



OUSD Unmanned Systems Update

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DoD UxS Vision & Mission



- **Vision**

- Integrate unmanned systems capabilities that provide flexible options for Joint Warfighters while exploiting the inherent advantages of unmanned systems to reduce programmatic, technical, and tactical risk
- DoD envisions unmanned systems seamlessly operating with manned systems with a gradual reduction in the cognitive load for the decision making process

- **Mission**

- Expedite the integration of unmanned systems within the Department through increased acquisitions efficiency and innovation, while reducing risk to human life





Current DoD Strategic Guidance Landscape



Date	Document	
Executive / DoD		
Feb-15	2015 National Security Strategy (White House)	
Jul-13	DoD Strategic Master Plan (DoD)	
March 2014	Quadrennial Defense Review 2014 (DoD)	
DoD	Apr-15	Better Buying Power 3.0 (AT&L)
	2016	Joint Concept on Robotics and Autonomous Systems (JCRAS)
	2015	2015 Defense Science Board Summer Study on Autonomy (AT&L)
	2015	2015 DSB Summer Study on Strategic Surprise (AT&L)
	Apr-15	The DoD Cyber Strategy (DoD)
Service Documents		
Army	2015	THE ARMY VISION - Strategic Advantage in a Complex World (USA) USA 2025 and Beyond (USA)
	2014	AMC 2014-2024 Strategic Plan (AMC)
	N/A	USA Operating Concept 2020-2040 (TRADOC)
	2014	RDECOM Strategic Plan (RDECOM)
	2014	Army Research Lab Tech Strategy (ARL)
	TBD	RAS Strategy 2015-2040 (USA)
	Air Force	Jun-15
Jul-14		America's Air Force: A Call to the Future (USAF)
Sep 2015		AF Future Operating Concept (USAF)
2013		U.S. Air Force RPA Vector (USAF)
TBD		Small RPA Vector (USAF)
Naval	2015	Naval S&T Strategy (ONR)
	2015	CNO Navigation Plan 2015-2019 (CNO)
	2014	Future Naval Capabilities FNC Guidebook (ONR)





UxS Cross Domain Themes



Human Machine Collaboration

- Human Machine Integration
- MUM-T
- Data Strategies
 - Fusion
 - Processing
 - Displays
- Operator-In/On-The-Loop
- Training

Interoperability

- Systems Integration
- Common Architectures
- Modularity / Interchangeability of Parts
- Payload:
 - Weapons
 - Cargo
 - Sensors
- Availability

Autonomy

- Swarm Controls
- Cognitive Understanding
- Increased Efficiency Using Manpower Force Multiples

Cyber

- Control Station Security in:
 - Command Guidance
 - Systems Comms
 - Comms Security

Operating Environment

- Mission/Domain Specific Topics in CONUS/OCONUS
 - Pacific Shift
 - A2AD
 - Training, Transit, Exercises, Operational
- New technologies:
 - Launch/ Recover
 - P&P
 - Structures/ Materials

AIR/GROUND/MARITIME JOINT MISSION SETS



Take away



As the Department regroups from 13 years of War and seeks to maintain its technological edge over its adversaries, OUSD(AT&L)/TWS will serve as the Departments UxS advocate to ensure the inherent advantages of unmanned systems are leveraged to meet the Department strategic goals.