



## **Topic Guide updates**

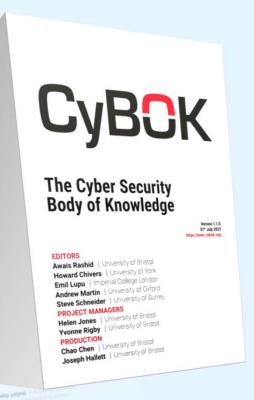
**Cloud Security and Security-Informed Safety** 

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# CyBOK: a living document set



- responsive mode updates
  - change requests open
- proactive review
  - · a theme at a time
- accompanying documents for
  - emerging themes
  - cross-cutting knowledge
  - (long-term development)

transparency

rigorous processes

peer review

community consensus



#### So far

#### **Security Economics** Knowledge Guide Issue 1.0.0

Tyler Moore | University of Tulsa

Yulia Cherdantseva | Cardiff University

Ross Anderson | University of Cambridge Daniel Arce | University of Texas at Dallas Rainer Böhme | University of Innistruck
Jason Nurse | University of Kent

Al for Security Topic Guide Issue 1.0.0

Matilda Rhode | Airbus

Awais Rashid | University of Bristol

Elisa Bertino | Purdue University
Daisuke Mashima | Advanced Digital Sciences Center
Guillermo Suarez-Tangil | IMDEA Networks Institute

Security and Privacy of Al Knowledge Guide Issue 1.0.0

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Emiliano De Cristofaro | University College London

Steve Schneider | University of Surrey

Jose Such | King's College London Yang Zhang | CISPA

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# Topic Guide in Progress: Cloud Security

- Identified as a cross-cutting theme/topic
- Relevant to many CyBOK KAs
  - including OS/virtualization, networking, distributed systems, AAA, Law & Regulation
- Lots of practitioner knowledge and emerging stable architecture models
- Small pockets of academic expertise
  - much research on details; not so much on the big picture



# Cloud Security Topic Guide

• 2023/24: lots of scoping discussions

Author identified

May 2025: strawman for expert review

• summer 2025: authoring and review; copy editing

autumn 2025: published TG



# Topic Guide in Progress: Cloud Security

- CyBOK was invited by DSTL to consider developing a Topic Guide in Security-Informed Safety
- Following our usual process:



# Workshop outcomes

- Strong agreement on the need
  - With some dissent
  - Noting much pre-existing work in regulations, codes of practice; not much that is discursive or expository.
- Topic guide needs to explain differences of approach in safety and security
  - Should consider the intellectual and engineering inter-play of the two themes
- Need sector-specific discussions
  - automotive, rail, nuclear, off-shore, aviation
- Nod to emerging concerns
  - e.g. security of AI in safety-critical settings

#### discussion questions

- 1. Is there a coherent body of established knowledge in this area, sufficient to warrant the creation of a substantive guide to the
- 2. What material from the core CyBOK should be part of such a
- 3. How can we make an indicative list of topics to be included (preferably with a structure/narrative arc to link them)?
- 4. What are the key references to draw upon and cite? (Other Bodies of Knowledge; Standards; seminal papers; textbooks).



### Current state, and plans

- Recruiting author, establishing scope, and strawman
  - we will follow the process described

#### Extra phase of work:

- CyBOK has had multiple rounds of 'small projects' for supporting materials
  - (practical labs, instruction material, evaluations in particular contexts, etc.)
  - all outputs freely available under OGL
- We will issue an open call for small projects specifically in Security-informed safety
  - Objectives of developing resources, and broadening awareness/take-up of the ideas
  - Based on previous experience, we would expect take-up by a range of academic and SMEs, typically: we offer up to £5k for a small project to produce some useful resources (to be published under OGL).
  - Project team reviews one-page proposals and funds the most promising/best focussed.



## In summary

- Working on:
  - Topic Guide in Cloud Security
    - publication later in 2025
  - Topic Guide in Security-Informed Safety
  - Resources supporting Security-Informed Safety
    - Teaching materials, curricula, practical labs, evaluations: depending on what the community offers and produces
- Informal input welcome in all published CyBOK





# CyBCK

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