

PEO STRI Science and Technology (S&T) Overview



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Agenda



- Current S&T Environment
- TSIS Objectives
- S&T Needs
- Emerging S&T Process
- Opportunities to Engage





Current S&T Environment



- Current S&T state
 - Independent, uncoordinated S&T initiatives.
 - No clear definition of needs and priorities.
 - New S&T focus areas and needs, not previously addressed:
 - Human Dimension
 - Augmented Reality
 - Cloud Computing
 - Cyber
 - Megacities
 - Medical
 - Training as a Service (TaaS)
 - Point of Need (PoN)
 - One World Terrain (OWT)
- Portfolio challenges
 - Declining budgets, increased competition for resources.
 - Aging portfolio versus new/emerging programs.
- DoD Better Buying Power emphasis on Technical Excellence and Innovation.





TSIS Objectives



- Convey PEO commitment to establishment and communication of S&T needs and priorities.
- Provide common S&T framework and key S&T needs for both current and emerging/future programs.
- Provide insight to emerging S&T Strategy/Process and role in Gov planning cycles (LIRA, POM, etc.)
- Identify vision and opportunities for industry/academia engagement.





S&T Needs



STE	Live	Test/Cyber	Medical
Enterprise			
<ul style="list-style-type: none"> • Architecture • Single Synthetic Environment • One World Terrain • Point of Need • Big Data • Adaptive Training • Artificial Intelligence • ... 	<ul style="list-style-type: none"> • Architecture • Next Gen TESS • Mixed Augmented Reality • Embedded • Sensor Fusion • Terrain Interoperability • Cloud Computing • ... 	<ul style="list-style-type: none"> • Architecture • Next Gen TESS • Enhanced Augmented Reality • Sensor Fusion • Embedded • Cyber Representation and Effects • Terrain • ... 	<ul style="list-style-type: none"> • Architecture • Synthetic Tissue • Medical MILES • Physiological/ Anatomical Fidelity • Augmented Reality • Manikin Instrumentation • Processes • ...

Partial list from PEO STRI S&T Research Areas – TSIS Read Ahead



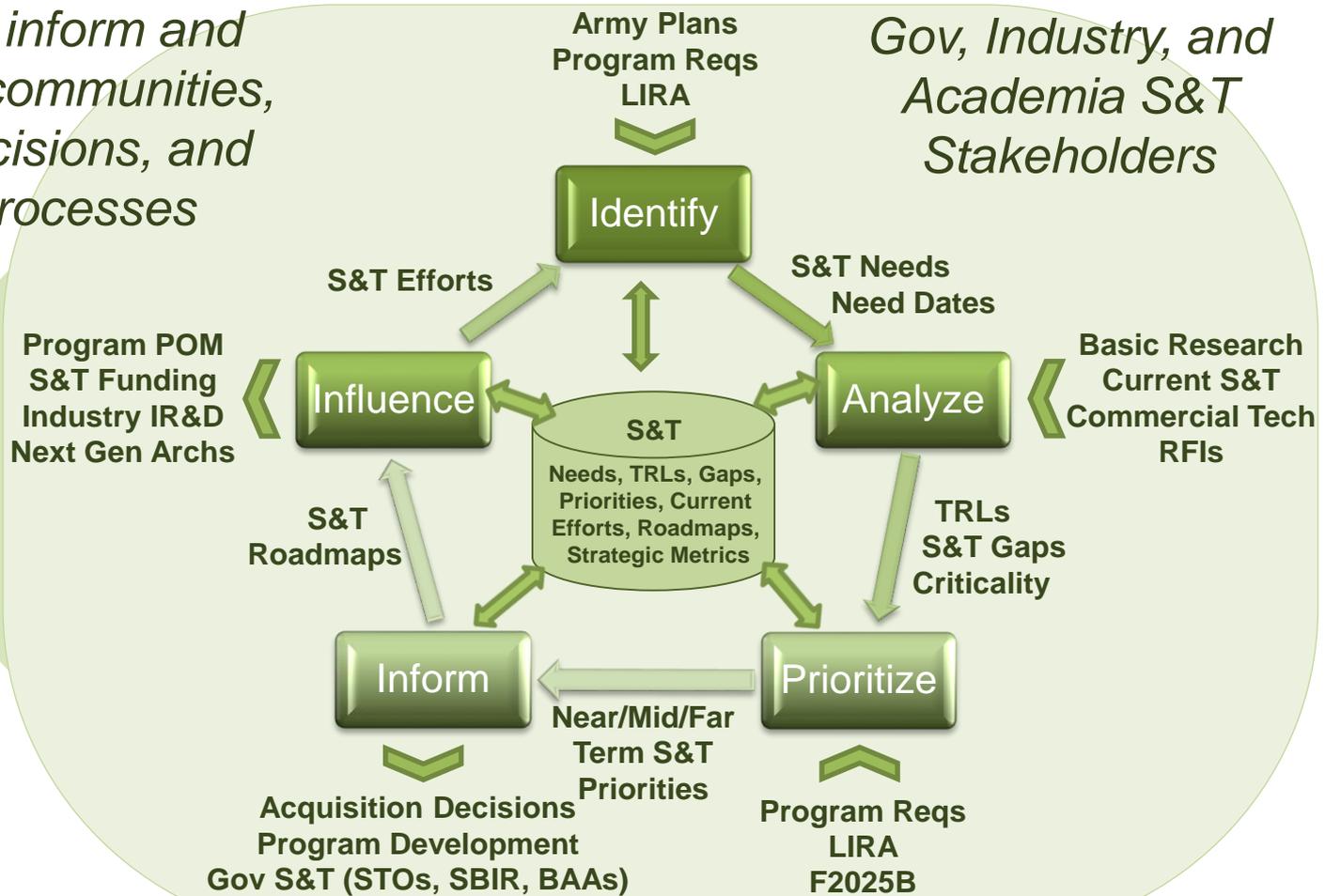


Emerging S&T Process



Goal: Integrated and timely identification and prioritization of S&T needs to inform and influence S&T communities, acquisition decisions, and budgeting processes

Performed in collaboration with Gov, Industry, and Academia S&T Stakeholders





Opportunities to Engage



- Participate in Panels
- Feedback on published S&T Focus Areas/Gaps
 - What key S&T needs are we missing?
 - Are our Technology Readiness Level (TRL) estimates reasonable?
 - What other work is ongoing?
- Collaborative Environments
- Standards Workshops and Forums
- Network Integration Evaluations (NIEs)/Army Warfighting Assessments (AWAs)
- Communities of Interests
- Program R&D/Risk Reduction initiatives
- Rapid Innovation Fund BAAs, SBIRs, STOs, CRADAs
- Industry R&D Investment





Face to Face Discussions



- Conduct Industry Face to Face discussions – July/Aug 2015
 - One on One meetings with Industry/Academia Partners
 - Inform S&T gaps, priorities, TRLs, and related research
 - Influence Industry IR&D
 - Identify opportunities for collaboration
 - Explore industry concerns
- To arrange your meeting, contact the Technical Director's office at:

usarmy.orlando.peo-stri.mbx.td@mail.mil





Closing





Acronyms



AWA – Army Warfighting Assessments

AI – Artificial Intelligence

AR – Augmented Reality

AT – Adaptive Training

BAA – Broad Area Announcement

BD – Big Data

CRADA – Cooperative Research and Development Agreement

F2025B – Force 2025 and Beyond

IR&D – Independent Research and Development

HD – Human Dimension

LIRA – Long Range Investment Requirements Analysis

M&S – Modeling and Simulation

MILES – Multiple Integrated Laser Engagement System

NIE – Network Integration Evaluation

OWT - One World Terrain

POM – Program Office Memorandum

PoN – Point of Need

RIF – Rapid Innovation Fund

S&T – Science and Technology

SBIR – Small Business Innovative Research

SSE – Single Synthetic Environment

STE – Synthetic Training Environment

STO – Science Technology Objective

STTC – Simulation and Training Technology Center

TaaS – Training as a Service

TESS – Tactical Engagement Simulation System

TRL – Technology Readiness Level

TTA – Technology Transition Agreement

