DTIC Information Analysis Centers (IAC) Technical Scope
Aligning with SECDEF's Top Priorities

www.csiac.org

CSIAC
Cyber Security & Information Systems
Information Analysis Center

CSTAT

- Software Data & Analysis
- Information Assurance (IA)
- Modeling & Simulation (M&S)
- Knowledge Management & Information Sharing

www.dsiac.org

DSIAC
Defense Systems
Information Analysis Center

DSTAT

- Weapons Systems
- Autonomous Systems
- Survivability & Vulnerability
- RMQSI
- Advanced Materials
- Military Sensing
- Energetics
- Directed Energy
- Non-lethal Weapons

www.hdiac.org

HDIAC
Homeland Defense & Security
Information Analysis Center

HDTAT

- Homeland Defense & Security
- Critical Infrastructure Protection (CIP)
- Weapons of Mass Destruction (WMD)
- CBRN Defense
- Biometrics
- Medical
- Cultural Studies
- Alternative Energy

DEFENSE INNOVATION MARKETPLACE

What is the *"Marketplace?"*

Communication resource between DoD R&E Enterprise and Industry/Academia containing:

- **DoD R&E Strategic Guidance documents**
  - Communities of Interest pages
- **DoD R&E Business Opportunities**
  - R&E-related solicitations, events
- **Technology Interchange Meetings**
  - Air Force Nuclear Deterrence Operations (May 2016)
- **Independent Research & Development (IR&D) Secure Portal**
  - Share IR&D projects with S&T/R&D and acquisition personnel

Review Combatant Command (CCMD) classified capability needs

- **Classified Reading Room** available at the Defense Technical Information Center, Fort Belvoir, VA
- Submit a visitor access request at http://www.dtic.mil
  - Active Security Clearance of secret or higher & U.S. citizenship required
  - Limited to Industry/Government/DoD
  - Minimum of 10-day processing
  - CCMDs approve access to their respective classified needs

Combatant Command Common Capability Needs

Rollup Category	Rollup Subcategory	USAFRICOM	USCENTCOM	USEUCOM	USNORTHCOM	USPACOM	USSOCOM	USSTRATCOM	USOUTHCOM	USTRANSCOM
C2/C4I/ Cyber	**Architectures & Components**	Communications: C4ISR for Multi-National Operations; C4ISR Data Transport; Coalition-shareable Airborne ISR Architecture	Information Sharing: Data Management–Compression and Processing. Information Sharing: Multiple Domain/ Cross Domain Assurance	Improved Interoperability with Partner and Allied Capabilities	Threat Information Sharing, Collaboration, Dissemination/Mission Assurance Common Integrative Framework	Architectures and Systems to Support Information Sharing, Assured Connectivity, as well as Enhanced Interoperability among Allies and Partners	Command, Control, Communications, and Computers: Low Visibility/Low Profile/ Conformal/Multi-Spectral Antennas. Ability to selectively permit/deny net connection of personal electronic devices. Proficiency to conduct cyber-enabled SOF operations to influence foreign audiences, reduce risk to the force, and gain advantage over competitors, adversaries, and enemies.		Improved interoperability with partner and Allied capabilities. Threat Information Sharing, Collaboration, Dissemination	Survivable/Secure Comms/Networks, Information Infrastructure Protection and Survivable Systems Engineering
	Cyber Defense	Communications: Cyber Freedom of Action (FOM)		Cyber COP Capable of Providing COCOM Freedom of Action	Network Resiliency	Cyber Defense/Network Security	Capabilities to counter detection in denied spaces, urban/rural areas, social media, and enhanced deception measures	Build Cyberspace Capability & Capacity	Cyber/Information Assurance. Cyber network Defense. Cyber COP capable of providing COCOM freedom of action	Cyber/Information Assurance: Defend Info and Mitigate Threats to Mobility Operations
	Sensors & Radars	ISR: Radio Frequency Direction Finding (RFDF); Stand Off Home-made/ Improvised Explosive Device (HME/IED) Detection; Fused Multi-Int'l Airborne/ FMV; Autonomy-enabled PED; Drone Sense & Avoid		C4: Low Vis/Low Phased Array Radio Detect and Ranging (RADAR). Optics: Undetectable	Detect, Track, and ID Air Targets/Northern Approaches Sensors	Persistent Wide Area ISR	Command, Control, Communications, and Computers: Low Vis/Low Pro Phased Array Radio Detect and Ranging (RADAR). Optics: Undetectable Aiming Laser and Advanced Sensors (persistent surveillance systems also referred to as unattended ground sensor (UGS) systems, tactical surveillance systems, and force protection systems).		Persistent Wide Area Surveillance to detect, track, and ID contacts of interest in CENTCOM and Caribbean approaches. UAS Due Regard Radar for Sense and Avoid foliage penetration.	Ability to Determine Security of a Landing Site for Arrival and Throughput Operations without Use of a Pre-coordinated On-site Survey as well as All-weather/Lights-out Taxi, Take-off and Landing Capability for Mobility Aircraft Operations from Prepared and Unprepared Fields.
	Communications	Communications: Centralized Commercial SATCOM Management; Language Translation; Situational Awareness; Coalition Radio Interoperability		Information Sharing/ Data Sharing with Partners and Allies.	Arctic Communication Capability: 24 Hour Persistent Comms Above 65 Degrees North	Assured, Interoperable and Cross-domain	Intelligence systems that provide unparalleled interoperability of data to support global SOF battlespace awareness for mission planning, rehearsal, analysis, & operations. Sufficiency to collect, store, retrieve, analyze, and disseminate data in near real-time (next generation Common Operating Picture)	Strategic Comms: Infrastructure Issues, and Compatibility	Information/Data sharing with partners, coalitions and allies. Assured interoperable and cross-domain comms. Caribbean Collaboration Environment	
	Precision, Navigation & Timing			Improved PNT in a contested environment	Critical Time Mgmt. Relative to GPS: Persistent and accurate timing signals	Assured Navigation	Position Location Information (PLI) for Disadvantaged Environments. Develop the ability to determine location information of friendly and enemy forces without relying upon GPS.	Assured PNT in an A2/AD environment		Delivery of joint forces and their sustainment within a GPS denied environment.

Combatant Command Common Capability Needs

Rollup Category	Rollup Subcategory	USAFRICOM	USCENTCOM	USEUCOM	USNORTHCOM	USPACOM	USSOCOM	USSTRATCOM	USOUTHCOM	USTRANSCOM
C2/C4I/Cyber	A2/AD			ISR/Communications in a contested environment		ISR/Communications in a contested environment	SOF aviation requires precise navigation in Anti-Access/Area Denial (A2AD) environments. Navigation Independent Relative Positioning System (NIRPS) that that can provide precise navigation independent of INS and GPS. Ability to achieve denial of enemy visual augmentation systems (VAS) capability during select phases of combat operations			Cyber/Information Assurance: Ability to conduct operations in a cyber contested environment.
Force Protection & Medical	Medical	Medical: Extend the "Golden Day"; Disease Surveillance and Prevention; Disease Modeling and Trauma Intervention; Remote / Austere Trauma Medicine; Medical Evacuation; Medical Informatics & Telemedicine	Medical: extend the "golden hour"	Rapid response to pandemic influenza/ infectious disease occurrence	Counter WMD preparedness and response in the domestic AOR	Counter pandemic and infectious disease	Counter WMD (CWMD) Bio-Med Systems: Tactical Portable Oxygen Generator Far-forward small team Tactical Combat Casualty Care (TCCC)-medical equipment/ protocols for rapid diagnostics, treatment, and prophylaxis. Freeze-dried Plasma/ Whole Blood Substitute		Biosurveillance, Countering Epidemic, Pandemic and Infectious disease. Counter IED (land, water-borne)	Virtual borders, decontamination of transportation assets, screen cargo for smuggled goods/explosives/chem-bio threats, stand-off/robotic detectors, enhance aircraft survivability
Domain Awareness	Subsurface	Maritime Domain Awareness (MDA): Beyond-Line-of-Sign; Coalition Interoperability; Automated Anomaly Detection; Common Maritime Picture		Maritime security/ maritime domain awareness	Maritime surveillance sub-surface/ mine/under water IED	Maritime security/ maritime domain awareness		Workforce development	Persistent Wide Area Surveillance to detect, track, and ID air contacts of interest in CENTCOM and Caribbean Approaches. UAS Due Regard Radar for Sense and Avoid. Foliage penetration.	
Power and Energy	Power Management	Operational Energy: Expeditionary Basing & Logistics; Reduced SWaP; Alternative Energy (Solar, Wind, Geothermal); Waste-to-Energy Disposal; Expeditionary Water Purification/Energy Efficient Housing, Power Distribution		Electrical energy security: ensured power where needed Electrical energy security: Secured Supervisory Control And Data Acquisition (SCADA)	Secured power and energy in all mission sets. Humanitarian assistance/disaster relief	Power and Energy: Undersea Manned Power System Safe, scalable non-flammable Li-Ion Cell			Technologies that reduce dependence/consumption of fossil fuels while maintaining or improving speed, flexibility, range, and responsiveness.	Technologies that reduce dependence/consumption of fossil fuels while maintaining or improving speed, flexibility, range, and responsiveness.

Combatant Command Common Capability Needs

Rollup Category	Rollup Subcategory	USAFRICOM	USCENTCOM	USEUCOM	USNORTHCOM	USPACOM	USSOCOM	USSTRATCOM	USOUTHCOM	USTRANSCOM
Operations & Mission Support	**Counter terrorism**	Counter-Violent Extremist Organization (C-VEO) - Social Media Analysis; Open Source Intelligence (OSINT) Indications & Warnings. ISR: Personnel Recovery.			Counter WMD preparedness and response in the domestic AOR	Counter terrorism/ extremism	Tagging, Tracking and Locating (TTL) technologies that can be used on persons and objects - technologies of interest would provide reductions in size, weight and power/price (SWaP2), improved accuracy or new capabilities	Assured PNT	Alternative platform and payload systems (APPS) for Counter-terrorism, CTOC, and CIT. Special Purpose Marine Air Ground Task Force (SPMAGTF). Counter WMD Preparedness and Response	
	Counter transnational crime	Identity Activities: Biometrics, Forensics, Documentation and Media Exploitation, Denial of Anonymity, Coalition Interoperability			Counter WMD preparedness and response in the domestic AOR	Counter transnational crime			Alternative platform and payload systems (APPS) for Counter-transnational organized crime	
Weapons	**Non-Lethal**	Non-Lethal Systems: Mobile Counter-Personnel, Counter-Materiel, Active Denial	Non-Lethal Engagement: Change in Chemical Properties Reversible Non-Lethal Engagement: Power Disruption Non-Lethal Engagement: Vessel and Vehicle Stop		Maritime Non-Lethal Engagement/Counter UAS Non-Lethal Operations	Non-lethal capabilities across many mission sets (e.g., counter unmanned threats, Vessel/Vehicle stopping)	Scalable Effects Weapons (SEW)-counter material and counter personnel Maritime Disablement Operations (MDO)		Maritime vessel stopping Non-lethal weapons	
	Directed Energy		Directed Energy: Ground/Air/Maritime Effects–Counter Mobility		Directed Energy-High power optics/laser for track/ID Directed Energy-High energy laser to engage Directed Energy-MM wave radar for Area Denial Directed Energy--High power microwave for Defense	Directed Energy: Offensive/Defensive	Airborne High Energy Laser (HEL)			
Electronic Spectrum Management	**EW management in contested environment**	Communications: Contested-EW Continuity of Operations (COOP)		Capability to continue normal military operations in a contested EW environment		Electronic Warfare and Operations in contested EMS environment		EW management in contested environment		