

DARPA SHARE Program

Dave Oran

Network Systems Research & Design

What is This?

- A solicitation from DARPA – U.S. Defense Advanced Research Projects Agency
- A “**Broad Agency Announcement**”, which is a non-secret, open request for proposals
- You can find it at
<https://www.fbo.gov/utills/view?id=a4742ef6ea3acce9ab33592a85bcf682>

What is it about?

- **Secure Handhelds on Assured Resilient Networks at the Tactical Edge**
- Let's unpack this:
 - Multi-level secure system for in-field deployment
 - Tactical (i.e. battlefield) networks with radios
 - Major improvement over existing systems in resilient operation
 - Field-testable system, not a research prototype
- DARPA thinks ICN may be just the ticket for this

Some administrivia

Caveat: don't take my word for all of this – I may have some of it wrong

- Proposal deadline was March 15
- Budget about \$15M over three years
- Thought to want to fund 2 proposals
- Received at least 9 proposals

What might be interesting about this for ICNRG

- How do you do multi-level secure group keying with ICN data-centric approach?
- How do you get differentiated service which captures information importance **and** request importance?
 - And map it to both transmission and caching?
- How do you get strong DTN properties using ICN protocols?
- How do you deal with mobility across both mesh tactical radios and COTS LTE-style radios with satellite uplinks?

You may have questions...but I probably don't have answers.