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Discussion Draft:

DSCA Commercial Technology Trends

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- Problem Statement

- Discussion Questions

- The Role of the Defense Innovation Community

- Proposed Prioritization Framework

- Recommendations

- Barriers to Commercial Tech Integration

- Discussion Questions

Use of commercial technologies in Ukraine illustrates their *potential* to improve partner nations' operational capabilities and enhance deterrence

Current Defense Security Cooperation Agency (DSCA) approaches to partner capability development largely focus on traditional hardware, platforms, and systems
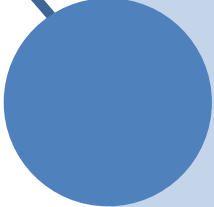
There are ways for DCSA to connect partners with commercial technology—but change will be needed to take advantage of the opportunity space.

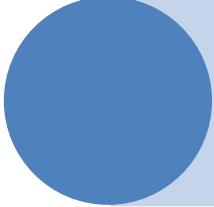*Research is still in progress—feedback on the following is most helpful*

- What steps are needed to better link commercial technology providers to partner nations' operational requirements?

- Are there procurement best practices/authorities that could be applied in new/creative ways to deliver these capabilities to partners?

- What additional barriers are there to incorporating commercial technology into security cooperation?

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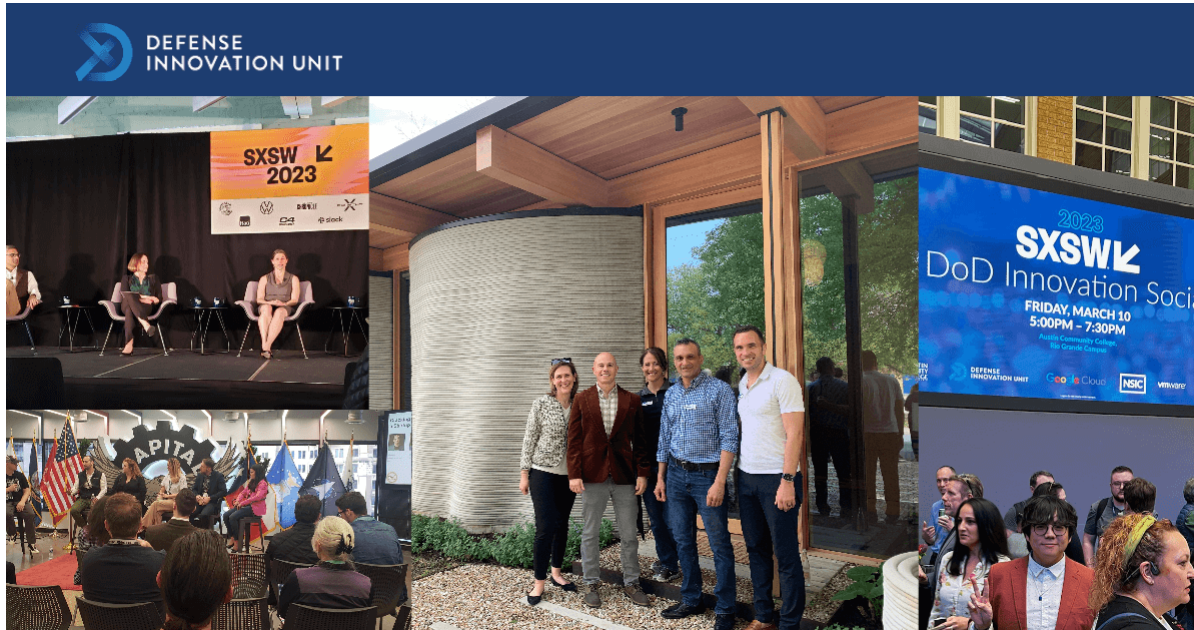
Defense Innovation Organizations Have Knowledge, Reach, and Relationships with Commercial Industry

The DIOs generally lack the **mandate**, **resources**, **presence**, and **expertise** required to help address partner nations' needs **proactively** and **consistently**.
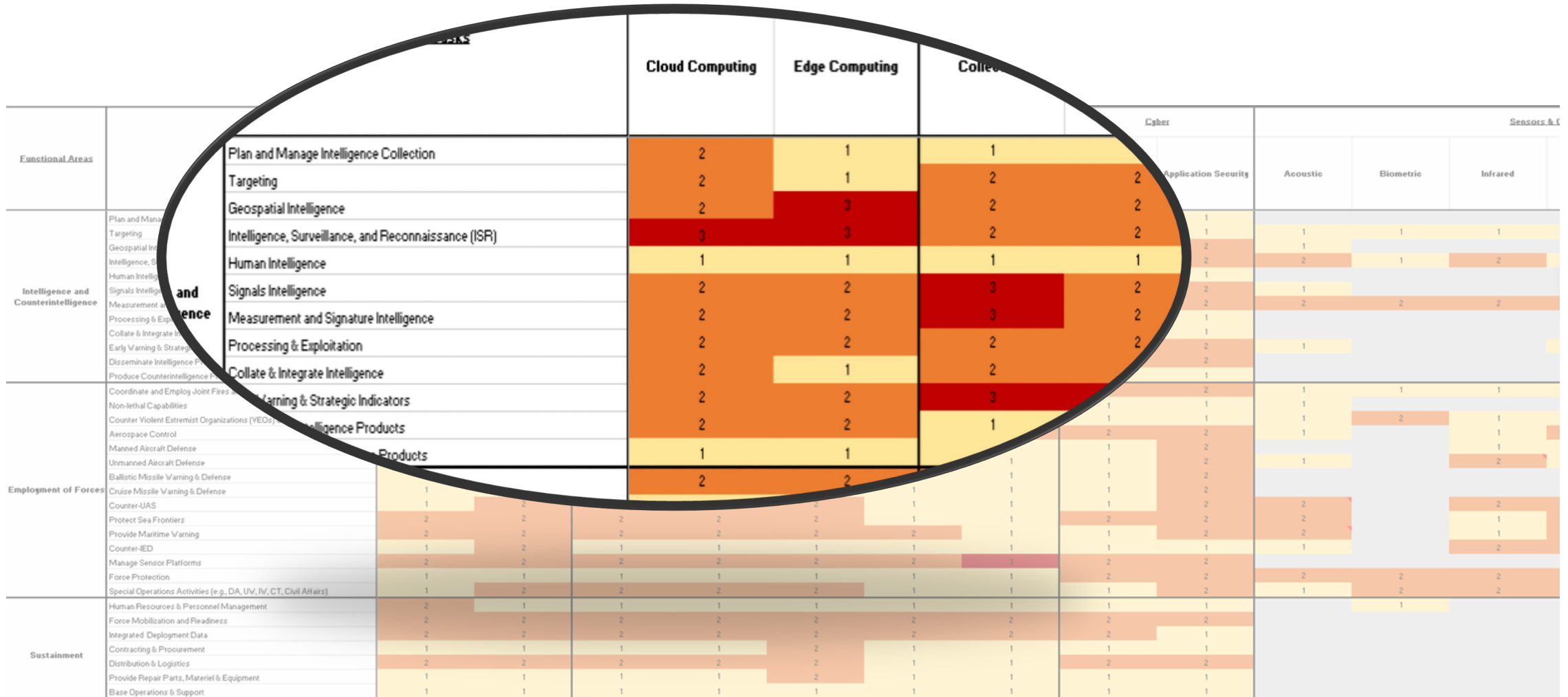
Data sharing limitations and staff bandwidth remain points of friction for DIO collaboration with DSCA—even as individual DIO team members recognize the value of this mission
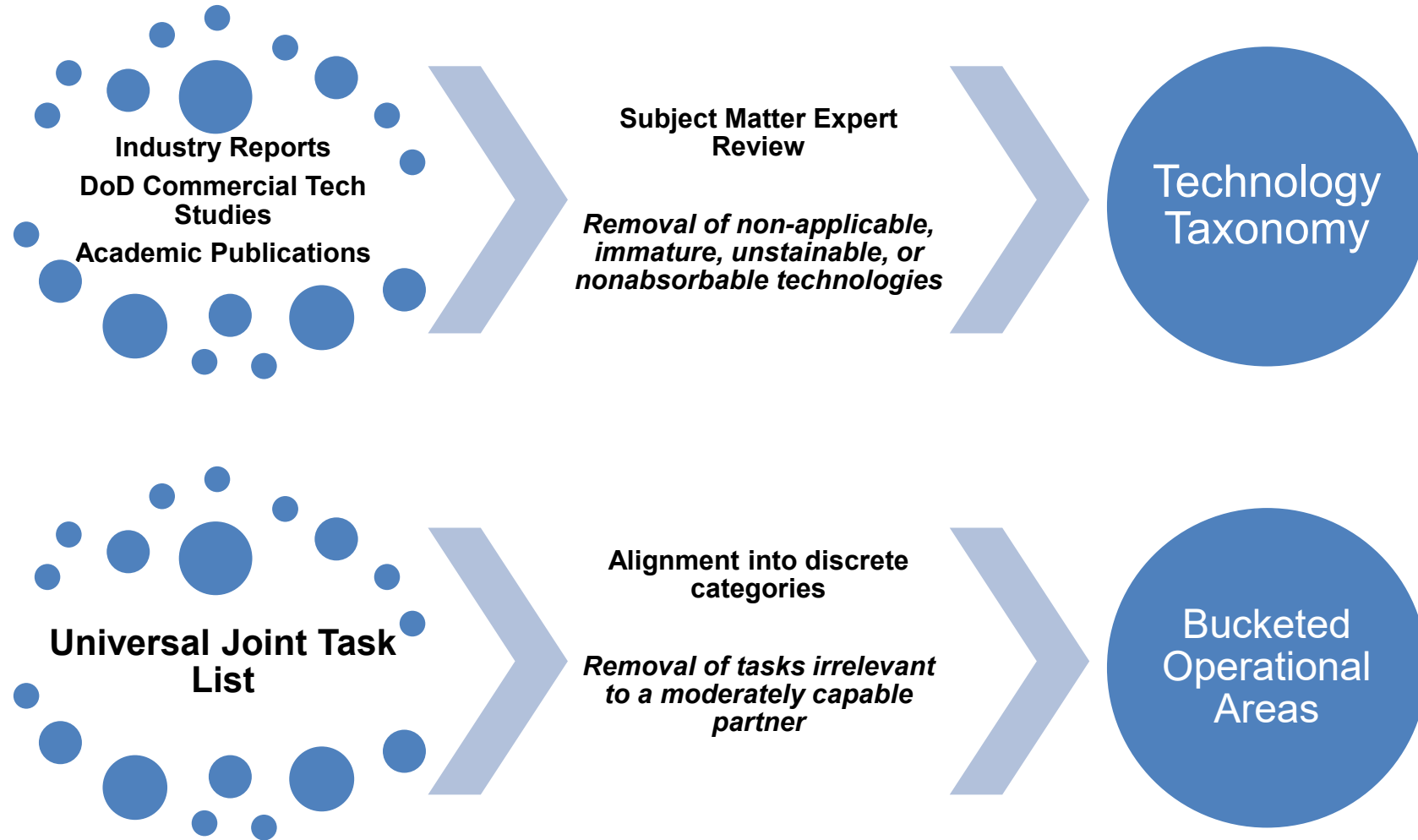
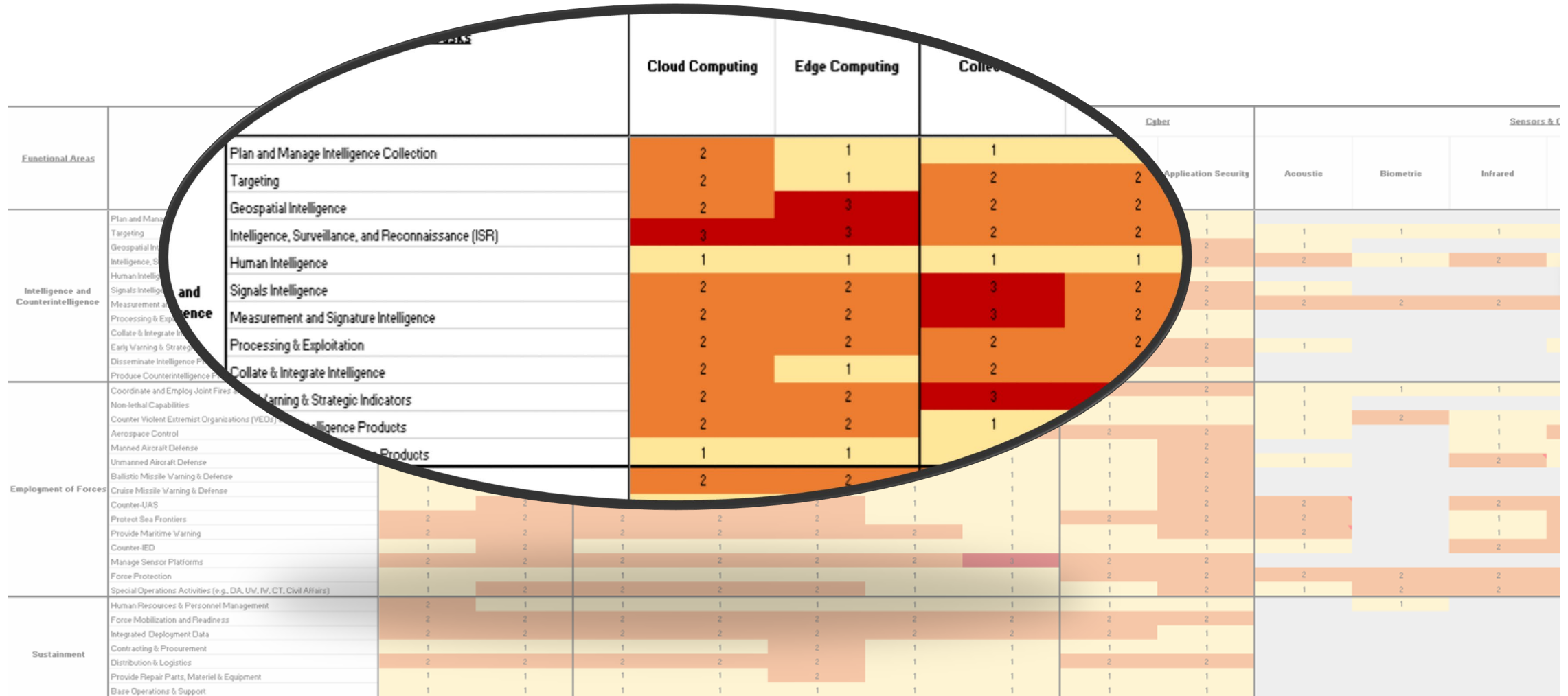Senior leader direction and policy changes could help address these issues

Even with such policy changes, *prioritization* is needed to best engage with DIOs and industry partners

	Cloud Computing	Edge Computing	Colle...		
Plan and Manage Intelligence Collection	2	1	1		
Targeting	2	1	2	2	
Geospatial Intelligence	2	3	2	2	
Intelligence, Surveillance, and Reconnaissance (ISR)	3	3	2	2	
Human Intelligence	1	1	1	1	
Signals Intelligence	2	2	3	2	
Measurement and Signature Intelligence	2	2	3	2	
Processing & Exploitation	2	2	2	2	
Collate & Integrate Intelligence	2	1	2		
Early Warning & Strategic Indicators	2	2	3		
...lligence Products	2	2	1		
...Products	1	1			
	2	2			

Functional Areas

Intelligence and Counterintelligence

Employment of Forces

Sustainment

Industry Reports
DoD Commercial Tech Studies
Academic Publications

Subject Matter Expert Review

Removal of non-applicable, immature, unstainable, or nonabsorbable technologies

Technology Taxonomy

Universal Joint Task List

Alignment into discrete categories

Removal of tasks irrelevant to a moderately capable partner

Bucketed Operational Areas

| High Impact Technologies	High Impact Operational Areas
• Compute • Data • Cyber • Multi-modal AI • Generative AI	• ISR • Measurement and signals intelligence (MASINT) • Maritime warning (i.e., maritime domain awareness) • Joint command and control • IT infrastructure

Phase 0: Pilot:

- Collaborate with a defense innovation organization to deliver initial capability to a partner nation in a low-risk, high impact area;
- Stress-test new processes and find friction points

Phase 1: Market Validation and Market Fit:

- Define DSCA's value proposition in enabling sales of commercial technology;
- Validate industry's willingness to provide solutions to partners
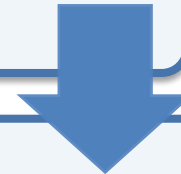
Phase 2: Preparation and Launch:

- Establish dedicated team
- Develop training and resources for SCOs
- Enhance market intelligence capabilities
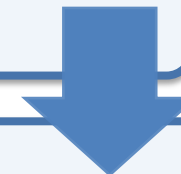
Phase 3: Execute and Scale:

- Conduct engagements with partner nations
- Field assessment teams to apply heatmap to partner nations
- Create tailored strategies and roadmaps in conjunction with industry

Procurement methods

Export controls

Risk mitigation

DSCA and SCO culture of innovation

Partner nations' culture of innovation and technical capacity

➢ What steps are needed to better link commercial technology providers to partner nations' operational requirements?

➢ Are there procurement best practices/authorities that could be applied in new/creative ways to deliver these capabilities to partners?

➢ What additional barriers are there to incorporating commercial technology into security cooperation?

Backup

Table 1. Impact Levels of Technologies in Taxonomy

Impact Level	Heatmap Color	Definition	Examples & Explanation
High Impact	(red)	The technology has a proven or expected ability to provide transformational capabilities and deliver outsized returns.	The technology can render an enemy capability obsolete and/or unlock or power the ability to use additional capabilities.
Moderate Impact	(orange)	The technology has a proven or expected ability to improve or optimize how a task is executed.	The technology can improve important functions in task execution. However, the technology alone may not unlock the ability to leverage additional capabilities.
Low Impact	(yellow)	The technology has a proven or potential utility in supporting execution of a task.	The technology may be useful to how a task is executed, but may not be required or essential.
No Impact	(gray)	The technology has no discernable application or direct relevance to a task.	N/A

- **Applicability.** Technologies must be relevant to measurably improving and/or enabling a partner nations' defense and deterrence of larger aggressors

- **Sustainability.** There must be a robust or rapidly growing commercial market for the technology. For defense-unique technologies that have little to no commercial market, there must be a viable path to ensuring its continued production and sustainability. Examples include significant adoption and/or use by allied forces and/or plans by the DoD to acquire and scale the Technology

- **Maturity.** Technologies must be technology readiness level (TRL) seven or higher.7 This indicates the technologies are no longer experimental and have been successfully prototyped, at a minimum, in a test reflective of expected operational conditions. The technology is generally ready for sale or transfer

- **Absorbability.** Those using the technology do not require specialized or advanced education (e.g., doctoral-level training). Training, certifications, and education on how to use the technology must be readily available (e.g., industry-provided) and generally consistent with what is commonly provided by the DoD to partner nations (e.g., via international military education and training (IMET)).8