

## National Commission on Innovation and Competitiveness Frontiers

### Working Group on Developing and Deploying Disruptive Technologies at Speed and Scale

#### *Session 2 Discussion Guide*

Wednesday, September 13<sup>th</sup>, 2023

3:30 p.m. to 5:00 p.m.

#### Agenda

- 3:30-3:40 – Welcome & Introduction
- 3:40-4:15 – Topic #1 Discussion
- 4:15-4:50 – Topic #2 Discussion
- 4:50-5:00 – Conclusion & Next Steps

#### Background & Context

The Future of Technology: Developing and Deploying Disruptive Technologies at Speed and Scale charter identifies four broad issue areas for the Commission and its Working Groups to explore:

- 1) Sustaining and properly allocating investments in R&D while removing barriers to commercialization of disruptive technologies.
- 2) Reinforcing U.S. innovation leadership through national domestic strategies and international technology statecraft.
- 3) Bolstering the security, resiliency, and reliability of critical supply chains.
- 4) Leveraging cross-disciplinary partnerships to harness the convergence of disruptive technologies.

When the Commission convened at UC Davis earlier this year, discussion was focused on topics 1 and 4. Discussion during this and subsequent Working Group Meetings will unpack those topics further, explore issue areas 2 and 3 above, and respond to recent policy and technology developments that are shaping the broader landscape of disruptive technologies. Specifically, major developments in this space include:

- Implementation of CHIPS and IRA: Both CHIPS and IRA celebrated their one-year anniversary this August, with both bills firmly in the implementation phase. Capitalizing on investments in commercialization and critical technologies will be key to promoting the innovation ecosystem.
- Congressional Focus on China: Congress continues to focus on China, particularly around technology and innovation, as evidenced by the growing interest in a “China 2.0” bill to address competitiveness issues in critical technologies.

- Push for Technology Regulation: In recent months, momentum has been growing for expanded technology regulation, particularly of artificial intelligence. Careful policy design will be critical to ensuring that federal action boosts, rather than diminishes, innovation in critical technologies.
- Critical Talent Shortages: Talent shortages in critical areas (e.g., semiconductors and cybersecurity) continue to pose a significant barrier to innovation and leadership in key technologies.

*The questions below are intended to guide discussion and provide food for thought. Not all questions need to be directly addressed during the Working Group session. Moderators and Working Group participants will collaboratively shape discussion around priority issues.*

## Discussion

### Topic 1: Building innovation ecosystems through national domestic strategies

- How can the United States leverage or reconfigure existing governance structures to create a coordinated national approach to innovation competitiveness?
- How can communication and collaboration between the public and private sector on key innovation challenges be strengthened?
- How can state and regional leadership capitalize on local resources to build innovation ecosystems? What role do these localized efforts play in an integrated, national innovation ecosystem?

### Topic 2: Enhancing the innovation workforce in critical industries and technologies

- What technologies and industries are facing the most critical talent shortages? Do these differ in the short run and long run?
- Are there opportunities for the public and private sector to collaborate on addressing talent shortages? Do we need new partnerships or new models of education and workforce training?
- What role does high-skill immigration play in filling talent gaps in critical technologies? Does the current immigration system need any reforms to support this goal?

## Conclusion & Next Steps

- Our second session will be held **October 16<sup>th</sup>, from 3:30pm-5:00pm**, and will focus on international strategies to advance disruptive technologies, including technology statecraft and securing critical supply chains. [*Moderators thank WG participants*]