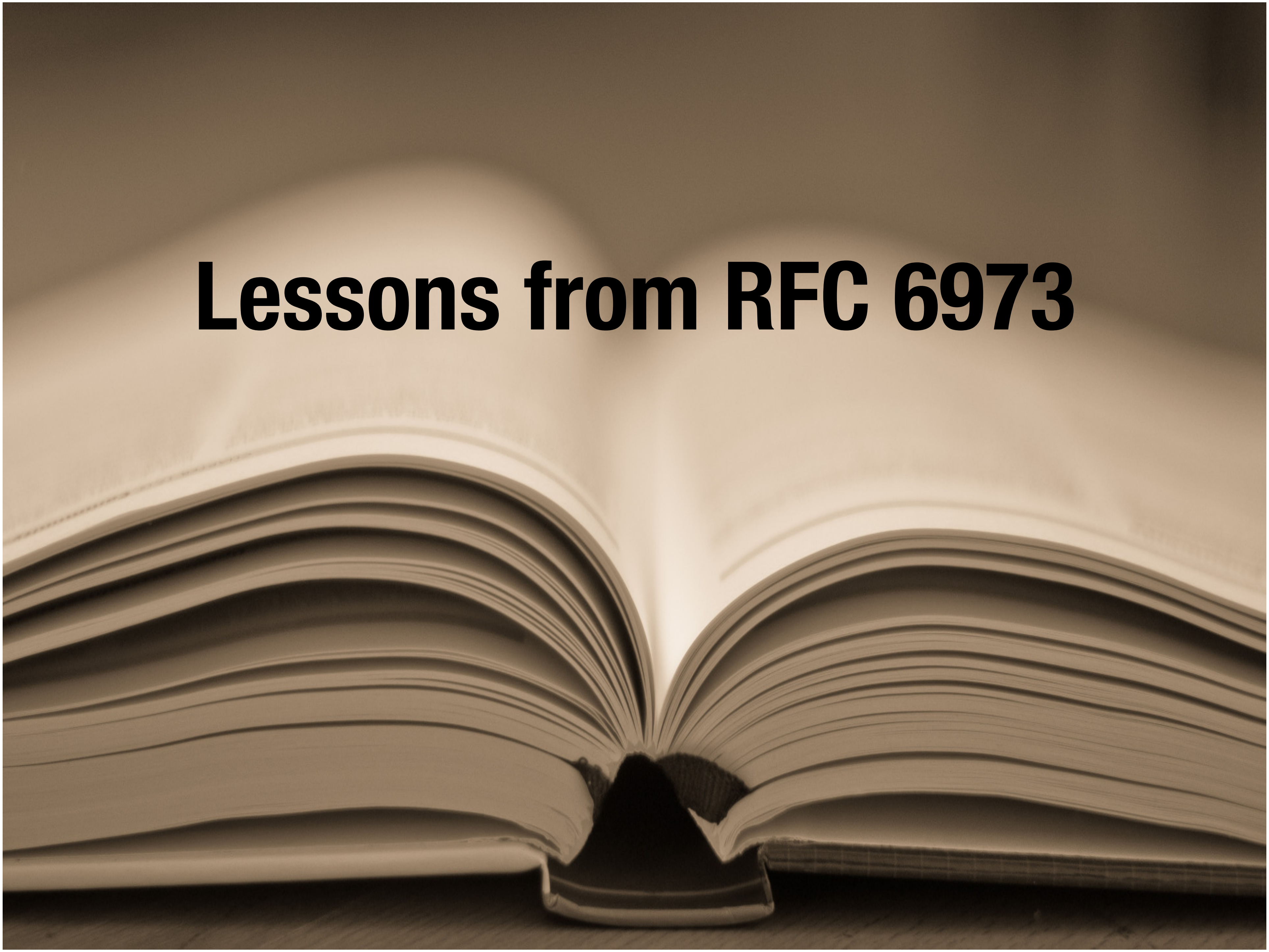
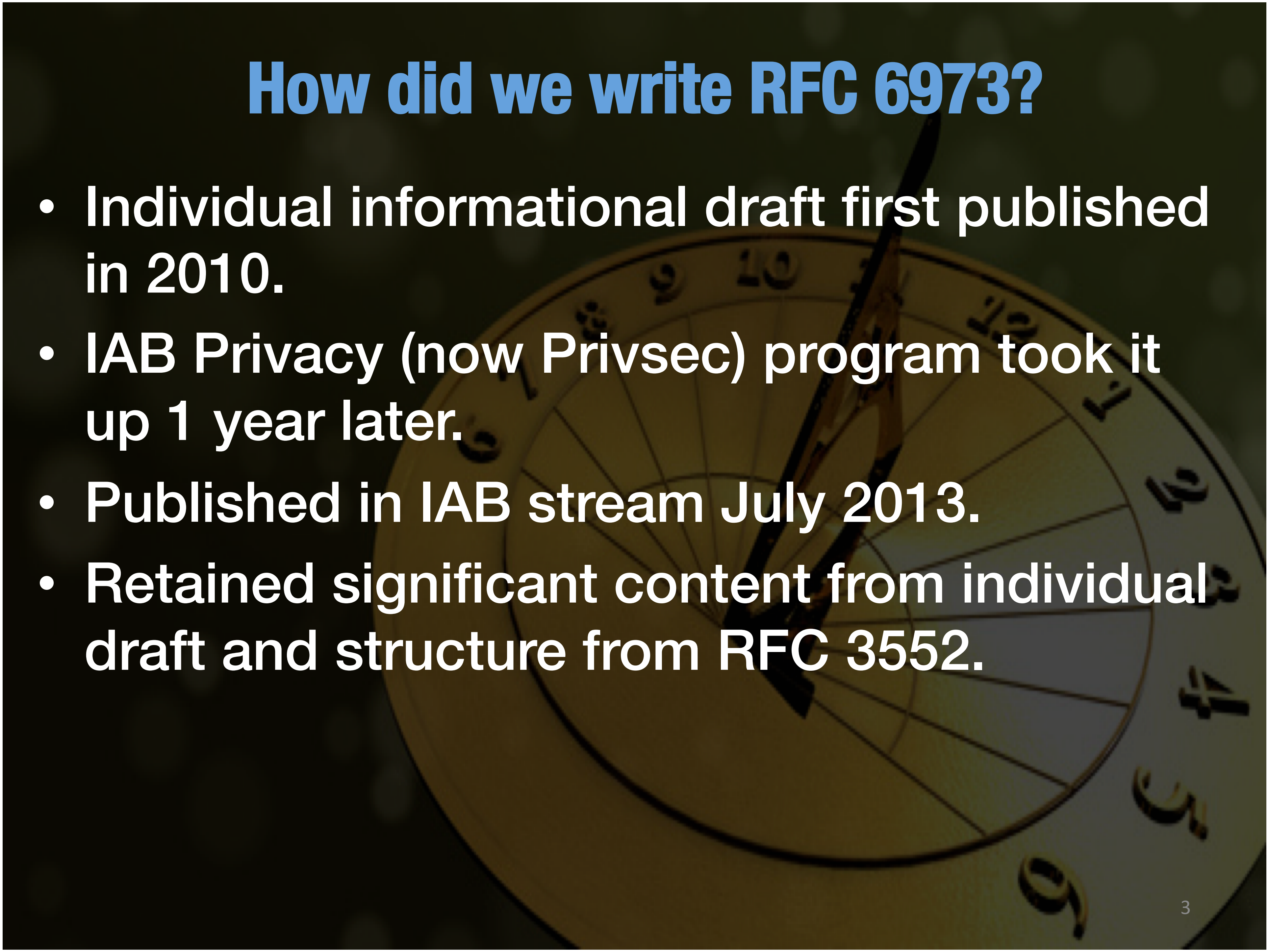


Lessons from RFC 6973

Why did we write RFC 6973?

- Security as an IETF design consideration (RFC 1543, 2223, 3552, 3365, …)
  - Realistically cannot design and standardize a new protocol without confidentiality, authentication, integrity, etc. protections or strong story for why not.
- Recognition within IAB and IETF of privacy as a design consideration.



How did we write RFC 6973?

- Individual informational draft first published in 2010.
- IAB Privacy (now Privsec) program took it up 1 year later.
- Published in IAB stream July 2013.
- Retained significant content from individual draft and structure from RFC 3552.

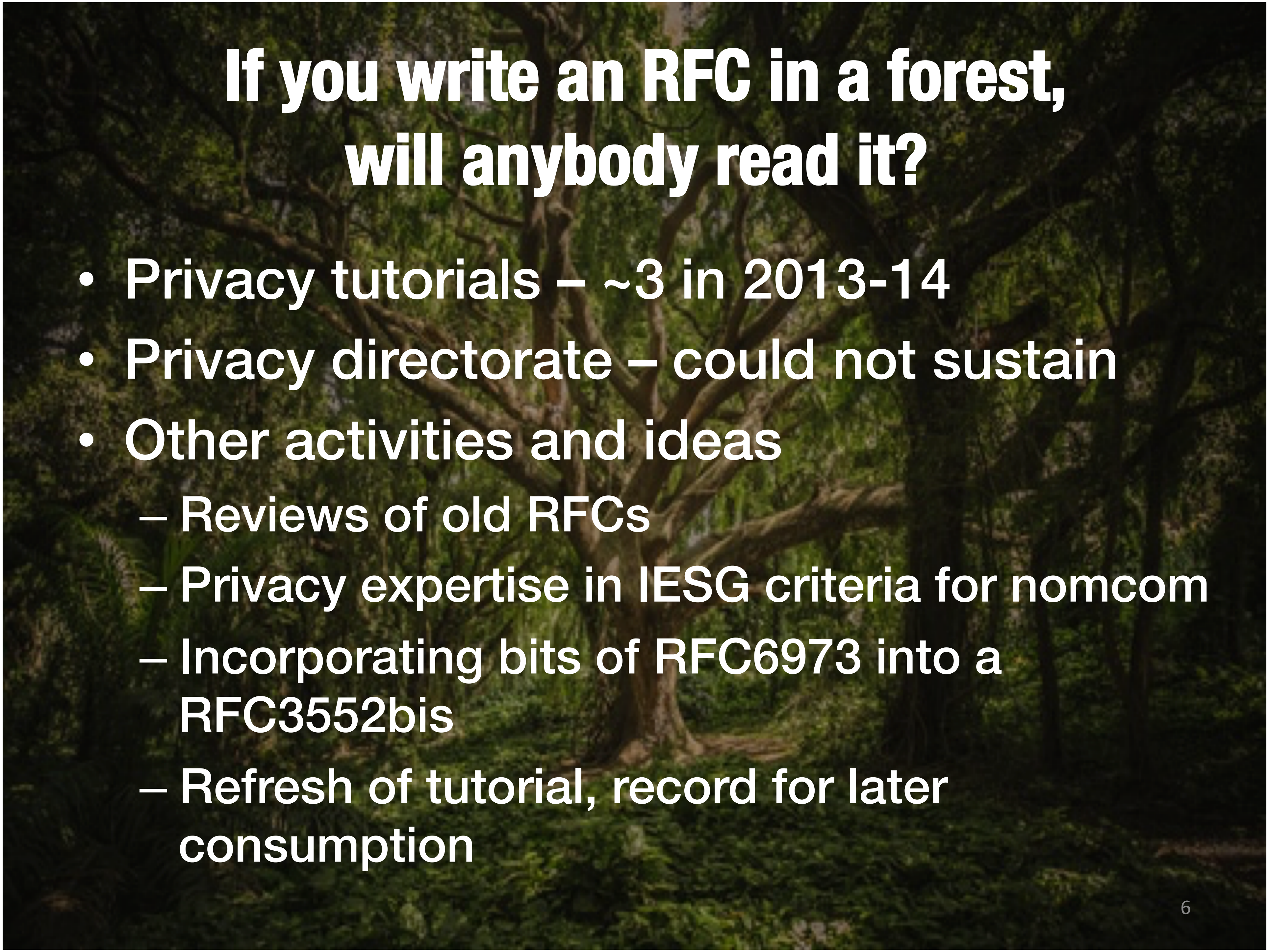
(Hard-fought) decisions (1/2)

- Limited ambition, general applicability
  - – No definition of "privacy."
  - – No explicit prohibitions or requirements.
  - – No required privacy considerations section.
  - – No specific legal framework.
- Acknowledged scope limitations
  - – What can be addressed in protocol design vs. deployment and operation.
  - – What can be addressed at each network layer.

(Hard-fought) decisions (2/2)

- Made distinction between (negative) defending against exploits and (positive) building privacy tools.

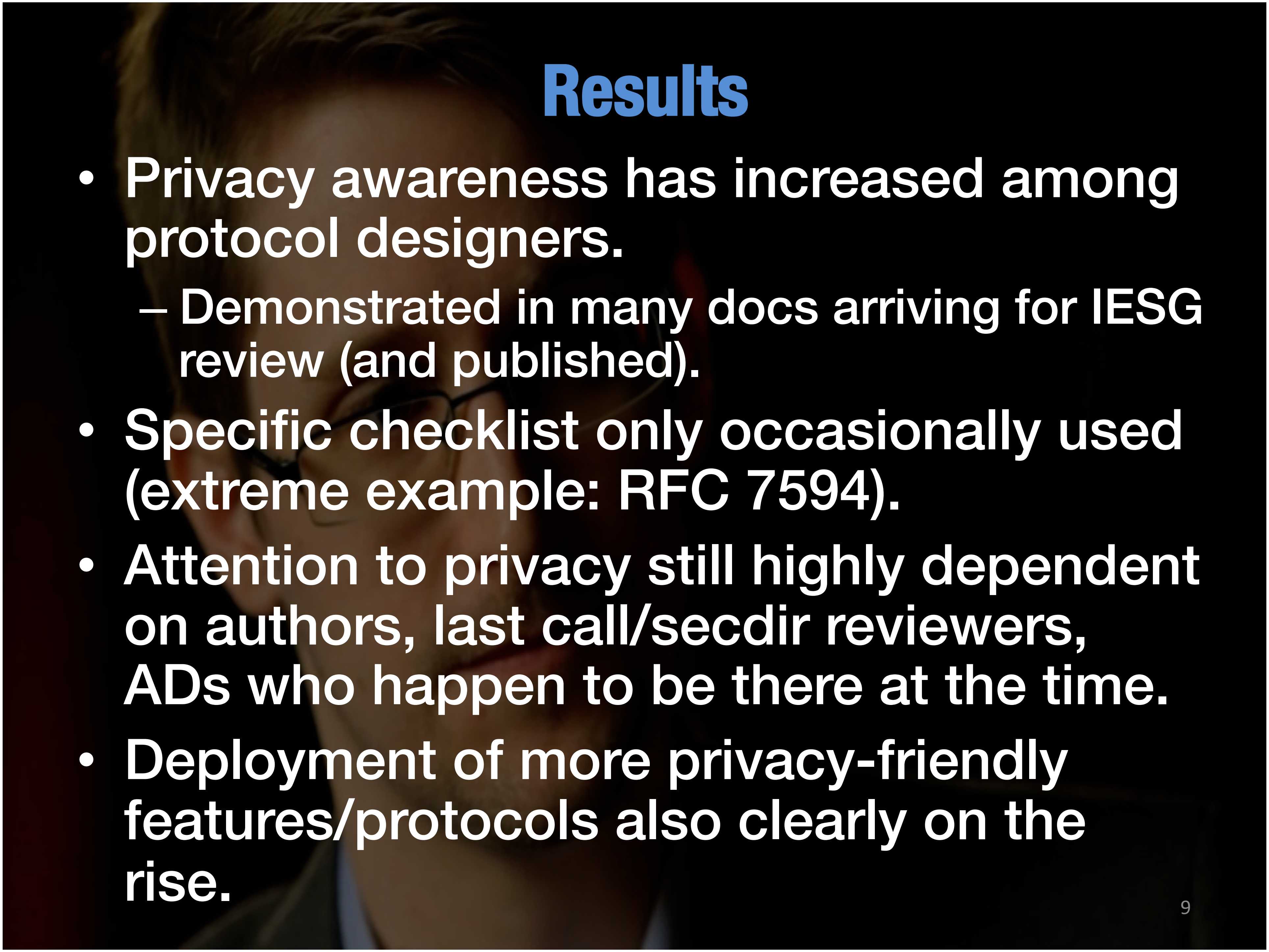
- Provided specific examples.



If you write an RFC in a forest, will anybody read it?

- Privacy tutorials – ~3 in 2013-14
- Privacy directorate – could not sustain
- Other activities and ideas
  - Reviews of old RFCs
  - Privacy expertise in IESG criteria for nomcom
  - Incorporating bits of RFC6973 into a RFC3552bis
  - Refresh of tutorial, record for later consumption

Results



Results

- Privacy awareness has increased among protocol designers.
  - Demonstrated in many docs arriving for IESG review (and published).
- Specific checklist only occasionally used (extreme example: RFC 7594).
- Attention to privacy still highly dependent on authors, last call/secdir reviewers, ADs who happen to be there at the time.
- Deployment of more privacy-friendly features/protocols also clearly on the rise.

Thoughts about human rights considerations in protocol design

- Focus on one area at a time
  - Censorship resistance? Decentralization?
- Focus on areas lacking in guidance
  - Security, privacy, internationalization, extensibility all well-trod already
- Provide specific examples of application
  - If an existing protocol design had considered X, how would it have changed?
- Be specific about scope limitations
  - Protocol vs. implementation vs. deployment
  - Upper layers vs. lower layers