Office of Strategic Capital

20 May 2025

NDIA Manufacturing Division

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DOD'S 14 CRITICAL TECHNOLOGY AREAS

Seed Areas of Emerging Opportunity

1. Biotechnology
2. Quantum Science
3. Future Generation Wireless Technology (FutureG)
4. Advanced Materials

Defense-Specific Areas

5. Directed Energy
6. Hypersonics
7. Integrated Sensing and Cyber

Effective Adoption Areas

8. Trusted AI and Autonomy
9. Integrated Network Systems-of-Systems
10. Microelectronics
11. Space Technology
12. Energy Resilience
13. Advanced Computing and Software
14. Human-Machine Interfaces

OSC's 33 Covered Technology Areas

1. **Advanced bulk materials;**
2. **Advanced manufacturing;**
3. **Autonomous mobile robots;**
4. **Battery storage;**
5. **Biochemicals;**
6. **Bioenergetics;**
7. **Biomass;**
8. Cybersecurity;
9. Data fabric;
10. Decision science;
11. Edge computing;
12. External communication;
13. **Hydrogen generation and storage;**
14. Mesh networks;
15. **Microelectronics assembly, testing, or packaging;**
16. Microelectronics design and development;
17. Microelectronics fabrication;
18. **Microelectronics manufacturing equipment;**
19. **Microelectronics materials;**
20. **Nanomaterials and metamaterials;**
21. Open RAN;
22. Optical communications;
23. **Sensor hardware;**
24. Solar;
25. Space launch;
26. **Spacecraft;**
27. Space-enabled services and equipment;
28. **Synthetic biology;**
29. Quantum computing;
30. Quantum security;
31. Quantum sensing;
32. Critical minerals and materials; and
33. Special marine infrastructure

Bold = "Industry Segments of Particular Interest" to OSC

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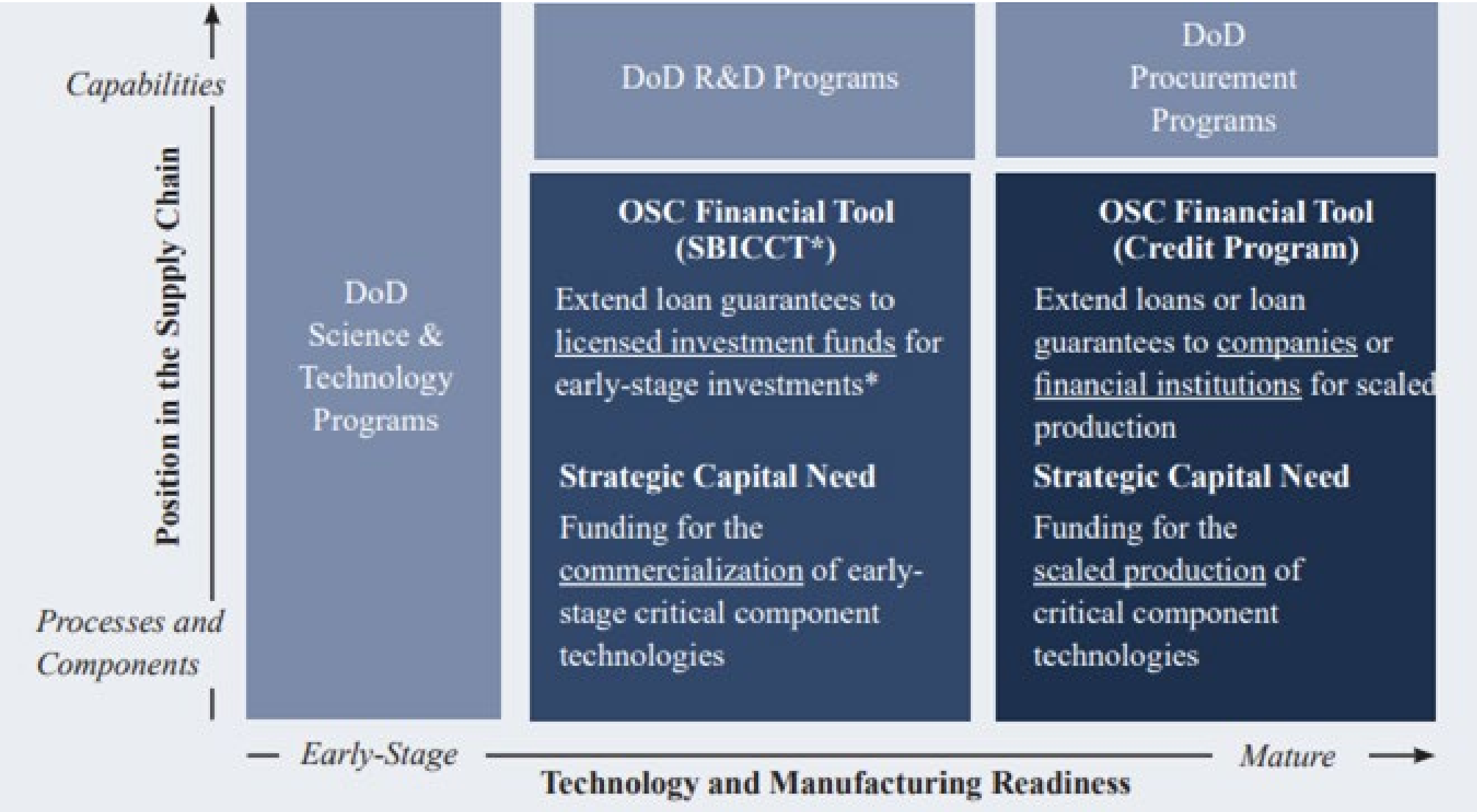
OSC's Guiding Critical Technology Framework



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