2010 Strategic Plan for DoD T&E Resources

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Discussion

- National Defense Authorization Act
- Strategic Plan Law and Guidance
- Strategic Plan Purpose
- Products and Effects of the Strategic Plan
- Strategic Plan Systems Engineering Requirements Traceability Process
- Strategic Plan Systems Engineering Approach
- Systems Engineering Approach Example – Space
- Domains and Focus Areas
- Questions

National Defense Authorization Act
(FY2003) (Public Law 107-314)

Established
TRMC

- DoD Field Activity
- Direct Report to USD(AT&L)
- ★★★ SES Director

Oversee
T&E Budgets

Major Range & Test Facility Base (MRTFB);
Other T&E Facilities
Within & Outside DoD

Biennial 10-Year Strategic Plan for DoD T&E Resources

Annual T&E Budget Certification

Military Departments & Defense Agencies

Administer
Centrally-Funded T&E
Investment Programs

CTEIP
T&E/S&T

Strategic Plan
Law and Guidance

U.S. Code
Title 10, Section 196 (d)

> "…**The strategic plan shall be based on a comprehensive review of the test and evaluation requirements** of the Department and the adequacy of the test and evaluation facilities and resources of the Department to meet those requirements…."

DoDD 5105.71

> "6.2.2.2. **The strategic plan shall be based on a comprehensive review of the Department's T&E requirements** …"

Strategic Plan for DoD T&E Resources

- Ensure adequate T&E capability and capacity with optimum effectiveness and efficiency 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

NOTE: 2010 Strategic Plan awaiting signature by USD(AT&L) on September 15, 2010

Products and Effects of the Strategic Plan

Strategic Plan

- T&E Requirements
- Performance Measures
- T&E Facility and Resource needs
- Investment needs
- Budgetary Resource needs

Inform Congress for Appropriations and Legislation

T&E Operations and Investments

T&E Budget Certification

Investments

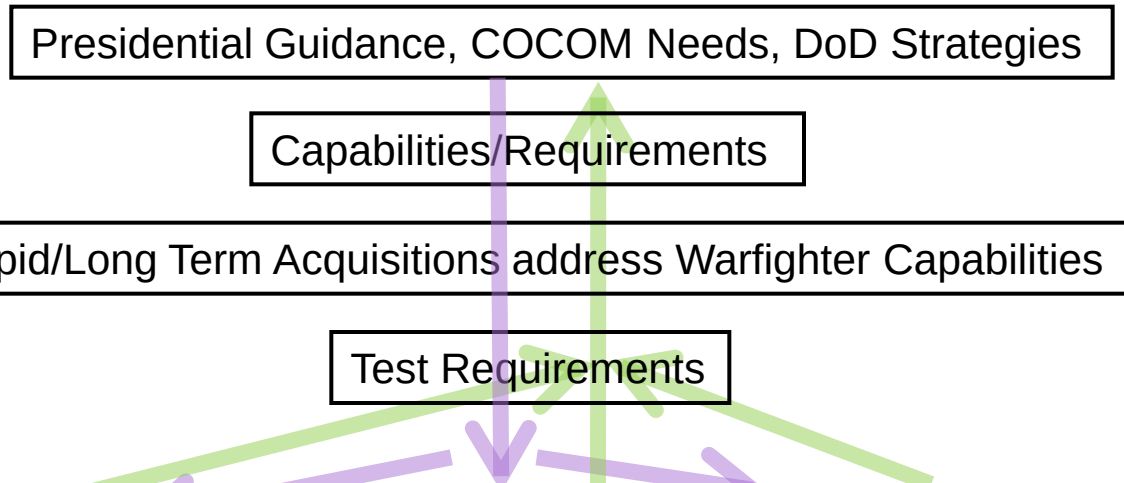
TEST AND EVALUATION SCIENCE AND TECHNOLOGY

IMPROVING T&E CAPABILITIES CTEIP

ENABLING JOINT DISTRIBUTED TESTING JMETC OSD

Strategic Plan Traceability

Comprehensive Systems Engineering Review Process



Strategic Plan provides a comprehensive and traceable review of T&E requirements as they affect T&E resources, including funding, infrastructure, and workforce.

Strategic Plan
Systems Engineering Approach

Institutionalize approach establishing a standard to link:
Warfighter requirement needs → testing → back to mission capability

Stakeholder & Interests

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

Global Context & Challenges	Warfighter Missions / Needs	T&E Capability Requirements	T&E Resource Enablers	Programs & Investments
Threats & Trends Strategic Objectives Complex Operating Environments	Technology Development (ACTD) Acquisition	Current (available) vs. Future Need (for current acquisition programs and future warfighter needs)	Funding Infrastructure Skill sets Processes	T&E S&T Service POM CTEIP

Systematically Map End-to-End

Partial / illustrative depiction

Step 1

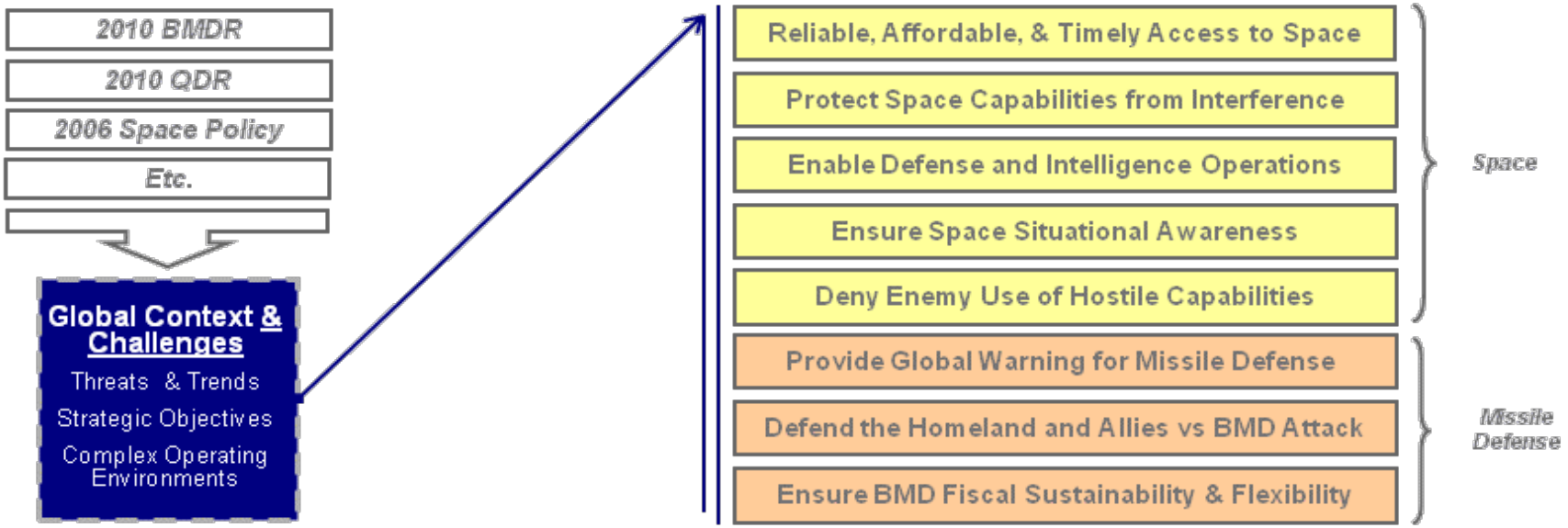
Example: Space

National Strategy to Strategic Objectives Mapping

Step 1: Use national strategic documents to extract, decompose, and communicate major strategic objectives.

Various national strategic documents (DoD, Executive) identify and sometimes prioritize US strategic thrusts, important global trends, and possible threats to national security.

Example Process for Space and Missile Defense



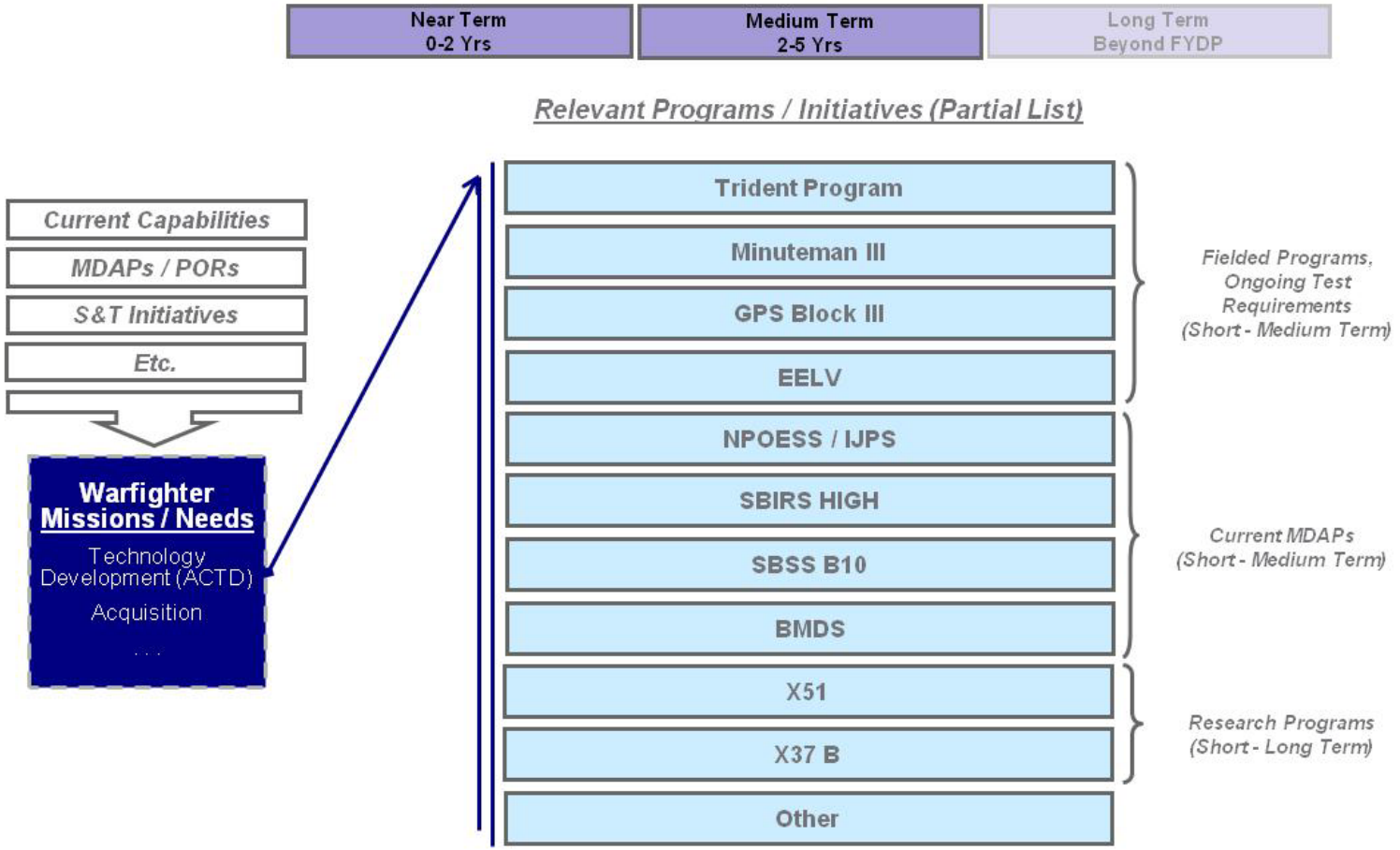
ILLUSTRATIVE LISTING (PARTIAL)

Step 2

Example: Space

Testing Resource Driver Identification

Step 2: Identify the major drivers (programs, technologies, initiatives, etc) which determine potential required test capabilities, by time period.



Short-term and medium-term priorities will tend to be driven primarily by current programs for some areas

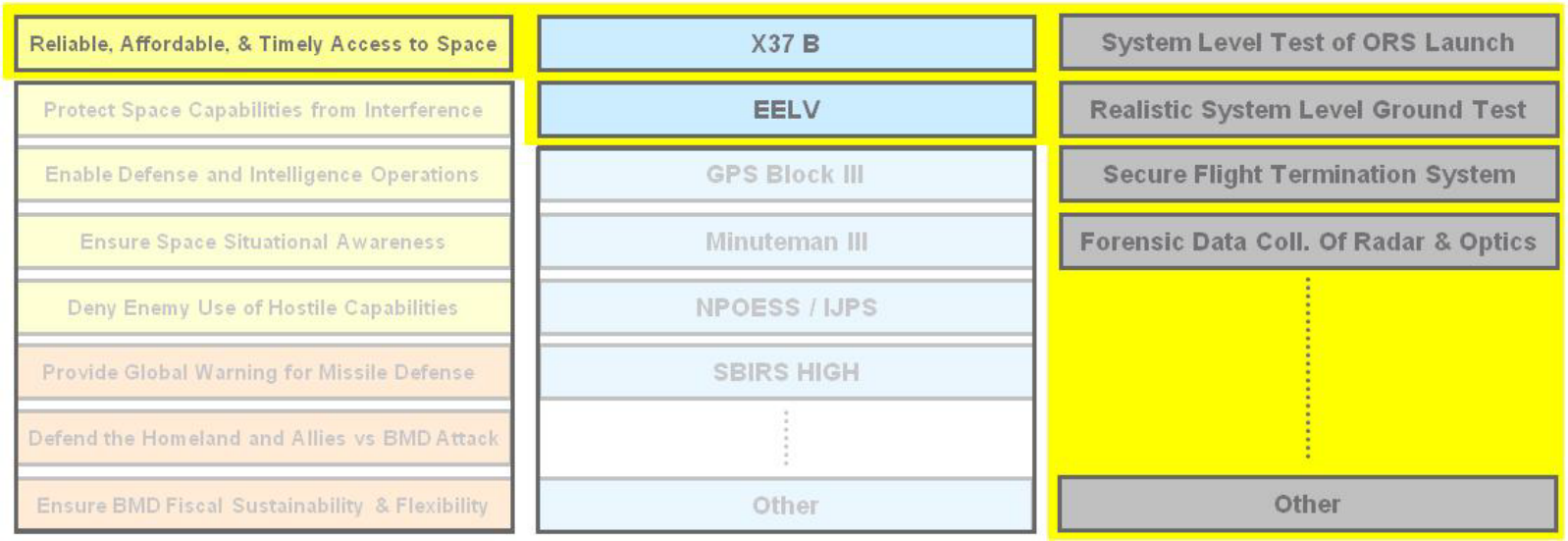
Step 3

Example: Space

T&E Capability Identification & Mapping

Step 3: Map strategic objectives to warfighter needs/programs to determine T&E capability requirements.

Warfighter missions/needs most likely support at least one strategic objective. T&E capabilities for each need (or program) may be identifiable based on tactical roadmaps, TEMPS, and so forth.



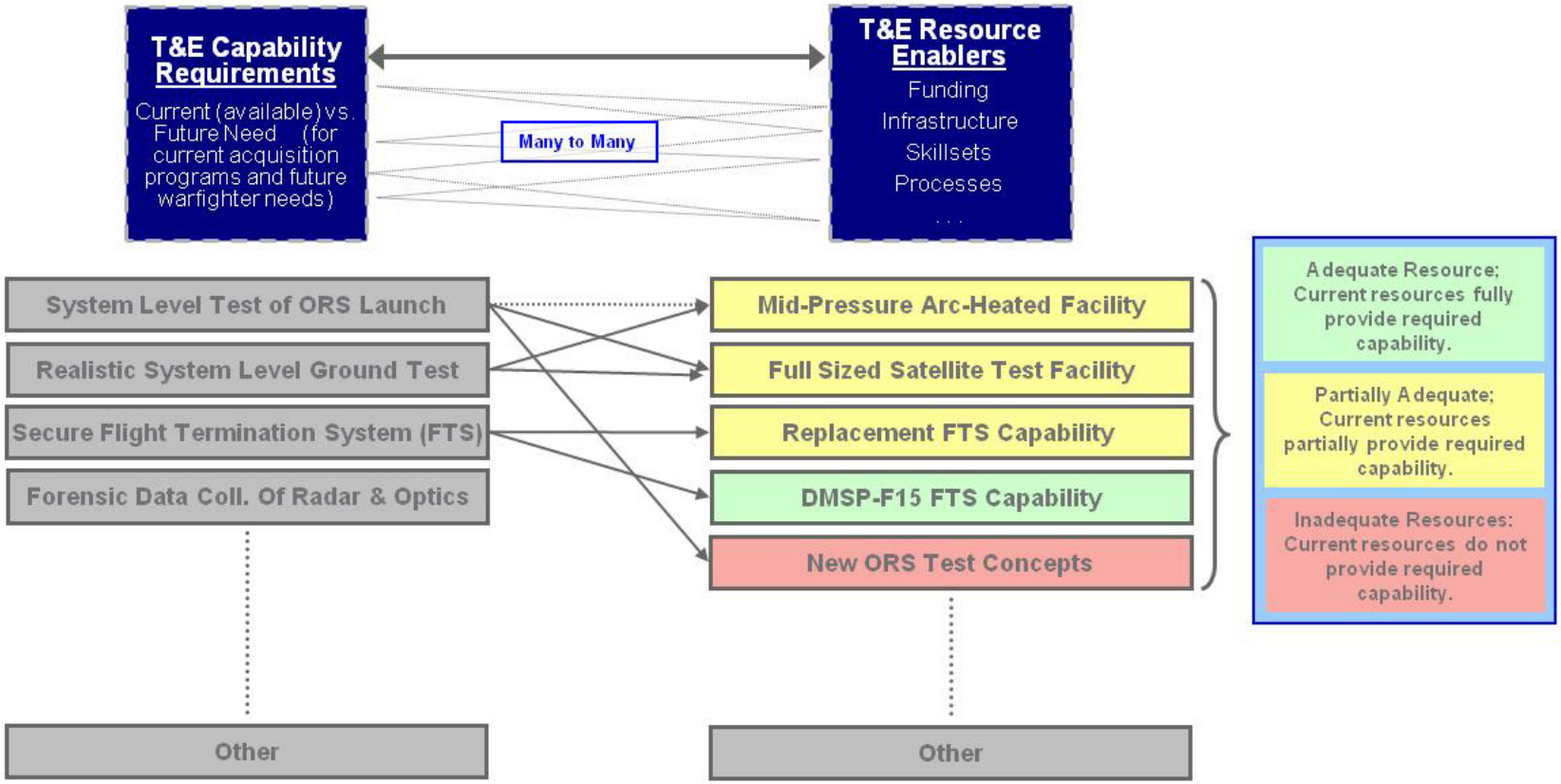
Step 4

Example: Space

Capability Resource Assessment

Step 4: Identify T&E resources required to completely fulfill the T&E capability requirements. Separate out current and needed capabilities.

Capabilities present resource requirements in terms of infrastructure, processes, and manpower. Capabilities may either be adequately, partially, or inadequately resourced.

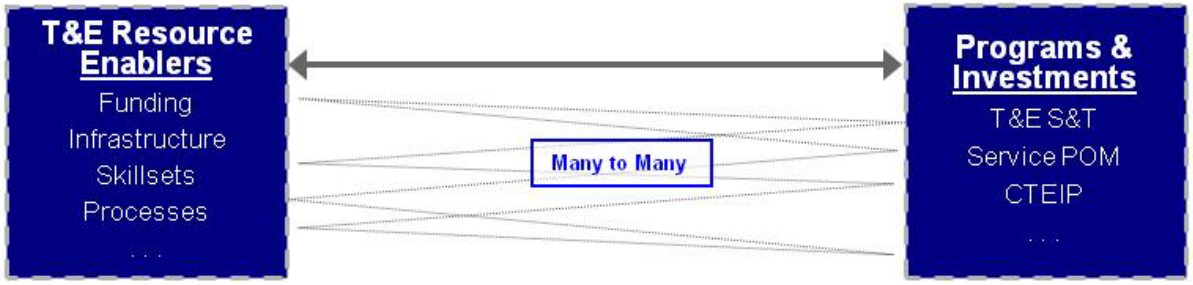


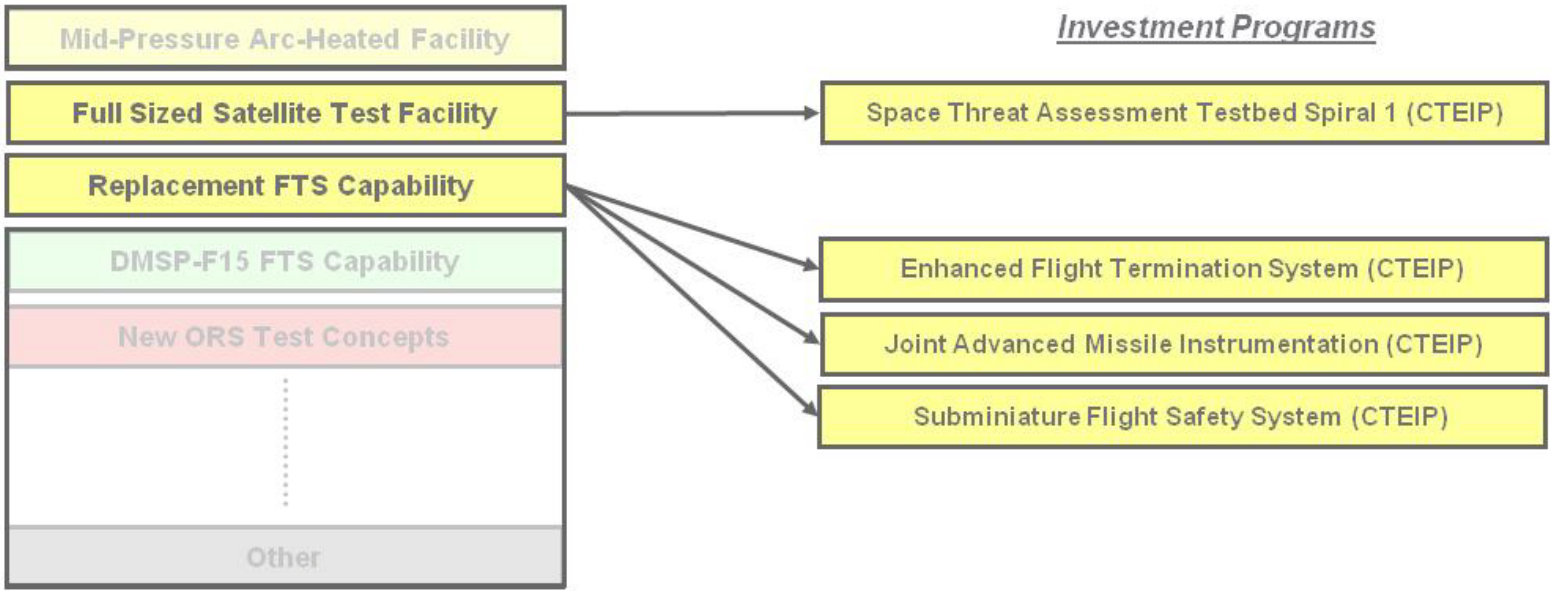
Step 5

Example: Space

Current Investment Assessment

Step 5: Map T&E Resource needs with relevant investment programs (CTEIP, TE/ST, Services) and the expected availability.

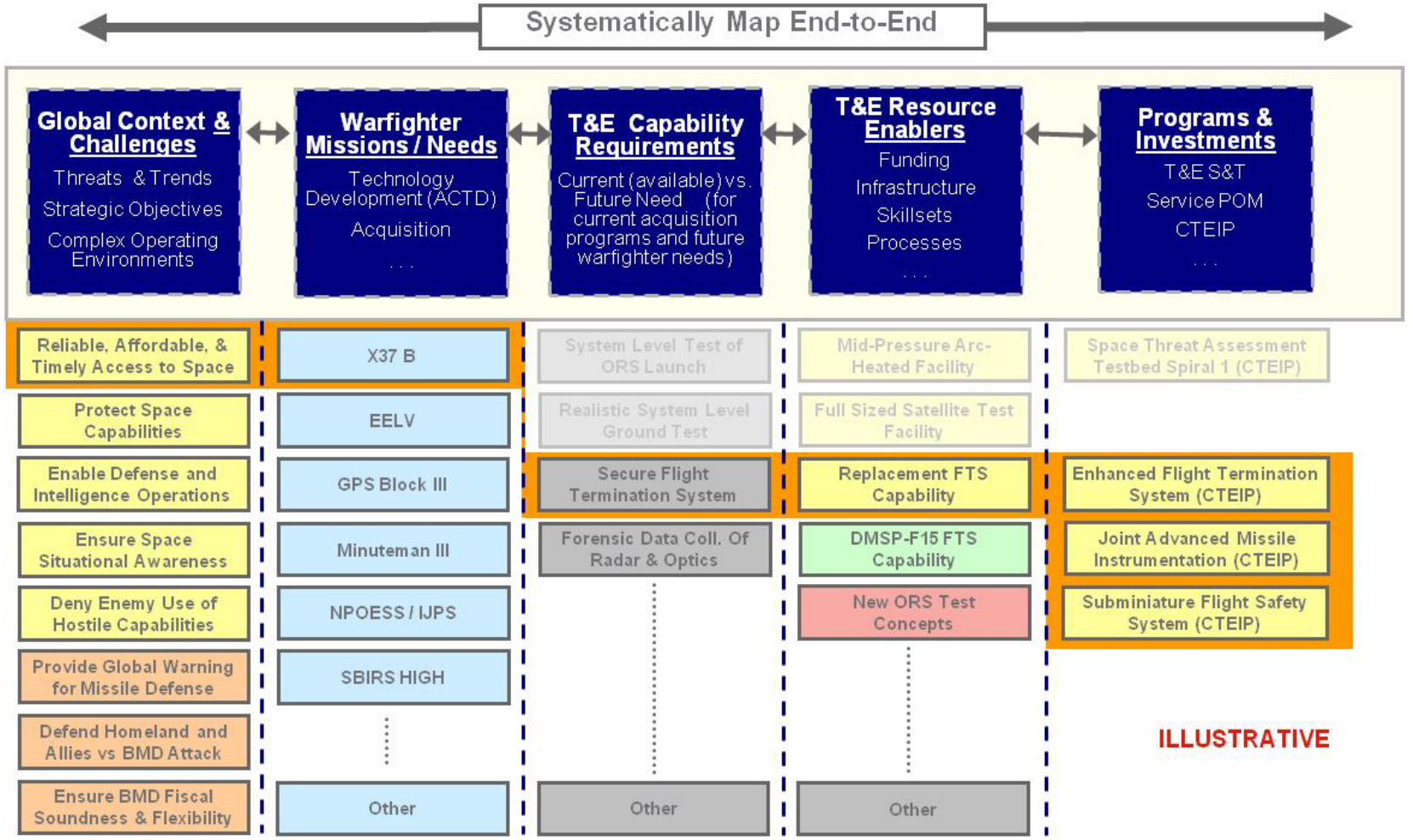




Example: Space

An Integrated Approach

One strategic objective, reliable access to space, provides an example of the disciplined integrated approach.



Formation of Work Groups

Strategic Plan Approach

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Systematically Map End-to-End

Partial / illustrative depiction

Domains and Focus Area Work Groups

- Develop each domain/focus area
  - Collect T&E requirements
  - Assess current T&E capability to support those requirements
  - Identify any known T&E resource gaps
  - Guide review of current capability for certification
- Regularly held meetings
- Led by TRMC Strategic Planning Focus Area POCs
  - Focus areas nominated by Service, Defense Agency, or OSD
  - SP Focus areas determined by February of the odd year
- Comprised of Service SMEs, OSD Agencies (DDR&E, DOT&E, DT&E, DISA, DARPA, etc…), and Academia

Areas of Focus

- **Strategic Plan Work Areas**
  - Domains
    - Air, Land, Sea & Cyberspace Combat; Space and Missile Defense
  - Focus Areas
    - Artificial Intelligence, Biometrics, Counter-IED, Electronic Combat/Directed Energy, Environments, Hypersonics, Joint Capability Testing, Net-Centric, Nuclear Weapons Effects, Spectrum Management and Stewardship, Targets and Threats, Unmanned and Autonomous Systems
- **Future Areas**
  - International, Intelligence, Sensors and Intelligence Surveillance & Reconnaissance, Medical, Science and Technology

Strategic Plan for DoD T&E Resources Questions

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