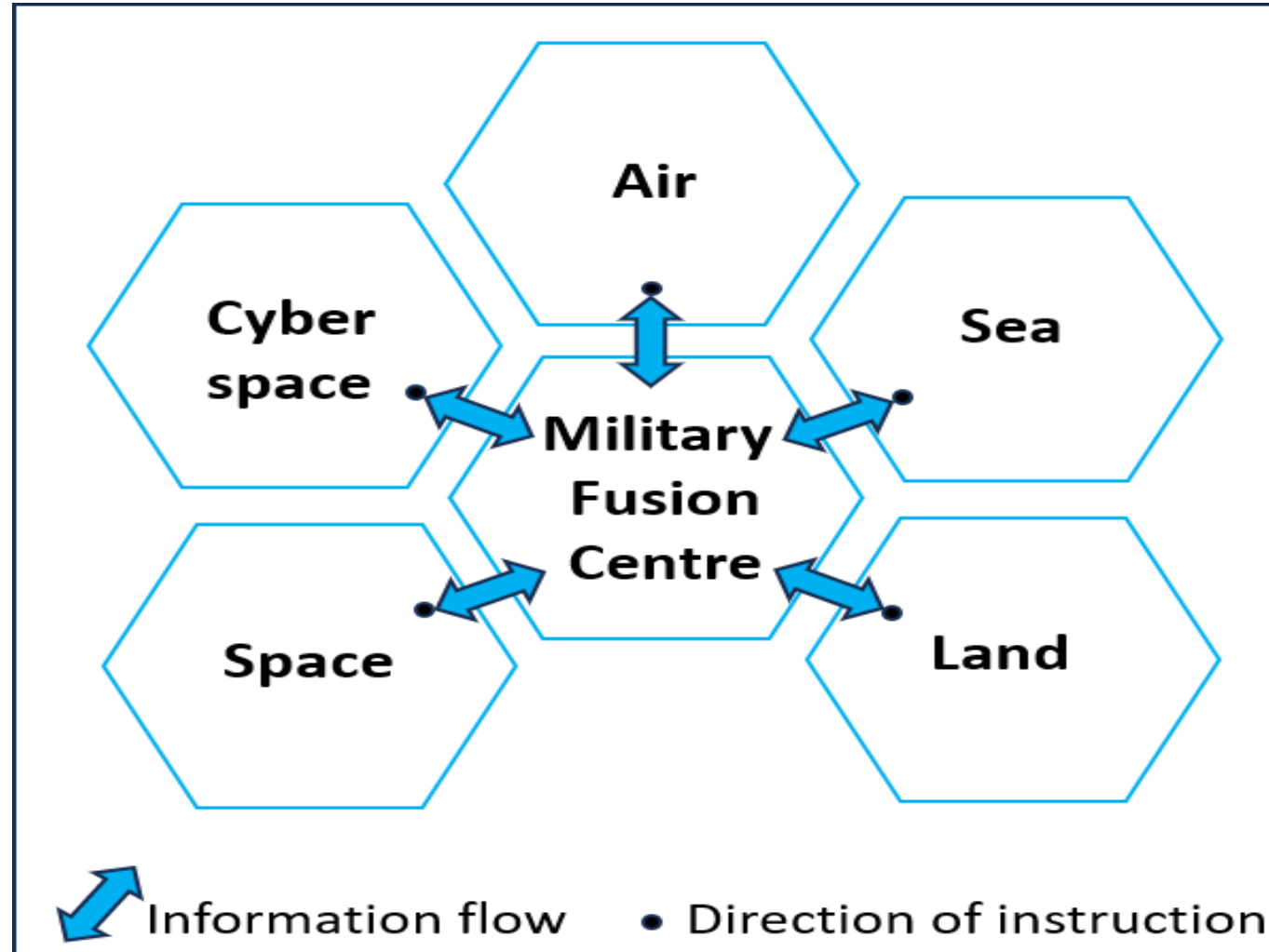
Accelerating identification and response to security threats.

Based on a tried and tested military models



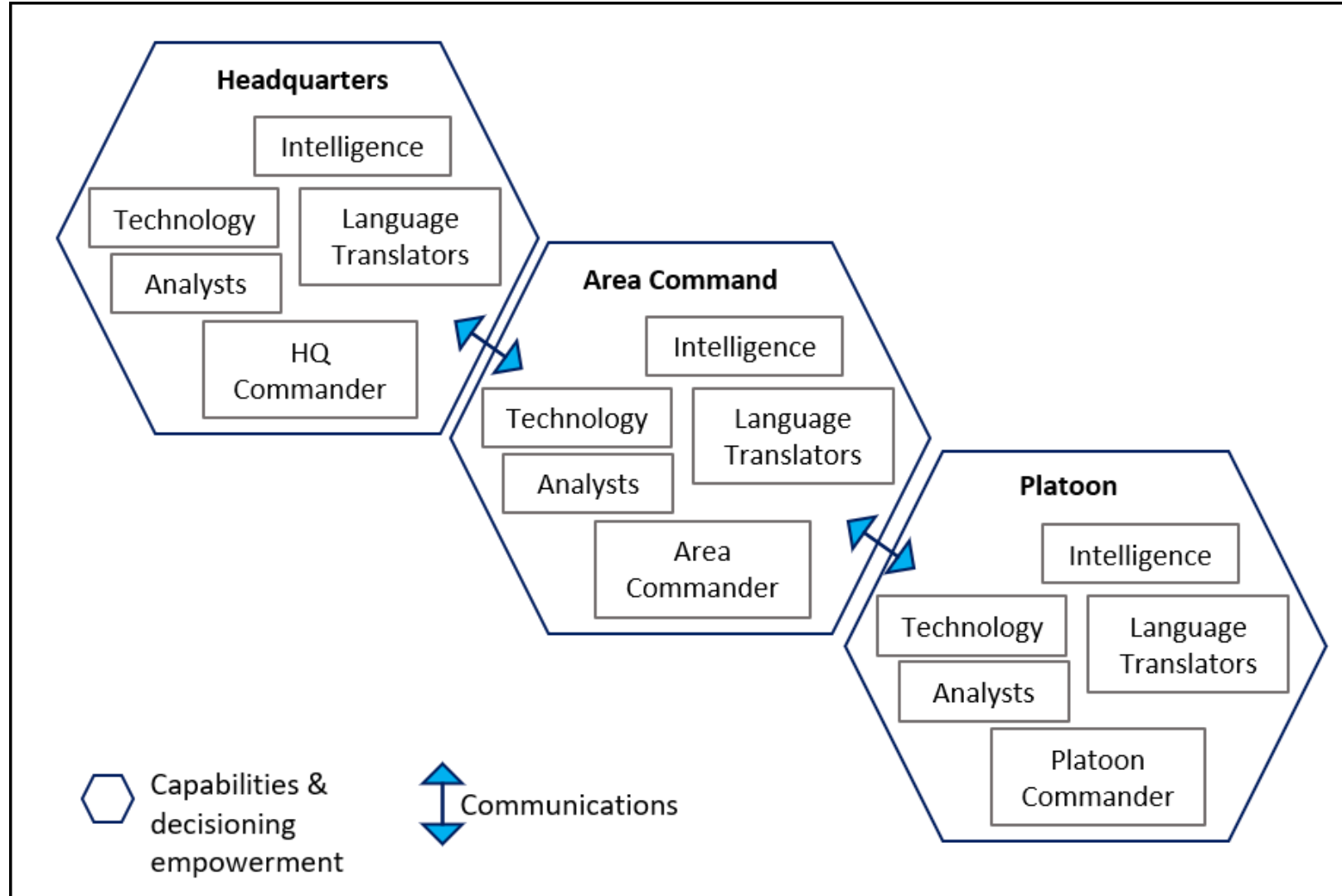
The Military Joint Operations Centre

Co-ordinating operations across the multiple domains of war: land, sea, air, and space, and cyberspace



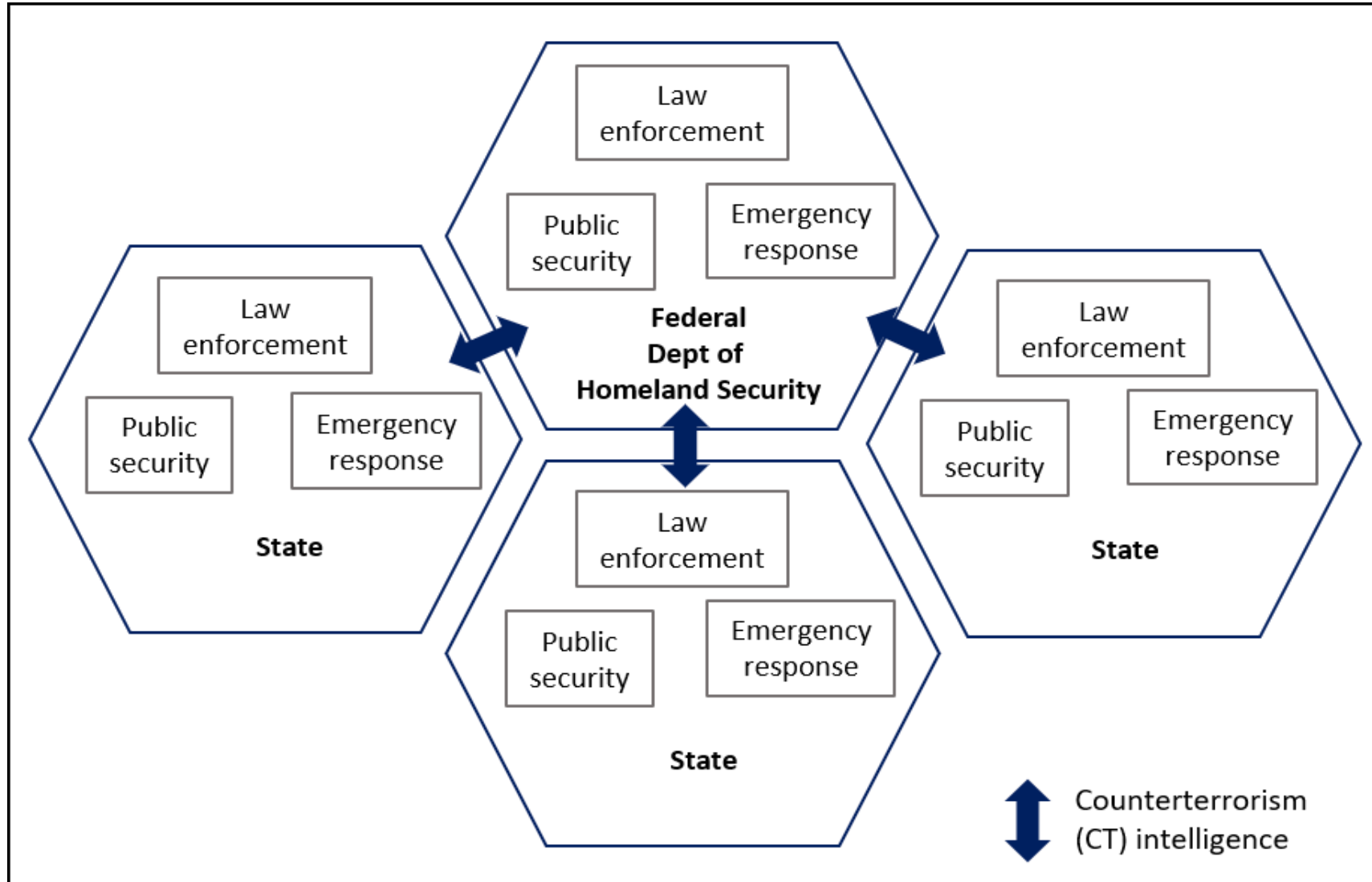
COINOPS

Counterinsurgency Operations' Intelligence Fusion and Flow for tangible real-time actionable intelligence



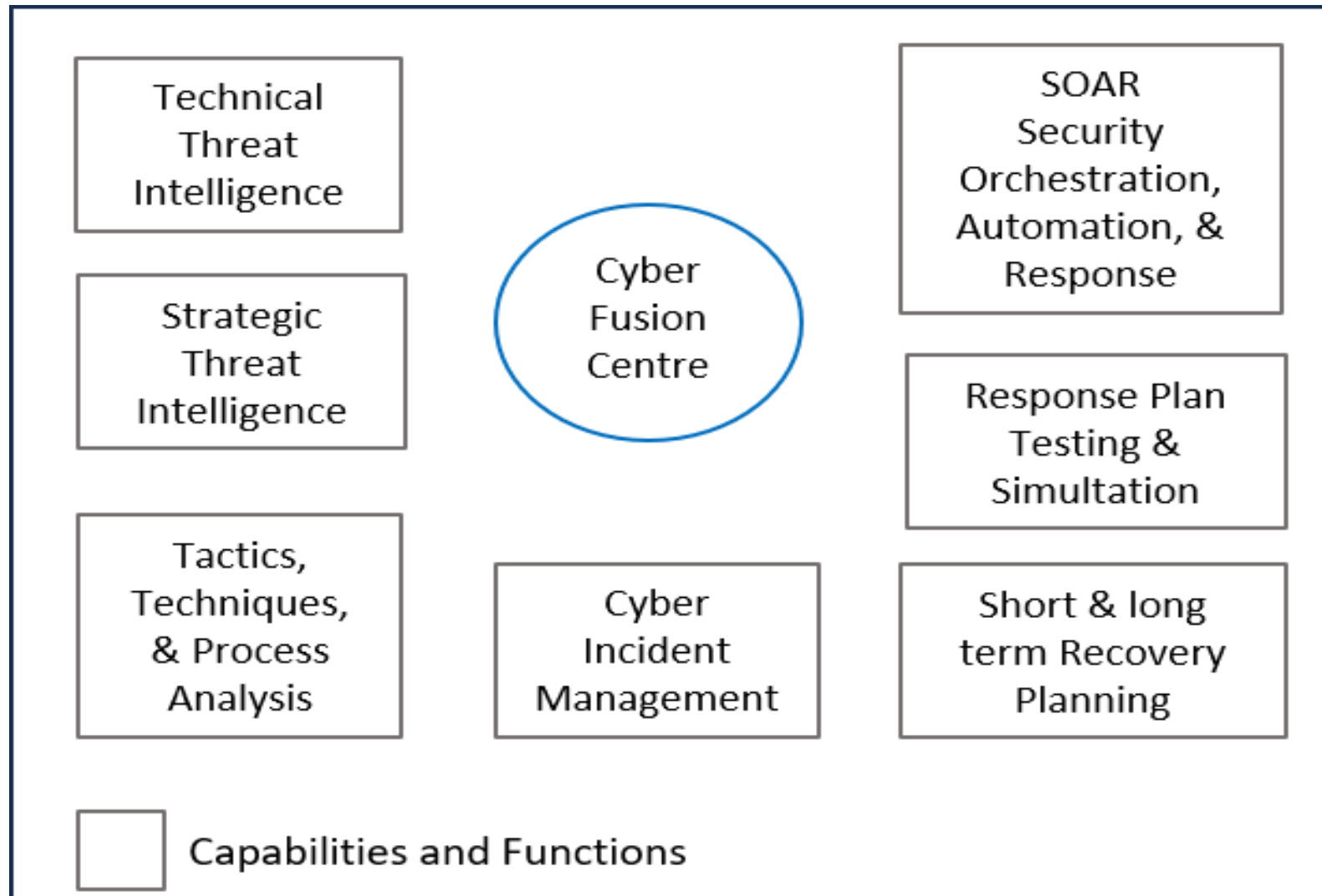
DHS Fusion Centres

Counterterrorism Intelligence Fusion Centres at local, state, and federal levels



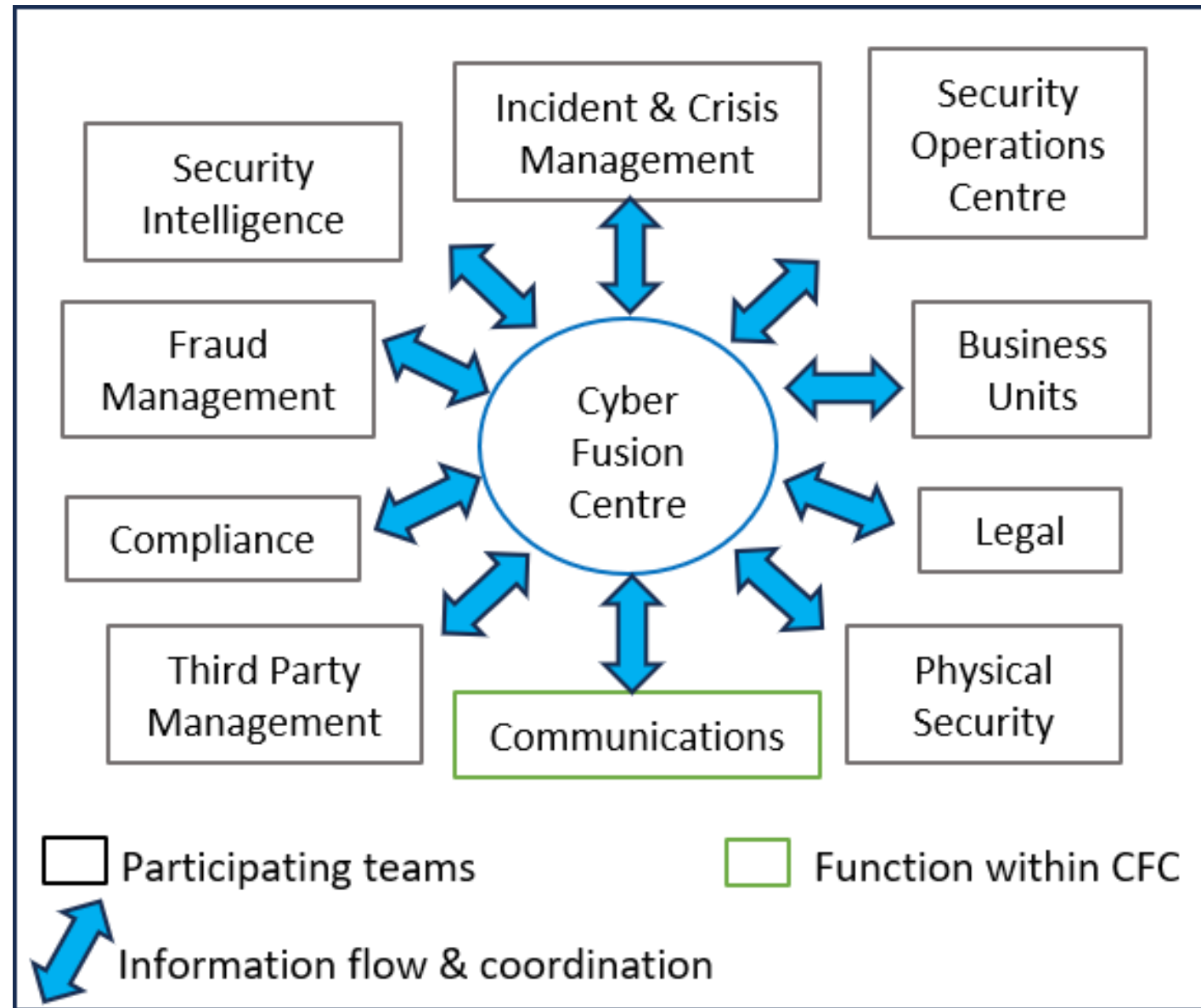
Intelligent Cyber Fusion Centre Model Theory

Identifying, managing, and rapidly responding to security threats.



The FSISAC Cyber Fusion Centre Model Reality

Basic collaboration



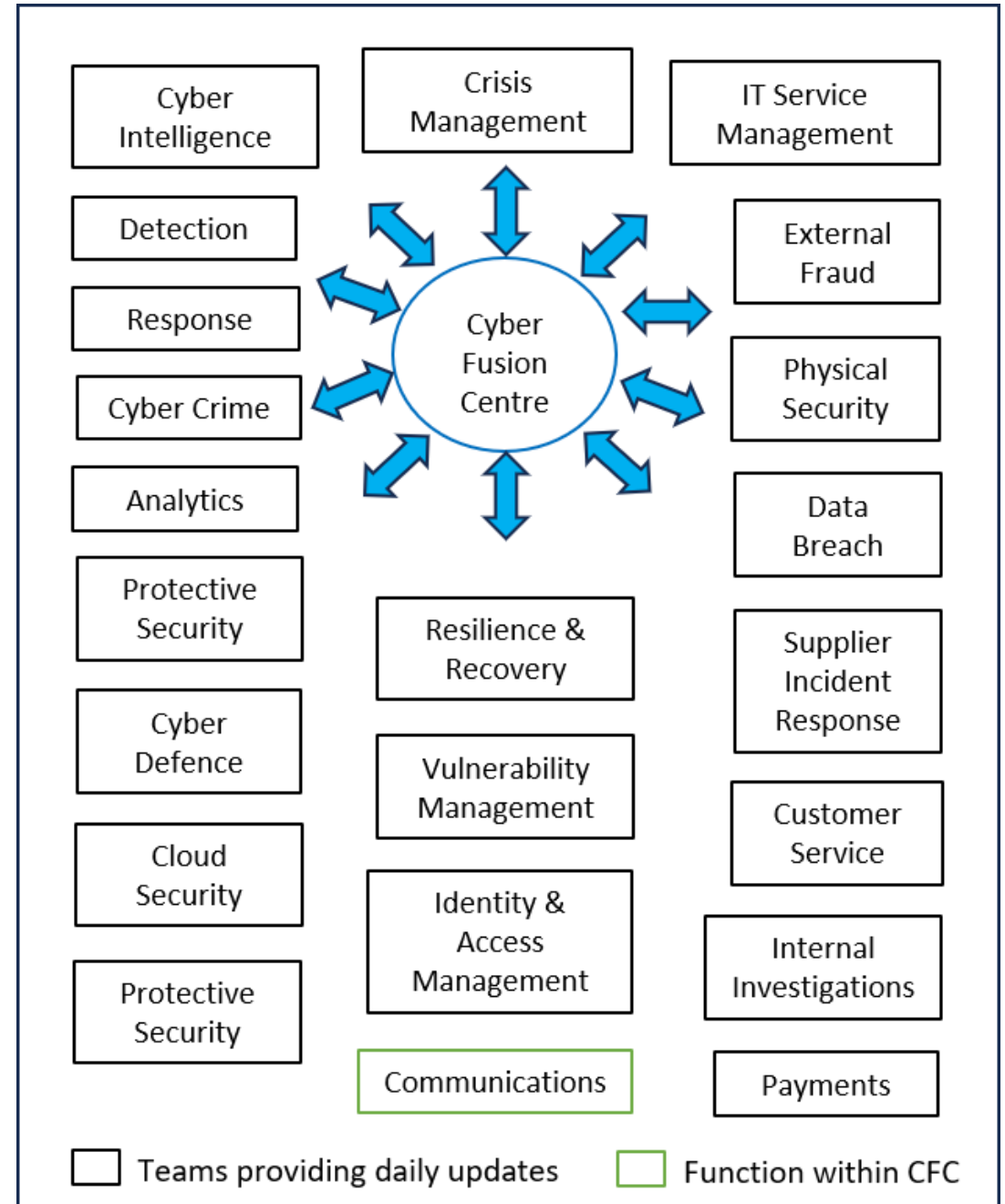
Cyber Fusion in Australia

Large organisations are silo'd
– operate independently
- poor information flow

Initially greater response co-operation

But - minimal information sharing
- teams continue to operate independently
- capability gap

➔ Limited benefits



Addressing the Gap

Applying the military experience & learnings to cyber fusion

- The Rousing Vision
- The Right Skills
- Capable, Inspiring Leadership
- Information Flow
- Clear Accountabilities
- Robust Strategy and Roadmap
- Performance Measures





References

1. Anomali, What is a Cyber Fusion Centre, Available from: <https://www.anomali.com/blog/what-is-a-cyber-fusion-center>, accessed July 2023.
2. Cyware, What is a Cyber Fusion Center Center and how is it different from Security Operations Center (SOC)?, August 2018, Available from: <https://cyware.com/security-guides/cyber-fusion-and-threat-response/what-is-cyber-fusion-center-and-how-is-it-different-from-security-operations-center-soc-b13a>, accessed June 2023.
3. Cyware, Building a Cyber Fusion Center, November 2020, Available from: <https://cyware.com/educational-guides/cyber-fusion-and-threat-response/building-a-cyber-fusion-center-ae08/>, accessed June 2023.
4. Cyware, Why are Financial Institutions Adopting Cyber Fusion Strategies, May 2022, Available from: <https://cyware.com/security-guides/cyber-fusion-and-threat-response/why-are-financial-institutions-adopting-cyber-fusion-strategies-57b5>, accessed June 2023.
5. Cyware, How Can You Improve Your Security Posture with Cyber Fusion?, June 2022, Available from: <https://cyware.com/security-guides/cyber-fusion-and-threat-response/how-can-you-improve-your-security-posture-with-cyber-fusion-3afb>, accessed June 2023.
6. Cyware, How Cyber Fusion Provides 360-degree Threat Visibility? July 2020, Available from: <https://cyware.com/security-guides/cyber-fusion-and-threat-response/how-cyber-fusion-provides-360-degree-threat-visibility-8fda>, accessed June 2023
7. D. P. Fidler, *Inter arma silent leges Redu?: The law of armed conflict and cyber conflict*, Cyberspace and national security threats, opportunities, and power in a virtual world, Georgetown University Press / Washington, DC 2012.
8. FSISAC1, Financial Services Information Sharing and Analysis Center, Available from <https://www.fsisac.com/>, accessed June 2023.
9. FSISAC² Fusion Council, Considerations for Implementing a Fusion Operating Model in Financial Services– Whitepaper, Financial Services Information Sharing and Analysis Centre (FS-ISAC) May 2023. Available from <https://www.fsisac.com/>, accessed June 2023.
10. K. L. McLaughlin, Cybersecurity and fusion centers, The EDP Audit, Control, And Security Newsletter 2023 Vol. 67, NO. 4 2023, Available from: <https://www.tandfonline.com/doi/pdf/10.1080/07366981.2023.2205689>, accessed June 2023.
11. A. Mishra, Synchronising Counterinsurgency Ops with Effective Intelligence, Available from: <https://theforge.defence.gov.au/publications/synchronising-counterinsurgency-ops-effective-intelligence>, accessed July 2023.
12. A. Reeves and D. Ashenden, Understanding decision making in security operations centres: building the case for cyber deception technology, 2023. Available from: <https://www.researchgate.net/search/Search.html?query=security+operations+centre&type=publication>, accessed June 2023.
13. S. Reveron, *An introduction to National Security and Cyberspace*, Cyberspace and national security threats, opportunities, and power in a virtual world, Georgetown University Press / Washington, DC 2012.
14. J. B. Sheldon, *Toward a theory of cyber power: Strategic purpose in peace and war*, Cyberspace and national security threats, opportunities, and power in a virtual world, Georgetown University Press / Washington, DC 2012.
15. J. E. Steiner, Needed: State-level, Integrated Intelligence Enterprises, *Studies in Intelligence* Vol. 53, No. 3 (Extracts, September 2009), Available from: <https://www.cia.gov/static/Needed-State-Level-Integrated.pdf>, accessed June 2023.
16. J. Steinke et al, Improving Cybersecurity Incident Response Team Effectiveness Using Teams-Based Research, *Security and Privacy: building dependability, reliability, and trust, Multidisciplinary Security*, July/August 2015, Vol 13, No.4, Available from: https://www.researchgate.net/publication/281467215_Improving_Cybersecurity_Incident_Response_Team_Effectiveness_Using_Teams-Based_Research, accessed September 2023.

Questions

Please email your questions to: anne.coull@proton.me

