



DoD Strategic Plan for Test and Evaluation Resources

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Strategic Planning Division



Outline



- Purpose
- Goals and Objectives
- DoD Strategic Plan for T&E Resources
- Processes
- Products



Strategic Planning Purpose

- Provide a vision of the capabilities and investments needed to support the testing of future warfighting capabilities
- Assess T&E resources from DoD T&E, non-DoD government, commercial, academia, and international
- Include requisite workforce, infrastructure, and funding resulting in a T&E capability, by means of the T&E processes
- Influence Service/Agency T&E POM and Needs and Solutions investments through the budget certification process

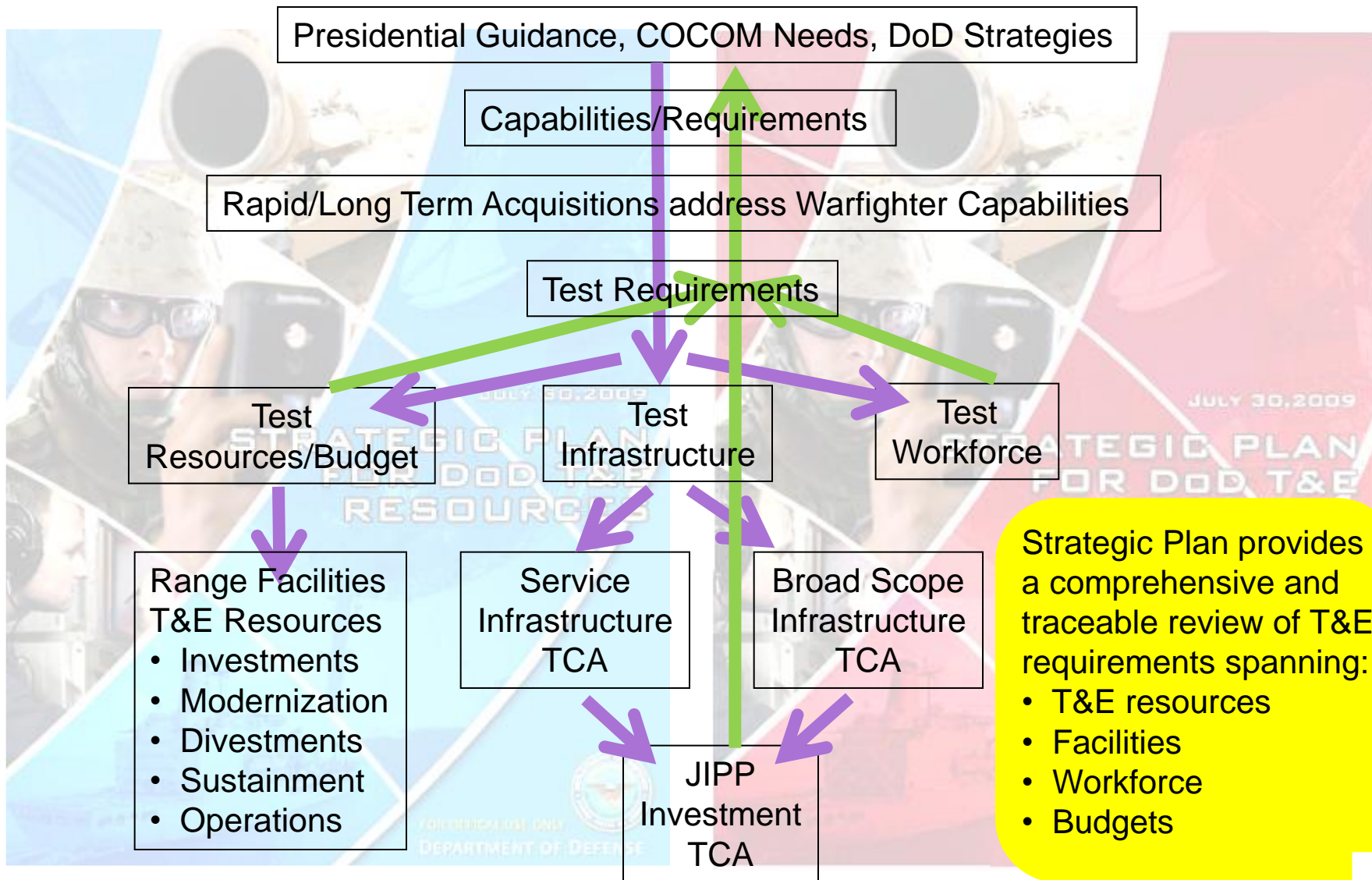


Goals and Objectives

- Translate top-level (National, OSD, & JCS) strategic guidance into strategic direction for the sustainment, improvement, and modernization of the DoD test resource infrastructure
- Guide the service & agency investment process (Service POM, CTEIP, T&E/S&T, Reliance)
- Assess the state of the current T&E infrastructure
- Provide a foundation for budget certification



Comprehensive Review





SASC Assessment of the 2010 Strategic Plan

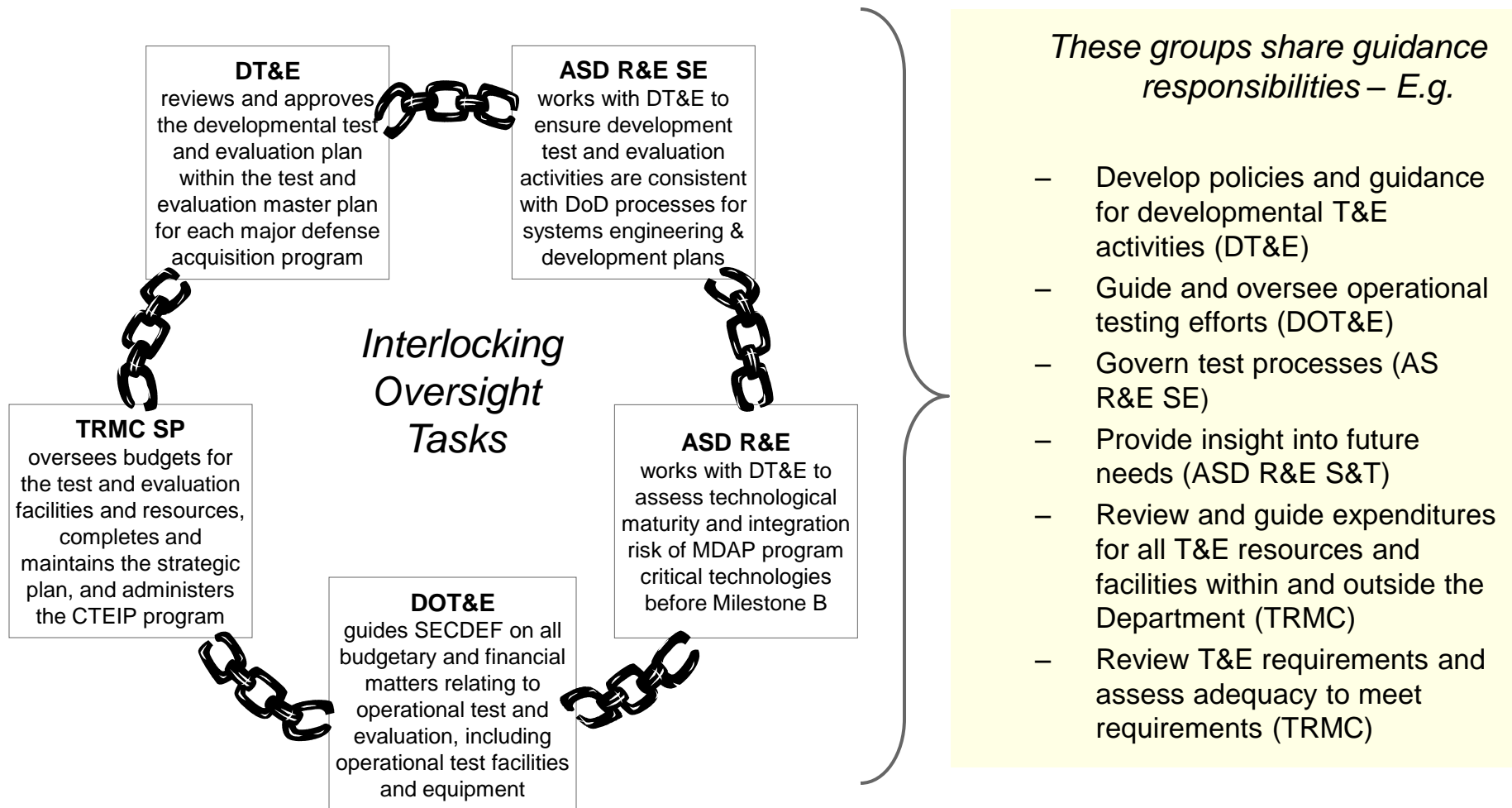
“We view the Strategic Plan as an important tool for identifying gaps in T&E resources and plans for addressing them. We review it with a particular eye to the grading system -- to evaluate how well DOD is meeting identified needs -- and to the identified gaps and recommended actions. We believe that the report is a valuable document which should be useful not only to us, but to the Department. The whole point of the strategic plan is to guide the Department's actions with an analytic approach to ensure that we have the T&E resources that we need in place when we need them.”

- Congressional Staff Member



T&E as an OSD Enterprise

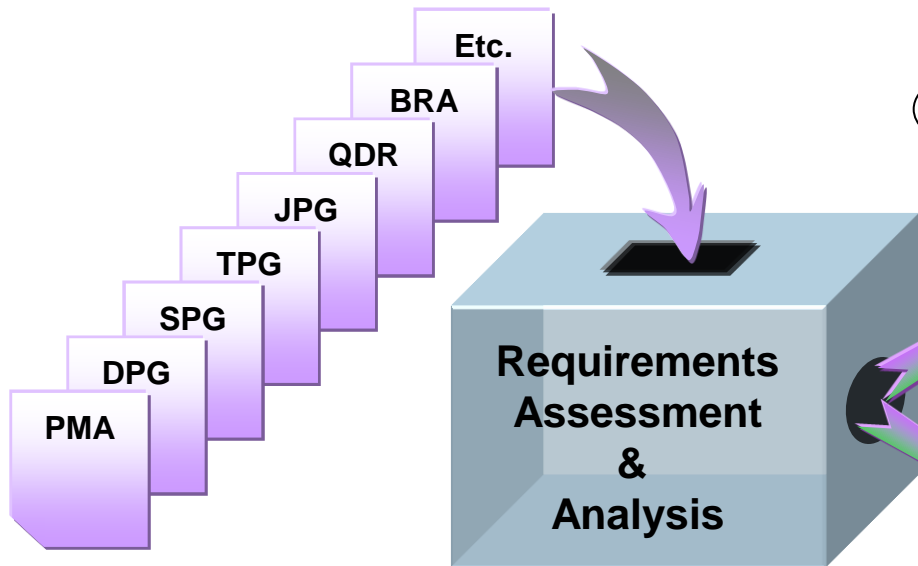
Working closely with other oversight groups helps TRMC achieve its mission and align plans/ guidance overall





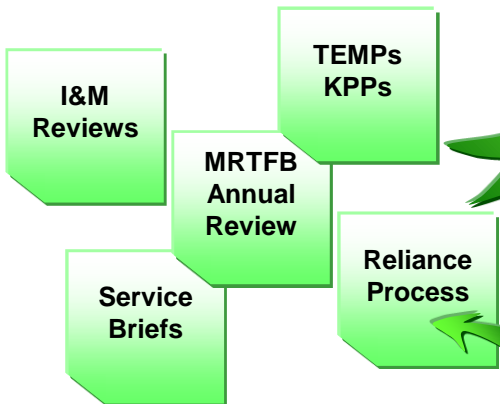
Building the DoD Strategic Plan

Top-Down Inputs



- Air Combat
- Cyberspace/CNO/EW/DE
- Land Combat (Chem/Bio)
- Sea Combat
- Space and Missile Defense

Warfighting Domain TCAs



Bottom-up Inputs

Test Capability Areas

1. Air Combat
2. Land Combat
3. Sea Combat
4. Electronic Combat
5. Space Combat
6. C4ISR
7. Armaments and Munitions
8. Targets and Threats
9. Test Environments
10. Common Range Instrumentation

- Artificial Intelligence
- Biometrics
- Counter-IED
- Counter Intelligence
- Environments
- Hypersonics
- International
- Joint Capability Testing
- Medical
- Net-Centric Operations
- Nuclear Weapons Effects
- S&T Technologies
- Targets/Threats
- Unmanned and Autonomous Systems

Focus Areas





Traceability: Warfighter Needs

Warfighter requirement needs → testing → back to mission capability

Main External POC & Critical Questions

OSD, Executive, DIA, S&T	AT&L, COCOMs	DT&E, DOT&E, Experts	SE, MDAP, T&E Users	Services, OMB, CAPE, Congress
<i>What are the emerging trends and threats?</i>	<i>What are the capability requirements and warfighter needs?</i>	<i>What tests are needed given likely missions and future demands?</i>	<i>What resources and facilities are required to facilitate T&E?</i>	<i>What investments are being made to fulfill resource demands?</i>

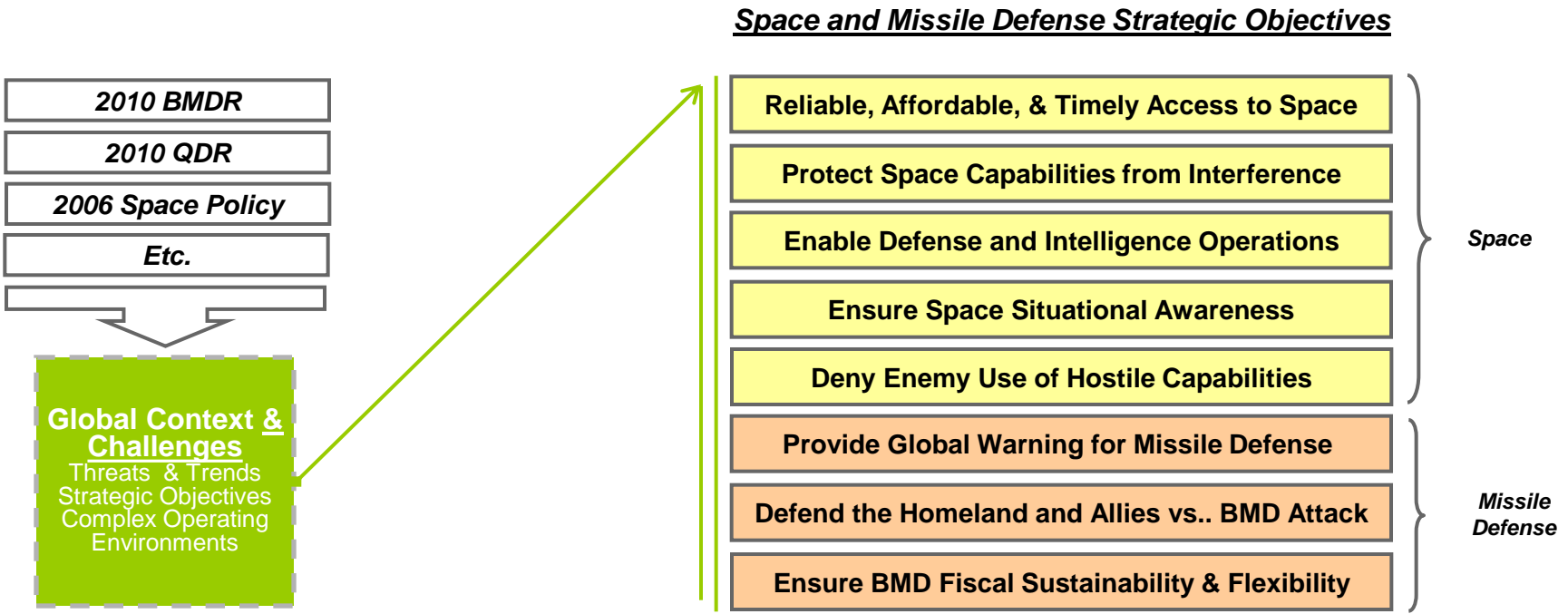


Systematically Map End-to-End

Partial / illustrative depiction



Traceability: Top-Level Guidance



ILLUSTRATIVE LISTING



Traceability: Mapping Needs to Objectives to Requirements

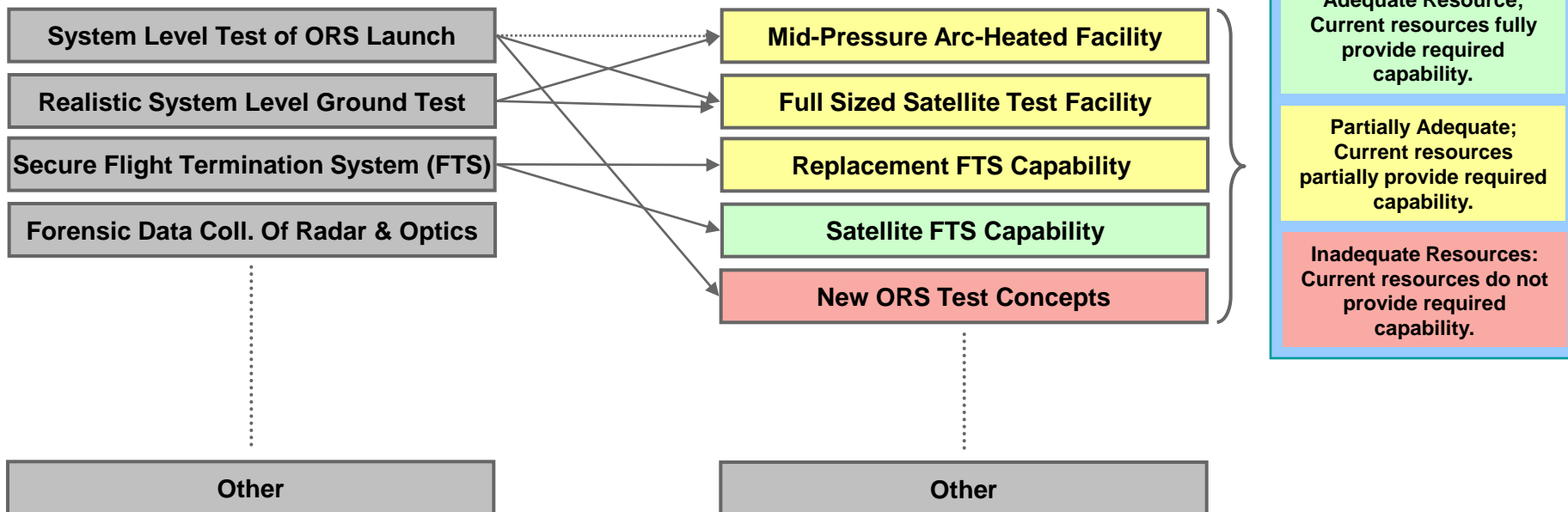
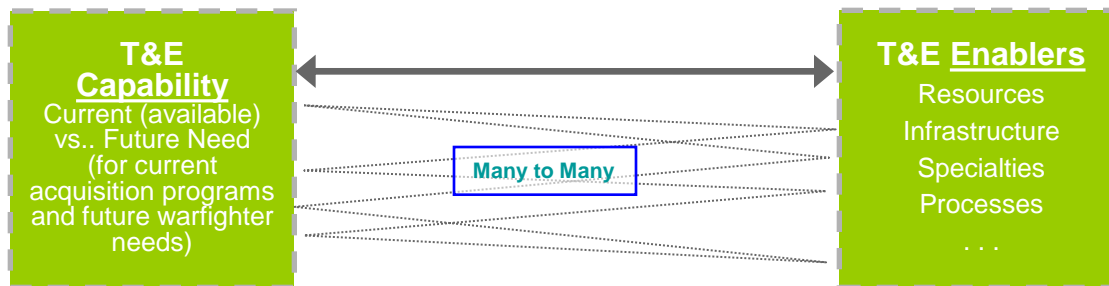


Reliable, Affordable, & Timely Access to Space	X37 B	System Level Test of ORS Launch
Protect Space Capabilities from Interference	EELV	Realistic System Level Ground Test
Enable Defense and Intelligence Operations	GPS Block III	Secure Flight Termination System
Ensure Space Situational Awareness	Minuteman III	Forensic Data Coll. of Radar & Optics
Deny Enemy Use of Hostile Capabilities	NPOESS / IJPS	
Provide Global Warning for Missile Defense	SBIRS HIGH	
Defend the Homeland and Allies vs.. BMD Attack	⋮	
Ensure BMD Fiscal Sustainability & Flexibility	Other	Other

ILLUSTRATIVE LISTING

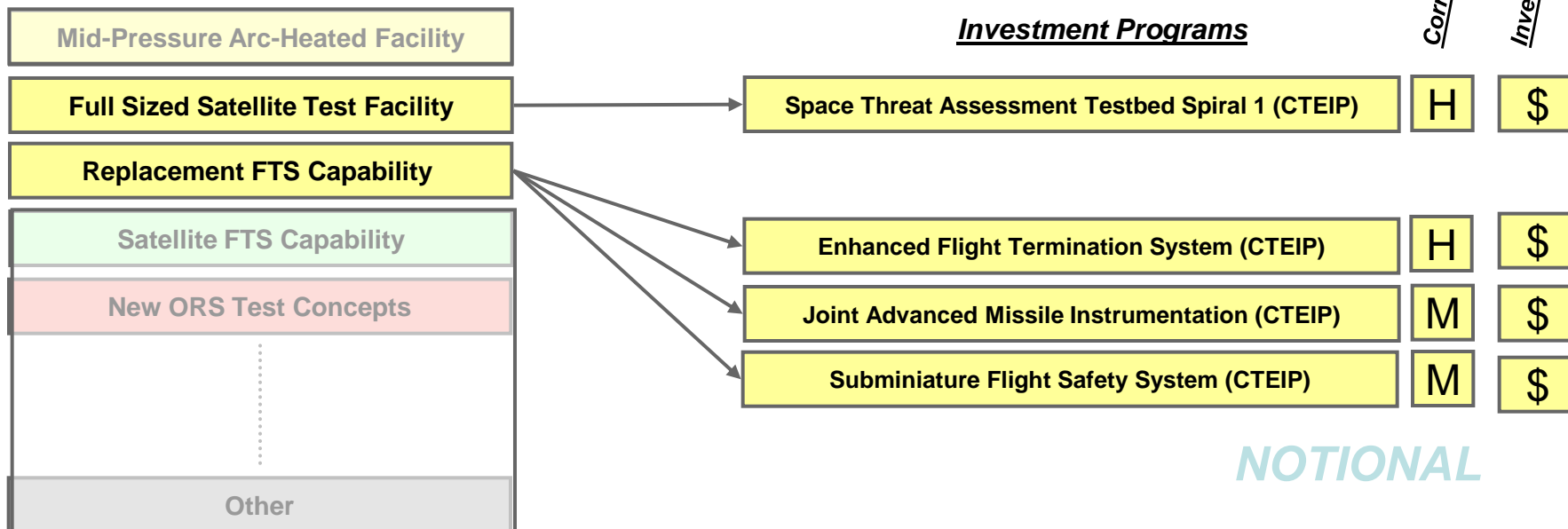
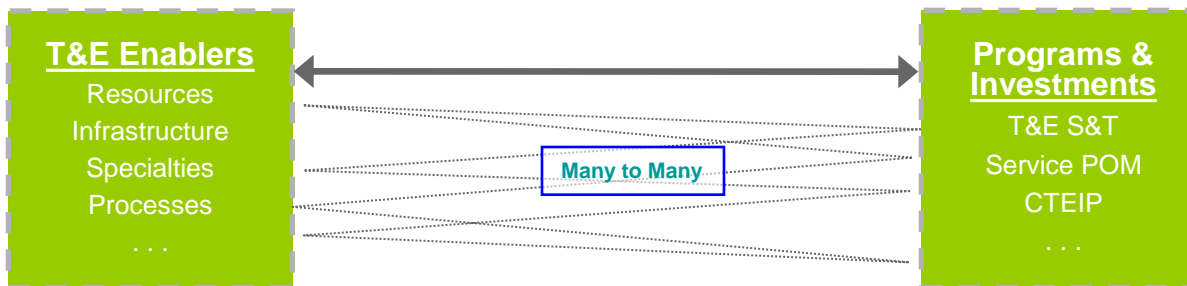


Traceability: Identify T&E Enablers





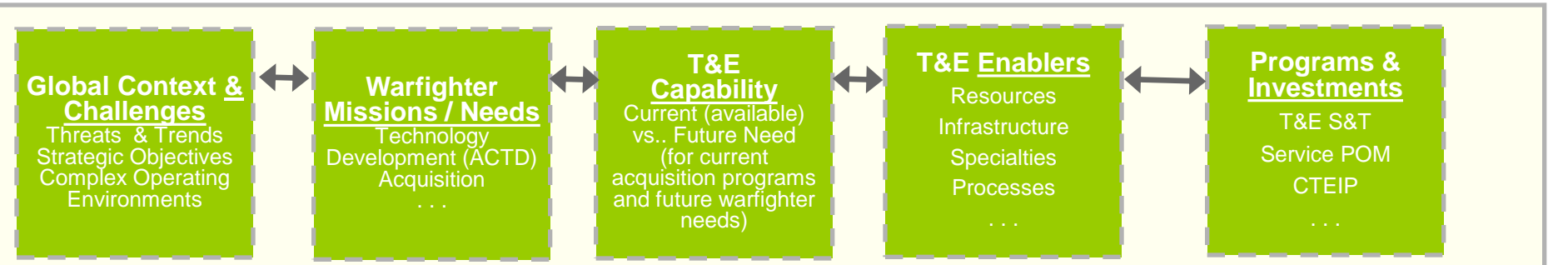
Traceability: Identify candidate investment methods





Traceability example: Space Access

Systematically Map End-to-End



Reliable, Affordable, & Timely Access to Space	X37 B	System Level Test of ORS Launch	Mid-Pressure Arc-Heated Facility	Space Threat Assessment Testbed Spiral 1 (CTEIP)	H	\$XM
Protect Space Capabilities	EELV	Realistic System Level Ground Test	Full Sized Satellite Test Facility			
Enable Defense and Intelligence Operations	GPS Block III	Secure Flight Termination System	Replacement FTS Capability	Enhanced Flight Termination System (CTEIP)	H	\$
Ensure Space Situational Awareness	Minuteman III	Forensic Data Coll. Of Radar & Optics	DMSF-F15 FTS Capability	Joint Advanced Missile Instrumentation (CTEIP)	M	\$
Deny Enemy Use of Hostile Capabilities	NPOESS / IJPS		New ORS Test Concepts	Subminiature Flight Safety System (CTEIP)	M	\$
Provide Global Warning for Missile Defense	SBIRS HIGH					
Defend Homeland and Allies vs. BMD Attack						
Ensure BMD Fiscal Soundness & Flexibility	Other	Other	Other			

ILLUSTRATIVE



Traceability: Warfighter Needs

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Systematically Map End-to-End

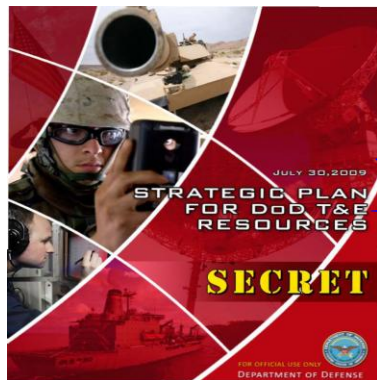
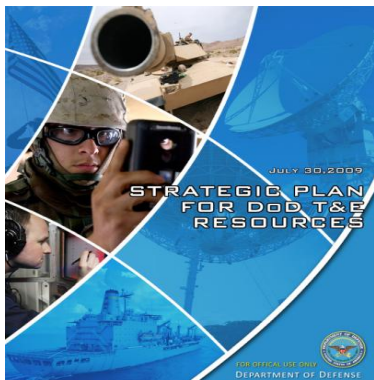
Partial / illustrative depiction



Products and Effects of the Strategic Plan



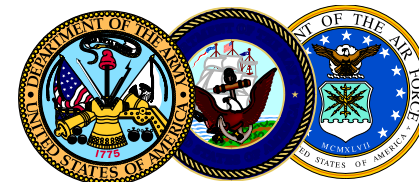
Strategic Plan



- T&E Requirements
- Performance Measures
- T&E Facilities and Resources needed
- Investments needed
- Budgetary Resources needed



Inform Congress for Appropriations and Legislation



T&E Operations and Investments



Investments





New Testing Challenges



- Cyber
- Artificial Intelligence
- Autonomy
- Nanotechnology
- Environments (GPS-denied, Domains, LVC, etc...)
- Space and Missile Defense
- Soldier systems (medical, human behavior/decision-making)
- Directed Energy
- Biometrics
- Hypersonics
- Energy/Power



The Strategic Plan and Budget Certification



- The Strategic Plan:
 - Is central to the TRMC mission and associated budget certification process
 - Provides guidance for the planning, programming, and budgeting of T&E resources
 - Forecasts a period of 10 years
- T&E gaps identified in the Strategic Plan are used during the budget certification process to ensure DoD T&E capabilities exist to support current and future acquisition programs



Strategic Planning Products

- Biennial Strategic Plan for DoD T&E Resources
- Studies and Analyses
 - 2010 T&E Manpower Conversion Report to Congress (currently working)
 - 2010 Airborne Laser Study to Congress (TRMC Member of study group)
 - 2010 Tri-Service Electronic Warfare Test Capabilities Study
 - 2009 Joint Urban Test Capabilities Study (Lead)
 - Impact Report to Congress on High Energy Laser Systems Test Facility (HELSTF) and Plan for T&E of High Energy Laser Systems April 2009
- OSD AT&L Joint Analysis Teams
 - Space and Missile Defense Launch and Test (DAB/DAE Review) (TRMC/SIO Leads)
 - Counter Improvised Explosive Device (Lead), 2010
- Other
 - Senior Oversight Group for Nuclear Weapons Effects T&E (Co-Chair with DTRA)
 - Rapid Acquisition Initiatives (TRMC and DDR&E joint effort)
 - OPM and OBM 2009 Reform Initiative Senior Working Group for Civilian Hiring (TRMC Member)

Note: DoD internal studies are not available to public



Summary

- Provide a vision of the capabilities and investments needed to support the testing of future warfighting capabilities
- Foundational document that uses a systems engineering process to identify DoD T&E resource investments and gaps
- Collaboration with OSD, military departments, non-DoD government Agencies, and commercial, academia, and international organizations
- Influence Service/Agency T&E POM investments through the budget certification process



Contact Information



For a copy of the 2010 Strategic Plan for T&E Resources, please contact:

TRMC

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Background



Resource Categories

Scope:

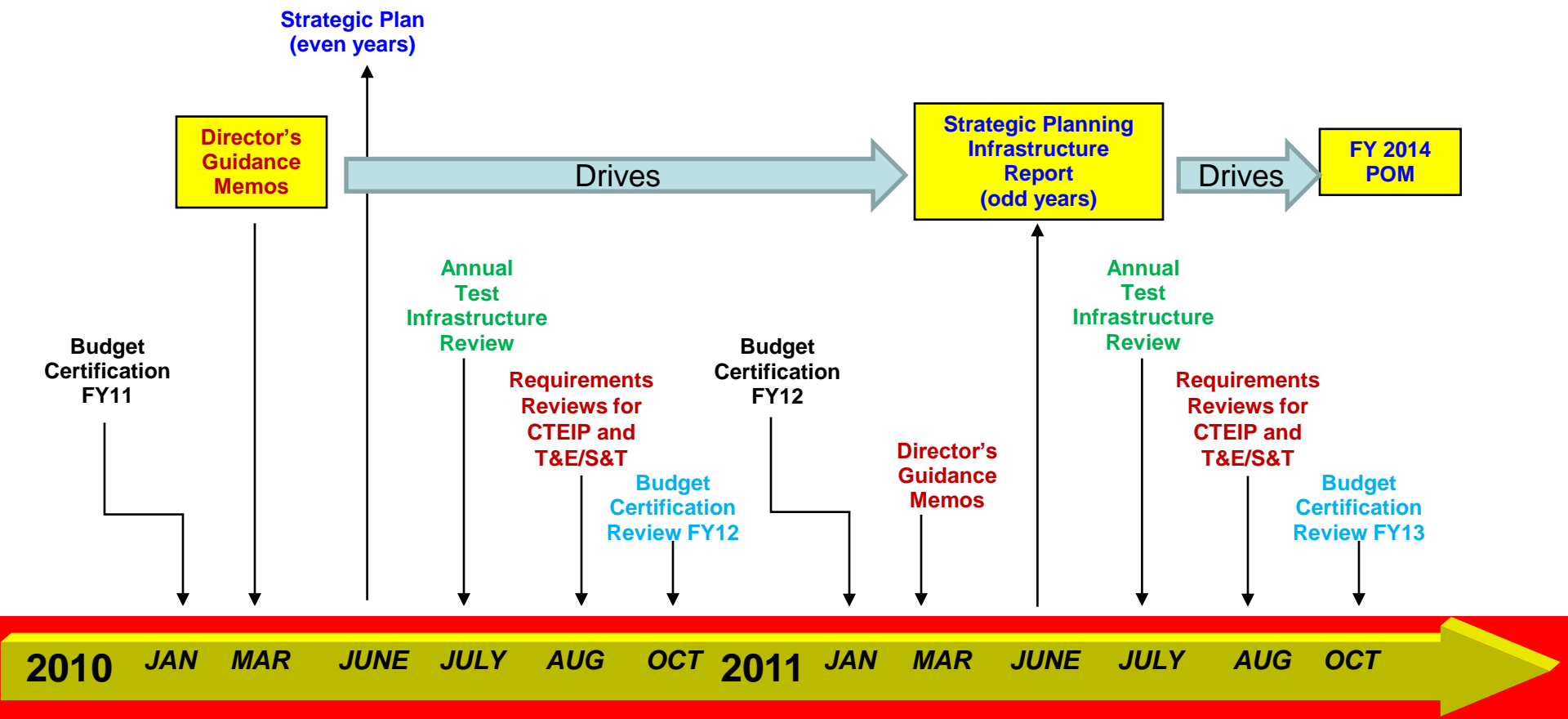
Review must be specific to each acquisition AND specific to each range/facility

Review considers capabilities inside and outside of the MRTFB

- Investment
 - Gap in existing Test Capabilities
 - New Test Capabilities
- Modernization
- Sustainment
- Workforce
- Operations
- Divestment (Helps in funding the above)



Development Timeline





The STEWARD of the DoD Test Infrastructure

Major Range and Test Facility Base (MRTFB): The "Critical Core"

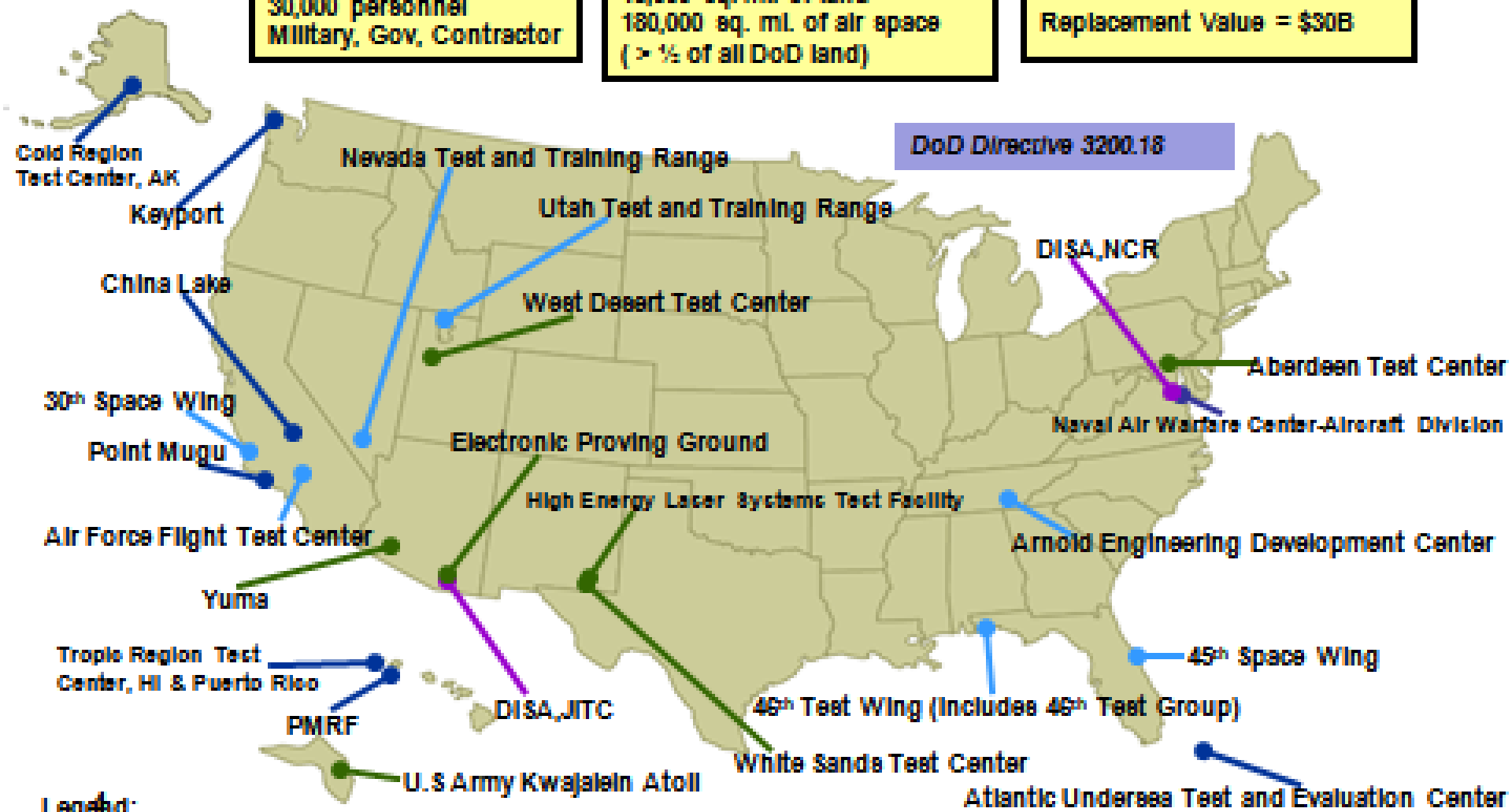
24 Sites: Army-9; Navy-6; Air Force-7; Defense Agency-2

30,000 personnel
Military, Gov, Contractor

18,000 sq. ml. of land
180,000 sq. ml. of air space
(> 1/2 of all DoD land)

Replacement Value = \$30B

DoD Directive 3200.18



Legend:
Army, Navy, AF, Defense Agency