

Cybersecurity: Why Policy Matters

EINSTEIN



- EINSTEIN detects and blocks cyber attacks from compromising federal agencies.

- EINSTEIN gives DHS the ability to use threat information from one agency to protect the rest of the government—and to help the private sector protect itself.

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 - EINSTEIN works fine for USG networks.
 - Doesn't scale, doesn't fit ICT infrastructure.
 - Doesn't fit power grid infrastructure.

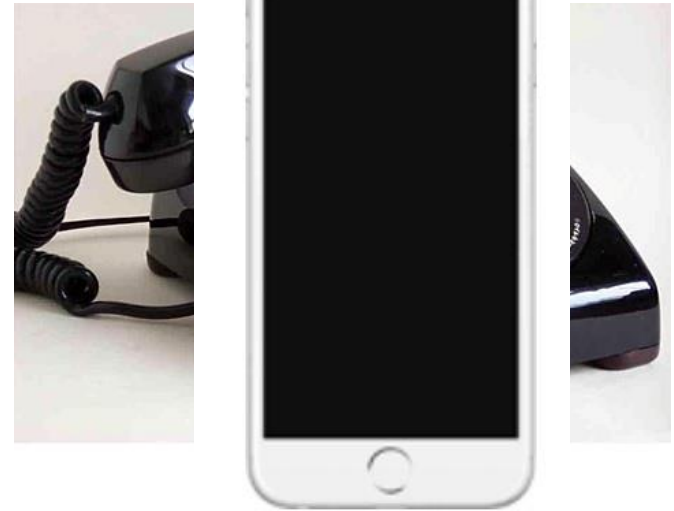
Encryption Debate

- End-to-end encryption.



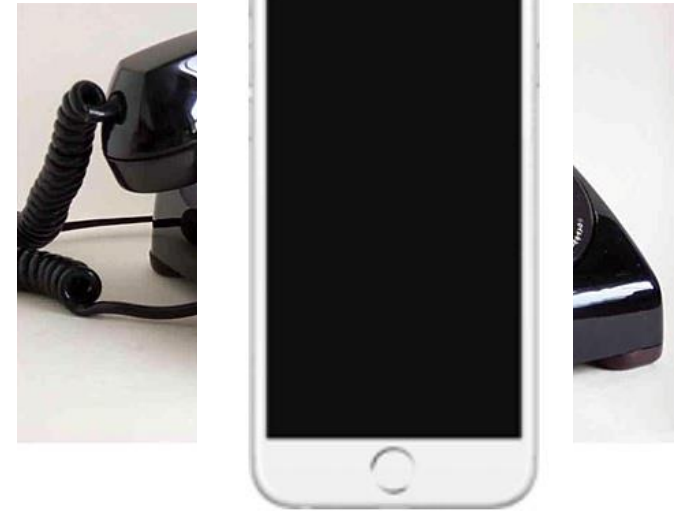
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Encryption Debate

- End-to-end encryption.
- Locked phones.
- Forty-year debate.
 - Change in export controls (why?).
 - Change in technologies.
 - Change in capabilities of USG.



Cybersecurity Policy: Necessary for Framing the Debate

- Law.
- Economics.
- Political Science.
- Sociology.
- Anthropology.
- Psychology.

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and Computer Science.



Facebook and Cambridge Analytica

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- What legal remedies are there?
- How does Facebook use information? Can the company's algorithms be modified without essentially undoing its capabilities?

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- You have to understand incentives (economics).
- You have to understand peoples' responses (psychology, economics, sociology, anthropology).

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- But ultimately, you have to understand where the levers for change are—and that's **law and regulations**.

Cybersecurity: Why Policy Matters

- Understand need for constraints on power.
- Understand tradeoffs in the policy space.
- Understand technical feasibility.