

The logo for K&L GATES, featuring the text in white on an orange rectangular background.

K&L GATES

Hudson Institute

Does the U.S. Need a National Quantum Initiative?

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October 17, 2017

ASKING THE KEY QUESTIONS

- Informal industry-led working group asking:
 - What is the need?
 - What is the value?
 - What are the risks?
 - What might a national initiative look like?

WHAT IS THE NEED?

- National R&D initiatives work best when:
 - A strong federal interest exists ✓
 - Public and private R&D is underway ✓
 - Coordination is spotty ✓
 - International competitors are racing to win ✓

WHAT IS THE VALUE?

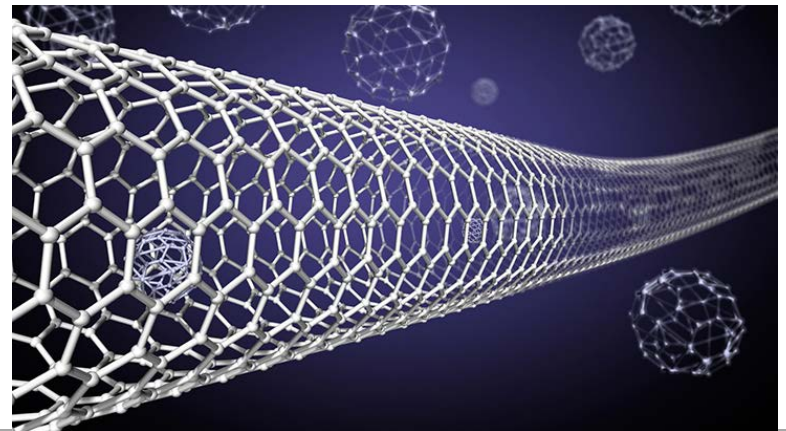
- Coordinate
 - Set broad objectives
 - Reduce gaps and overlaps
- Accelerate
 - Enable more federal funding, attract private funding
- Raise the profile of the field
- Signal to competitors

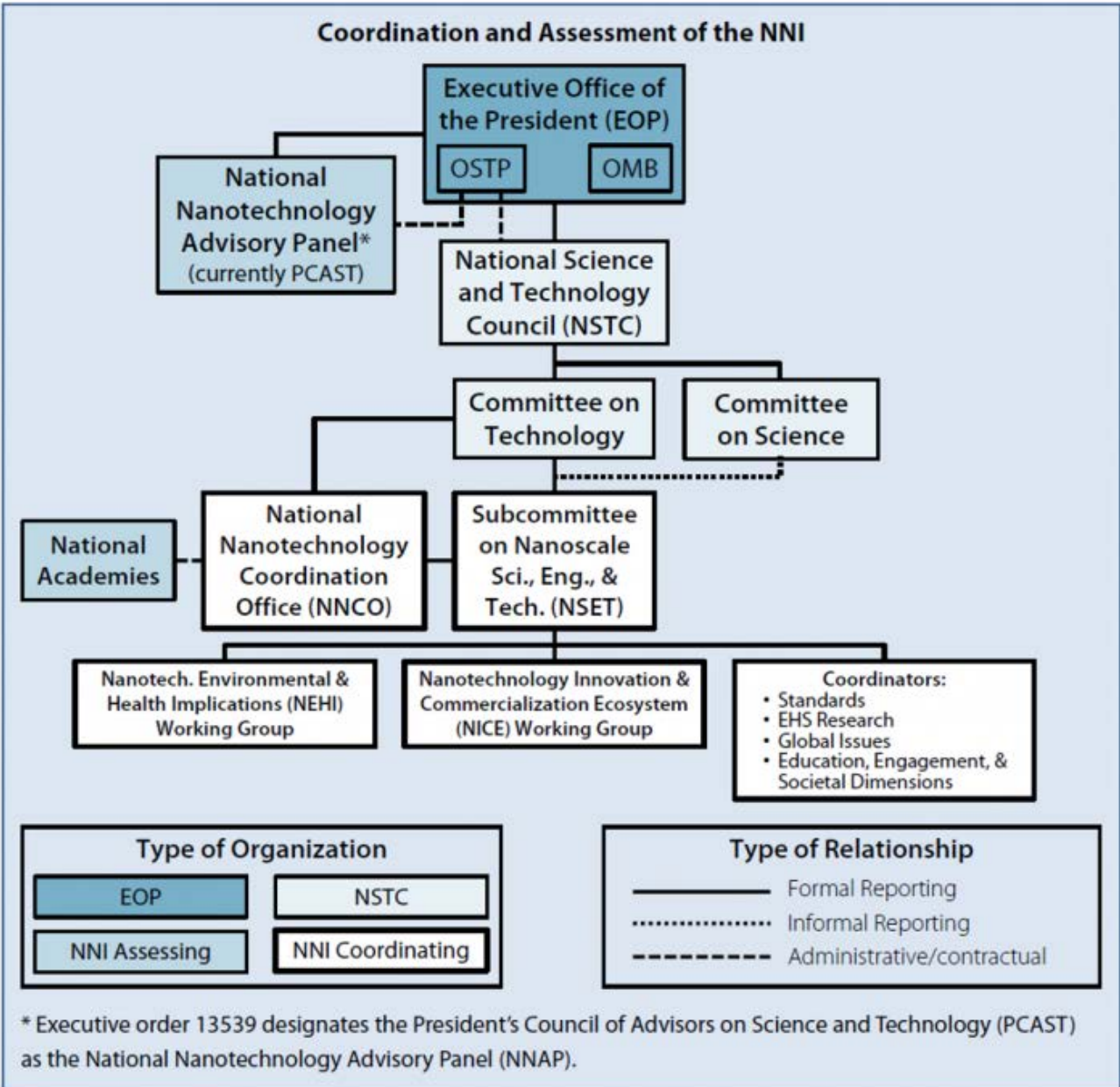
WHAT ARE THE RISKS?

- Mandating particular technologies
- Picking winners and losers in the marketplace
- Crowding out private investment
- Raising barriers to entry
- Regulating prematurely

THE NANOTECHNOLOGY MODEL

- National Nanotechnology Initiative
 - Created in 2000, enacted in 2002
 - Coordinates ~20 federal departments and agencies
 - Regularly-updated Strategic Plan
 - Vision, goals, grand challenges, and signature initiatives
 - R&D funded by NNI member agencies (not NNI)
 - \$1.4 billion in 2017 budget
 - Led from the White House





SPECIAL CONSIDERATIONS

- Scope
 - Computing?
 - Cryptography?
 - Both?
- **CLASSIFIED**
- “Right every time” v. “right once”

FOR MORE INFORMATION

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